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# **Biodiversity and Tourism in Costa Rica**

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**i. Introduction.**

In the last decade Costa Rica has positioned itself in the world as a country of peace – without an army - and as an agricultural nation, with traditionally important products such as bananas, coffee, and sugar cane. It has also distinguished itself for its efforts in the area of biodiversity conservation; and accordingly, has positioned itself as an innovative tourist destination based on its natural wealth, clearly differentiated in the large international markets.

This small country located in the Central American region, has nature-associated tourism as one of its main hubs for development, and one with a great growth potential. Examples of initiatives that in some way integrate conservation and tourism are more numerous and varied everyday, where the excellent relationship of state and the private sectors has been a factor of the success of the activity. In spite of pitfalls that must be overcome, and changes that have to be made to fully become part of the globalised world, Costa Rica has clear, and assumes as a great challenge, the fact that the only road to follow is that of sustainable tourism, towards which all efforts are directed, as much by the government as by the private sector.

The aim of the present document is to describe the main characteristics of tourist activity and its relation with conservation and the sustainable use of biodiversity in the country, specifically within the framework of the National Biodiversity Strategy. It is a first attempt to compile and integrate information on the effect of touristic activity on conservation and how this has at the same time, favoured tourism in Costa Rica.

In its first part, the document summarizes the development of tourism in the country and its institutional and legal framework; it is preceded by a brief summary of the country's socio-economic situation. The second part is focused on the general characteristics of Costa Rican biodiversity, and on policies of conservation and sustainable use of our biological wealth. It continues with a third part that relates both themes: conservation and the tourism, with an analysis of the problematic and efforts to overcome problems, then it presents an analysis on proposed strategies and solutions. The document concludes in a brief manner with some case studies that give an idea of the great diversity of initiatives that exist in the country.

## ii. Acronyms and Abbreviations.

ACAHN	Área de Conservación Huetar Norte
ACAT	Área de Conservación Arenal Tilarán
ACCVC	Área de Conservación Cordillera Volcánica Central
ACG	Área de Conservación Guanacaste
ACLAC	Área de Conservación La Amistad Caribe
ACLAP	Área de Conservación La Amistad Pacífico
ACMIC	Área de Conservación Marina Isla del Coco
ACOPAC	Área de Conservación Pacífico Central
ACOPROT	Asociación Costarricense de Profesionales en Turismo
ACOSA	Área de Conservación OSA
ACOT	Asociación Costarricense de Operadores Turísticos
ACT	Área de Conservación Tempisque
ACTo	Área de Conservación Tortuguero
ACHA	Asociación Costarricense de Hoteleros y Afines
AMCHAM	Costa Rican-American Chamber of Commerce
ALIDES	Alianza para el Desarrollo Sostenible en Centroamérica
ASOPRADES	Asociación de Productores para la Protección del Ambiente y Desarrollo Sostenible
ASP	Áreas Silvestres Protegidas
ASVO	Asociación de Voluntarios de las Áreas Silvestres Protegidas
AyA	Instituto Nacional de Acueductos y Alcantarillados
CANAMET	Cámara Nacional de Microempresa Turística
CANATUR	Cámara Nacional de Turismo
CBM / MBC	Corredor Biológico Mesoamericano / Mesoamerican Biological Corridor
CCT	Centro Científico Tropical
CDB / CBD	<i>Convenio sobre la Diversidad Biológica</i> – “Convention on Biological Diversity”
CST	Certificado de Sostenibilidad Turística
ENB	Estrategia Nacional de Biodiversidad
FUNDACA	Fundación para el Desarrollo del Área de Conservación Arenal-Tilarán
GEF	Global Environment Facility
GNP	Gross National Product
ICT	Instituto Costarricense de Turismo
IDA	Instituto de Desarrollo Agrario
INA	Instituto Nacional de Aprendizaje
INBio	Instituto Nacional de Biodiversidad
INCAE	Instituto Centroamericana de Administración de Empresas
INVU	Instituto Nacional de Vivienda y Urbanismo
JICA	Agencia Japonesa de Cooperación Internacional
MEIC	Ministerio de Economía, Industria y Comercio
MICE	Mode of tourism related to meetings, incentives, conferences and events.
MIDEPLAN	Ministerio de Planificación /Planning Ministry)
MINAE	Ministerio del Ambiente y Energía /Environment and Energy Ministry)
MINSA	Ministerio de Salud /Health Ministry)
MOPT	Ministerio de Obras Públicas y Transportes/ Build and Transportation Ministry
OET / OTS	Organización para Estudios Tropicales / Organization for Tropical Studies
OMT	Organización Mundial del Turismo
NGO	Nongovernmental organization
OPS	Oficina Panamericana de la Salud/ Panamerican Health Office
SETENA	Secretaría Técnica Nacional del Ambiente-MINAE/National Technic Secretary of Environment
SINAC	Sistema Nacional de Áreas de Conservación-MINAE/Conservation Areas System
SWOT	Strengths, weaknesses, opportunities and threats
UICN	Unión Internacional para la Conservación de la Naturaleza/ International Union for the Conservation of the Nature)

## **1. Summary of the Socio-economic Situation in Costa Rica<sup>1</sup>.**

Costa Rica is a Central American country with a land area of 51,100 sq km and a population of nearly 3.8 million people<sup>2</sup> with an annual growth rate of 2.9% (1999)<sup>3</sup>.

The human development index places it as a high-level country. Historically, economic development has been detrimental to natural resources, particularly in the second half of the 20<sup>th</sup> century, for the conservation of which, the country has been making enormous efforts.

Coffee, bananas, meat and sugar have been the traditional products of export, whose proportional contribution to the gross national product (GNP) as a whole has been diminishing in the last few years before the development of tourism and the advent of high-technology businesses, as well as in response to changes in the world markets that have meant diversification and promotion of non-traditional products. In 1999, the high-technology activity (electronic microstructure) was the main generator of currency, followed by tourism<sup>4</sup>.

The per capita GNP is around US\$2,934.00<sup>5</sup> and annual inflation for 2000 was a little over 10%<sup>5</sup>.

A full 95% of the population counts with piped water services; 89%, with sewer service for disposal of excrement, and more than 90% of the population has access to electric power service. Social medical insurance covers nearly 90% of the population. Primary and secondary education is free and obligatory. Illiteracy is near 5% in persons over 12 years old. 20% of 15 to 17 year olds do not study or work<sup>5</sup>.

About 20.6% of the population live in conditions of poverty, with 6.7% under conditions of extreme poverty (1.4% more than in 1998). Of these people, 47% live in the central region of the country<sup>6</sup>. The open rate of unemployment is 6%<sup>57</sup>.

Life expectancy at birth is 74.1 years for men and 79.8 years for women, one of the highest in Latin America.<sup>8</sup> Amerindians, belonging to eight distinct ethnic groups, make up 1.2% of the national population; a full 55% of the total population is rural.

The political problems that affected Central America in the last decades, the strong impact of the natural disasters in the zone, together with, in the last two years, the economic and political situation of Colombia, provoked intra and inter-regional migrations. In 1999, between 7.8% and 8.8% of the population were Nicaraguans<sup>9</sup>.

The Costa Rican State is now in a process of restructuring that includes policies for reducing government spending and internal debt, as well as an opening up of State businesses. The State assumes a function that is progressively more regulatory than executive, prompting important changes in activities such as public utilities and health services. In 1999, the Government's social investment was 16.5% of the GNP (in the decade of the nineties it fluctuated between 15 and 17%)<sup>10</sup>.

Actions directed to the appraisal of environmental services that forests and other ecosystems provide, through the tax on fuels aimed at generating financial resources to maintain forest cover on private property and the adaptation of the normative and institutional framework have, in the last few years, given environmental topics unprecedented social relevance. Activities as important to the economy as tourism and the hydroelectric generation of energy (which supplies 80% of the national demand), as well as hydric resources for human, agricultural and industrial consumption, depend, in great part, on protected wilderness areas that have been established by the State, which occupy 25.1% of the national territory<sup>11</sup>.

## 2. Outlook of the Present State of Development of Tourism in the Country.

### 2.1 Phases of Development and Importance at Present

Tourism has been considered by the Costa Rican governments one of the economic activities of greatest potential as generator of employment, distribution of benefits, promoter for foreign investment and promoter of growth that is compatible with the environment and rural development. The main success factor of the activity has been the quality and variety of attractive nature the country possesses. In the present Government's National Plan for Human Development 1998-2002, actions to improve the sector aimed at strengthening ecotourism and nature-based tourism in a socio-politic, democratic and peaceful environment are established, modality through which the country has positioned itself in the world<sup>12</sup>.

At present, tourism in Costa Rica is considered to be in a phase of evolution. The different periods are shown on Table 1.

Until approximately 1987 the “**Pioneer Period**” of ecological tourism, or ecotourism took place; from 1988-1994, the “**Growth Period**”, and after 1994 the “**Evolutionary Period**” from a nature-based tourism destination to a tourism activity with a strong nature interest but with multi-phased and varied character, diversifying the line of products and services that are offered. The intention is to, in this way, respond to the inclinations and needs of new segments of the market, such as tourism for conferences or events (MICE), of groups of advanced aged persons (Senior Citizens), and of students (educational and intercultural holidays). These are people who come, not necessarily motivated by nature, but do take advantage of their stay to enjoy it<sup>13</sup>.

Therefore, this evolution implies facing the challenge of integrating ecotourism to the diverse activities and tourist attractions, with the aim of being able to offer a single one and only **extensive tourist product: a peaceful, green, and clean country.**

The tourism market in Costa Rica has expanded over the years. Currently we have, not only specialized ecotourists come to the country, but also tourists with a general interest in nature, although, not as tolerant as the former to a lack of “creature comforts”. The result of this has been a wider range of possibilities available for tourists, including light adventure activities (surfing, kayak, sport fishing) and traditional sun/surf activities, combined with more hard-

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Ecotourism understood to mean: *An experience as part of an excursion through nature that provides the tourist an opportunity to admire and to learn about natural and cultural attributes of the destination area while contributing to its conservation. This can be achieved by respecting and improving the integrity of the natural ecosystems as well as the socio-cultural characteristics of the tourist destination.* (Scace, 1993. In: Haysmith, Y. & Harvey, J. Eds. 1996. Ecotourism and Conservation of Nature in Central America. *Proyecto Paseo Pantera* “Paseo Pantera Project”, WCS, CC, USAID, UNEP, University of Idaho. p.30.). The CDB establishes that ecotourism depends on the existence and maintenance of biological diversity and its habitat. (Secretariat of the Convention, 2000. Decisions adopted by the conference of the parties to the CDB at its fifth meeting, Nairobi, 16-26 May, 2000. V/25. Biological diversity and tourism. p.120).

core, nature-oriented experiences. These are a very attractive options for the new market segments mentioned above (Table 1)<sup>13</sup>.

During the period of evolution, especially from 1995 to 1999, the largest hotel expansion the country has seen has taken place. Most of the people in the new segments of the market come in larger groups (20 to more than 100) than what the usual number in specialized ecotourism (10-15 persons) is. The need to have 4 and 5 star hotels with 100 or more rooms to satisfy the demand of the new potential market arises<sup>13</sup>.

Nationwide, Costa Rica has 28,000 rooms in 1,671 hotels. A full 32% of available rooms are to be found in the Central Valley, where San Jose, the capital city is located.

It is expected that, within the next 10 years, this number of rooms will grow to nearly 52,000, and have greater distribution throughout the country<sup>14</sup>.

Of the 1,671 hotels, only 27 (1.6%) have more than 50 rooms, the remainder of establishments (98.4%) are made up by entrepreneurs who offer lodging in facilities having an average of **3 rooms** and by hotels that have less than 50 rooms (**65% have less than 40 rooms**). Nearly 300 hotels have certification for quality of service (star system); as for the number of rooms, among these 300 hotels we find those having the largest number of rooms in the country<sup>15</sup>.

We find therefore, that at present the country faces a need to have more 4 and 5 star hotels with 100 or more rooms each in order to satisfy the demand of the new segments, with the enormous challenge of diminishing to the maximum environmental impact, conserve biodiversity, not losing what has been gained in previous periods of development of tourism, but rather strengthening this<sup>13</sup>.

**Table 1. Phases of the Development of Tourism in Costa Rica.**

	1980's	1990's (beginnings)	End of 90's, 2000 2005 2010	2010 and Beyond
<b>Phase of Development</b>	<b>Pioneer</b>	<b>Growth</b>	<b>Evolution</b>	<b>Maturity</b>
<b>Segment of the Market</b>	-Academia (investigators, students, etc.)  -Tourists with strong nature-related interests, satisfied with basic amenities.	-Tourists with moderate interest in ecotourism, not so tolerant to lack of "creature comforts". General interests with nature experience.  -Sun/Surf with nature experience.	-Sun/Surf with moderate/adventure activities.  - MICE tourism (meetings, incentives, conferences and exhibitions) with nature experience.  -Inter-cultural tourism with nature experience.	
<b>Perception of destination market</b>	Hard-core ecotourism.	Moderate ecotourism.	Multi-phased tourism with strong interest in nature.	<b>Clean, green and peaceful destination.</b>

**Source:** Adapted from JICA, ICT. 2000. *Estudio para el Plan de Uso de la Tierra en las zonas costeras de las unidades de planeamiento turístico en la República de Costa Rica. Borrador del reporte final. Mimeografiado. p. 3.8, 3.9, 3.11* "Study for the Use of Lands in Coastal Areas of the Tourism Planning Units in the Republic of Costa Rica. Draft of final report. Mimeographed. P. 3.8, 3.9, 3.11".

From 1995 to 1998, tourism was the leading **currency-generating activity in the country**<sup>16</sup>. Although still in growing, in 1999 and 2000 it moved to second place due to the surge of high-technology industry (electronic microstructure), especially because of the establishment in the country of the microprocessor giant, Intel.

For Costa Rica, tourism represents 72% of national monetary reserves, generates 140,000 jobs - or 12% of the total labour force-, 15% of exports, and represents 8.4% of the GNP<sup>17</sup> (in 1999). More than one-half million Costa Ricans (16% of the total population) depend directly or indirectly on the tourism sector. In 1999, for the first time, the country welcomed little more than **one million tourists** (1,027,000)<sup>18</sup>, which, according to average growth suggested for the country by recent studies, is expected to double by 2010<sup>19</sup>.

Development of the activity demonstrated a **growth rate** of 16% between 1988-1993, period when there was a boom in incentives for the activity, and nearly 7% between 1994 and 1999. The growth rate in 1999 in respect to 1998 was 9%; by year's end 2000, it was already **10%**<sup>20</sup>. This rate is very positive compared with the annual rhythm of growth of tourism worldwide, which according to WTO figures, varies between 3% and 4%<sup>21</sup>.

In 1975 the number of foreign **tourists** was 297,000, figure that was maintained as average for more than a decade; as of 1987 growth was exponential, something that coincides with the strengthening in the international market of the offer of the nature product nature begun in 1985-86; by 1995, more than 700,000 tourists were already visiting the country; and the million mark was surpassed in 1999 and 2000.

Of the 8 countries that provide the world market with the greatest number of tourists, Costa Rica receives visitors from seven: United States of America, Germany, England, Italy, Holland, Canada and Spain. Additionally, it is visited by Mexicans and other Hispanics from Central and South American. The largest percentage of tourists comes from the United States and Canada. For 1999, by blocks of countries, North America accounted for 45.5% of the tourist total, Central America for 30.1% and Europe 13.6%. The North American block presents the greatest percentage growth in the period 1998-99, a significant 11.5%<sup>22</sup>.

The **high tourist season** for the country corresponds to a period of only 4 months (December to March, the "dry season"); and the remainder of the year is still not being adequately exploited. This is due mainly to the premise that the "rainy season" does not sell. Of available rooms in the country, 50% remain idle especially in this season, the impact of which is felt mainly by the small and mid-sized entrepreneur<sup>23</sup>. This is an area of great potential that the country has yet to develop, something which will depend mainly on the devising and carrying out of an excellent programme for promotion<sup>24</sup>.

In regard to the rest of Central America, as of 1995 Costa Rica became the country in the region that receives the most tourists. In 1994, it was Guatemala. However, it is worth pointing out that all countries of the region have shown growth in the number of tourists within the last decade. The country that had the greatest average annual growth percentage in the 1995-98 period was El Salvador, followed by Panama and Nicaragua. In this period, Costa Rica occupied fifth place in growth rate <sup>25</sup>.

## **2.2 Institutional Structure of Governmental Policy and Planning for Tourism:**

In Costa Rica there are 33 norms that regulate the tourist businesses and tourism activities in the country, including the Organic Law of the Environment (N7554 of November 1995)<sup>26</sup>.

The *Instituto Costarricense de Turismo- ICT* (Costa Rican Board of Tourism) is the national regulatory institution. Operating under the *Ministerio de Turismo* (Ministry of Tourism), it was created by Law N°1917 of August 9<sup>th</sup> 1955. This law establishes its objectives, functions and operation. It underwent modifications that are articulated in Law N°7472 of January 19<sup>th</sup>, 1995. It is an institution with managerial autonomy and its own budget, which has been on the increase in recent years. It has a Board of Directors and an Executive President who is appointed by the Government Council 21. The ICT has had Nature as its platform for promotion of the country on the world market; two phrases have identified this promotion in the last years: *Costa Rica al natural* “Costa Rica naturally”, and *Costa Rica sin ingredientes artificiales* “Costa Rica - no artificial ingredients”.

The exponential growth of tourism in the country has brought to light existing gaps in the sector, and prompted the identification of a series of actions to be followed on a short, mid and long-term basis, which, among other things include: training, an air transportation policy, congruency between the ecological image and reality, the legal framework, competitiveness, sustainability of the environment, the need for a tourism promoter of a mixed organization nature (private/public) and providing safety for the tourist. At the moment, there is a government bill in the Legislative Assembly that tries to integrate the strengthening of these issues (*Ley Orgánica del Ministerio de Turismo, Exp.13960* “Organic Law of the Ministry of Tourism”)<sup>27</sup>.

There are several important issues that remain to be solved. Some of these are: the lack of a plan of official territorial planning that permits clear zoning of areas apt for tourism, specifying what type of tourism; the centralization in San José of information for the tourist; the existing disharmony of coordination of ICT activities with the activities of other national groups and, at regional levels in the country (MINAE, municipalities, NGOs, etc.), the lack of material and adequate infrastructure in protected wilderness areas; the lack of awareness of Costa Rican society on the importance of tourism<sup>28</sup>, as well as on the need that it be developed in harmony with the environment. These issues, other relevant problems and efforts towards solutions, will be analysed in more detail in Section 4.

### 2.3 Modalities of Tourism in Costa Rica:

As part of the challenge that the country faces in the present period of Evolution towards a green, clean and peaceful tourist destination, different modalities of tourism are being considered as a sole yet heterogeneous but integrated product, where nature continues to play a key role as the hub for diverse modalities of tourism. These modalities are described here, and specific attractions are discussed in detail in Section 2.3.2.

Since the 80's, Costa Rica's presentation card for the tourist has been **ecological tourism or ecotourism**, which mainly offers visits to state and private protected wilderness areas, and lodging in a natural environment where facilities have been built and are operated and maintained in harmony with nature.

Ecotourism is growing in the world at a yearly rate of from 25% to 30%; currently it represents 5% of the international market. This offers great possibilities for future strengthening and growth of the activity in the country<sup>29</sup>. The **sun and surf** modality grows worldwide at a rate of less than 4% per year<sup>28</sup>. In the country, this modality is related to the rich biodiversity of both coasts, and endeavours to make appraisal of biodiversity part of this modality are underway (see Ecologic Blue Flag, Section 4.2.1). This modality is currently the number one for the tourists.

As part of the ecotouristic offer, or by itself, but generally including an appraisal of nature component, there are offered diverse and more creative options in **adventure tourism** (scuba and skin-diving, surfing, canopy tours, bungee jumps, walks on elevated trails or "bridges" - sky walk and sky trek, rafting, etc.), all in active growth in the country. Referring to this modality, a journalist recently wrote: *Costa Rica could be spoken of as the place where nature and human ingenuity merged to create extreme sports that are full of excitement*<sup>30</sup>. Activities such as sports fishing, lawn or "zacate" skiing (grassboarding, a new sport invented and patented by Costa Ricans<sup>31</sup>), and mountain biking, can also be offered as part of ecotourism (if they comply to appropriate environmental criteria) or as separate options in adventure tourism.

In addition, **cultural tourism**, based on pre-colonial and colonial heritage is offered (as monuments, museums, and other attractions), and living culture (Amerindian and African-American: foods, craft, ways of life)<sup>32</sup>. In general, cultural tourism in Costa Rica is integrated to ecotourism and other modalities of tourism that are offered in the country.

**Agroecotourism**, a modality born in 1991 within the framework of an agreement between the *ICT* and the *Instituto de Desarrollo Agrario (IDA)* "Institute for Agricultural Development", has been surging and gaining ground in recent years. This is a modality that takes the tourist to the rural ambience of the country, with traditional and non-traditional sustainable agricultural practices, which include among others, shaded coffee plantations, organic agriculture, medicinal plants and ornamental plants<sup>33</sup>. This activity is closely related to ecotourism, and it could be said that it partly surged as its complement in answer to the period's tourist boom. The possibility of becoming acquainted with local activities for conservation of the environment (protected areas, management of species, sustainable use) is one of the products that many Costa Rican rural communities offer their visitors.

Conservation facilities *ex situ* such as botanical gardens, rescue centres and zoo-breeding farms, among which butterfly farms and aviaries stand out are economically self-sufficient, maintained by visits from students and the general public<sup>34</sup>. These facilities are, for the most part, in private hands and are included in tourist packages in diverse zones of the country, whether individually or as a complement of visits to protected wildlife areas and private reserves.

In a like manner, and considering the integrated development of communities, the ICT is developing a programme of **Community Tourist Development**, whose objective is the development of tourist zones in the country's different regions, based on local participation, propagation of tourist attractions, strengthening of organizations and exploiting the potential of tourist, ecologic, cultural and productive resources through *expoferias* "expo-fairs". This programme is carried out in association with the zone's chambers of tourism, municipalities, local organizations, and private business<sup>35</sup>.

As part of tourist activities, every year the country receives visits of cruise ships on its two coasts. With the *Ley de Marinas N° 7744* (Law on Marinas) of February 26<sup>th</sup>, 1998, some first results have been obtained, related to the promotion of construction of physical facilities to cater, in an adequate manner, to this sector of maritime tourism sector, which is of great economic importance. In 1999, the construction of two marinas with a capacity for mooring 510 vessels was approved. It is estimated that these facilities will generate nearly 1,150 direct jobs and 2,850 indirect jobs<sup>36</sup>.

This modality is relatively too new to objectively measure the economic, cultural or environmental impact that it is generating. However, it is important that the marina infrastructure take advantage of existing facilities at the main national ports. Besides, with this law, the *Comisión Interinstitucional de Marinas y Atracaderos Turísticos* "Inter-institutional Commission of Marinas and Tourist Landings" was created, with participation of the INVU, SETENA-MINAE – administrative office responsible for procedure and application of environmental impact assessments for all activities carried out in the country-, MOPT, MINSA and ICT. This Commission will ensure that actions to be carried out are within the framework of sustainable tourism.

The product that is offered the tourists, depending on their stay, includes short visits to nearby communities and to protected wilderness areas, and in this way promotes and diversifies visits to natural areas and the development of local tourism. Because of the size of the country, some groups are also taken to the Central Valley to see and enjoy diverse cultural and natural attractions.

### 2.3.1 Tourist's Perception of the Country:

Every year, the ICT interviews foreign tourists upon their exit from the country, in order to analyse, among others things, their impressions of the country and their perception of the product obtained, quality of attention and problems they might have experienced. This is

done with the aim of monitoring the activity, identifying gaps and to become aware of trends in order to carry out better planning.

According to the last survey of the 2000 high season, with a sampling of 1,500 tourists visiting mainly from Europe, North America (US, Canada) and Latin America (for the first time, there is specific data for the latter region), the following results were given: 69.9% of those interviewed mentioned as the main reasons for their trip: pleasure, rest or holidays (vacationists), 21.7% came for job or business-related reasons, and 3.8% for study.

In a breakdown of the **vacationists'** percentage, the following data is obtained: 72.5% carried out **sun and surf** activities; **ecotourism** activities represented significant percentages: 53.8% carried out walks on trails in protected areas, 48.2% carried out observation of flora and fauna, and 35.5% carried out bird-watching activities. Other important activities related to nature, were surfing, diving and river rafting<sup>37</sup>.

According to the survey, the average stay of a tourist in the country was 11.1 nights, something which has been on increase since 1996. Of the total interviewed, 72.9% lodged in a hotel; of these, nearly 45% roomed in 4 and 5 stars hotels, and 19% in 3 star establishments. For the most part (51.3%), visits were motivated by a relative, friend or other person who spoke to them about the country. **Little more than one third is here on their second or third visit to Costa Rica.**

Features of the country rated the best (from 1 to 10) by vacationists were: **protected areas (8.79)**, followed by treatment received from Costa Ricans (8.75) and volcanoes (8.5), which are also protected areas in the country (National Parks). Aspects with the lowest rating were roads (highways) and road signs, two things that the Government is working diligently on, and perception of which is expected to better in coming years.

A **general ratings** summary of the country as a tourist destination was, for nearly 80% of those interviewed, between 8 and 10; 35.7% of persons rated the country as an 8, 23.1% gave it a 9 and 20.8% awarded Costa Rica a full 10.

### **2.3.2 Description of Costa Rica's Main Ecotourism Attractions<sup>38</sup>:**

Costa Rica enjoys a tropical climate with two well-defined seasons: the rainy season (May-November) and the dry season (December-April). The temperature is stable and pleasant throughout the year, ranging (depending on the location), from 17 to 32° C; at the highest peak, Mount Chirripó (within and namesake of Chirripó National Park), which is wasteland, temperatures can go down to 0° C or less.

There is a mountain chain through the country where numerous volcanoes can be found. This backbone of rugged mountains makes for an enormous diversity of terrestrial habitats, or microhabitats, which support a high biotic diversity in relation to the area the country occupies on the planet's surface. This is reflected by the country's rich flora and fauna. Costa Rica is home to more than half a million species and has a great diversity of ecosystems. In this sense, it is considered as one of the 9 countries in the world of

*extreme* high diversity of organisms in forest ecosystems<sup>39</sup> (details are given in Section 3). The diversity of mountains also makes for an enormous variety of possibilities for modalities in adventure tourism.

Owners of private reservations and hotels offer different packages, where they combine activities that, all the time, are more and more creative. These include: visits to protected wilderness areas, visits to sites for agroecotourism, farms or forestry management projects and to zoos, botanical gardens, recreational parks, butterfly farms and rescue centres. Also offered are activities such as: bird watching, observation of sea-turtle nesting, diving in areas rich in marine biodiversity, forest canopy tours by cable car, walks and horse rides on paths that lead to waterfalls or other attraction of special cultural or biological interest in the area, or simply for enjoying a forest, wetland or other area.

Adventure packages include, among other activities, *grassboarding* (as already mentioned, a sport invented in the country), *canopy tours*, *kayaking* on swift rivers, walking systems of paths and suspended bridges in the forest, and extreme sports such as parachuting and bungee jumping. Details of some of these activities are offered in the case studies, Section 4.

Following is a description of the main ecotourism attractions of the country, which the tourist can enjoy in very diverse ways.

#### **Nature Sites:**

**Mountains:** with maximum heights of slightly over 3,800 m. above sea level, they possess a great diversity of climates and microclimates, morphology, vegetation and fauna. In Costa Rica's mountains we find forests of very diverse types (humid, very humid, cloud), also found are wastelands and **plains** with singular characteristics.

**Coasts:** the country is 10 times larger in extension thanks to its coasts. It has 589,000 Km<sup>2</sup> of territorial seas within its national limits, with a coastline of 210 Km on the Caribbean and 1,106 Km on the Pacific.

The climate on the Caribbean Coast is tropical rainy to very rainy, with a dry season that exactly corresponds to the rainy season of the Pacific Coast. Both coasts have a total of 380 beaches, of black and white sands and with varied characteristics; most of them are found in good environmental conditions in quality of water, and sand. Having waves of variable size, some of Costa Rica's beaches are renown worldwide as excellent sites for the sport of *surfing*. Costa Rica is one of the favourite places for professional sport fishing and diving. Six of the existing 11 Conservation Areas have marine zones as part of their protected areas. These cover a total of 328,256 hectares of an inestimable value in biodiversity. Of this area, 30% corresponds to *Isla del Coco* "Coconut Island" (over 97,000 hectares)<sup>40</sup>, whose marine ecosystems are of great importance as a species distribution centre of the Indo-Pacific region.

Costa Rican law does not permit construction of hotels, houses or any building within 50 metres of the high tide level. All the beaches are public within those 50 metres. This allows the visitor to have access to any beach in the country.

**Lakes, ponds and estuaries:** More than 300 wetlands, taking into account reefs and mangroves are found within national territory, covering nearly a 7% of the area<sup>41</sup>.

Nine of these have been declared of international importance or Ramsar sites, according to the Convention on Wetlands of International Importance Especially as a Waterfowl Habitat. Of these, 3 are categorized as refuges, and another is a National Park: *Isla del Coco*, which has been declared a World Heritage Site.

**Mangroves:** Making up 1% of the country's area, mangroves are found along the Pacific Coast, mainly in the Gulf of Nicoya in the north of the country. **Coral Reefs** are more extended on the Pacific Coast; however, Cahuita, on the Caribbean side, because of its level of development, is the country's most important reef and also the most widely studied.

**Rivers:** Costa Rica is a country of rivers, which are distributed in 34 basins. It is because of this that the country has such enormous potential for the generating of hydroelectric energy. It can be said that there is almost no town in the country where we do not find a river passing through. There are large and small rivers, varying in volume and characteristics. Many rivers of larger volume and swifter waters are being exploited by adventure tourism through activities such as rafting and kayaking.

**Waterfalls:** Thanks to the country's wealth of rivers, combined with its mountainous topography, waterfalls are numerous and are distributed throughout Costa Rica. They are found in enormous variety of form, volume, and height – from majestic and voluminous cascades to delicate trickles of water. Many of these have been integrated into tourist activities.

**Caves, Grottos and Caverns:** Those located in the north of the country are the most often visited, however there is enormous potential in some of the ones found in the country's South Pacific sector.

**Sites for Observation of Flora and Fauna:** In this sense, the country has worldwide renown as an important place for bird watching and the study of marine turtles. Within its territory, Costa Rica has 864 species of birds, this permits that in any part of the country, and all year-round, birds can be observed and studied. As a matter of fact, Costa Rica is the country in the world\* that has the highest "bird species national density" (BSND), a concept developed by Héctor Ceballos-Lascuráin in 1992<sup>42</sup>. BSND is defined as the total number of bird species within a specific country divided by the land area in thousands of square kilometres. In the case of Costa Rica, its BSND is 16.9. Second place in the world corresponds to neighbouring Panama, with a BSND of 12.2.

The country has 14 species of turtles, which corresponds to nearly 42% of families in the order *Chelonia* in the world today, which due to the size of the country is considered very

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\* For countries with a land area of over 50,000 sq km

high. In the group we find 6 marine and 8 terrestrial species represented. Marine species arrive at beaches on the Caribbean and Pacific to deposit their eggs during different seasons of the year, and it is here where tour operators take advantage of yet another possibility for the diversification of the ecotouristic activity: turtle watching. There are also different areas distributed throughout the country for observation of mammals in the wild, especially in the Central and South Pacific region of the country.

In addition, *ex situ* conservation facilities such as zoos, recreational parks, botanical gardens, butterfly farms and rescue centres are available to the visitor.

**Sport Fishing Sites:** The extensive continental platform on the Pacific Coast is one of the determining factors for the wealth in fishing found here. However, the Caribbean Coast also has areas rich in marine resources and of great interest for sports fishing.

**Hot Springs:** Because of the country's numerous volcanoes, hot springs occur naturally in many places, especially in the northern regions. The tourist can enjoy these waters in very diverse ways: as spas, steam baths, therapeutic treatment with clays, etc.

**National Parks and Flora and Fauna Reserves:** There are 150 protected areas in Costa Rica that cover an extension corresponding to 25% of the national territory, to this we must add the 100 private reservations that cover nearly a 1% of the country. Due to this fact, and to the size of the country, it could be said that, from almost any point, you will find a protected area nearby. These areas are as diverse as the biodiversity itself. The tourist has an enormous range of possibilities to choose from according to his affinity. However, not all areas have as of yet, an adequate infrastructure for tending to visitors. This will be analysed in more detail in Section 3.

Visits to a protected area, in most cases and especially so in relation to foreign tourists, is usually associated to a tourist package that includes activities in one or several protected areas, as well as other nearby tourist attractions. In Protected Wilderness Areas, which have set schedules of attention to the public, visitors are, in general, offered walks on nature trails, night treks to observe rare or unique species, camping facilities, environmental lectures, videos related to fauna and wild flora present in the zone, and permanent exhibitions. Visitors not associated to a tour agency generally follow nature trails on their own without a guide or staff member accompanying them.

In these areas wild fauna and flora can be observed to great advantage. Some visitors, for example, come exclusively and specifically for activities such as bird watching, observing marine fauna or the nesting of sea turtles. Details in respect to this were given in the previous section on visitors' preferences.

### **Folklore:**

**Arts and Crafts:** The various regions of the country can be differentiated by their **crafts**. This growing cultural expression is being promoted mainly in answer to demands of tourism, exalting the roots of each region, and permitting the development of the small national and local industry. There are artisans associations in the country at national and

local levels that promote this activity and distribute their products throughout the country. Also, the number of artisans who take advantage of sustainable biodiversity resources and who exploit waste materials as a complement to the vision of a country committed to conservation and sustainable use of its biological resources is growing everyday. At present for example, the visitor is offered very diverse craft manufactured from recycled material coming from the production process of coffee and bananas, Costa Rica's main agricultural products for export, that generate great waste materials quantity.

**Typical Food and Drinks:** Rather than as a separate attraction, typical food and beverages are part of the package tourist are offered. That is to say, in lunches, breakfasts and suppers, typical Costa Rican fare and drinks, alcoholic and non-alcoholic are offered. Among the non-alcoholic beverages, are the typical natural juices that come from the great variety of fruit the country has.

**Ethnic Groups:** As in the case of food and beverages, and very much related to this attraction, in his or her package the tourist is offered the option of visiting and getting to know about national autochthonous cultures; from the county folk of rural areas to the Amerindian and Afro-Caribbean ethnic groups that are a part of Costa Rica's rich heritage. This activity is, for the most part, carried out with emphasis on aspects related to nature and the environment.

#### **Contemporary Technical, Scientific and Artistic Achievement:**

**Crops and Agriculture:** Agroecoturism sites include the growing of, native medicinal plants, native plants as ornamentals, and products grown organically – organic agriculture; also, the growing of traditional crops such as coffee and bananas, Costa Rica's main agricultural products of export. In recent years, the production of banana production incorporated environmentally sustainable methods for the disposal of waste materials, both from the banana plant itself, and from materials used in planting, cultivation and maintenance (e.g., plastic bags, boxes). A great part of this material is now handled as a “by-product”, which is used, as in the manufacture of banana paper, to produce other useful, commercially viable products.

#### **Programmed Events (MICE):**

The events, meetings, conferences and incentives sector is relatively new in the country. As mentioned in Section 1, the country aims to respond to this and other surging segments in tourism worldwide, as well as existing segments through offering of a single product: a clean, green and peaceful country. In other words, promoting the country for the carrying out of events directly related to nature, as well as any other type of event, through offering nature-related activities for participants of said events to enjoy (guided tours, short visits to nearby protected areas, etc).

There have been important international events related to nature carried out in the country. For example, in 1999 the meeting of parties signing the Ramsar Convention was held, the first meeting of the CBD's Access to Genetic Resources Experts Panel was also held in Costa Rica that year.

In June 2001, the “Workshop on Tourism and Biological Diversity”, will be probably held in Costa Rica, with the sponsorship of the CBD Secretary and the German government. In addition, under the framework of the Bilateral Convention Costa Rica-The Netherlands for Sustainable Development, in May 2002 “The 2002 International Conference on Sustainable Tourism” will be held in the country.

#### **2.4 Participation of different Sectors in the National Tourist Activity:**

Civil society is organized in different ways for tourist activity. There are regional chambers of tourism that are integrated to the *Cámara Nacional de Turismo (CANATUR)* “National Chamber of Tourism”; in addition, there is the *Asociación Costarricense de Profesionales en Turismo (ACOPROT)*, and the *Asociación Costarricense de Hoteleros y Afines (ACHA)* “Costa Rican Association of Tourism Professionals” and Costa Rican Association of Hoteliers and Related Concerns”. Touristic micro-entrepreneurs are also organized under the *Cámara Nacional de Microempresa Turística (CANAMET)* “National Chamber of Tourist Micro-businesses” and, as for tour operators, these have their *Asociación Costarricense de Operadores Turísticos (ACOT)* “Costa Rican Association of Tour Operators”.

In the country there are a number of tourist agencies that specialize in ecotourism. Two of the best known are *Horizontes* “Horizons” and *Costa Rica Expeditions*, both with considerable time and experience in the field. These agencies have a working-relationship with both the ICT and MINAE as well as with the private sector.

The ICT has various cooperation agreements for carrying out activities with other State agencies such as the *Ministerio del Ambiente y Energía (MINAE)* “Ministry of the Environment and Energy”, the *Instituto Nacional de Aprendizaje (INA)* “National Institute of Trade Apprenticeship” and *Instituto de Desarrollo Agrario (IDA)* “Institute of Agricultural Development”; as well as with institutions from the private sector such as the *Instituto Nacional de Biodiversidad (INBio)* “National Institute of Biodiversity”.

Communities have formed associations and cooperatives in diverse places throughout the country that have, as their main activity, local tourism. Private reserves, which at the moment total more than 150, and cover 1% of the national territory, rely on ecotourism as their main source of revenue. They carry out their activities in coordination with, and backing from the ICT and the MINAE, in the case of ecotourism, and, in the case of the previously discussed segment of agrotourism, with the ICT and IDA. In the country, numerous and rich experiences are available in both of these activities, especially in ecotourism.

Nature guides have organized themselves in some regions of the country under the modality of associations with the aim of providing better service and give direction to activities such as training. This is one of the co-management modalities in the State’s Protected Wilderness Areas under the State.

Non-Governmental Organizations (NGOs) also carry out tourism activities, many of these with emphasis on ecotourism. There are clear examples of this in the country, led by NGOs such as the *Centro Científico Tropical (CCT)* “Tropical Scientific Center” and the *Asociación*

*Conservacionista Monteverde (ACM)* “Monteverde Conservationist Association”. Additionally, there are NGOs that are dedicated, among other things, to education and the building of awareness on the importance of biodiversity and a sound environment, including within their activities, attention to national and foreign tourists, INBio and the *Fundación Neotrópica* “Neotropic Foundation” being good representative examples of this.

Annually, ACOPROT, with the collaboration of CANATUR, the ICT and other institutions and national organizations carry out, for 16 consecutive years now, EXPOTUR, an annual event that has consolidated itself as the main means for the commercialisation of tourism. EXPOTUR 2000 had a special innovative characteristic of great importance for the development of local touristic activity based on ecotourism and incorporating the natural and typical cultural beauty of each region and the friendly treatment provided by Costa Ricans: **Regional Tourist Circuits**. The purpose was that of conveying, to international buyers the experience a tourist lives when visiting the country. Each entrepreneur negotiated with international wholesale agencies for the first time at his place of word, and his presentation card was the **natural beauty and the warmth of the people**<sup>43</sup>.

At EXPOTUR vendors from the rest of the Americas participate, thus it has become a world-showcase, not just about the beauty of Costa Rica, but also of the rest of America, of regions such as: Mesoamerica, the Caribbean, and North and South America.

CANATUR likewise coordinates with the ICT, ACOPROT and other organizations in the field, the **National Tourism Congress**, the tenth one of which was held in 2000. The congress is a space for the analysis of the situation and course of tourism in the country. A great part of this analysis is presented in this document.

## 2.5 Training in Tourism:

Training for tourist activities is provided fundamentally by the INA, under a cooperation agreement with the ICT; also various state and private institutions collaborate. The INA teaches short technical and specialization courses in the diverse fields related to tourism. In 1999, for example, the INA was able to cover the 5,107 technicians in the sector (2,523 women and 2,584 men). Additionally, there were two “training trainers” courses in areas such as development of personnel, administration skills and efficiency of service carried out. To this we must add the 20 training courses that were imparted in the country’s main tourist regions, directed to the different sub-sectors of the tourist industry (hotel management, food and beverage services), through which approximately 400 people received training<sup>44</sup>.

All nature guides in the country must be trained by the INA to be certified as such, and must be registered with the ICT. Staff of *Sistema Nacional de Áreas de Conservación (SINAC)* “National Conservation Areas System” of the MINAE, especially those who are in activities of attention to the public in protected areas, can opt for the nature guide’s license through an agreement of that institution with the ICT.

As for formal education through public universities, the *Universidad de Costa Rica* “University of Costa Rica”, the largest in the country, offers a Bachelor’s degree in Ecologic

Tourism, at the main campus as well as at regional campuses. There are three private universities that offer degrees, at Bachelor's and Master's level, in diverse modalities of ecotourism: tourism with a focus on management of wilderness areas; ecotourism with a focus on administration and planning; and tourism with a focus on administration of ecotourism. At three para-university level institutions (2 colleges and the *Escuela Centroamericana de Ganadería* "Central American School of Stockbreeding") students can earn an Associate Degree as a nature guide, or in agrotourism management<sup>45</sup>.

ACOPROT is carrying out training programmes, especially in Guanacaste province, with the aim of training persons who live there to fill in tourist positions. Regions such as Guanacaste, a province in the north region of the country with a great influx of tourists, has one of the nation's highest indexes of unemployment, especially among its youth. Tourism could offer more employment opportunities if could count on trained local personnel. It is here where this organization's training programme is aimed<sup>46</sup>.

NGOs such as INBio have training programmes on topics related to biodiversity, as well as on environmental education and interpretation. Currently, INBio aims many of its training activity at travel agencies, nature guides, SINAC staff and members of rural communities throughout the country. Specifically, this non-profit organization has programmed, as of 2001 a permanent offer of courses named *Biodiversidad, Seguridad, Prevención y Rescate* "Biodiversity, Safety, Prevention and Rescue", which will be offered to nature and adventure guides from Costa Rica and from the rest of Central America. These courses have been organized in coordination with the Costa Rican Red Cross and the ICT.

## **2.6 Compatibility of Costa Rican Tourism with International Guidelines in Sustainable Tourism:**

In the nineties, diverse international and regional forums and conventions, in which the country has actively participated, have recommended internationally consented principles and guidelines for the sustainability of tourism. Although meetings of great world importance such as the 1992 Earth Summit in Río de Janeiro did not explicitly deal with the topic of tourism as such, the activity is implicit in the recommendations given in both Agenda 21 and the Convention on Biological Diversity (CBD), which took place there.<sup>47</sup> After this, the topic was analysed in the light of the CBD, specifically, at the Berlin Declaration, and at the fifth meeting of Parties, held in Nairobi, Kenya in May 2000, the results of which are recorded in decision V 1-29.

Despite that world guidelines for sustainable tourism are, generally speaking, known in Costa Rica, as well as in the rest of the world, it has been difficult to make political decisions at a national, local and business level in a coherent and integral way; more difficult still has been the mid and long-term planning beyond the different administrations of government and taking into account the opinion of all involved sectors of society, as well as to favour public rights over private rights in the development of tourism<sup>31</sup>.

However, in general terms, the national course towards sustainable tourism, strengthening what has been accomplished to the moment and generating new initiatives, we see

materialized in efforts for national planning in the sector, and in efforts for conservation and the sustainable use of biodiversity. This will be analysed in more detail in Section 4.

### 3. Overview of Present State of Biodiversity and Planning<sup>48</sup>.

Costa Rica, a geographically small country with just **51,100 Km<sup>2</sup>** of terrestrial area, which represents only **0.03% of the world's total**, is generally considered one of the 20 countries in the world having the highest diversity of species, expressed as total number of species. It is expected that more than **half a million** species will be found coexisting in the country, a figure that corresponds to **4%** of expected biodiversity of species in the world (Table 2 and 3). Costa Rica also possesses a great diversity of ecosystems, and is considered one of the 9 countries with an extremely high diversity of organisms in forest ecosystems in the world<sup>4</sup>.

Its geographic position in the Neotropics, which permits it to receive a great amount of solar energy and have a relatively stable temperature all year long; its geologic history – serving as a biological and geological bridge between Central and South America – permitting the passage, and serving as a filter of species at once; its two coasts; and its mountainous system, which provides numerous and varied microclimates, are in general the reasons for the wealth of biodiversity found (species, genes and ecosystems) in Costa Rica<sup>49</sup>.

The establishing of protected wilderness areas in order to conserve this rich biodiversity constitutes one of the most relevant efforts in matters of conservation in the country. In contrast to other countries, Costa Rica has integrated the management of national parks, wildlife and forests into a single organization, the MINAE's SINAC (Sistema Nacional de Áreas de Conservación). This system is an institutional model that, operating in a decentralised manner, plans and executes integral processes at regional levels, for the sustainable management of natural resources. Administratively, the system is made up of a General Direction and eleven Conservation Areas.

A **Conservation Area** is a countenance of MINAE's-SINAC regionalization and is defined as that territorial unit governed by one and the same strategy for development and administration, where we find an interrelation of both, private activities **that include tourism**, as well as state activities on issues of management and conservation of natural resources, and where sustainable development solutions are pursued jointly with civil society. In this way, SINAC's administration covers all of the national territory, in protected areas as well as in the rest of the territory where exploitation of biodiversity activities and natural resources in general are promoted and regulated<sup>50</sup>. Each area has therefore, a set number of protected wilderness areas, including neighbouring zones. This work is realized in coordination with state institutions and civil society carrying out activities in the areas.

In the 70's, 80's and especially in the 90's the establishing of most of Costa Rica's Protected Wilderness Areas (PWAs) took place, 44% (period of 1971-1990) and 50% (period of 1991-1999) respectively. In recent years small but numerous areas have been established, particularly ones categorized as *Refugio Nacional de Vida Silvestre* "National Wildlife Refuge" mixed and private, *Zona Protectora* "Buffer Zones" and protection of wetlands.

Currently, the country has **25.1% of its territory classified under some category of management**; this percentage protects nearly half the forest standing in Costa Rica.

**Table 2. Diversity of Species (Taxonomic Groups) in Costa Rica**

Source: MINAE, SINAC, INBio. 2000. Country Study Actualization. National Biodiversity

<b>Taxonomic groups</b>	<b>Number of species known in the world</b>	<b>Number of species expected to be found in Costa Rica</b>	<b>Number of species known in Costa Rica</b>	<b>Percentage of species expected in Costa Rica known or described</b>
<b>VIRUS</b>	4.000	8.000	125	1,56
<b>MONERA</b> (bacteria and some micro-algae)	8.276	26.350	213	0,8
<b>FUNGI</b> (macro and micro fungi) <i>Ascomycota and Basidiomycota</i>	72.000	65.000	2.311 <i>aprox. 700</i> <i>aprox. 1300</i>	3,6
<b>ALGAE</b> (macro and micro algae) <i>Macro-algae</i> <i>Micro-algae</i>	40.000	4.350	564  205	13
<b>PLANTAE</b> (plants)	270.000	12.117	10.000	83
<b>PROTOZOA</b> (protozoan)	40.000	8.000	670	8,4
<b>ANIMALIA</b> (Invertebrates):	1.275.000	377.235	71.030	18,8
<i>Insects:</i>	950.000	360.000	66.265	18,4
<i>Coleoptera</i>	400.000	35.000	2.856	8,16
<i>Hymenoptera</i>	130.000	20.000	<i>Approximately 4.000</i>	20
<i>Díptera</i>	120.000	20.000	1.300	6,5
<i>Lepidoptera</i>	150.000	255.000 (10-15% diurnal)	16.000	6,27
<b>Other Invertebrates:</b>		17.235	4.751	27,6
<i>Nematodes (flatworms, important as parasites)</i>	25.000 <i>(more than 800.000 expected to exist)</i>	<i>Nd</i>	88	
<b>Molluscs</b>	70.000	3.275	1.550	47
<b>ANIMALIA</b> (Vertebrates)	45.000	3.012	2.422	81
<b>TOTAL</b>	<b>1.754.276</b>	<b>504.064</b>	<b>87.335</b>	<b>17,3</b>

Strategy. PNUD-GEF. <http://www.minae.go.cr/estrategia>

**Table 3. Vertebrates of Costa Rica.**

Vertebrate Groups	Number of species known in the world	Number of species expected to be found in Costa Rica	Number of species known in Costa Rica	Percentage of species expected in Costa Rica already known or described
Fishes	19.056	1.400 (Osteichthyes –bony fish)	835	59,6
		122 (Chondrichthyes- cartilaginous)	81 <i>781 marine species, 135 fresh water species</i>	66,4
Amphibians	4.184	165	178	surpassed
Reptiles	6.300	220	228	surpassed
Birds	9.040	855	864	surpassed
Mammals	4.629	250	236	94
<i>Bats</i>			112	
<i>Marine mammals</i>			24	
<b>Total</b>	<b>43.209</b>	<b>3.012</b>	<b>2.422</b>	<b>80</b>

**Source:** MINAE, SINAC, INBio. 2000. Country Study Actualization. National Biodiversity Strategy. PNUD-GEF. <http://www.minae.go.cr/estrategia>

Few countries in the world dedicate as much effort towards the conservation of biodiversity, perhaps because they don't recognize the value and usefulness of said effort. Costa Rica is one of the countries in the world that has more than 23% of their territory under some category of management. Two of these, besides Costa Rica, are in Central America (Panama and Belize) and another two are found in South America (Ecuador and Venezuela)<sup>51</sup>.

In 1991, the extension of PWAs was 1,094,413.6 hectares; covering 21% of the national territory, in 1993 these covered 22.6%, with 1,154,945 hectares<sup>52</sup>. The present-day percentage of 25.1 covers **1,291,142.5 hectares**, 44% of which is found in private hands (Table 4). Within this percentage of national territory is found 41.4% of the forest cover the country presently counts on (43.5% in total). The PWAs protect 78% of the types of vegetation native to the national territory.

**Table 4. Extension, Percentage of National Territory and Ownership of Lands in Protected Wilderness Areas in Costa Rica.**

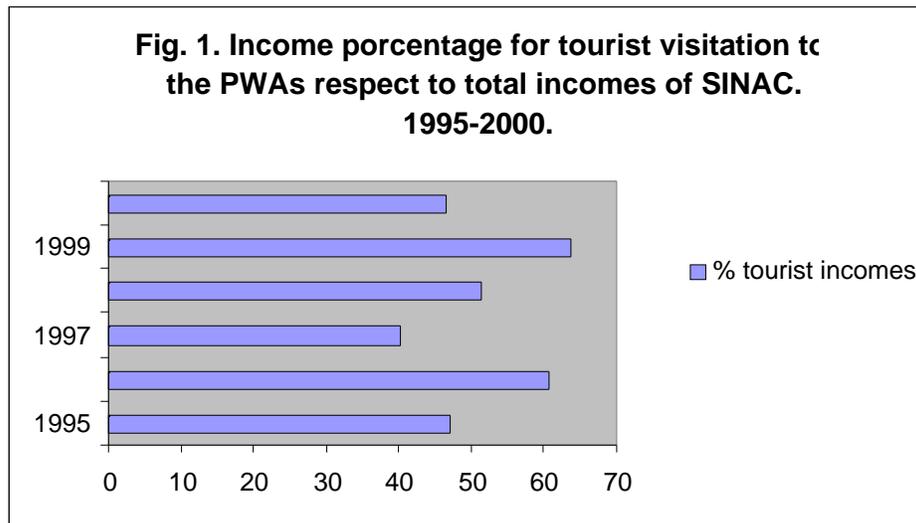
Management Category	#	Area (hect)	Area (km2)	% country	% Prv.Prop
National Parks	25	638.482,0	6.384,82	12,49	15
Biological Reserves	8	21.648,0	216,48	0,42	49
Buffer Zones	31	157.097,0	1.570,97	3,07	76
Forest Reserves	10	206.964,0	2.069,64	4,05	74
Wild Life Refuges	49	175.466,0	1.754,66	3,43	59
Wetlands (includes mangroves)	14	76.177,0	761,77	1,49	88
Nat.Monumt.and Exper. Stat.	2	5.387,0	53,87	0,1054	17 (Nat.Mon
Absolute Nat. Reserves	2	1.420,0	14,20	0,0278	0,14
Other Areas (landholdings)	9	8.501,5	85,01	0,1664	
<b>TOTAL</b>	<b>150</b>	<b>1.291.142,5</b>	<b>12.911,42</b>	<b>25,24</b>	<b>44</b>
				<b>25.1 with no landho</b>	
<i>Note: does not include marine areas and declaration of</i>					
<i>Tapantí-Macizo de la Muerte National park in 1999 is included.</i>					
<i>Priv.Prop.: Percentage of area that is still private property.</i>					

**Source:** MINAE-SINAC. 1999. *Tenencia de la Tierra en las áreas silvestres protegidas* "Landholdings in Protected Wilderness Areas. Version updated to October 1999. Mimeographed. - ACLAP. 1999. Remembrance of the signing of the declaration of the *Parque Nacional Tapantí-Macizo de la Muerte*, 19 November 1999. -Marín, P. October 2000. (interview). SINAC.

### 3.1 Tourist Visitation to Protected Wilderness Areas:

Tourist activity is one of the most important ways of valuing biodiversity and backing its conservation. Both the national and foreign tourist are among SINAC's main *clients*. It is they who currently generate the greatest **amount of resources for the institution**: between 40 and 77% of the incomes of SINAC, are generated by tourist visitation (Figure 1). Because of this great effort is under way for promoting and bettering services (infrastructure, posting of trail signs and development of trails, quality of information, souvenir shops, etc.) that are offered to the visitor in the different protected areas distributed throughout the country. The MINAE-SINAC in collaboration with the ICT and the private sector (NGOs among others), has invested significant funds, coming from this activity and international sources, in disseminating information and betterment of services and facilities. It has also worked on training of personnel to handle the growing touristic activities.

With the aim of using tourism as a positive tool for the management of the PWAs, SINAC has defined as its **general policy** facilitating the development of sustainable tourism based on responsible practices of planning management that are in accord with actions of conservation of the country's natural and cultural heritage. With this policy the country tries to prevent damage to the ecology, coordinate social research and the satisfaction of visitors, provides support to the monitoring of sustainable tourism and is interested in contributing to the country's local economies in general<sup>53</sup>.



**Source:** SINAC, Financial Department. 2001.

There are numerous community projects, already implemented and in the formulation process, that have sustainable tourism associated to protected areas as base for their activity, which are being promoted and count on support and advise of staff from the respective Conservation Area. To get just a mere idea of the number of community projects, there are on average, at least three projects of this sort per Conservation Area (and, due to lack of reliable data, this is very probably an underestimation).

In 1999, protected areas welcomed a total of 866,083 national and foreign tourists (of the total of foreigners, **40% visited protected areas**) that generated more than 700 million Colones (US\$ 2,5 million approximately.) in admission fees and payment of services. These figures are greater than the ones obtained in the last decade<sup>54</sup> (Table 5).

In general, every year since 1992 and until August 2000, between 40% and 70% of foreign tourists visited protected wilderness areas. As for national tourists, visitation to PWAs has experienced a notable increase since 1990; for foreigners, the 94-95 period showed a decrease, this due to, among other things, increased admission fees, a move meant to control the number of visitors, as this was getting to be greater than the carrying capacity of some of the protected wilderness areas. Fees were reduced afterwards, which has resulted in moderate recuperation with dissimilar behaviour, in 1998 it was 56% and in 1999, 40%<sup>16</sup>.

It is important to point out that national tourist visitation to these areas has demonstrated exponential growth. From 1991 to 1994, the percentage of foreign visitors to PWAs had always been greater than that of national visitors. As of 1995 and until August 2000, the situation turned around, the nationals maintaining a difference of 20% more (Table 5). Reasons could be many; one of the most important is perhaps the better assessment on the part of Costa Rican society of the beauty and benefits of these areas.

**Table 5. Visitation to the PWAs. Period of 1996-August 2000.**

Visitors to PWAs	1996	1997	1998	1999	2000 (January-August)	Total
Nationals	389,883	452,680	485,950	495,829	300,327	2,124,669
Foreigners	268,774	290,081	324,148	370,254	219,234	1,472,491
<b>Total</b>	<b>658,657</b>	<b>742,761</b>	<b>810,098</b>	<b>866,083</b>	<b>519,561</b>	<b>3,597,160</b>

**Source:** SINAC, 1999. In: Bermúdez, *et al.* 2000, p: 44; and Gutiérrez, R. 2000. Charts of statistics on number of visitors, residents and non-residents, to the ASPs "Protected Wilderness Areas" from 1999 to August 2000. SINAC-Marketing Department

However, visitation to PWAs is registered, for the most part, only in three National Parks: *Volcán Poas*, *Volcán Irazú*, and *Manuel Antonio*, this due mainly to their geographic location, existing infrastructure and quality of the attraction, which is adequate for the different segments of tourists. To counteract this situation, it is necessary to diversify the offer, strengthen the services and promote the other PWAs in the country, which count on potential of great proportions to diversify the tourist product offered at present; effort that SINAC in collaboration with the private sector is already working on. INBioparque, for example, which has positioned itself as the point of departure to the National Parks of Costa Rica, seeks to promote the 28 PWAs that according to SINAC are most apt for receiving visitors.

The problem of the carrying capacity of the PWAs' ecosystems is a dilemma for which a solution has been sought in each specific case. Research in this respect has been carried out at *Manuel Antonio* and *Parque Nacional Carara*, two of the country's most visited areas.

Research on the characteristics of the ecosystems the country counts on and of possible negative effects tourism could have on these, as well as instruments and means to prevent damage must be reinforced. This calls for a joint effort from universities, the private sector and State institutions such as the ICT and the MINAE, that results in the obtaining of factual information for SINAC's decision-making on the topic.

### 3.1.1 Perception of Visitors to Protected Wilderness Areas<sup>55</sup>:

In order to set differential fees according to the protected wilderness area and the services it offers, a **survey** is carried out in 1999, in the 11 Conservation Areas, where the 25 PWAs were evaluated. This survey permitted the compilation of information about the visitor in relation to the services the area provides, obtain a profile of the visitor and willingness to pay (WTP). A total of 1,409 surveys were practiced on both national and foreigners 18 years of age and over, at the end of their stay in the corresponding Area, throughout the country. Following are some of the results:

**Visitor Profile:** very high level of education, most with university studies; this as much for nationals (47%) as for foreigners (64%). Given this level of education, it is necessary to be

able to count on better-trained personnel and technical information to tend to the requirements of the user.

**How they arrive to the PWAs:** for the most part independently and with friends, secondly there are the excursions and travel agency tours. This shows that users go to car-rental agencies and other means of private or public transportation to visit the areas, distributing benefits. Totally programmed trips to visit the areas are not sought.

**Reasons:** recreation is the main reason, which implies an interest in diversion linked to knowledge on the particularities of the scenic beauty and natural resources, making it necessary therefore to endow the PWAs with more and more varied services linked to the enjoyment of resources. The tourists use mainly the trails, lookout points and lunch areas as well as parking lots and toilet facilities. This demonstrates that, along with dissemination of information services in order to better the quality of experience of visitors, investment should focus on low-investment projects that provide for the user's basic needs and not large infrastructure such as visitor's centres, which, according to the perception of users, are not needed. Services and facilities received, in general, positive percentages in the assessments carried out, but need to be improved.

**How do they hear about the PWAs:** in finding the ideal means of communication with users, this question was asked. The most common answer was word-of-mouth (previous visitors told them), others found out on their own (Internet, books, etc.) and a representative group said they found out, in different languages, through tourist guides. This indicates that in order to have adequate contact with users, the System must strengthen the training and skills of staff attending visitors, and in addition, have ample and available information on the Internet, and finally, provide authors of international guides on the country, reliable and up to date information about the PWAs. Work on this was carried out, with the System's exclusive Internet page. Also, with support from the private sector, NGOs such as INBio for example, more information is being updated and generated every year. In general, good rating is given by the visitor to the oral information received from staff.

**Willingness to pay:** these results showed that regarding the user's willingness to pay, tourist services and quality of natural resources are highly valued. In places of difficult access, but with relevant natural resources, fees can be increased and revenues can be bettered without affecting or diminishing demand.

Results of the survey permitted the identification of investment to improve services, and work on drawing up related proposals is being carried out in the PWAs, which should be financed by sums collected through the adjustment of fees and its implementation as of 2001.

### **3.2 Support to Conservation *In Situ*: Biological Corridors, Conservation *Ex Situ* and the Paid Environmental Services Programme.**

Although enormous efforts for conservation and sustainable use of biodiversity in Costa Rica have been, and are being carried out, actions within the country alone cannot be

depended on. Thought must also be given and action must also be taken at a regional and global level. Central America is renowned as a region of global importance to the conservation of biodiversity, as it carries out a vital function as a biological corridor and, at the same time, acts as barrier between two continental masses and two oceans.

Central America contains approximately 7% of the biological wealth in the world within only 0.4% of the planet's land mass; possesses 8% of the world's mangroves and the second most important barrier reef in the world with a length of 1,600 km; 38% of its territory is still covered by forests. However, deforestation in Central America marches on at the rate of approximately 40ha/hour (averaging 392,000 ha/year); only in 1998, fires destroyed an area equal to the number of hectares lost to deforestation in a period of 4 years<sup>56</sup>. Mexico, considered a mega-diverse country and whose southern states make up part of Mesoamerica, has one of the highest deforestation rates on the planet. This is estimated at between 300 thousand and one million hectares a year, and this country has suffered the loss of more than 95% of its tropical rainforests<sup>57</sup>.

For this and other economic and social reasons, the Central American governments have taken on the challenge of developing the *Corredor Biológico Mesoamericano (CBM)* "Mesoamerican Biological Corridor", which includes the seven countries on the Central American isthmus and Mexico's southern states. This initiative is one of the first experiences in the world in which the countries of the region have come together under different instances, associations and organizations of the government and private sector to promote joint development in favour of conservation and the betterment of the quality of life of its inhabitants<sup>58</sup>.

The CBM has as its objective the conservation of the nuclei of large protected areas that interconnect through narrow, relatively well-conserved or restored-habitat areas called biocorridors. It combines ecologic, social and economic criteria for the design of these corridors at landscape level. Each member country has a point of focus or organization responsible and two levels of action: a national one to strengthen national corridors and another at regional level, participating in joint activities in the region. In Costa Rica the point of focus is SINAC and it counts on a strategic support commission for corridor actions, national as well as regional<sup>59</sup>.

The corridor will be approved through the mapping of ecosystems at a regional level, which is already under way in Costa Rica, among other countries, by the project ECOMAPAS (INBio, SINAC). This project began in 1998 and, at the moment encompasses six Conservation Areas that include more than 80% of the ecosystems found in the country. The work being carried out is developing the maps for these Areas giving a more precise classification system for conservation and land-use planning purposes<sup>60</sup>.

A preliminary diagnosis on the number of corridors in the country gives a figure of 32 initiatives distributed through the national territory with emphasis on the north regions of the country, areas that have small protected areas, especially wetlands<sup>59</sup>.

The benefits of the CBM are applied at two levels: **global benefits and regional-local benefits**. Globally speaking, it strengthens work on conservation of vulnerable ecosystems

and endangered species through developing methods and instruments for management of species and land-use planning as well as the creating of carbon sinks through reforestation.

The **regional-local** benefits of biological corridors are found in the generation of revenue and jobs, the sustainable management of forestry resources, reduction of vulnerability to natural disasters, potential for development of ecotourism, information management and dissemination for different users and institutional development of the Conservation Areas.

In Costa Rica, most wild species **conservation centres *ex situ*** are in the hands of the private sector with a very diversified level of support on the part of the MINAE-SINAC, and scant coordination between them and the MINAE. A small percentage carries out research with the aim of re-introduction, and most are financed through monies received from the admission fees charged to students and the general public<sup>61</sup>. **Tending to the national and foreign tourist is part of their routine daily operations.**

Based on information that is on hand at the moment, the Conservation Area that has the largest number of these centres is ACCVC, which encompasses the Central Valley, followed by ACOPAC (Central Pacific) and ACAHN (north zone of the country). Public universities and institutions such as the *Ministerio de Agricultura* “Ministry of Agriculture” have *ex situ* facilities with the purpose of research in agriculture.

**The Paid Environmental Services Programme (PES):** the PES consists of **compensation** (payment) to owners of forestlands (forest and forest plantations) for environmental services that these areas provide for Costa Rican society specifically and the global community in general. It is an instrument of innovative policies that besides is expressed through a law. This is very significant to both the environmental policy and the economy because for the first time it is acknowledged through national law that forests provide goods and services apart from wood and lands for agriculture which must be paid for, and the assessment of which must be carried out adequately, although for many of these there is as of yet no traditional market<sup>62</sup>.

The different ecosystems offer diverse services that provide local, national and global benefits. In Costa Rica, recognized for the PES are: mitigation of greenhouse effect gases, protection of ground waters for urban, rural or hydroelectric use, protection of biodiversity with the aim of sustainable use and the maintaining of natural scenic for touristic and scientific purposes. The modalities or categories under which, at present, owners of forests and forest plantations are paid for these services are: protection of forests, reforestation, management of forest and established plantations.

The mean importance of this system is the opportunity it offers owners of obtaining direct benefits for conserving or adequately managing forests on their property. Thus, conservation and sustainable use on private lands is being promoted as a complement to efforts that have been made in protected wilderness areas.

Thanks to the PES in 1999, for example, and only through the Protection of Forests modality, forests under private protection covered 3.8% of national territory.

The size of areas that have been included in the PES range from one hectare to more than 300 ha, and can be requested by individuals or groups (organizations)<sup>150</sup>.

Economic resources for the PES come from international cooperation, sale of services carried out at national or international level, and mainly from one third of the revenue collected through a tax levied on fossil fuels. This because it is the premise that **he who contaminates, pays**: production and use of gasoline contaminates the air and this has a cost, taxing this product produces funds that are invested in payment for environmental services for the conservation of forests, which, among other things, clean the air through the fixation of gases, acting as carbon sinks.

### 3.3 Organization of Civil Society for Conservation:

It is necessary to point out the *in situ* conservation efforts that have been carried out by the private initiative in recent years. A programme aimed at establishing a **network of private reserves**, which was begun in 1995 and to date (1999), comprises nearly 1% of the national territory, this corresponding to 100 reserves distributed throughout the country (nearly 50% are found in two provinces). This network is established as a non-profit entity. Most of the associated reserves (60%) are involved in **ecotourism activities**, 33% are dedicated to protection and 7% to research and other uses. Financing, in most cases, comes from donations, loans and private investment<sup>63</sup>.

There are different modes for volunteer work<sup>64</sup>; one is the *Comités de Vigilancia de los Recursos Naturales, COVIRENAS* “**Committees for the Surveillance of Natural Resources**”, which, since 1992, carry out different support tasks for conservation such as control and surveillance work (fires, poaching; illegal hunting, fishing and timbering), reforestation, care of springs, cleanliness of rivers and beaches, education and awareness for tourists and students, specially in areas adjacent to protected areas and their surroundings. They also actively participate in training and consultation workshops carried out in the regions. To 1997, the movement brought together more than 1,500 persons, grouped in 100 committees, representing 44 cantons.

Since 1997, we find the *guardarecursos* “**resource watchers**”, also there are brigadistas “**brigadiers**”, who collaborate, specially, in fire control and *voluntarios* “**volunteers**” who support work in the PWAs, the latter coordinated by the *Asociación Nacional de Voluntarios (ASVO)* “National Volunteer’s Association”. Up to 1999, there were 706 brigadiers, organized in 62 brigades in 6 Conservation Areas.

At **NGO and other modes of local community organization** level, the relationship between these and the State grows ever stronger and continues growth in the different regions of the country with the aim of carrying out joint work of mutual benefit that has as its goal the conservation and sustainable use of natural resources. Clear examples of great experiences can be found especially in the *Área de Conservación La Amistad Caribe (ACLAC)* and *Pacífico Central (ACOPAC)* – “Conservation Areas”.

Another possibility for the participation of civil society lies in the country's legal framework, which defines the creation of formal mechanisms for participation and decision making, such as the **local and environmental regional committees** in each conservation area, with the participation of community, private and state sectors. In order to avoid duplication of effort, MINAE is currently working on the integration of both modalities, local and environmental, into single, regional entities.

**National level NGOs** also have a fundamental role that complements and strengthens SINAC's work. There are strategic alliances established by SINAC with organization from civil society and companies in the private sector, one of the most relevant being with INBio.

### **3.4 Legal Framework for Conservation and Sustainable Use of Biodiversity:**

Costa Rica counts on a heterogeneous legal framework that has permitted advancement in conservation and sustainable use of biodiversity. This framework translates into nearly 245 norms (only laws and decrees related to the topic) proclaimed in the period 1993- March 1997<sup>65</sup>. There was a significant increase in 1994 (44%, 109 norms), due to, among other things, the national policy for sustainable development, which impelled conservation efforts in the country, and to the ratification of international conventions of great importance such as the one on Biological Diversity and the one on Climatic Change. That year, 30 protected wilderness areas were established (22% of the 134 created by decree) in different categories of management, nearly half of these were wetlands (86% of all existing to October 1999)<sup>66</sup>.

From 1998 to 1999, 12 decrees related only to the creation or expansion of protected wilderness areas, and 3 related to endangered species (bans and lists of species) were produced. In 1998 the *Ley de Biodiversidad (N° 7788, de 1998)* "Biodiversity Law", first of its kind in Mesoamerica and it could be said, in the world, was approved.

Given the complexity of biodiversity and its comprehensive nature, there are many norms that are related. These encompass a varied spectrum of themes and topics, some being socio-economic and cultural in nature, including tourism, while others are of scientific-technical and of general management character. Also, these can be at national, regional (Central America and America) or international (world conventions that the country has signed and ratified) levels.

### **3.5 Trilogy of Save, Know and Use: National Conservation and Sustainable Use of Biodiversity Strategy and the Convention on Biological Diversity<sup>67</sup>:**

The Convention on Biological Diversity (CBD) was signed by Costa Rica at the Rio Summit held in 1992 and was ratified in 1994, when it was constituted as Law of the Republic. As of that time, the MINAE formed a national advisory committee on biodiversity that, among other things, became the Convention's point of focus in the country. This commission was dissolved in 1998 and the point of focus was passed on to SINAC-MINAE. The Biodiversity Law proclaimed in 1998 aims to better adapt the Convention to national reality and to

integrate the management of biodiversity through complementing and filling in gaps existing in other related laws such as the Wildlife Law and the National Parks and Forestry Laws.

Also product of the effort of compliance with the CBD and the Biodiversity Law, the *Estrategia Nacional de Conservación y Uso Sostenible de la Biodiversidad (ENB)* “**National Conservation and Sustainable Use of Biodiversity Strategy**” was developed through a very participative process at national and local levels, by Area of Conservation. This took place in the period 1997-1999, with financing from the Global Environment Facility (GEF).

The ENB is a framework for directing national policies on biodiversity, based on the trilogy: **Save, Know and Use**, cornerstone of the World Conservation Strategy (1992) and the CBD, with which the country has identified and applies since the late 80’s. It was reached through integration of local needs by Conservation Area. Each area has its own local strategy. Following this same methodology, and as topics that complement one another very well, the MINAE-SINAC developed in almost parallel manner, the *Estrategia Nacional de Investigación* and the *Estrategia de Educación Ambiental* “National Environmental Research and Education Strategies” of which each Area also has its own respective local strategy.

The ENB establishes general multi-sectorial topics that relate to all socio-economic activities in Costa Rica such as agriculture, animal husbandry, industry, commerce, forestry, fishing, scientific research and tourism, among others. Conservation and use of biodiversity must be looked at as part of each sectorial activity, and will succeed insofar as the sectors implement integrated action, it being everyone’s job.

This is why formulation of the ENB at Conservation Area level included participation in diverse workshops of all sectors involved in management of biodiversity. In this manner, local strategy responds to the needs of all the sectors that together with SINAC-MINAE staff diagnosed the different issues and defined solutions within a five-year period. The ENB integrated the common denominators of all Areas and complemented these with specific topics through workshops with national experts and workshops for consultation of the final draft. Specific issues for which strategic matters and a plan of action are established are analysed in Section 4.

## **4. Relationship Between Development of Tourism and Conservation of Biodiversity: Problems and Efforts for Finding Solutions.**

### **4.1 Gaps in the Relationship Between the Tourism Sector and Conservation:**

Because ecotourism has been the hub of touristic activity and base of the national economy, it is difficult to analyse the relationship between the tourism sector and conservation without looking at these in an integral manner within the socio-economic framework. It is for this reason that the following diagnosis of the tourism sector focuses on all facets of this issue, but with emphasis on environmentally related matters.

Annex 1 presents details of aspects that do not directly relate to the environment.

#### **4.1.1 Diagnosis of the Tourist Sector:**

Despite the fact that an ecotourism policy has been in place and has been strengthened for decades and through several government administrations, one of the main challenges the country faces is the abandoning of the short-term vision and concentrate efforts on mid and long-term development policies without being pressured by the change a new government administration (presidential term) represents<sup>68</sup>. With each change of government, changes are expected and these are not necessarily for the best. In most cases there seems to be a need to do something different than what the corresponding predecessor did.

Also, according to some experts, the paternalistic system has not permitted the country to become fully integrated in the economy of our globalised world. Investment in tourism, and this applies in general to all sectors, is not what it was hoped to be due to State policies such as taxes, State and autonomous institutions that are highly bureaucratic and lack the adequate instruments for growth, where coordination with other State institutions and the private sector is not the rule, reasons that they become inefficient. There is fear of opening and of change too and also corruption<sup>69</sup>. All this implies consequences for the tourist sector, for conservation and the relationship between the two.

Following is the diagnosis in relation to tourism given by the Estrategia Nacional de Biodiversidad (ENB), after carrying out a SWOT\* analysis.

##### **4.1.1.1 Strengths, Weaknesses, Opportunities and Threats (SWOT), in the Tourism Sector:**

Perceived **weaknesses and threats** in the tourism sector are: the poor infrastructure of support to tourism (paths, signposting and tourist information), poor management and attention to the visitor (trail systems, visitor centres, lack of trained personnel, visiting schedules, toilet

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\* strengths, weaknesses, opportunities and threats

facilities, etc.), a relative lack of attractions in urban centres, adding to this the lack of consideration of those who litter and those who contaminate the air with emissions from the engines of their vehicles, in sharp contrast to the country's perceived caring for nature; the fixed and deeply rooted perception among the tourist sector (both private and State) that during the rainy season you cannot make any sales, and the resulting lack of concerted effort towards aggressive marketing during this season. Also the scarcity of historical/cultural monuments preserved to be highlighted in juxtaposition with ecotourism<sup>70</sup>. The importance of preserving historical, architectural and other cultural elements was not, until a decade ago, an important part of the government administration's concerns. A consequence of this poor assessment has been the loss of many of these valuable elements and the erosion of national cultural traditions.

Mr. Roberto Artavia, from INCAE<sup>71</sup>, in his strategic diagnosis of tourism in Costa Rica, establishes that investment is greater in the tourist sector than in other sectors of the national economy. Tourism is the best engine for development that the country has; the value added tourist dollar is more democratically distributed and the sector offer opportunities for participation of all social strata and sectors. He adds to the aforementioned list of **weaknesses** some other key points where there are problems for the development of tourism in the country:

- The schooling of professionals and technicians in tourism must be intensified, expanded and modernized, making it consistent with the national positioning as a destination for ecotourism. Efforts in this respect are being carried out on several points both, by the private sector as well as by the State in a coordinated manner thanks to agreements made by the ICT with private organizations and State agencies.
- Adequate environmental legislation must be impelled and bettered. Penalties and fines for environmental damage caused by production activity, including tourism are at this time ludicrous. Additionally, economic interests many times overrule technical criteria and recommendations on the building or not building of tourist infrastructure at a set place; depending more on particular interests, environmental impact studies are frequently not heeded to. Control and follow up of these activities, as well as coordination to implement and see them through are not efficient. Some reasons for this are a lack of mechanisms for coordinating inter-institutional and inter-sectorial activity, as well as an awareness as to the importance of coordinating said activity, lack of personnel and training on the part of the MINAE and the Department of Justice, as well as by municipalities.
- Of the productive sectors, the ones demonstrating the greatest lag are the tourism attractions themselves (protected areas, museums, entertainment, sports and recreational equipment rental, casinos, gifts and *souvenirs*) and transportation (airlines, car rentals, taxis, collective transport, cruises, aquatic transport), for in lodging, food services and promotion of service there is clear and consistent headway that is in tune with aspirations for growth.

The tourism attractions sector (or tourism resource base) has not, as of recent, demonstrated significant long term investment of any sort and access to existing investment has experienced little betterment, moreover, at international level, disturbing

tendencies, such as gambling and sexual tourism have surfaced. In this sense, the Government is investing funds in promotion against tourism of this sort.

As for protected areas, SINAC in coordination with NGOs has invested as never before in the promotion of the different and numerous protected wilderness areas in the country and in bettering the infrastructure for attention to the public. This effort has had its positive impact, as was shown by the survey on tourist's perception, on international tourism but more so and especially on national tourism, as reflected by the number of visitors to the PWAs presented in Section 3.

Despite the fact that the ICT and the national airline, LACSA were the two biggest promoters of ecotourism in the country in the 80's and 90's and, at present, still are, the ICT has maintained a relatively weak relationship with the MINAE. The Institute has not been involved in the planning of protected wilderness areas (expansions, protection of buffer zones, and any other topic related to ecological aspects of protected areas). There have been occasional conflicts over hotel infrastructure in and around protected areas and in general on the topic of how to define ecologically friendly tourism<sup>72</sup>.

Also, there has been a certain amount of rejection on the part of SINAC-MINAE staff insofar as their function of attention to the tourist and on the role tourism plays in conservation of protected areas. Before the 80's, the PWAs were looked upon as little glass boxes, which must not be touched nor tampered with. Consequently, this vision towards "Saving, Knowing and Using" biodiversity has been, for some of the staff, difficult to accept.

The process of formulating the *Estrategia Nacional de Biodiversidad (ENB)* "National Biodiversity Strategy", as will be seen further on, also very clearly identified problems in general coordination, awareness attitude and management of environmental impact.

As other **threats**, we could mention the apparent complacency with the perception of Costa Rica as an established ecotourism destination that prevails in the country and the consequent lack of effort to enhance and perfect this perception, setting the country on course as a future clean, green and peaceful destination. Also, lack of national awareness as to the importance of tourism and issues of national safety could be mentioned here<sup>67</sup>.

In speaking of **strengths and opportunities** that the country portrays we can mention: its wealth of biodiversity and natural resources within a small territory; a great image/perception as an ecotourism destination that is well established on the world market - providing eco-stations / reserves / shelters for nature research, an activity Costa Rica pioneered in the world. The potential of being able to combine any touristic activity with nature to take advantage of new segments of the market that are opening up, the tourist industry's high environmental awareness towards ecotourism as well as relatively speaking, among the general population and the hospitality of the Costa Rican people<sup>73</sup>. We can top this off by mentioning the country's stable political climate as a peaceful democracy.

Many communities are becoming important comptrollers of productive activities that have to do with the biodiversity and natural resources in their region. In several of these cases, productive projects, including tourist projects have had to cease operation or be discarded

because of the community's imputation that these are not heeding to or abiding to the expectations for conservation and sustainable use that are promoted in the country.

To this we can add the vast amount of information that has been compiled on the country's biodiversity, which is presently available in different formats, and of great importance to the tourism sector, users and decision makers as well, including communities and the tourist him or herself. This information is the product of research efforts of public universities, State institutions such as the *Museo Nacional* "National Museum" and of NGOs that have specialized in this area. This will be considered in more detail in Section 4.2.

In spite of problems, and compensated by the strengths and opportunities, **foreign investment**, especially in tourism, is coming into the country as it never has before. By 2000 investment in tourism had multiplied eightfold in relation to 1999 levels<sup>74</sup> (xxx is this correct? It seems too much for a one-year period - HCL). This has permitted visualizing, even further, pitfalls that are still to be solved and the effort that, in general, is being carried out and must be completed in order to overcome them (in the area of the relationship tourism-conservation, efforts are presented in Section 4.2.). The X National Congress on Tourism, held in 2000, made for a new analysis in this sense (Annex 1).

As one of the conclusions resulting from this Congress, CANATUR's President, Mr. Rubén Pacheco, summarized the main topics considered, where he highlighted the need to strengthen and make uniform the congruency between the image which is promoted of a country with an interest on conservation and reality<sup>75</sup>. In this sense, a more multi-phased tourism, but one always presenting a keen focus on nature, has been marked as the course to follow and is considered the key to success in this activity.

#### **4.1.1.2 Diagnosis of the Tourism Sector in Accord with the National Biodiversity Strategy:**

According to the diagnosis obtained in formulating the National Biodiversity Strategy<sup>76</sup> in 1997-1999, an analysis of tourist activity especially within Conservation Areas, brought to light the following main aspects where problems in this sector, and other national productive sectors can be found and must be solved in order to effect conservation and sustainable use of biodiversity. These identified problems were the following:

- **Education and Public Awareness:** efforts in environmental education in the past did not put forward conservation of biodiversity and socio-economic development as components of a single process directed at bettering quality of life for the Costa Rican people. Efforts to make known the need to conserve natural resources and opportunities for its sustainable use, on formal and non-formal levels education, has not reached the whole of the population, is not articulated and responds to different interests and initiatives. Community needs of integrated programmes where "doing" would be part of the education process are not addressed. The result of this is a society that does not yet value biodiversity resources adequately. Work is not being carried out with the same intensity as it is with children, with priority groups such as fishermen, agro-industrialists, tourism and forestry

entrepreneurs among others who depend on natural resources, but who, at the same time have an impact on biodiversity and the local economy.

Being that national tourism activity depends, in great measure, on the state of its natural resources, the process of environmental and biological education, on a national level, must include the tourist sector. An awareness of the value of, and the right to a sound and healthy environment as established by the constitution of the Republic should be promoted in the sector at all levels. This is the reason that NGOs such as INBio are collaborating with the ICT, CANATUR and ACOPROT in training programmes so that these include conservation and sustainable use of biodiversity components. INBio's INBioparque is being used as a very important instrument for the promoting of civil awareness on these issues.

- **Inter-sectorial Coordination:** there is no effective integration of the different sectors for sustainable management of biodiversity. There is greater appropriation of the topic in civil society than within the State's institutions. The spaces that State institutions count on for planning, coordination, participation and co-responsibility of environmental management with civil society are yet to be consolidated.

There are still activity coordination problems between the ICT and the MINAE, and between tourism entrepreneurs, chambers of tourism and Conservation Areas, especially in aspects that concern planning.

- **Information:** information on the country's biodiversity, its state, its characteristics, are not to be found either systematized nor in formats adequate to the needs of different social groups. Neither have channels for establishing links between producers of information and users, nor for integrating these to the production process.

However, systematisation and generation of information efforts on biodiversity for the tourism sector, as much for tourists, guides and travel agencies as for decision-makers that have been carried out by the State and by the private sector, have proven that they have been resulting to be very significant. Examples are presented in Section 4.2.

- **Control and Monitoring of Environmental Impact of Productive Activity on Biodiversity–Land-Use Planning:** insufficient institutional capacity in the Conservation Areas for follow up of assessments of environmental impact and application of prevailing norms. There is a lack of information on the environmental impact of the different productive activities on biodiversity and of mechanisms to evaluate this impact. To this we must add the inefficient coordination existing between state dependencies, local governments and communal groups. Legal processes for indemnifying negative impact on the environment are still lengthy and penalties do not compensate damage to society. Instruments for regional planning are insufficient or faultily applied, which becomes one of the most important flaws in the management and use of lands.

Under this topic are combined several of the aforementioned problems. Development of physical tourist facilities and related structures, especially in coastal areas, has been on a gradual increase in the last 10 years. Some of these tourist developments have caused

destruction and deterioration of the environment, as much on land as to the marine ecosystems in these areas. To minimize tourism impact, appropriate coordination of official plans for land use that have been drawn up in a participative manner, respect of the law and a heavy hand on the part of the State when it is disobeyed, are required, as well as training and enhancement of environmental awareness. There is effort under way in all these areas, but the work that needs to be accomplished is enormous and said effort must be constant and diligent

One specific case of great importance in national jurisprudence, which should be mentioned, is that of the case against a tourist developer who during the construction phase caused great environmental damage. The trial was won by the State and the company had to pay indemnity, which, despite it did not compensate for the damage done, is a valuable precedent. In denouncing this matter there was participation of the community, the MINAE and several NGOs.

The *Bandera Azul* “Blue Flag” and the *Certificación de Sostenibilidad Turística* “Certification of Tourism Sustainability”, as well as the effort made in the study for land-use planning in the country’s coastal zones (for two of the 9 existing units of touristic planning) for the ICT, carried out jointly by the ICT and the Government of Japan are examples of actions in this direction. Details are provided in Section 4.2.

- **Payment for Environmental Services and Incentives:** the state’s capacity of financial reply does not cover the amount required for payment of environmental services; neither have any internalisation of cost mechanisms for the cost of several of these services been established. Additionally, non-sustainable production practices are being stimulated, practices which, in many cases, are promoted solely considering their economic impact (subsidies for fishermen, hotel exemptions, etc).

As analysed in Section 3, payment for environmental services has been an instrument of great importance for conservation and sustainable use of biodiversity. Many farms, under this system carry out ecotouristic activities, or are farms that protect rich forests that make up part of the Costa Rican landscape, which the tourist can enjoy, and which, at the same time provide other important environmental services such as the maintaining of forest cover, water springs and conservation of flora and fauna.

With the aim of improving the efficiency of the tourist industry, and eliminating privileges, article 11 of the *Ley de Incentivos para el Desarrollo Turístico (No.6990, de 1985)* “Law for Incentives for Tourist Development”, was abolished. This article allowed companies to deduct from their corporate income taxes 50% of sums invested in tourist activities. This measure is desirable to make effective the government’s policy of rationalizing the granting of incentives, above all in those cases of companies that have been taking advantage of the benefit for several years.

To this we must add administrative capacity, where the developing of national capacity for adequate management of biodiversity in all sectors and at all levels is basic; management of coastal-marine resources of great touristic potential, which, at the same time have been threatened and deteriorated by tourist activities in several zones in the country; and conservation *in situ*, which refers to protected areas.

For each of these topics, the ENB establishes a line of action and activities with priority on five-year terms, where the tourist sector is a key factor. In the Strategy, ecotourism with ample participation by civil society and in coordination with the State sector is visualized as the main tourist activity to be developed and strengthened for conservation and sustainable use of biodiversity.

Efforts under way in the country, by both the private and public sectors that are described in Section 4.2, are on course towards sustainable tourism.

## 4.2 Ongoing efforts to solve the gaps:

The trilogy **Save, Know, and Use**, base for the national conservation policy presented in Section 3.4, clearly establishes the close relationship that exists between conservation and sustainable use. Tourism is immersed in this strategy within the component Use, as are the rest of productive activities being carried out in the country. Tourist activity has been gradually becoming amalgamated to this national policy of biodiversity conservation, through which the country has positioned itself in the world.

The ICT's policy has had as its emphasis, for the last two decades, the promotion of the country as a nature destination. As we previously mentioned in the section on visitation to wilderness areas, 40% of international tourists are considered nature-based tourists, be they active or passive, who are conscious of the quality of the environment and are sensitive to its deterioration. However, this percentage could be much larger if results of the ICT survey on tourists' perception of the country are taken into account. This type of tourism, as well as adventure tourism, and even the sun and surf modality, which is the preferred type of tourism in the country, are all closely linked to nature. Environmental damage suffered, be it in coastal zones or at sites in the interior, due to poorly planned tourist activities and other productive activities have a serious negative impact on conservation of biodiversity and therefore also affect tourism<sup>77</sup>.

It is for this reason that Costa Rica is staking its lot on **sustainable tourism** promoted at international level, as the only possible way of development that gives countenance for the future. The key factor for success for Costa Rica's tourism sector is **sustainability as much of tourism activity as of natural resources**. In this scheme of things, the State plays the role of **coordinating entity and regulator of projects and programmes** that provide incentives for as well as promote and generate a real need of the sustainable model as part of environmental, business and local participation schemes<sup>78</sup>.

As part of sustainable tourism, Costa Rica seeks an activity where there is **better distribution of resources** in the different regions of the country and directly involves rural communities. It also seeks to reduce to a maximum any **environmental impact** the activity might have and extend practices of sustainable use to other areas related to the sector; agroecotourism is a good example of this. Currently, 65% of hotels have less than 40 rooms; this represents 46% of the total offer of available rooms in the country, and 75% of tourist ventures are in rural areas<sup>79</sup>. Future development will complement this offer, as it is considered (see Section 1) that

hotels with more than 100 rooms, and of at least 4 stars are necessary to fill the demand of the new segments of tourism; however, as was pointed out, always within a sustainable tourism focus.

The rich biodiversity and the small size of the country facilitates nature-oriented travel; tourists can go from one place to another without having to travel vast distances, this permits development of **regionalized tourist projects**, through the previously mentioned **Community Tourism Development Programmes** which has already been implemented and will promote a better distribution of revenue and benefits produced by tourism<sup>80</sup>.

In order to attract both the tourist and the investor, the actions of the country<sup>81</sup> are being focused on the strengthening of Costa Rica as a **destination of world preference, offering a clean, green and peaceful country** (Table 1). To achieve this, efforts are being directed on promotion against sexual tourism, professionalization of the activity at all levels, which includes signing conventions with institutions such as INBio in order to strengthen training, elimination of excessive taxes and of privileges, providing security for the tourist, creating a tourist police jointly with municipalities, betterment of infrastructure – including substantial changes at Juan Santa Maria airport as of 2000, and environmental protection through strengthening of the programmes *Bandera Azul* “Blue Flag” and *Certificación de Sostenibilidad Turística* “Certification of Touristic Sustainability”.

These programmes are placed within sustainable tourism policy with the aim of controlling **the environmental impact** of tourist activity as they are complemented by the development of the study for the *Plan de Uso de la Tierra en las Zonas Costeras para el Desarrollo Turístico Sostenible* “Land-Use Plan in Coastal Zones for Sustainable Tourism Development”, carried out by the Government of Japan and the ICT in coordination with the groups involved.

In this sense, MINAE’s Secretaría Técnica Nacional del Ambiente (SETENA) has also undergone important changes within the last two years, structural as well as of personnel, this with the aim of performing satisfactorily, in regard to capacity, promptness and coordinated follow-up in its function of controlling the environmental impact, as much of tourism as of the other productive sectors of the country.

All national efforts described following are in accord with international policies given in forums at conventions such as the CDB and Agenda 21. Additionally they have been encompassed by regional conventions such as the Alianza para el Desarrollo Sostenible en Centroamérica (ALIDES) “Alliance for Sustainable Development in Central America”, as well as by the national policies established in the ENB.

#### 4.2.1 Blue Ecological Flag:

The *Bandera Azul Ecológica*<sup>82</sup> “Blue Ecological Flag” programme was established in 1996 by Executive Decree, -*Decreto Ejecutivo 27010 MINAE-S*-, in coordination with the *Instituto de Acueductos y Alcantarillados (AyA)* “Institute of Water and Sewers”, *CANATUR*, the *Ministerio de Salud* “Ministry of Health” and the *MINAE*. It has as its main objective the organizing of coastal communities for administration and surveillance of the sanitary quality

of Costa Rica's beaches to guarantee that tourists can count on beaches with adequate sanitary and environmental conditions, as well as measurement of sustainability of tourism indicators, permitting corroboration that the country is heading towards sustainable touristic development<sup>83</sup>. The goal is to have more competitive beaches, better environmental protection and security for the tourist. Sun and surf tourism is the main reason for tourist visits according to the survey presented in Section 2.3.1.

Among the aspects evaluated to award the flag are: the quality of beach waters, bacteriological condition of water meant for human consumption, posting of signs that warn about risk zones, solid and liquid waste management, and educational activities that build awareness on the importance of a sound environment. Categories are assigned, the highest being triple A. This is assigned when, in addition to the former there are: special features for disabled persons - facilitating access, for example, first aid, tourist information centres and fulfilment of camping norms. One A is awarded when minimum sanitation requirements are met.

There is ample dissemination of beaches receiving awards, and monitoring of these is maintained. The programme has created more than 50 Blue Flag committees that oversee maintenance and betterment of the quality beaches. In 1999, 57 beaches were evaluated, of these, 27 qualified. In 2000, 69 beaches voluntarily submitted to assessment and 35 received the Blue Flag's category of A, of these, 3 received an AA and one was awarded the highest category, AAA<sup>84</sup>.

The programme is a small sampling, for, as has been mentioned before, the country has 380 beaches; however, as they have not all registered for the programme, not all are visited. It is not, necessarily, that they are contaminated, it is probably a matter of organization, as to take steps to enrol in the programme, and it is necessary that the community be organized to carry out cleaning and maintenance tasks of respective beaches. On the other hand, some of these beaches are known to be polluted and therefore have not submitted to the programme<sup>81</sup>. It must be pointed out that many of the beaches included in the programme are those that have the highest visitation in the country.

Some beaches have received the award for the fifth consecutive time, or have moved up to a higher category.

Some benefits obtained through the programme are the conservation of aqueducts, better water quality, microbiological analysis of numerous beaches, active community participation, which especially includes schools and high schools and a better assessment of resources for their conservation<sup>81</sup>.

#### **4.2.2 Certification of Touristic Sustainability (CTS):**

Through this programme, created in 1998, the country offers a new way of competing, of turning the concept of sustainability into something real, and it is considered as the only way of competing in the new century. Costa Rica's present Minister of Tourism clearly explains why this is so with the following words: "*History has shown that a quality destination is forged not just by bettering the condition of the more visible factors of the industry, such as hotels, food services and promotion, but also with public safety, the attractions, the*

*environment, the local communities and training among other things. Integral strengthening results in a wholesome and balanced tourism in its economic, social and environmental aspects that opens new possibilities of attaining competitive advantage*<sup>85</sup>.

The CTS is a distinction that certifies that the tourist entrepreneur that has it, regardless of the number of rooms or whether his establishment has stars or not, is sustainable in terms of minimum impact on natural, cultural and social resources of the area where he is carrying out his activity. It is the aim of this certification to recognize and differentiate the effort of ventures that have implanted programmes that are in line with sustainability. For facilities that have certification of quality through stars, this results an important complement, and for those that do not, due to, for example, their number of rooms, it is a means to obtain certification of great value. The programme is voluntary, and has been recognized by WTO as one of the programmes that is working toward modifying, and bettering, the way of carrying out tourist activity.<sup>52</sup>

The *Decreto Ejecutivo N° 27235-MEIC-MINAE* “Executive Decree” provides the legal framework for administration of this certificate. It establishes the *Comisión Nacional de Acreditación* “National Accreditation Commission” as the agency responsible for awarding the CTS, and carry out reassessments. This is a multi-sectorial commission with representation from both the State (ICT, MINAE, INA and *Universidad de Costa Rica* “University of Costa Rica”), and the private (*Instituto Centroamericano de Administración de Empresas (INCAE)* “Central American Institute of Business Management”, *Consejo de la Tierra* “The Earth Council”, *Unión Internacional para la Conservación de la Naturaleza-sede regional (UICN)* “International Union for the Conservation of Nature-Regional Headquarters”, *INBio*, and *CANATUR*) sectors related to the field.

Of the 1,671 establishments in the country, 49 have obtained CTS certification, another 11 have been certified, but are waiting notification from the MINAE on their situation in the respective Conservation Area (whether there are any legal matters pending)<sup>86</sup>, and 110 are under study<sup>87</sup>. This makes for nearly 10% of the hotels in the country that have been tended to in two years of operation. In order to achieve better impact of the programme, its promotion is being strengthened by letting its advantages be known, as well as by bettering coordination among related institutions responsible for its function.

Within the international certification of sustainability market, the CTS can be compared to the Green Globe 21, based on Agenda 21, which is considered the only internationally recognized world programme that certifies travel and sustainable tourism in the 21<sup>st</sup> Century. Both programmes are considered to be very complete, in relation to the other 6 in the world (KDA-Haiti and Dominican Republic, ITR-Spain, ICOIBEX-Switzerland, Green Suitcase-Germany, NEAP-Australia, AEM-Austria)<sup>88</sup>.

#### **4.2.3 Generation and Dissemination of Information with Touristic Aims: INBio-SINAC Joint Programme:**

Although much needs to be done, the situation of **information available to the tourist and decision-makers in the sector** is far from being what it was when the surge in nature tourism

started. Currently, there is much more systematized and available information about the country's biodiversity, which is the base of ecotourism, than was available in the 80's. This information is product of the dissemination of results of research carried out by organizations such as universities and various NGOs as well as the State sector, notably the ICT itself and SINAC. Here will be highlighted, specially, the work carried out in this field by the INBio-SINAC Joint Programme.

This programme has as one of its main components the production of informative materials and diverse publications such as guides and other books, all related to Costa Rica's biodiversity. Today, Costa Ricans as well as foreigners have access to information through INBio publications. These are mainly elaborated within the INBio-SINAC Joint Programme, and cover an extensive range of groups of interest such as plants, vertebrates and invertebrates. *La Guía de Aves de Costa Rica* "Field Guide to the Birds of Costa Rica", published in Spanish, is a book that is considered "a bible" on the country's birds, and is widely used by nature guides and tourists, both national and foreign. To this book, which was published in 1995 we can add subsequent publications in this genera; we have to date: Field Guide to the: Mammals, Beetles, Scorpions, Butterflies, Flies and Related Insects, Ornamental Plants, Bromeliads, Orchids, and Fungi of Costa Rica - as well as specialized guides for some of the Protected Areas.

Additionally, INBio has information about Costa Rican species, classified by Conservation Area and by Protected Area, available on the Internet (<http://www.inbio.ac.cr>). SINAC for its part, and within the Joint Programme, has made available to the public a Web site on these areas and the function of the system, instruments for planning such as the *Estrategia Nacional de Biodiversidad* "National Biodiversity Strategy" and by Conservation Area. The *Estrategia* page also provides general information on the state of biodiversity in Costa Rica. This information is complemented by other Internet sites, for example the ICT's as well as sites and pages from organizations in the private sector, that promote Costa Rica as a destination for nature tourism.

These publications, both hard copy and electronic, are used by students, teachers, SINAC staff, conservationists, members of local communities, nature lovers, embassies, tourist guides and tourists, among many more. More than a dozen books on diverse topics are at this time in different stages of preparation or production.

The Joint Programme has also provided a way for SINAC to produce informative material on Protected Areas with emphasis on the least known in order to promote visitation to these. The material also provides information about facilities for tourists in the Areas and on general conservation topics aimed at disseminating information and also training, such as, for example, an informative pamphlet on the Environmental Services Programme. Just in 2000, for example, 23 informative pamphlets, corresponding to 23 PWAs in 5 Conservation Areas, were published for tourists. In total these publications summed 215,000 copies<sup>89</sup>.

The information available represents, in large percentage, results of the *Inventario Nacional* "National Inventory", a generation of information process being carried out by INBio, within the framework for action of its convention with the MINAE and the INBio-SINAC Joint

Programme in the protected wilderness areas, something which gives tourism in Costa Rica greater added value.

Dissemination of information to generate greater awareness in the population on the importance of biodiversity is the task of many groups in the country, and it could be said that it is on the increase. Three important groups that can be pointed out, aside from NGOs and State, are television, radio and national newspapers. Television channels have for years, aired weekly programmes, produced by private companies that guide the viewer in different ways through the natural beauty the country has to offer. On the radio, different national and local stations transmit specialized programmes, interviews, analysis of diverse topics, or general information on nature. SINAC and various NGOs have television spots where short documentaries on the importance of conservation and its benefits are highlighted.

National and international newspapers in the country promote the valuation of nature through weekly magazines, inserts, or series on specific environmental topics such as protected wilderness areas, biodiversity, environmentally friendly activities, information to promote tourism having a natural component and ecotourism, and also interviews or biographies of persons related to conservation.

It could be said that nature is present in the media everyday. These disseminative activities are, without doubt, generating a great interest, which has very probably been at least partly responsible for the increase of national visitors to protected wilderness areas. At the moment, as was pointed out in Section 3.1, visits of national tourists exceed foreign visitation in the PWAs.

#### **4.2.4 Efforts in Coordination and Training:**

There is greater awareness, as much in the MINAE-SINAC as in the ICT for the need of strengthening the coordination of activities. Efforts towards this can be seen in the different commissions formed on the Marinas topic, the CTS and the Blue Flag, activities where not just the MINAE participates, but so do other State institutions and related civil society organizations.

Likewise, the ICT, CANATUR and ACOPROT have signed conventions with diverse institutions and NGOs to be better able to carry out their work. Conventions with the IDA, INBio and the INA are previously mentioned examples (Sections 2.2, 2.4 y 2.5).

Training efforts for the tourism sector related to conservation were detailed in Sections 2.4 and 2.5. The case study on INBioparque, Section 5.1 reinforces this.

Also, there is greater coordination thanks to the environmental awareness that exists among SINAC and tourism entrepreneurs at the Conservation Area level, a very clear sign of valuation of biodiversity through tourism. Everyday more and more entrepreneurs show interest in supporting conservation work, as much in lands that are their property, as in nearby protected areas. There are examples of hotels belonging to nationals and foreigners that request collaboration from their clients, or that assign part of their budget

to the respective Conservation Area. Some even build amenities for research activities that facilitate use of the Areas.

There are also cases of foundations, such as FUNDACA, created thanks to support received from friendly countries such as Canada, for the strengthening of specific Conservation Areas such as the ACAT, who assign part of their funding to the promotion of local nature-based tourism which they view as an important productive activity in communities in the Area. A case study that illustrates this example is summarized in Section 5. This effort requires efficient and permanent coordination with all parts involved (State as well as private).

### 4.3 Relationship Between the Vision of Tourism in Costa Rica and the ENB:

When analysing the visions of tourism and that of the Estrategia Nacional de Biodiversidad (ENB), the integration of ideas can be clearly seen. It is obvious that the paths complement one another and lead to the same destination: *Sustainable Development*.

The ENB **vision** establishes the following<sup>49</sup>:

*The country's biodiversity is protected, known and used in a sustainable manner by Costa Rican Society, in such a way that its quality of life is bettered, for this, costs and benefits derived from the conservation and sustainable use of said biological wealth are integrated and distributed equally and fairly.*

The ENB names the MINAE, in coordination with the different social and economic sectors, including tourism as responsible for its implementation.

The long-term vision for the tourist sector, where the relationship of ecotourism with the ENB in the country is clearly expressed and is as follows, according to Artavia, 2000<sup>48</sup>:

*Costa Rica will be a destination where tourists experience first-hand the hospitality of Ticos in combination with a fabulous heritage of ecological attractions that together will provide him or her with an unforgettable experience, full of enriching situations and of mental relaxation. The tourist must have the opportunity to enjoy the environment in a wholesome and safe manner, interacting with a people that will dazzle him or her with the quality of the services offered and provided. Costa Rica's offer is clearly differentiated and positioned as the best nature tourism destination in the world and will have as characteristics, constant innovation, respect for the environment and the capacity to re-invent itself upon surge of competition.*

In order to carry this vision through, a genuine **sectorial strategy** needs to be developed, but one that is integrated within the other sectors involved, especially the conservation and the environment sectors, within, minimum, a 10-year period. Present forms of exploitation of natural and human resources and even of spaces that the legal framework in force concedes only results in the rapid deterioration of the system and in a positioning that is easily imitated by international competitors. Tourism has to become as much an issue of priority for the

Government as technology is. In general, the diagnosis carried out by Artavia, 2000, can be summarized as follows:

**Potential:** enormous  
**Positioning:** excellent but latent  
**Development of Strategy:** medium  
**International Competition:** strong and growing  
**Social Impact:** strong and with growth potential  
**Role of the Private Sector:** requires focus  
**Role of the Public Sector:** regressing

This gives a mark for 2000 of 70 out of 100. The challenge ahead is to decide whether to remain in mediocrity but with potential, or grow and become the real sustainable leader of ecotourism at world level. The ENB's vision and the Government's present policy in the tourism sector is to take on the challenge, and as was analysed in the previous section, there are steps being taken so that this will be so.

However, and as the Strategy also establishes (Section 3.5), in order to achieve sustainable development, not just the tourism sector has to take the challenge on. Given that the stage for tourism activity covers practically all of the country, it is evident that the dynamics that any and all other sectors assume in relation to their contribution towards conservation and sustainable use and a sound-wholesome environment will have a direct impact on tourist activity. No matter how organized the tourist sector is in giving its support to conservation of biodiversity, its efforts could easily be blotched through poor agricultural practices, inadequate management of air pollution produced by motor vehicles or by industrial wastes, to mention just some examples. There must be congruency of actions within the institutions, between the institutions, in the private sector and between this sector and the State. The ENB establishes as one of its essential strategic concerns coordination for joint planning and the need to strengthen inter-sectorial alliances.

#### **4.4 Examples of Bad Practices and Faults in Links Between Tourism and Biodiversity Conservation Planning (BCP):**

This section relates to section 4.1 Gaps between tourism and conservation; however, following, several more specific examples will be annotated.

In general, it could be said that these examples of bad practices and faults in links between tourism and conservation in the country can be summarized in 3 fundamental points, which at once, are closely related: **inefficient coordination between responsible parties, environmental impact of non-planned tourism and lack of environmental awareness in the society on the importance of sustainable tourism.**

- The ICT and MINAE-SINAC's systems of land-use planning do not agree . While SINAC has 11 Conservation Areas, the ICT has 9 *Unidades de Planificación Turística* "Units of Touristic Planning". The *Ministerio de Planificación, MIDEPLAN* "Ministry of Planning", uses 6 other regions.

- Slow response, which can take months, from the MINAE to the ICT on matters related to the CTS.
- Tri-partite commission, CANATUR-ICT-MINAE as an effort, that in spite of being maintained for several years, resulted inefficient, specifically in regards to joint planning.
- There is not, at the moment, a *Plan Nacional de Ordenamiento Territorial* “National Land-Use Plan”, officialised and in practice, although SINAC-MINAE and ICT were involved, together with the different groups, in the drafting of such a plan.
- There have been cases where negative actions have occurred such as: draining of wetlands, filling up of mangroves, deforestation and destruction of parts of mountains to obtain building materials for hotels, in spite of there being laws that prohibit and institutions that must carry out and control these activities.
- Hotels that are built and have respective permits, despite there not being a plan for disposal of solid waste or elimination of residual waters. Existing hotels that present the same problems.
- The Maritime Law establishes that plans for land use must establish a land area of 200 m from the coastline (coastal fringe). However, in some coastal areas with considerable tourist potential (e.g., North Guanacaste), development of tourist facilities has been grossly carried out, beyond this 200 m coastal fringe<sup>90</sup>. This concentration brings environmental impact on both terrestrial and marine Ecosystems.
- In Costa Rica, there are no studies for assessment and types of damage to biodiversity by touristic activity; this hinders the work of the *Secretaría Técnica Nacional Ambiental (SETENA)* “National Technical Secretariat of the Environment” in evaluating the impact of this activity.
- The concept of biodiversity and its assessment as the base for the survival of humankind is still not fully understood by all the groups related to ecotourism in the country. Additionally there is little or no awareness on the importance of quality of service, nor of added value. The incongruity persists.

## 5. Proposed Strategies and Solutions.

The following are proposed strategies and solutions the authors and the collaborators from INBio offer for improving biodiversity and conservation planning. In general, these agree with efforts that are, at present, already going in the country, and, where INBio is mentioned, have a direct relationship with many of them in different ways; for example, in the case of the CST, as part of some of the commissions or groups generating, implementing, coordinating or promoting ideas.

As mentioned in the last section citing examples of bad practices linking tourism and conservation, there are three main areas: **coordination between responsible parties, environmental impact of non-planned tourism and lack of environmental awareness on the part of society on the importance of sustainable tourism.** On these as well as on other aspects (assessment of the tourism sector, gaps existing in ENB, efforts in

solving said gaps), the authors and collaborators attempt to summarize the main and most important solutions suggested as follows:

### **5.1 Policy Oriented:**

- Need of being able to count on a participative, integrative, inter-sectorial and consented upon environmental policy that provides a stable structure, which will prevail through changes of government administrations, where the topic of the environment is considered an integral part of government and private action in all fields (the ENB provides a general framework for action, but one without specific detailing of practices and / or procedure in environmental “grey areas” such as are: contamination, management of solid and liquid waste, emission of gases, etc.). On the topic of tourism, this environmental policy should embrace sustainable tourism, making it clear that this is the only option to be followed.
- Modernization of the ICT with the aim of strengthening its activity as guiding and facilitating entity, and one with long term vision.
- As these relate to tourism, efficient application of current laws in force regarding environmental impact, marinas, management of coastal-marine areas and conservation: mechanisms for control, penalties, and follow-up.
- Strengthening of actions in controlling and generating knowledge on the environmental impact of tourism: strengthening of the SETENA and specifying indicators.
- Greater promotion and further strengthening of programmes that espouse sustainable tourism. (CST, Bandera Azul).
- Broadening of the CST program; expanding it towards travel agencies and other tourist services, not just lodging, with the aim of motivating entrepreneurs to raise the quality of his product and carry out practices of sustainable tourism.
- Apply for a touristic declarative as a requirement to operate any tourist service with the aim of ensuring better quality and safety of said service, benefiting the final user.
- Strengthening the monitoring of certifications awarded to eco-friendly projects and incentives granted in the tourism sector.
- Strengthen promotion of a “clean, green and peaceful country”.
- Strengthen the *expoferias* or regional tourist fairs program (community tourist development).

### **5.2 Economic:**

- Strengthening tourism aimed at bettering standard of living of local communities (small and mid-sized entrepreneurs): better distribution of benefits, new options for participation in activity.

- Strengthening credit-funding programs in the State banking system through the offering of low interest rates for sustainable tourism projects, with an emphasis on development of communities (an example of this is the environmental fund of the *Banco Centroamericano de Integración Económica* “Central American Bank for Economic Integration”).
- Development of opportunity for donations as seed capital for smaller projects (e.g., a fund of small donations from the PNUD-GEF).
- Development of investigation of economic valuation of sustainable tourism: economic quantification of tourism’s contribution towards conservation, and in general, betterment of the environment.
- Diversification of the tourist offer: increasing attention paid to segments in active growth, such as bird-watching.
- Development and strengthening of mechanisms for granting concession of tourist services in Protected Wilderness Areas.
- Development and strengthening of participation by hotels and other tourist installations in the financing of conservation: e.g., hotels donate a set percentage of their earnings (obtained by requesting this from the client) to the conservation area where they are located to be used towards conservation of this ASP “Protected Wilderness Area”, which these hotels use as part of the area’s draw.

### **5.3 Technical/Managerial-Including Mechanisms for Inter-sectorial Coordination:**

- Strengthening of inter-sectorial through clear mechanisms for participation of the private and state sectors for planning I tourism: e.g., *MINAE-ICT-CANATUR* Commission, *CST* and *Bandera Ecológica* Commissions.
- Having accredited firms carry out quality of service audits.
- Better follow-up of incentives granted and of assented touristic declaratives; revision and betterment requirements and monitoring.
- Development of more products of scientific information on biodiversity that are available in the public and private sector (universities, state institutions) with the aim of giving added value to tourism.
- Internalising the ENB in both state and private institutions in the sector: define coordination mechanisms for its implementation.
- Strengthening of the exchange of experiences in sustainable tourism by conservation area, as much as protected area level as at involved community level (within the area, with other areas, and with other countries in the Central American Region).
- Strengthening of marketing activities for small and mid-sized business: technical support and dissemination of projects.

*March, 2001*

#### **5.4 Human Resources (Including Education and Training):**

- Strengthening of training in quality of service: development of more training opportunities in all fields, with an emphasis on the small and mid-sized entrepreneur in the tourism industry and on topics such as tourist safety, service culture and the biology of conservation. Developing of courses for park rangers and members of local committees and environmental committees by conservation area.
- Achieve a greater dissemination of available training initiatives. Although in the end it will be competence that defines who is best in the market, facilitation and promotion of training options must be strengthened and enhanced, making known possibilities offered by and available through organizations and institutions such as IMAS, INA, IDA, SINAC, and INBio.
- Evaluation and strengthening of educating the tourist: strengthening of the vision of the tourist viewed as a potential ally towards sustainable development.
- Improving civil society's awareness of the importance of tourism, and that said tourism be sustainable: strengthen consciousness-raising programs for students (primary, high school and university) and adults and also for target groups within the tourism sector (operators, agencies, guides, communities that have projects or are in the process of developing projects) on the importance of sustainable tourism. Strengthen existing strategic alliances with the private and generate new options for alliances.

#### **5.5 Biodiversity Conservation *per se* (At All Three Levels: Ecosystem, Species and Genetic):**

- Diversifying the tourist offer in the ASPs "Protected Wilderness Areas", through a joint effort on the part of the ICT-MINAE and the private sector for decentralize current visitation trends.
- Strengthening of zoning for land use of the ASPs "Protected Wilderness Areas": participative management plans based on scientific-technical investigation that defines areas to be used for tourism. Carry out evaluation of results.
- Development of methods for measuring environmental impact of visitation to the ASPs "Protected Wilderness Areas": application and evaluation of these.
- Greater and better utilization of the information available in the national inventory of biodiversity, including the mapping of ecosystems (ECOMAPAS) carried out by INBio-SINAC, for decision-making on zoning, as well as for dissemination of tourist draws and the shaping and developing of public awareness.
- Utilization of sustainable tourism as an activity of priority in developing of biological corridors: generation and making use of supporting investigation.
- Strengthening of agroecotourism in the ASPs "Protected Wilderness Areas" and biological corridor buffer zones, as a means of disseminating and reinforcing local

culture and traditions, sustainable agriculture and of generating economic benefit for the communities involved. Developing of relevant investigation and defining mechanisms for its dissemination and utilization in decision-making.

- Strengthening of *ex situ* conservation centres (zoos, rescue centres, biological gardens, etc.) which; within their activity contemplate tourism as a means for obtaining financial resources and support for conservation *in situ*.

The ENB details many others policies and strategies that could be adapted in the tourism sector. The authors and collaborators (INBio and SINAC) have worked on this process either as part of an ENB implementing team, as participants or both.

## **5.6 Case Studies. Examples of Best Practices in Linking Tourism Development and BCP:**

As was pointed out in Section 4.2, research on biodiversity has generated important information for the development of tourism. The great amount of research carried out in the 50's and 60's by national and foreign investigators, displayed in scientific magazines the relevance of Costa Rica's biodiversity, which at once, attracted and strengthened further research. Some of the researchers that came launched ecotouristic projects in the country, as in the case of Monteverde (5.6.3).

The information generated put at the user's service in different formats, permits offering our tourists a product with great added value, this favours visitation, which at the same time becomes a source of revenue that helps maintain the very activity object of research with the purpose of its conservation. This is an example of how planning well managed tourism based on nature can become an effective means to protect biodiversity and generate income for the development of communities and the country in general.

Existing examples in the country are numerous, diverse and there are more everyday; examples of practices that work and have met with success in relating tourism in all its modalities and conservation. There not being, as of yet, any sort of comprehensive diagnosis on this topic and, conservatively speaking, it is estimated that in Costa Rica, there could be more than **200 successful initiatives of this type**, including hotel facilities with national and/or foreign investment development associations, cooperatives, communal and family projects, including farmers and indigenous groups, private reserves with tourist activities, NGOs, etc. Following, a brief look at just some of these.

### **5.6.1 INBioparque at INBio:**

**Name of project:** INBioparque

**Exact location:** Santo Domingo de Heredia, Costa Rica.

**Management and coordination:** INBio.

**Description of main objectives, achievements, and constraints:**

INBioparque is a recreational and educational park that is focused on supporting INBio's mission of promoting in Costa Rican society a greater awareness on the value of biodiversity in order to achieve its conservation. Education and awareness of the public is a fundamental theme in the CBD and in the *Estrategia Nacional de Biodiversidad - Costa Rica's National Biodiversity Strategy*.

INBio promotes the environmental and biological education of Costa Rican society, so that it will evolve, from a slight interest and relative awareness of the rich biodiversity it is immersed in, into a genuine environmental culture, where biodiversity is known, valued and made use of in a sustainable manner to, in this way, support the social, economic, intellectual and spiritual development of society. To carry out its mission of making society bioliterate, instruments, in accord with the needs of carrying the message to the greatest number of people possible are required. This is the reason why INBio created INBioparque.

INBioparque was selected as a case study because of its impact on education and public awareness, through the process of environmental and biological education, in the forming and training of tourist guides throughout the country, because of its direct relationship with SINAC through the innovative promotion of Protected Wilderness Areas, as gateways to these areas, and because of its swift positioning within travel agencies and tourism promoters as the important initial station for foreign visitors, and as a new option for national tourism in the Central Valley.

It is a recreational park that provides an educational space that promotes and informs people on the national parks and biodiversity of Costa Rica. Because of its positioning, just 8 months after having opened its doors (February 2000), it received CANATUR's *La Distinción al Mérito Empresarial Turístico "Tourism Entrepreneurial Merit Award"*, an award that recognizes and recompenses that venture through which significant contribution towards strengthening the national tourist industry has been made, thus permitting the country to offer a highly competitive, differentiated product aimed at conserving the environment.

Within the 5 hectares that make up INBioparque, are found areas with permanent exhibits on biodiversity, National Parks and ecosystems of Costa Rica, as well as on the work of INBio and SINAC. It also counts with an open-air area with interpretive trails and samplings of live collections of different species, where the visitor can learn about, nature, as well as enjoy it, just ten minutes from the capital city. There is also a restaurant with typical Costa Rican food, a cafeteria specializing in the different ways of enjoying Costa Rica's coffee and a gift shop that offers only crafts and national products, in particular, those which are made from recycled materials or which make a sustainable use of diverse resources of the country's biodiversity and express, in form and colour, the natural wealth of the land.

Since its opening, in February 2000 and to December of that same year, INBioparque welcomed 45,292 visitors, of which a little over 50% were schoolchildren and high school students, public as well as private (54% were students from public schools). A total of 6% of

the visitors participated in specific workshops, which were more than 2 hours in length<sup>91</sup>; 6% were foreigners and 29% corresponded to adult nationals and their families.

In its facilities are offered training programmes, short courses on diverse fields for specialists, both national and international and the general public, which will be strengthened as of 2001. In these events, the staff of INBio and the staff of other national institutions have participated as lecturers and instructors.

The ACACIA is a programme for pre-school teachers, elementary school and high school educators in general basic education and diversified training education, that INBioparque offers as a natural educational-recreational space where teachers can impart lessons. For this, there is a one-afternoon induction programme on the contents of the exhibit modules and trails. This programme began in the second semester of 2000 and in less than 6 months 540 educators participated.

In 2000, 55 nature guides were trained, both so that they could guide groups through INBioparque and to strengthen their formation as guides specialized in nature. There were 4 inductions for operators of student tours in which 60 environmental educators participated. This activity will be strengthened in 2001, through a series of permanent courses named *Biodiversidad, Seguridad, Prevención y Rescate* "Biodiversity, Prevention and Rescue, which will be offered to nature and adventure guides in association with the Costa Rican Red Cross and the ICT.

Between November 1999 and December 2000, INBio participated in awareness-building seminars for travel agents from the United States, specifically from Illinois, New York and New Jersey, with the attendance of nearly 300 agents. These events focused on Costa Rica in general, where the topic of biodiversity, and INBioparque were presented as outstanding aspects of the national tourist product.

Following these first months of activity, visitor's perception of the product that is offered at INBioparque has been of a very varied nature. It has been especially positive for professors and teachers, who view the park as an instrument to develop and carry out their work plans of study. A great number of parents, students and teachers were and are impressed and show pride in the fact that a park of this kind, only in its genera, exists in our country. On the other hand, information gathered from some of the tourist agencies indicates that foreign tourists perceive INBioparque as something complex as far as its exhibits and not very entertaining. Efforts for bettering all these aspects are underway.

Internally, within INBio, el INBioparque at first was viewed by some of the staff as a problem. In some manner, they did not understand that the scientific information on biodiversity that they dealt with should be put on exhibition for the general public. This resulted in there being a certain degree of difficulty in obtaining and processing information in accord to what was desired. This situation has without any kind of doubt been overcome.

Another limitation is the time taken by the operator to incorporate INBioparque as part of their packages. It is usual for this to happen, and that it takes time to incorporate a new product to a package since the operator has to try out the service first before exposing all

of his clients to the new product. The park was included since the beginning of its operation as an optional tour but not as part of the packages. It is until one year after opening and two and a half years of initiated the promotion, marketing and sales process that it is starting to be included as part of the packages of some operators that have all ready tried out the service that the park offers.

### 5.6.2 La Catarata<sup>92</sup>:

**Name of project:** *Ecotouristic Shelter La Catarata*

**Exact location:** Located at IDA's so-called "farmer's settlement", in *La Fortuna de San Carlos* (in the northern region of the country).

**Management and coordination:** Private family association

#### **Description of main objectives, achievements, and constraints:**

This project has an area of 1.5 hectares. Five families participate in the project, all together 10 adults and several children and youths. They are members of *Asociación de Productores para la Protección del Ambiente y Desarrollo Sostenible (ASOPRADES)* "Association of Producers for the Protection of the Environment and Sustainable Development". Seven years ago, these people came together in search of production alternatives, this as overproduction of *yucca* (cassava) and *tiquisque* (an edible rhizome) plummeted prices. At first there were 20 partners, but, as at first it was very difficult to see economic gain, some desisted and pulled out. Initial financing came from Canadian funds through a loan from the *Fundación para el Area de Conservación Arenal (FUNDACA)* "Foundation for the Arenal Conservation Area". At present, the project generates income from visitors' payment for food and lodging, as well as from the sale of butterflies and medicinal plants and derived products.

The objective is to provide a source of income that will contribute to raising the associated families' standard of living. It also seeks to be a demonstration project in organic agriculture and to teach these techniques to other farmers. The project includes cabins for ecotourism, a butterfly garden and a *tepezcuintle* (spotted cavy or paca) zoo-breeding farm. At this moment, the cabins generate enough income to pay salaries and for repayment of loans.

Medicinal plants are produced for dry sale. Their cultivation is carried out employing organic farming practices and techniques. A solar dehydrating or drying unit, built of wood, stone plastic and screen is used for the drying process. Also they have acquired a mill. To date samples of their products have been sent to the United States. In 1999 export, jointly with a group of women in the community of El Molino, who also produce medicinal plants, began.

The butterfly garden was built with saran-screening material. It is round and is for exhibition purposes. The group is already exporting *Caligo* butterfly cocoons. The *tepezcuintles* are bred mainly as an attraction, and has turned out to be a very difficult activity. These are not used as a source of meat.

The settlement's parcels are devoted to the planting of cassava, tiquisque, ginseng and dairy farms. There are two dairies in the zone. Conventional agriculture continues employing agro-chemicals. A neighbour rents horses to the shelter's guests so that these can visit the waterfall and other attractions in the area.

Some of the problems and obstacles that have been faced in the establishing and operation of this shelter are:

- The transition from farmer mentality to that of touristic micro-entrepreneur
- Lack of faith on the part of Association members who eventually left the project
- Commencing talk on biodiversity: learn about the importance of species that live in the area, and go from saying "butterfly equal to bug that flies" to "butterfly species X, which we cultivate for export to Europe"
- Chauvinist attitude of men: it was a process through which they recognized women's productive role.
- Creation of quality of service: attention to the tourist had to be learned, restaurant management, how to manage the shelter in general
- Financing was no easy task
- Legal part: suffered financial setbacks as they were not aware that they had to pay ICT taxes
- Promotion: how to make the project known

### 5.6.3 Monteverde<sup>93</sup>:

**Name of development:** Monteverde City Centre

**Exact location:** Monteverde, Puntarenas, Costa Rica.

**Management and coordination:** A community with ecotourism as its main economic activity.

#### **Description of main objectives, achievements, and constraints:**

Monteverde is a region located in the central-north of the country, under the influence of climatic conditions of the Atlantic and Pacific slopes; reason why up to six different ecosystems have been identified within the relatively small area. Consequently, a great wealth of biodiversity is found here.

This region began its economic development in the 50's, aided by the arrival of groups of Quakers, and soon after becomes known as a dairy region. In the mid-eighties, a tourist component is added to its development, based mainly on the existence of a valuable cloud forest, which years before had been discovered by scientists whose research results attracted the attention of the first visitors. With vision and through effort, Monteverde soon became one of the main destinations of specialized tourism, shaping the concept of that activity we now refer to as ecotourism.

Growth of the tourist offer (lodging, food services, transport and support services) not only promoted investment in infrastructure and services, but also stimulated and

augmented conservation efforts bringing about the creation of new natural reserves, public and private, and new tourist attractions (such as butterfly farms, an orchid garden and canopy tours); it was also the catalyst for undertakings in organic farming and for adequate waste management, and for the forming of groups of artisans and other groups catering to tourists' needs, and demands surged.

By 1995, Monteverde generated 18% of total tourist income at national level, and, although there are no new statistics available, it is thought that this figure, far from having diminished, has been maintained and probably has increased. At present, Monteverde remains a must for the nature-loving tourist thirsty for knowledge.

In the last 5 years, there have been new developments, including a centre of language learning, research and training specialized in biology and sustainable development. Also, conservationist NGOs, renowned in the country, that carry out research and provide training courses such as the *Centro Científico Tropical (CCT)* "Tropical Scientific Center" and the *Asociación Conservacionista de Monteverde (ACM)* "Monteverde Conservationist Association" now call the area home. New tourist products are the *Sky Walk* and *Sky Trek*, which are systems of suspended bridges over the forest - developed by a Monteverde native, biologist and community leader -, gardens for observing hummingbirds, among others, and recently an increase in the number of available beds. The new tourist attractions have much greater added value and are generating employment, and also, have prompted the tourist to stay one more day, which has a positive effect on food and lodging services.

The ACM recently received a special mention on the part of the *Defensoría de los Habitantes* "Ombudsman's Office" for its work in conservation of hydrological basins in the region.

The **CCT**<sup>94</sup> is a private consulting firm, created in 1962, by three renowned American investigators that are dedicated to research, training and organization of conferences on tropical forests. Since the 70's it is the administrator of the Monteverde Reserve, a private reserve that is one of the best known in the country and the world, and perhaps the best organized of its type and where hundreds of national and foreign tourists arrive monthly. The establishment of this reserve was the work of the ornithologist and investigator G. Powell and his wife, who were impressed by the wealth of birds in the Monteverde area and very alarmed at the threats the region faced on the part of hunters, land speculators and others. The Powells went to the CCT seeking help in establishing the reserve and save the biodiversity of the zone. From that time on, the CCT becomes the promotion agent for the reserve.

The centre carries out diverse research on tropical forests, especially cloud forests, and also maintains physical facilities on the reserve for visitation. It is a very clear example of how tourism can finance research and how this in turn can give added value to the attractions offered to the tourist.

Plans for improving the road that leads to Monteverde have been discussed, but these have always been abandoned by the CCT and other organizations in the Monteverde community, this in order to prevent an overload of visitors to the fragile mountain ecosystem they guard. In spite of the road, visitation grows with time. Due to the increase of daily visitors, in the late 80's, when the situation got out of hand, a restructuring of visitation, with aim of not permitting the carrying capacity of the reserve to be exceeded, had to be developed. Only a

small portion of the reserve's total area is open to visitors through the use of several trails. This small percentage suffices to maintain operating cost of the reserve and the organization's research.

Another important reserve, adjacent to Monteverde, is the *Reserva del Bosque Eterno de los Niños* ("Eternal Forest Reserve for Children"), a product of the efforts of a Swedish teacher who was worried about the destruction taking place in the not-protected areas surrounding the Monteverde reserve, which she visited in the late 80's, with her children who were 9 year-old students at the time. Upon her return to Sweden, she began to raise funds in order to purchase the lands near the reserve. The idea grew and expanded to several more countries, and with the help of schoolchildren from around the world, the lands were bought. This has served as an example in other parts of the world. One of her main activities at present is nature tourism. This reserve is administrated by ACM.

#### **5.6.4 Monte Alto Forest Reserve<sup>95</sup>:**

**Name of project:** Monte Alto Forest Reserve

**Exact location:** Hojanca, Nicoya, Guanacaste

**Management and coordination:** Monte Alto Foundation, established by the community of Hojanca.

#### **Description of main objectives, achievements, and constraints:**

As initiative of the community of Hojanca in the Province of Guanacaste, and due to a shortage of water brought on by the deforestation of a river basin, the *Monte Alto* Reserve was created on the 10<sup>th</sup> of June, 1992 and declared a buffer zone in 1994. The aim of this reserve is to permit the natural regeneration of forest cover on the Río Nosara basin, to better the infiltration of water and augment the river's volume, source of the community's potable water. Other objectives are conserving the biodiversity of the zone, by improving the populations of flora and fauna found there.

The community organized itself in order to purchase the lands in basin areas of sharpest slope, where springs are found. The Sub-Regional Headquarters of the *Área de Conservación Tempisque (ACT)-MINAE* "Tempisque Conservation Area" has backed the initiative from the start in many different ways.

For management of the reserve a foundation was created. Its affiliates are persons or corporate entities that donate the value of one or more hectares through instalments according to their economic means. The cost per hectare at present is 50,000 Colones (\$US 155.00 - approximately) and currently, there are 175 affiliates. Also, through the MINAE, resources have been channelled for acquisition of lands for the reserve. International donors: persons, organizations and institutions from different countries (Germany, USA, Canada, Denmark, etc.), have also contributed monies towards the project's development. Several private landholdings, have submitted to payment for environmental services for protection of the forest.

Different tourist attractions have been developed on the reserve: an orchid garden, a sugar mill museum which is a rural relic that is desired to be preserved as a memory of the rural folk who lived in the area, as this was their way of processing sugar cane to produce molasses. The area also has a bird observatory, a lookout point and an Ecocultural Information Centre. Additionally there are trails that lead to waterfalls, forests, fauna, birds and flora special to the area. Lodging, a meeting hall, transport and food services are available. There are archaeological tours through lands belonging to small coffee growers and vegetable farmers as well as to small forest plantation entrepreneurs.

Due to the success of the project in nature tourism, environmental education (with a specific programme imparted in five schools near the reserve) and in conservation, this venture has received two national awards: *Premio Nacional del Ambiente Guayacán 1996* (first place) “Guayacán National Environmental Award” and the *Premio Nacional Cantones Saludables de Costa Rica. OPS/OMS 1998* “National Healthy Cantons of Costa Rica Award”.

## 6. **Annex: Details on the Diagnosis of the Tourist Sector in Costa Rica Presented at the X National Congress on Tourism.**

According to Lic. Humberto Pacheco, ex -President of the AMCHAM, some of the problems and efforts towards a solution are the following<sup>96</sup>

- **Existing Conflicts** with the United States of America, for causes imputed to the Costa Rican State as a permanent judicial entity, independent of the current administration; expropriations for the establishing of protected wilderness areas where process of payment has been tedious and lengthy, lack of protection of intellectual property rights and from the usurping of lands. This has caused erosion of the national image before the most important supplier of tourists and the largest market for the country's exports, the United States. The Santa Elena case, landholding located within Guanacaste National Park, was finally solved in 2000 after several years of legal dispute, coming as of the late 80's.
- For a long period of time, the country has been without a genuine **promotional campaign** overseas, save for sporadic and insufficient permanent efforts, something that has repercussions on both its image as a suitable place for investment and as an ideal tourist destination. Efforts in this respect have been taking place in recent years, especially in financial resources, which have been on the increase for advertising and promotion<sup>97</sup>.
- In the **legal framework**, there are great holdbacks to the implementation of projects, in which we include irremovable employees who are corrupt, social contributions that are too high, bid delays, inefficient banks, administrative corruption, the private and short term pretension to compress topics of concession within a single government administration, with no vision of a mid-term programme.
- Tourism as well as investment has suffered as a result of the worst crisis of **infrastructure and poor roads** in history. Despite a great effort made in this direction carried out by the present administration, especially at the airport, ports and main access roads, there is still much to be done. Factories cannot transport their products efficiently and tourists feel somewhat de-stimulated and afraid due to the conditions of roads. In fact, in the survey of tourists carried out by the ICT mentioned in Section 2, the aspects that were rated lowest were roads and traffic signs. However, the Government's main effort in this sense was carried out mostly during 2000, and is something that is hoped will better this perception by tourists.
- **Communications** have been gradually lagging, although they are still among the best in the region. Internet access is slow, and still not available in all of the country, cellular telephony is still inefficient. This relative lag in telecommunications is a potential problem on a mid-term basis. Use of electronic commerce is quite latent, when at the moment a great percentage of tourists use the Internet to obtain information on touristic sites and services. Efforts in this sense made during 2000 have covered the deficit in cellular telephony, and through incorporation in the Maya cable, which will speed up the Internet.

- The lack of **security** for the visitor is another important factor, as is the corruption of some public employees who demand extra payment from the tourist for carrying out their normal duties or to speed up paperwork. In the past two years, the Costa Rican Government has been taking important steps towards solving these problems, especially on the matter of public safety, through the tourist police. The latter, through a convention between the ICT and the *Ministerio de Seguridad Pública* “Ministry of Public Safety”<sup>98</sup>.

Mr. Roberto Artavia, of INCAE<sup>99</sup>, in his strategic diagnosis of tourism in Costa Rica, adds to the previous list other key points where problems for the development of tourism in the country exist:

- There is no **specialized bank** for tourist investment, nor are the banks up and aware on the sector’s needs.
- Short-term **financial services** for tourists are barely in the development stage in most financial entities and lodging facilities in the country.
- The sectors of **lodging, promotion and services** are the ones that present the greatest development in all their competitive strata and clearer positioning as regards the development of the tourist industry. Even though it is true that there is clear progress, it is important to improve, that which is being done in the establishing of performance standards, quality control, tourist safety and communication. The country needs to be better positioned in general because of its specific attractions.
- There are **well-differentiated options for lodging**, just as there are quite clear options of activities and options of services. In ecotourism, very well differentiated specific cases could be mentioned, such as is the *Hotel Lapa Ríos* and the *Sí como No*, among many others. There are, on the other hand, incomplete positioning attempts that offer great potential as are health tourism, training tourism and educational tourism, all of which could be associated to nature so that the product could be offered as part of the single product the country is after: a clean, green, and peaceful country. Options for the low season have not been fully developed.
- Innovations related to positioning as nature destination are clear, although of **unequal distribution**. Local competition for the tourist dollar is high, when really there is plenty of room for growth in relation to the international market.
- Although always, in one way or another, it has been the base, there has been no constancy in the **backing of positioning** that was put in force in 1996-97, principally in ecotourism. The most important efforts that the country is carrying out to make the backing of ecotourism more homogeneous and stable on the road of evolving towards a multi-phased tourism with a strong interest in nature is detailed in Section 4.2.

- There is no permanent programme for **bettering of standards**, nor of **recognition** and dissemination of existing practices in the country. In this sense, the CTS (Section 4.2) is a mechanism that responds to this gap in an integral manner.
- Even if it is so that the **public sector** is, at this time reassuming its role as leader, two years have been lost.
- As for **international competition**, it is greater than ever before; this calls for high quality complementary activities at each and every destination. Double the quality at a minimum price. The country has not made the progress it should have made as far as inter-sectorial communication goes, something, which in other countries has shown great advance. Our national positioning as a nature destination is something that is being replicated by other countries that have advantage in some key areas (conventional mega-attractions, services, commerce, access). The limitation of our growth makes that national and international entrepreneurs invest in neighbouring countries.

In order to maintain and better its positioning on a long –term basis, the country needs discipline and soberness in its strategy towards a tourist offer that is unique in the world, one that views the country as a clean, green and peaceful destination.

- The role of the **private sector** is that of providing continuity to programmes destined to deal with topics of opportunity and national weakness, provide input to the government on topics of national importance, demand consistency in promptness and congruency of decisions, back government initiatives that are consistent and congruent and combat corruption. The private sector is an engine for the putting into action government decisions, which must be taken advantage of to the fullest and viewed as a strategic ally.

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