

**CASE STUDY: TOURISM AND BIODIVERSITY  
(ECOTOURISM - A SUSTAINABLE DEVELOPMENT  
TOOL, A CASE FOR BELIZE)**

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January, 2001

## Introduction:

The following is a Case Study: Tourism and Biodiversity. In this instance, Ecotourism as a developmental tool and a tool for biodiversity planning and conservation for Belize is emphasized. This document highlights the potential of ecotourism as an economic activity that will: contribute to the sustainable economic and social development of the country and contribute to environmental and cultural heritage preservation, while ensuring the participation of the local communities and other stakeholders in the process.

## Overview of present state of Tourism Development in Belize:

### 1.1 Relative importance in the national economy

Tourism is currently the most important contributor to Belize's economy. According to the figures presented by the Belize Tourism Board for the year 1999, tourism contributes to approximately 18 percent of the Gross Domestic Product (GDP), 23 percent of the GDP with indirect economic benefits complied, 25 percent of total foreign exchange earnings and 1 in 4 jobs. The trend for the past ten years (1990 - to present) shows a steady increase (reflected in the Annex). Renewed investor confidence, an integrated tourism strategy and clear policy direction will set the platform for further economic growth while protecting Belize's rich natural and cultural resources.

Given the increasing economic importance of tourism to Belize's economy, the Ministry of Tourism and Youth has embarked on the development of a new strategic platform for tourism. One of the objectives of the platform is the generation of new jobs across the national economy.

As mentioned above, based on statistics provided by the Belize Tourist Board, there have been continuous increases in the travel and tourism sector of Belize's economy over the past several years and it is anticipated that this trend will continue into this new millennium (reflected in the Annex). These job opportunities present themselves in areas such as hotels and their construction, car rental companies, telecommunication and financial services, air traffic control and border clearance. Job opportunities also arise in rural areas where structural unemployment is at its most severe and in small and medium-sized business that form the backbone of the economy.

## 1.2 Relative priority in the National Planning Policy

Tourism for Belize began in the mid-1960s. At the time Belize became known as a diving destination. For almost two decades, development was focused on the cayes, and in particular, on San Pedro Ambergris Caye. Traditional tourism (sun, sea and sand) was the main attraction and what was marketed internationally. Unlike Mexico to the north, Belize does not have the type of beaches suited to mass tourism and development remained low key and smaller-scale.

In the mid to late 1980s, Belize=s profile as a tourism destination took a new course as it was among the first countries to strongly embrace the new, rapidly growing form of tourism known as ecotourism, focused on the nature-based experiences offered by Belize=s mainland, as its national tourism policy and Direction. This did not mean, in any way, that mainland activities replaced traditional (sun, sea and sand) tourism but rather complemented it.

## 1.3 Institutional Structure of Tourism government planning and policy

Tourism is currently included within the Ministry of Tourism and Youth. The Ministry of Tourism also includes the Department of Archaeology and a quasi-governmental agency - the Belize Tourism Board (BTB). The BTB is responsible for tourism marketing, product development and management and pays for its staff and all activities through collection of the 7 percent hotel tax. Although the BTB plays an important role in tourism development that include among others, planning, perhaps the setting makes it difficult for the industry to have a high profile among the other governmental agencies and other organizations hence inter-sectoral linkages are generally weak as a result. Nonetheless, I must mention that this panorama is changing. There are however, some areas of direct interaction and cooperation for example with the Department of Immigration, Central Statistical office.

I must highlight the involvement of the Belize Tourism Industry Association (BTIA), which was formed 1985 to bring together tourism-related interests to meet the challenges of the industry and act as an important link between the public and private sectors. BTIA has chapters in each district of Belize, and includes a broad range of individual members from all areas of the industry as well as representation from associations such as the Belize Hotels Association, Belize Tour Guides Association, Belize Tour Operators Association, Belize Ecotourism Association and others. A weakness of BTIA is that it functions more like a membership-based

organization rather than an umbrella organization. As such, it would be able to function more directly as an advocacy for the industry. Another weakness that I must highlight is the perception by many small operators that BTIA represents primarily the interests of larger hotels and businesses. Overall attitude of the private sector is that of dependency on the Government rather than be more proactive, innovative and move from that dependency syndrome, which hurts more than assists.

#### 1.4 Dominant types of tourism practiced

To its mainland, Belize is currently attracting what can be termed the most elite advanced and sought after-end of the North American new tourist market, which is interested primarily in the natural history (cultural and natural, ruins and rainforest) attractions that Belize has to offer. These advanced or elite natural history tourists tend to be over 60 years old, highly educated, affluent, highly travelled, and members of a university alumnae association and/or a natural history organization e.g., Audubon, Museum of Natural History. Preferring small group travel, they are looking for destinations that are off the beaten track and that provide authentic, enriching and educational experiences. Belize is also attracting a small, dedicated birders' market, and is beginning to draw a younger adventure tourist interested in kayaking, caving, mountain-biking and wildlife viewing opportunities.

The diving market, which is not as seasonal as other market segments, has always been Belize's mainstay. Some estimate that about 80 percent of all tourists coming to Belize visit the cays to experience the marine environment (reflected in the Annex). While the demographics of both North America and Europe are shifting toward baby-boomers and seniors (generally over 50), the market for diving is generally younger (30s and 40s) than the natural history/elite ecotourism market. Divers are not as seasonal in their visitation to Belize. However, occupancy levels of accommodation properties in Belize's diving areas indicate that this market is not coming in sufficient numbers to bring hotel properties to adequate occupancy levels (please refer to Annex). Belize attracts few European tourists. Those who do come are often the budget-conscious backpackers and student travellers who pass through Belize enroute to Guatemala, Honduras and/or Mexico. Because Belize is "expensive", the young, price-sensitive budget traveller, as anecdotal information repeatedly indicates, spends only a day or two. The more upscale European and U.K. new tourist market currently coming to Belize is very small and is comprised, in complete contrast to the American market which prefers small group travel, almost entirely of FITs (free independent travellers) coming from neighbouring Guatemala

and Mexico for short stays to see the ruins and collect an additional country on their passports. These European FITs who tend to have profiles mirroring the elite new North American tourists but are somewhat younger (50+ years) come to the Yucatan, Mexico and Peten, Guatemala in the thousands every year, particularly in the summer months, which is Belize's low season.

#### 1.5 Participation and degree of interaction of different sectors and stakeholders in the tourism process.

Tourism is linked with many other sectors of the economy although to the extent that tourism interests are not understood or focused on, some of the decisions that are being made in other departments can inadvertently have a negative impact on the industry. The institutional setting for tourism in Belize is fairly disjointed, involving many government departments, NGOs, and training agencies, etc.. Some bottlenecks can be identified that can be seen to be impeding the development of the industry, while capitalizing on the opportunities that exist. These specific issues oscillate among:

- The need for a unit (department) within the Ministry of Tourism and Youth, to carry out the necessary initiatives with respect to policy development and implementation, planning, product development, coordination with other agencies, and the many other activities that are required for a strong tourism industry to evolve;
- There is a lack of direct investment in the sector by the government, with the Belize Tourism Board's marketing activities being financed by the hotel tax;
- Because of lack of staff and budgets, and lack of strong government policy stressing the importance of the industry, the linkages between tourism and other productive sectors of the economy are poorly understood and not capitalized on as they could be to the benefit of all sectors.

#### 1.6 Education and training of tourism

Training is required throughout the industry to improve services. A fairly strong "infrastructure" for technical and vocational training actually exists, through the Belize Institute of Management, Belize Technical College, the Belize Tour Guides Association, The University College of Belize (University of Belize), and The Centre

for Employment Training, among others. Belize is also instituting a “service best” and excellence in the Mundo Maya to upgrade the level of services through regional programs such as the Tourism Federation of Central America (FEDECATUR) and MUNDO MAYA.

In addition to the need for technical-vocational training is the need for awareness building to make government and the general public more aware of the importance of the tourism industry to the country, and of the need to project a friendly and warm image to visitors to ensure the industry’s success. Private sector operators are increasingly recognizing the need to work more closely together, and with the other stakeholders, in the interest of all.

The following are some of the concerns that are considered as weaknesses relating to training and awareness building:

- It is perceived that a number of Belizeans have developed negative attitudes about tourism industry, tending to view “service as servitude,” and this factor is seen as strongly affecting work ethics and motivations;
- There appears to be a low awareness level by many about the value of tourism, its links to the economic well-being of the country, the opportunities that exist for participation in the industry, among others;
- The value of training is not appreciated by many owners and operators;
- It has been highlighted by Belizean stakeholders involved in training that even though many courses have been available, few people participate, even when they were offered at highly subsidized costs or for free. Others note that even where costs are low, there are constraints to participation by many due to seasonality issues (e.g., inability to free up staff to participate during the high season, and reductions to skeleton staff sizes during the low season), geographic availability and time of day of courses.

#### 1.7 Compliance with existing international guidelines on best practices for sustainable tourism

In the 1990’s, international and Belizean environmentalists as well as tourists have demonstrated a growing interest in its natural resources whose survival depends on

preservation of these habitats. Their interest has led to a reevaluation of the nation's 'undeveloped' forested areas. Environmentalist NGOs from Belize and abroad, tourism entrepreneurs, and the government itself have all become involved in the project of reshaping the way Belizeans think about development and the environment, and ecotourism promotion has been a key part of this strategy.

The government has promoted ecotourism as a strategy that can protect Belize's 'natural wonders' at the same time that it contributes to the welfare of the people. In its emphasis on husbanding natural resources - now more broadly defined in a way which accords utility to beauty and uniqueness - and improving the welfare of the people, the government echoes the arguments being made by the conservationists internationally, who initially promoted ecotourism as a means for making both conservation and development "sustainable".

Among the actions taken by the government to protect - as well as to promote- the environment, is the designation of new protected areas ensuring about 1/3 of the land mass is under some form of legal protection and the passing of the Environmental Protection Act in 1992 thus establishing the Department of the Environment. However, while Belize has passed a number of environmental measures which conservationists consider as good pieces of legislation, the Department of the Environment has been unable to enforce the environmental protection legislation due to lack of resources and personnel. While some accuse that government of lacking the political will or conviction to enforce its environmental legislation, the problem is more complex due to international influence that undermines the government's ability to monitor or enforce. I will touch on this topic again later on.

#### 1.8 Brief description of main ecotourism attractions of Belize

Today, the Ministry of Tourism and Youth oversees an industry that offers very diverse types of mainland and marine tourism experiences. The diversity of Belize's tourism product continues to set the country apart from other world destinations. Belize offers a kaleidoscope of tourist attractions, particularly to the visitor interested in natural and/or cultural history. With its rainforests, diverse marine and terrestrial wildlife, its living Maya and archaeological sites, and the second longest barrier reef in the world, Belize has an enviable tourism resource base to present to the world. Moreover, as mentioned above, its history and its geographical location enable Belize to offer both a Latin and a Caribbean tourism experience in an English-speaking country - a unique and highly saleable combination.

Belize cays have been, and remain, the key drawing factor for visitors to Belize,

because of the presence of the 200 miles long Belize Barrier Reef, which provides opportunities for world class diving and snorkelling. While most tourists stay in the island of San Pedro Ambergris Caye, which has the most developed tourism infrastructure, other facilities for visitors have grown up on Caye Caulker, Turneffe and the other islands and atolls, appealing mainly to serious divers and others looking for an out of the way and non-touristy destination.

After the reef and cays, Belize's Maya ruins are the second most popular draw for tourists. Visitation to archaeological sites has maintained an increase yearly, (reflected in the Annex). There are many sites in the country that are in different states of excavation, including Cerros in Corozal, Caracol, Xunantunich, Cahal Pech and Pilar in Cayo District, Altun Ha in Belize District, Laminai in Orange Walk, and Lubaantun and Nimli Punit in Toledo District. Caracol, in particular, is an enormous site with the potential to put Belize squarely and quickly on the Ruta Maya map.

Belize's cultural diversity is also a major attraction for tourists. Many stakeholders noted that they consider the living Maya to be a strong attraction for many tourists.

Belize has many events and festivals that are of interest to tourists, many of which include a cultural focus. Garifuna Settlement Day (November 19) is a well-known event, where Belizeans gather from all over the country in Dangriga and Toledo to celebrate with the Garifuna in recognition of their arrival to the region from other Caribbean islands in 1823. Local drummers, the local "punta rock" music, and the traditional foods make this celebration an entertaining spectacle. The Toledo Maya Cultural Council (TMCC) has made efforts in recent years to bring back the traditional dances and celebrations of the Maya, and celebrations can be observed in some of the village from mid-August to September 25, when a large dancing festival usually occurs in San Antonio.

Capitalizing in this endowment, the country has focused on ecotourism, i.e. marketing of this industry is based on ecotourism, rather than just traditional tourism (sea, sand and sun) as its development strategy.

### Overview of Present State of Biodiversity Conservation and Planning:

#### 2.1 Relative priority in national planning policy

There is no comprehensive conservation policy for Belize and much less one that deals with the specific field of protected areas, despite the considerable efforts being expended in the field. Conservation is, by its very nature, a cross-sectoral

activity but is governed in Belize by a variety of policy statements developed by individual governmental and non-governmental agencies to address their particular statutory duties or fulfil their constitutions. Beyond that, official statements are supportive, but very general. Defining overall conservation policy is normally part of National Environmental Action Planning; such a plan is being developed and a draft National Environmental Report has been produced. This report outlines a number of important environmental issues and makes specific recommendations with direct relevance to protected areas. It does not however, make a general policy statement.

## 2.2 Institutional structure of biodiversity government planning and policy.

The institutional framework supporting the protected areas network is diffuse, spanning four different departments within three different ministries. This reflects the evolution of the protected area network, the inter-relationships between the various government departments, and the different legal instruments used to establish particular sites. Other departments and quasi-governmental bodies, both within or associated with the three “primary” ministries or with others, have functions that touch to a greater or lesser degree upon protected area management.

Under the portfolio of the Ministry of Natural Resources and the Environment is the Forestry Department with the responsibility for administering the Forest, National Parks System and Wildlife Protection Acts, thus all designated protected areas. It also has a Mangrove Unit with special responsibilities for conservation in the coastal fringe and participates within the Coastal Zone Management Unit. The Land Information Centre and the Land Utilization Authority are also under the Ministry of Natural Resources and the Environment portfolio. The former is a collection and collation body while the latter is responsible administering the Land Utilization Act and for making recommendations for subdivision applications. This Act deals with the subdivision and utilization of land both in the urban and rural areas. The sections covering land subdivision are adequate to withstand litigation, however, the sections dealing with land utilization/planning are very general hence very weak. Accordingly the Act does not contain any specific statutory provisions for the establishment of a comprehensive regime for the control of land use. The Department of the Environment is specifically charged with fostering inter-ministerial cooperation to promote prudent use and proper management of the natural resources of the country, control of pollution of the natural environment and the “re-establishment of ecological equilibrium”. It thus “had” a great influence

over the general environment in which the protected areas are embedded.

The Fisheries Department is under the Ministry of Agriculture and Fisheries and is responsible for the Fisheries Act and thus for any Marine Reserve created under it. Unlike the National Parks System Act, this Act makes no specific provision for delegation of managerial responsibility. The Coastal Zone Management Unit is under the Fisheries Department and deals with the development of Marine Reserves.

The Department of Archaeology comes under the portfolio of the Ministry of Tourism and Youth and is responsible for Archaeological Reserves established under the Ancient Monuments and Antiquities Act, 1981. The main thrust of management within the Archaeological Reserves is towards protection of, and research into, their cultural values. They differ fundamentally from the other protected areas although they can be accommodated within them, as with Caracol in the Chiquibul National Park. Although not a managing body, the Ministry of Tourism does have a strong interest and influence upon protected areas and is active in the eco-tourism field.

Given the setting of institutional structure, no doubt that there are significant weaknesses in the existing government support structure for the protected areas. Administration is divided between ministries on traditional sectoral lines (four Ministries), while protected area establishment and management is a cross-sectoral issue. Moreover, management institutions are still relatively weak and their financial base is wholly inadequate.

These weaknesses are reflected in management deficiencies on the ground. Although great progress has been made throughout Belize, the level of management still does not reflect the intrinsic importance of the Belizean Protected Areas, which transcends national boundaries, and the system as a whole is not achieving its full potential value to both the national economy and in provision of benefits to local communities.

### 2.3 Perceived degree of participation of Belize in the Convention on Biological Diversity (CBD) and perceived benefits of being a part of CBD.

Belize ratified its subscription to the Convention on Biological Diversity. Under this Convention Belize was committed to design a National Biodiversity Strategy and Action Plan, hence the establishment of a National Biodiversity Committee in 1996 and which was comprised of government ministries namely: the Ministry of

Natural Resources and Environment, Economic Development, Human Resources, Tourism and Agriculture, Fisheries and Cooperatives, umbrella non-governmental organizations namely: Association of National Development Agencies (ANDA) and Belize Association of Conservation NGOs (BACONGO); a representative from the United Nations Development Program (UNDP) and a representative of the University College of Belize (now - University of Belize).

The National Biodiversity Strategy is the end product of consultations throughout Belize focusing in the importance conserving the biological/natural resources for sustainable socio-economic development. It pinpoints the fact that overall, the Belizean populace recognized and endorsed the fact that the effort for conserving the biodiversity resources will ensure benefits for all be it socio-economic, environmental, scientific and educational. The consultations also revealed the fact that more public awareness needs to be done that will curve unwanted attitudes and practices and promote the need for enforcement of existing legislation to achieve its goals. The goal centres on the idea: “To promote the sustainable use of Belize’s biological and cultural resources by educating society to properly conserve biological diversity in order to maintain and enhance the quality of life for all Belizeans. This will be achieved by ensuring local participation and equitable access to benefits, through adequate institutional and human capacity building and collaborative research and development.”

To achieve the set goals of the National Biodiversity Strategy and Action Plan it is necessary to fulfil the following objective outlined in the document and which I reproduce below:

1. Foster and enhance human and institutional capacity building to effectively plan and manage Belize’s biodiversity resources.
2. Create an awareness of the importance of biodiversity resources to Belize’s development and to the welfare of its people.
3. Promote community participation and decentralize the management and use of Belize’s biodiversity resources.
4. Determine, document and monitor the status and value of Belize’s biological resources.
5. Strengthen and consolidate *in-situ* conservation.
6. Promote *ex-situ* conservation of Belize’s biological resources as a complement to *in-situ* conservation.
7. Promote the sustainable use, equitable access and distribution of benefits derived from Belize’s biological resources.

8. Formulate policies on bio-safety and intellectual property rights.
9. Amend legislation to ensure that Belize's biodiversity is developed and used sustainably.

Despite having identified this list of objectives scarcely anything has been achieved, if any. The Strategy and Action Plan, which has put forth recommendations for comprehensive environmental management and planning, has been submitted to the Government for approval, however, no funds are, nor have been allocated to implement its recommendations. The lack of funds results in a deficient human resource, especially in numbers, that could be utilized for implementation of the suggested actions. This pre-empts criticism to the extent that some accuse the government of lacking the political will or conviction to enforce its environmental legislation.

Belize houses a kaleidoscope of flora and fauna, which include 571 species of birds, 163 species of terrestrial mammals of some 30 families, 121 species of reptiles, 42 species of amphibians and a variety of plants. According to the Belize Biodiversity Strategy document, the habitats and species are threatened by many "developmental" activities and factors that do not adhere nor contribute to sustainable use and conservation. The following are some of the more salient of these (but not limited to) highlighted by the document:

- A lack of adequate solid and liquid waste management system;
- The improper use of chemicals which include pesticides, herbicides, biocides and inorganic nutrients from aquaculture and agriculture activities;
- Deforestation for agriculture; tourism and residential developments;
- Mangrove clearance for tourism and residential developments;
- Destruction of the beach habitats by tourism and other activities;
- Unsustainable fishing practices;
- Unsustainable harvesting of forest products;
- Indiscriminate killings and illegal hunting;
- Inappropriate legislation;
- Lack of monitoring and enforcement;
- Introduction of exotic species
- Population growth;
- Dredging and sand mining;
- Poaching;
- Decreasing literacy rate;

- Mechanical damage to the reef from the trampling by divers, boat anchors and dynamiting;
- Unregulated maritime transportation of toxic substances;
- And natural disasters such as hurricanes, floods and wild fires.

The Strategic Plan purports to be the guidelines for the Government of Belize to follow in its socio-economic development agenda. Within the framework of the Strategic Plan, Belize will conserve its biodiversity and use in a sustainable fashion its natural resources. The objective of the Action Plan is to coordinate and guide the implementation of actions by stakeholders to achieve the objectives of the National Biodiversity Strategy. This plan would serve as a guide for the Government of Belize to develop policies necessary to protect, conserve and use its biodiversity in a sustainable fashion. This effort is a must, as it will provide the tools for sustainable development thus marrying biodiversity conservation and socio-economic development. The only limitation is that this plan is for a five-year period, 1998 to 2003 but with the proviso that evaluations of progress reports during the stipulated time frame will serve to justify future revisions of the Strategy. The success of the programs hinges on key factors such as: type of programs developed for implementation consistent with biodiversity protection/conservation by the Government, community participation and the economic derivatives and distribution. The irony of all of this is, as highlighted earlier, is that no funds have been allocated for the implementation of the Action Plan. A good document is produced but no implementation has occurred. Recalling that this National Biodiversity Strategy and Action Plan is a five-year project (1998 to 2003) and nothing, if any, has been done to date, it certainly defeats the purpose for which it was produced. Personally, I would ponder to comment that by the time some funds are secured or somebody decides to do something as follow-up activity, it will be necessary to revise the document or produce a new one for things change constantly.

#### 2.4 Overview of the role of NGOs and local communities in biodiversity

The NGO community plays a major role in protected area planning and management in Belize. The Belize Audubon Society (BAS) for example, is a membership organization and has as its objective “ the promotion of sustainable use and preservation of natural resources in order to maintain a balance between people and the environment”. BAS manages/administrates, under an agreement with the Government of Belize, eight protected areas established under the National Parks Systems Act and seven small sites originally designated under the Crown Lands Ordinance, as well

as other National Reserves such as the Community Baboon Sanctuary and the Shipstern Nature Reserve. The remit of the organization does not preclude land acquisition and ownership, and BAS holds Tapir Mountain (Society Hall) under a 99-year lease. Apart from its land management function, BAS is active in education and advocacy.

Program for Belize (PFB) is dedicated to the conservation of the natural heritage of Belize and to promoting wise use of its natural resources. The article of Association under the Companies Act and the Memorandum of Understanding with the Government of Belize determine its non-profit nature but offers wide scope of action to achieve its aim. All profit from revenue-earning activity must, however, be reinvested in conservation management. Pursuit of financial sustainability within the constraints of good conservation practice is indeed the major activity of the PFB. PFB was designed as a land owning and managing entity. It is also engaged in education, public outreach, research and professional training, as part of long-term strategy to improve conservation management both on the Rio Bravo Conservation and Management Area (RBCMA) and in the nation as a whole.

A number of other NGOs have interests in particular sites or possess land that is, or could be, managed on protected area principles. The Association of Friends of Five Blues acts as management body of Five Blues National Park. The Association of Traditional Healers is closely involved in the development of management approach for the Terra Nova Forest Reserve, where a primary aim is to protect and promote plants of traditional medicinal use. The Belize Zoo and Tropical Education Centre, whilst primarily an education and research body in addition to being a zoological garden, owns about 900 ha. of land in the Belize Valley. There are a number of bodies with an education/research/educational-ecotourism role that also protect the land upon which they are situated for example: Monkey Bay Wildlife Sanctuary and Possum Point. The Belize Center for Environmental Studies concentrates upon data collection and synthesis and is a major contributor in national planning on environmental issues. Organizations such as the Toledo Ecotourism Association represent the interplay between conservation and tourism particularly at the community level. This list is by no means definitive and it should also be borne in mind that the number and the activities of the various NGOs alter constantly. As a group, however, they play an influential role and indeed possess the greater part of the in-country protected area management expertise.

## 2.5 Overview of National System of National Parks and Protected Areas

The country of Belize, lying between 15° 53' - 18° 30'N and 87° 15' - 89° 15'W, is bounded to the north by Mexico (Quintana Roo and, in the extreme north west, Campeche states), to the west and south by Guatemala (the departments of Peten and in the extreme south, Izabal). In form, the country is roughly rectangular, measuring 280 km from north to south and 109 km from east to west, extending to 180 km through inclusion of territorial sea. Total land area, including the cayes, is 8,867 square miles or 22,960 square km in a total national territory including territorial sea of c. 18,000 square miles or 46,620 square km. The country is divided into six districts, 7 municipalities and more than 240 villages.

Belize is a very varied country for its size. Inland, the Maya Mountain/Mountain Pine Ridge massif is the dominant landscape feature and rises to 1,124 m or 3,688 ft at its highest point. It is surrounded by rugged karst limestone hills. Beyond that, most of the country and the entire coastal area, including Toledo in the south, consist of low-lying plains. Nine land systems, each comprising a particular combination of topography, soils and vegetation, and thus distinctive landscapes, have been distinguished. Rainfall varies from less than 1300 mm p.a. with a four-month dry season in the north to over 4500 mm and shorter dry season in the south. The natural vegetation is similarly varied and 49 distinct types are recognized even after simplification under a revised classification system.

Belize is a small country with low population density. (The official population estimate is 225,000 inhabitants in a total land area) hence this pressure has enabled the country to retain significant areas in natural vegetation, to the benefit of both biodiversity and the tourism dependent on natural areas. The government took measures to support an extensive protected areas system, and embedded an environmental ethic into its tourism policy. Presently, 2/3 of Belize's territory is declared as conservation areas - forest reserves and national parks, sanctuaries etc.) In a nutshell, extensive protected areas have led to some of the most intact marine and terrestrial ecotourism attractions in the region.

Approximately twenty two Acts with multiple regulations directly impact on biological resources, though not specific to biodiversity all protected areas designated under the Acts are clearly within the scope of the National System. Acts that directly address biological resources are: the Fisheries Act, the Forest Act, the Wildlife Protection Act and the National Parks System Act. The Environmental Protection Act and the Land Utilization Act do provide blanket protection for biological resources. Several policies have also been developed and these will have an impact on biodiversity. These include: the Cayes Development

Policy, Mines and Minerals Policy, the Tourism Policy and a Forest Policy.

3 Overview of Links Between Tourism Development and Biodiversity Conservation and Planning (BCP):

3.1 Description and critique of existing national strategy, plan or policy applied to any interaction between tourism development and biodiversity conservation and planning - i.e., national biodiversity strategy and action plans.

Environmental NGOs from Belize and abroad, tourism entrepreneurs, and the government have all become involved in the project of reshaping the way Belizeans think about development and the environment, and ecotourism promotion has been the key part of this strategy. In 1991 the then Ministry of Tourism and the Environment produced an Integrated Tourism Policy and Strategy Statement, which asserted:

We are blessed indeed to have a land that nature has endowed so richly; to still have intact pristine forest, jungles, savannahs, unpolluted rivers and a clean sea; to have wildlife in abundance, a Maya past, unequalled even in our region, and a barrier reef second to none in our hemisphere. Let us take careful consideration of these remarkable assets and let us pause and make sure that we do not misuse or waste them. Carefully husbanding, such extraordinary natural wonders can be kept perfectly intact, and at the same time significantly contribute to the welfare of all our people.

This statement offers an example of how 'undeveloped' lands are being redefined as 'pristine'; how what had been symbolic liabilities connoting backwardness are being accorded value as 'remarkable assets'; and how 'bush' is being reinterpreted as 'natural wonder'.

Ecotourism is a complex concept with multiple definitions. Many terms are used interchangeably with ecotourism, but more often than not they describe a component of the whole. Descriptive definitions are based on the tourist behaviour and motivation. The definition segments tourism by activity, e.g. adventure, cultural and nature, and/or by value judgments that consider the approach and the impact of the travel and not the activity, e.g. alternative, responsible and sustainable. Another approach to the definition focuses on the role of the host country and defines ecotourism as a developmental model. The objectives look beyond tourist satisfaction and consider also the achievement of socio-economic goals of the host

area.

The Government has promoted ecotourism as a strategy that can protect Belize's 'natural wonders' at the same time that it contributes to the welfare of Belizean people. The Ministry of Tourism offers the following definition for the term - ecotourism :

It is the Government's policy that "Ecotourism" will be the main focus of our developmental and marketing efforts in the tourism industry of Belize. By 'ecotourism' we mean: the careful husbanding of Belize's natural resources such as the Barrier reef, inland Forest and savannahs, rivers, wildlife, flora and fauna and the majestic Maya city states for controlled tourism with a specific sensitivity to possible harm or effect to those resources (Ministry of Tourism and the Environment 1991).

It is widely recognized that tourism in Belize is totally tied to the diverse natural and cultural resources that are present, and that protection of these resources is crucial to the industry's future. Stakeholders agree that the following weaknesses exist in this area:

- While there are many sound laws and regulations in place with respect to environmental management, enforcement is a weakness due to a lack of financial resources;
- Institutional capacity is not sufficient to carry out the needed land use planning, park management activities, environmental inventories and impact assessments, etc.
- Parks do not receive any government funding, with several being managed by the Belize Audubon Society, which raises funds through park fees and other sources;
- In terms of environmental constraints affecting tourism, a major factor that has to be acknowledged is related to climate, which presents a severe seasonality problem for the industry. A lengthy rainy season, coupled with the threat of hurricanes during part of the year, makes tour operators avoid the country at these times.

### 3.2 Analysis of main perceived problems and constraints at the national level (including negative linkages and threats of tourism to biodiversity conservation)

#### 3.2.1 Political

The perception prevalent is that a major and to an extent the most important weakness to conservation programs is the lack of political commitment and compromise. As highlighted earlier, the National Biodiversity Strategy and Action Plan was drafted and contains a wealth of sound recommendations but did not have a clearly defined financing component, either by an oversight or simply because of lack of political commitment. Therefore, funds are secured for the design phase of the project but none for the implementation phase.

Another point to belabour is the time frame for the project. For example, the Biodiversity Strategy and Action Plan is a five-year plan operating from 1998 to 2003. To date, after approximately three plus years from the inception of this project speaking with fellow public officers and consultants who were involved in the drafting of this plan, it was revealed that nothing has been implemented. It boils down to square one - lack of political compromise to implement such program translates into no allocation of funds which in turn in lack of personnel and equipment for follow-up action.

From the above-mentioned point, two salient factors that can be attributed directly or indirectly to the prevalent “attitude” displayed by politicians: Perhaps the lack of knowledge and their direct and indirect effect on the stakeholders, for example investors in tourism which translate into carrying capacities issues, land tenure, habitats, pollution and erosion of the environment and to culture which is less obvious in the short term; perhaps the lack of guidance by the technocrats who become “Yes Sir” employees rather than give sound advice and guidance.

### 3.2.2 Economic

Ecotourism also imposes costs on protected areas, and some of these costs result in increased expenditures by protected areas. The costs associated with protected areas and ecotourism may be grouped into the following categories:

- direct
- external
- opportunity
- ecologic
- social
- congestion

The first three categories are costs related to the existence of the protected area and thus would occur even without ecotourism. However, ecotourism development can increase these costs. The latter three costs are incurred as a result of ecotourism.

Direct costs are the expenditures resulting from establishing and managing the protected area, including money spent on land purchase, personnel, infrastructure, and so on. External costs result from the “spillover” damage occurring outside the protected area (e.g. crop damage by animals coming from the protected area).

Opportunity costs are those resulting from losing the opportunity to use the area for its next best use (e.g. timber or agricultural production).

Ecologic costs consist of the damage resulting from tourist use of the protected area (e.g. disturbance of wildlife) or from tourist consumption of resources taken from the area (e.g. food or souvenirs). Social costs consist of the negative impacts to neighbouring communities resulting from tourist visitation to the area.

Congestion costs consist of the reduction in enjoyment by tourist when the number of tourists increases.

Fortunately, many of these tourism-related costs can be mitigated or eliminated through careful planning and management. In addition, they often will be minor compared to the benefits provided by tourism. However, in some cases they will be significant and can be exacerbated by desires to maximize short-term gains from tourism (e.g. carrying capacity). The resulting ecological and social damage is a direct result of pressures to maximize short-term tourism benefits.

Even when matters are simplified by focusing on direct cost and the associated expenditures, we are still left with the problem of determining how much of the protected area expenditure to allocate to ecotourism. This is because the protected area may serve many purposes at one time. For example, one area may simultaneously provide protection of flora and fauna, protection of an important watershed, opportunities for ecotourism, and so on. Allocating a protected area’s expenditure to each of these functions is difficult.

In line with the above, an effort was made by the Government of Belize to generate funds for supporting conservation and promoting environmentally sound management of Belize’s natural and cultural resources to foster sustainable development with the creation of the Protected Areas Conservation Trust (PACT). In a nutshell, PACT is a prominent part of a bold and innovative strategy for non-traditional revenue generation to provide a sustainable means of funding for activities to help conserve

the natural and cultural treasures of Belize. PACT was designed to meet the critical need for an immediate and sustainable infusion of funds essential for Belizean efforts to manage and protect Belize's valuable resources through conservation, maintenance of biodiversity, protection of ecological processes and maintenance of visitor enjoyment and quality of life. The PACT funds were generated from: a US\$3.75 fee to be paid by foreign visitors to Belize, 20 percent of revenues derived from protected areas entrance fees, concession fees, permit and licence fees and cruise ship passenger fees, grants from International donor agencies, and donations through a foundation. These funds are administered by a Board of Directors which consist of seven members: one representative each from the Tourism sector, Village Council and from a Conservation NGO, three representatives from relevant Government of Belize Departments, one member selected by the Board members and two ex-officio members (non-voting), the Financial Secretary of the Ministry of Finance and the Executive Director of the Trust. PACT derived from the world-wide need to protect resources and protect areas; but without adequate funding to ensure proper management and conservation. It is best if all beneficiaries can contribute to the future sustainability of world treasures. The way this work is that the PACT board would invite proposals for project and activities funding and make approvals based upon recommendations from a Technical Advisory Council in accordance with a 5-year National Strategic Plan. The activities that qualify must be for purposes associated with the protection, conservation and enhancement of the natural and cultural resources of Belize for the enjoyment of visitors and for future generations. The maximum grant offered by the Small Grants Program is US\$17,500.00. Smaller donations are available for initiatives that complement PACT's mission and objectives. PACT's Small Grants Program does not fund salaries or consultation services, Environmental Impact Assessments or studies/projects from private companies or individuals. Some of the benefits of PACT are: a source of funds dedicated entirely to cultural and natural resource protection, a recognition by world communities that Belize has world-class natural resources that need protection, and that Belize is committed to protecting these outstanding resources. Recipients of Trust monies may include "an individual, organization, governmental or non-governmental agency, community or institution involved in the conservation and management for sustainable use of Belize's natural and cultural resources".

### 3.2.3 Social

The Ministry of Tourism and Youth puts emphasis on developing further the "Community approach" at several locations in order to increase benefits to the local

population but with various degrees of support and success. The growth of the industry must, however, include balancing of a defined marketing strategy with associated improvements in infrastructure and training. Where the tourist trade becomes established before proper management procedures are put in place, the benefits tend to accrue to the outside tourist operators rather than the site or the local people. It is difficult to change the situation once patterns become fixed. This is a real risk in many protected areas in Belize.

Medium size operators provide significantly to the tourist industry, at the same time and in this same context, it must be highlighted that community participation is being developed and integrated in various localities. These efforts are geared towards increasing the benefits to the local communities while minimizing environmental impact.

#### 3.2.4 Technical (managerial) and

#### 3.2.5 Human Resources

The comment on these two sub-topics will be done simultaneously because of their inter-relationship.

It can be said, to a large extent, that Government policy and practice contradict each other. A vivid one example is: the Department of Environment was established to foster inter-ministerial cooperation, to promote prudent use and proper management of the natural resources of Belize, control of pollution of the natural environment and the 're-establishment of 'equilibrium'. It thus had a great influence over the general environment in which the protected areas are embedded. Presently, this department exist but with no influence and implementing capacity due to lack of trained staff and finances.

The Forestry Department has had similar transformation. These examples reiterate the fact that while good pieces of legislation have been passed the government departments have been unable to enforce them due to lack of resources and personnel. A lack of political will or the conviction to enforce legislation is just part of the problem. Often, when new regulations are being created, new enforcement responsibilities are also created, such as the IMF requirement to reduce the size of Belize's payroll (and thus the size of its public services).

Above, the important role that NGOs play in tourism (ecotourism) development and biodiversity conservation was highlighted. However important their role, they do

have a constraint which has become obvious in some occasions/situations and should be of (serious) concern is the lack of ethic on part of certain “NGOs”. A certain NGO was established in pro of conservation and environmental protection. It was a legally registered organization, with good membership, credible objectives and an apparent sound sense of direction. It turned into a scam, members resigned, and funds never reached their destination. The community supported this program initially but after becoming aware of the “set up” became very critical of this program. This brings many problems including credibility issues, funding problems from donor agencies and community skepticism of future organizations hence programs.

### 3.2.6 Biodiversity conservation (at all three levels: ecosystem, species and genetic)

Tourism is an industry that cuts across virtually all other sectors meaning that the industry can affect them and they in turn can have impacts on tourism. Perhaps the most obvious and important linkage in Belize is the critical one between tourism and the environment. Indeed the tourism industry is highly dependent on the natural and heritage resource base. Tourism needs to be developed to protect the resources, and also needs to work hand-in-hand with those in the environmental agencies to ensure that other activities do not contribute to its degradation. Tourism needs to have strong linkages with the Department of the Environment, with respect to environmental impact assessment and pollution control, etc., and with departments responsible for natural resources, fisheries and archaeology who manage parks and protected areas and heritage sites.

Clearly tourism in Belize is virtually wholly dependent on the characteristics and quality of the natural environment. The country lacks the expansive beaches and more highly developed infrastructure that typifies most of the more heavily visited “mass tourism” destinations in the rest of the Caribbean. Consequently, the visitors who are coming are attracted to the other environmental and cultural features that Belize has to offer, for example the world-class reef (second largest in the world), the Maya Archaeological Sites, the rainforest and the local cultures.

As mentioned earlier, the Government of Belize has over the years, designated large areas of the country as national parks, forest reserves, marine reserves, and wildlife sanctuaries, among others. These areas can potentially form a very important “core resource” for nature-based tourism throughout the whole country, providing almost unlimited opportunities for bird watching, nature viewing, hiking, river tripping, scientific studies, photography, etc., to name a few. The key parks

system resources are currently managed by the Belize Audubon Society, which receives no funding from Government, but rather raises its funds through entrance fees, Protected Areas and Conservation Trust (PACT) taxes, international donors, *inter alia*. The parks have only very rudimentary facilities and staff, and all require further upgrading and staffing if they are to function as tourism attractions. However, it must be mentioned that the national parks, reserves and sanctuaries fall outside the jurisdiction of the Ministry of Tourism and are not intended to act solely as resources for tourism.

### 3.2.7 Example of bad practice and failures

This example is not exactly a bad practice but certainly a failure with regards to biodiversity conservation that can be attributed to the weaknesses and constraints highlighted earlier. The Mountain Pine Ridge Reserve is presently being devastated by the Bark Beetle, perhaps not because of bad practice but certainly because lack of resources which resulted in negligence. The million-dollar question here is - by whom? The government reduced its personnel due to foreign pressure. This resulted in inappropriate management of the Reserve, very little to no monitoring, a need for personnel and equipment and to compound things further, job insecurity due to retrenchment of personnel.

The logging companies (private businesses) as I understand it, working in the area had a thinning project (which by the way is the area that has not been infected) but stopped due to government leasing of this same acreages to other companies. Certainly, this was not in the best interest of the logging companies to spend time effort and money on thinning.

## 4. The following are Proposed Strategies and Solutions for Improving Biodiversity Conservation and Planning in the Tourism Planning Sector:

There is no “quick fix” in the implementation of plans. A process must be initiated, building on current activity. There is a wide range of issues to be addressed and actions to undertake as part of the process. This case study cannot, and indeed should not, attempt to spell out every detail of a dynamic evolution that will in practice be subject to modification at every stage. Described below are proposed strategies and solutions designed to integrate biodiversity conservation and planning into the tourism planning sector and improve upon them.

### 4.1 Policy-oriented

Biodiversity is under continuous exploitation pressure. The rate of habitat destruction, coupled with the arbitrary exploitation of biological resources renders mono-specific management approaches inadequate. Ecosystems management must be promoted as a measure to conserve not only species, but also critical habitats and their inter- and intra-specific relationships. Efforts must be made to identify new areas that merit protective status, with the objective of ensuring their protection in-situ. Immediate actions will include the formal adoption of the Protected Areas Systems Plan and the development of a Management Framework for Protected Areas including Marine Resources.

Existing laws and policies governing Belize's biodiversity are obsolete and do not reflect the regulatory needs of the resources, especially the Fisheries Act and the Wildlife Protection Act. This problem is compounded by legislative overlaps and lack of enforcement mechanisms, resulting in the existing legal framework being highly ineffective. Early revisions of present laws as well as the formulation of new laws to specifically address biodiversity must be given priority. In both cases, the inclusion of enforcement mechanisms is indispensable. The reassignment of mandates to agencies with governance over the management of biological resources should be initiated immediately to eliminate legislative overlaps. The development and adoption of several policies will be essential for obtaining the sustainable use of biological resources in Belize: an integrated Coastal Development Policy; a Fisheries Development Policy; a Tourism Development Policy; a National Agricultural Policy; a Forest Policy; a National Land-Use Policy and a National Population Policy. The integrated Coastal Development Policy will be required to contain a strong component on conflict resolution, the Agricultural Policy will be required to contain special emphasis on controlling the introduction of LMOs, while the National Population Policy will be required to specifically address unplanned settlements by immigrants.

The major threats to biodiversity in Belize are either directly or indirectly associated with agriculture and tourism. Concurrent approaches must be undertaken to reduce conflicts between tourism and biodiversity conservation, these include: the provision of adequate infrastructure; increase access to new areas of eco-tourism interest; the introduction of an acceptable impact approach to determine capacity levels of tourist sites; adequate waste disposal; increase in tourist visitation changes to allow for the sustainable management of protected areas.

The objective here would be to develop a Tourism Policy that is cognizant of

biodiversity and environmental issues. To achieve this objective it is suggested that a revision of the Tourism Strategy Plan be done and modified to address biodiversity and environmental issues, and monitor tourism carrying capacity for all sites visited by registered tour guides with tourists, in order to determine when visitation becomes a threat to biodiversity.

#### 4.2 Economic

The success of biodiversity conservation and development will depend on how well mechanisms can be put in place to ensure the equitable distribution of benefits. Whether benefits are direct or indirect, there has to be a conspicuous and tangible flow of returns for users, managers and the community at large. Global benefits derived from biodiversity conservation and development at the local, national and regional levels must also be built into the benefit-distribution equation.

The objective would be to develop the legal and institutional framework necessary to ensure that maximum benefits accrue to Belize from the exploitation of its biological resources. This objective could be met by conducting:

- a. conducting consultations with competent authorities in countries with similar policies and mechanisms being used to ensure maximum benefits from the exploitation of those resources;
- b. seeking advice from the public, the judiciary and the civil society on possible ways to ensure equitable distribution of benefits derived from the use of biological resources, cultural resources and traditional knowledge, at the national and local levels;
- c. developing regulations to ensure that some of the benefits derived from the exploitation of biological resources are invested in conserving the integrity of critical habitats and ecosystems;
- d. considering the inappropriate expertise, hiring a consultant or a technician to develop the legal and institutional framework for the equitable distribution of benefits derived from the exploitation of biological and cultural resources; and,
- e. contributing to the re-examination of international policies on intellectual property protection, and incorporating mechanisms to protect traditional knowledge.

Tourism has a large potential to bring economic prosperity and environmental conservation/protection to the destination in which it operates. Poorly planned and managed tourism can harm the very resources on which it is based. Environmental

and cultural degradation can be avoided by the adoption and enforcement of appropriate planning measures.

#### 4.3 Technical/managerial - including mechanisms for inter-sectoral coordination

Poor coordination, collaboration and 'turf protection' have been quite notorious between agencies with mandates for the management of Belize's biological resources, resulting in duplication of efforts, unjustified spending and reduced efficiency and effectiveness. A lack of knowledge on efforts by neighbouring countries to manage trans-border resources and threats can undermine local achievements and render them ineffective.

In addition to national needs, biodiversity conservation has to be seen from a regional perspective, consistent with regional and global initiatives. Regional collaboration will compliment local efforts, enabling Belize to draw on regional expertise and will facilitate the optimisation of the region's human, financial and infrastructural resources.

The objective identified here is to strengthen and participate fully in regional tourism development, promotion and marketing programs. To achieve this goal Belize needs to establish closer links with international agencies involved in the tourism sector and participate fully in regional tourism development and marketing programs, for example: participate more in SICA program.

#### 4.4 Human Resource (including education and training)

As stated earlier, institutions with responsibilities for the management and development of Belize's biodiversity do not possess the infrastructure or human resources necessary (numbers and expertise) to effectively perform their functions. Most of the available staff lack technical training. Primary users and other stakeholders of biological resources are not sufficiently exposed to sustainable methods of exploitation and to the rationale for biodiversity conservation. Therefore obtaining trained personnel and conscious stakeholders are an utmost priority. Human and institutional capacity building must be undertaken in collaboration with international partners, and technology transfer must be an integral part of institutional strengthening. Institutions must be equipped with at least the minimum infrastructure necessary to ensure efficiency and effectiveness. The objectives then are twofold: to strengthen the Ministry of Tourism and strengthen community based organizations (CBOs) involved in tourism to improve

their sustainability. The actions suggested is to review the Ministry of Tourism and make recommendations to Cabinet for its restructuring, including equipments and personnel, consistent with the importance of tourism to the economy of Belize and conduct a series of workshops on the opportunities and potential problems in the tourism sector, conduct a series of workshops on management, bookkeeping, public relations, marketing and leadership training, and establish mechanisms for financial support to CBOs.

People will only protect what they appreciate and will only appreciate what they can understand. Even though there is a growing level of environmental consciousness in Belize, this is occurring at a very low pace and is not enough to create the awareness and advocacy necessary to ensure the sustainable use of Belize's biological resources. There is an evident need for biodiversity conservation to be formally addressed as a topic at all levels of society.

In addition, school curricula at the primary, secondary and tertiary levels need to be modified to include biodiversity conservation. A major public awareness campaign is necessary to sensitise stakeholders, consumers and other users of the resource and particularly youths, on the need to conserve biodiversity and the rationale for it. Special emphasis must be placed on sensitising immigrant communities, fishermen, game hunters, mechanized farmers, extractive industries and rural communities on a whole.

The objectives to address these needs are: To educate civil society in the importance and relevance of biodiversity conservation to the tourism industry and the economy of Belize; and, to promote the marketing of tourism, emphasizing Belize's biodiversity. The actions to be undertaken to accomplish these are: Publish and develop newspaper articles, radio and television programs, produce pamphlets along with BTIA to inform tourism industry personnel and tourists of biodiversity conservation, and prepare and distribute (nationally, regionally and internationally) small brochures targeting specific groups, such as bird-watchers, campers and divers.

#### 4.5 Biodiversity conservation (at all three levels: ecosystem, species and genetic)

Efforts must be made to identify new areas that merit protective status, both marine and terrestrial, with the objective of ensuring their protection in-situ. The strategy should formally seek to adopt the National Protected Areas System Plan as an in-situ conservation measure, including the national Biological Corridors System.

As a complimentary activity, and where the financial and human resources permit, research on the captive breeding of native aquatic species should also be promoted in an effort to replenish depleted stocks and to minimize the introduction of exotic species. Ex-situ conservation of plants species will be achieved through Botanic Gardens, Public Parks, School Gardens, a National Herbarium and the storage of seeds in seed banks.

While most tourists visit the offshore cayes, some are eco-tourists, and the bio-cultural nature of medicinal plants and traditional healing draws special attention of tourists. Tour visitations to the two medicinal trails exiting in Belize are the main income for these trails. Tourists and international visitors are also the most important financial contributors to educational and other traditional healing programs in Belize. On the other hand, tourist visitation interrupts nesting of birds, requires clearing for the construction of lodges and hotels, expands the need for more waste disposal facilities, and generates noise pollution that affects forest wildlife. The need to improve infrastructure at tourism sites within and outside protected areas is important. Actions designed to address this include accessing the basic needs of tourism sites, identifying and accessing financing, and conducting infrastructural improvements at such sites.

Unsustainable harvesting practices and indiscriminate killings are quite evident for both terrestrial and marine resources. Structured and focused management approaches are needed in the face of imminent depletion of stocks. Management measures are developed based on the availability of quality data. Though much research has been conducted on biological resources in Belize, this is not management-oriented research, thus the data produced have little or no immediate application to management.

Focused research must be a permanent activity that will allow proper monitoring and will continuously provide the data necessary on which to structure management measures and development policies.

The foregoing pre-empts the need to develop and implement marketing of tourism emphasizing Belize's biodiversity. The action that needs to be taken next is to prepare and distribute (nationally, regionally and internationally) small brochures targeting specific groups, e.g. bird-watchers, rainforest, wetlands, insects, culture, reef, etc.

Open access to genetic resources can easily result in arbitrary exploitation and

indiscriminate use. Developmental research such as bio-prospecting presents no guarantee for success and specific guidelines are essential for identifying accessible areas and for minimizing wanton waste. Belize has to develop its own capacity to conduct developmental research therefore technology transfer and protection of intellectual property should be integral parts of access agreements. Belize must also provide guidelines for controlling access to genetic resources, regulate bio-prospecting in all forms, ensure a robust inspection of application for permits to conduct bio-prospecting, and address new areas of Intellectual Property Rights defined by the Convention on Biodiversity.

#### 4.6.4 An example of best practice in linking tourism development and Biodiversity Conservation and Planning:

Around mid 1990's, the Toledo Eco-tourism Association, an NGO, embarked on a community project which included the towns of Mopan, Ketchi, Creole and Garifuna in the Southern District of Toledo in Belize. This program was formed to support the involvement of the area's inhabitants in planning and control of eco-tourism development, in a way that benefits the inhabitants of the zone.

The profits made are channelled to a general fund that contributes to the standard of living and education of the local communities, the conservation of tropical forests and the operation of the central office. More than 80 percent of the resources belong to the communities that are visited.

Additional to offering the visitor a rich and unforgettable experience, other important program objectives include:

- Develop alternatives for slash and burn agriculture, the number one deforestation cause in Toledo.
- Improve the standard of living and education of local communities.
- Support the protection and respect for natural resources and improvement in the standard of living of communities, through controlled tourism.
- Preserve the culture and values of the communities of Toledo.
- Share the benefits through a system of community relations.
- Provide visitors with lodging that does not harm communities or its natural resources.

This is only one of the success stories that can be mentioned. The only constraint, as has been the case in some many other examples, is finances otherwise this and all

other project would have ore far reaching effects. Other success stories exist, for example: the Amigos del Pilar project which involves an Archaeological Site and the surrounding communities in the Cayo District. This is an ongoing project.

### Brief general remarks on ecotourism development

Tourism development in Belize must be undertaken within the framework of specific development plans and strategies. In some cases, the development of tourism facilities and activities has ignored existing legislation and regulations. Since tourism in Belize is dependent on delicately balanced ecosystems, it is essential that the expansion be managed in a manner that ensures that its growth does not degrade nor destroy the special environmental attractions of Belize upon which tourism depends. It is also important to ensure that rural communities are integrated into tourism activities and that the Belizean culture and social fabric remain intact as tourism expands.

On several occasions the Government of Belize has expressed its firm commitment to the growth and development of the tourism industry in Belize. This commitment focuses on the promotion of Belizean participation at all levels of the industry and on the development of the tourism product through the removal of obstacles, the development of additional infrastructure, on the granting of economic incentives to those involved in tourism and the protection of Belize's natural and cultural heritage.

The ecotourism concept fits well within the framework of the basic concept of sustainable development as presented in Agenda 21, the centrepiece document of the United Nations Conference on Environment and Development. It is in accordance with the principle of seeking to satisfy the needs of the present without compromising the ability of future generations to satisfy their needs - Belize's eco-cultural tourism policy is, in its best sense, undoubtedly a commitment to the future.

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<b><u>Tourists Visitors</u></b>	<b><u>1999</u></b>	<b><u>1998R*</u></b>	<b><u>1997</u></b>	<b><u>1996</u></b>	<b><u>1995</u></b>
Tourist Visitors [1998 Rev]	172,292	166,743	134,289	123,389	121,270
Business Visitors	7,412	8,285	9,764	7,793	8,234
Official Visitors	1,091	1,026	1,849	1,634	1,305
<b>TOTAL</b>	<b>180,795</b>	<b>176,054</b>	<b>145,902</b>	<b>132,816</b>	<b>130,809</b>
<b>Cruise Visitors (Same-day visitors)</b>	<b>34,130</b>	<b>14,183</b>	<b>2,678</b>	<b>152</b>	<b>7,953</b>
<b><u>Hotel Statistics</u></b>	<b><u>1999</u></b>	<b><u>1998</u></b>	<b><u>1997</u></b>	<b><u>1996</u></b>	<b><u>1995</u></b>
Hotels	390	408	383	360	362
Rooms	3,963	3,921	3,905	3,690	3,708
Beds	6,810	6,617	6,425	6,111	6,137
Occupancy	31.4	29.9	27.1	27.2	29.0
Revenues (mn Bze \$) [Rev. 1998 & 1999]	49.5	43.9	36.0	35.9	34.3
Revenues (mn US \$) [Rev. 1998 & 1999]	24.8	22.0	18.0	18.0	17.2
Employment by hotels	2,570	2,203	2,186	2,092	2,107
<b><u>Economics</u></b>					
Tourist Expenditure (mn Bze \$) [Rev 1998 & 1999]	222.9	216.6	176.0	177.2	154.1
Tourist Expenditure (mn US \$) [Rev 1998 & 1999]	111.5	108.3	88.0	88.6	77.1
Employment - Hotels & Restaurants [CSO's LFS]	5,490	5,285	3,925	2,690	3,300
<b><u>Visitors to National Parks and Reserves</u></b>	<b><u>1999</u></b>	<b><u>1998</u></b>	<b><u>1997</u></b>	<b><u>1996</u></b>	<b><u>1995</u></b>
Guanacaste National Park	2,788	2,567	2,582	1,364	2,479
Crooked Tree Wildlife Sanctuary	1,619	1,483	2,074	1,584	1,613
Cockscomb Basin Wildlife Sanctuary	3,603	4,078	3,488	4,007	4,760
Blue Hole National Park (Inland)	6,162	7,098	5,017	4,497	7,930
Half Moon Caye National Monument	7,940	7,310	N/A	N/A	N/A
(5 sites above manages by the Belize Audubon Society)	22,112	22,536	13,161	11,452	16,782
Belize Zoo & Tropical Education Centre	39,838	40,855	37,029	38,766	39,086
Mountain Pine Ridge	25,835	17,896	32,262	15,640	27,411
	65,673	58,751	69,291	54,406	66,497
Community Baboon Sanctuary	4,011	4,676	4,931	5,204	5,124
	<b><u>1999/00P</u></b>	<b><u>1998/99R</u></b>	<b><u>1997/98</u></b>	<b><u>1996/97</u></b>	<b><u>1995/96R</u></b>
Hol Chan Marine Reserve	37,954	38,737	41,380	40,622	38,552
<b><u>Visitors to Mayan Sites</u></b>	<b><u>1999</u></b>	<b><u>1998</u></b>	<b><u>1997</u></b>	<b><u>1996</u></b>	<b><u>1995</u></b>
ALTUN HA	19,826	17,626	18,200	12,763	10,626
CAHAL PECH	7,259	10,944	10,978	10,202	10,377
LAMANAI	17,740	19,720	13,193	10,687	10,336
XUNANTUNICH	27,614	23,818	22,866	17,745	14,291

CARACOL	4,579	3,972	5,916	5,609	N/A
SANTA RITA	1,712	1,705	1,476	887	N/A
NIM LI PUNIT	1,917	1,552	1,089	1,301	1,486
LUBAANTUN	2,491	2,271	1,889	1,246	1,663
CERROS	362	468	N/A	N/A	N/A
EL PILAR	1,593	453	N/A	N/A	N/A
	85,093	82,529	75,607	60,440	48,779

P = Provisional

R = Revised

N/A = Not Available

We must thank the following organizations for their input:

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Belize Zoo & Tropical Education Center	08-13004	08-13010	<a href="mailto:belizezoo@btl.net">belizezoo@btl.net</a>
Forestry Department - Western Division	09-23280	09-23280	-
Department of Archaeology	08-22106	08-23345	<a href="mailto:doabelize@btl.net">doabelize@btl.net</a>
Community Baboon Sanctuary	02-122181	02-122181	<a href="mailto:baboon@btl.net">baboon@btl.net</a>
Hol Chan Marine Reserve	-	-	<a href="mailto:hcmr@btl.net">hcmr@btl.net</a>
Central Bank of Belize	02-36194	02-36226	-
Immigration & Nationality Department	02-44080	02-24056	-
Central Statistical Office	08-22207	08-23206	<a href="mailto:cosgob@btl.net">cosgob@btl.net</a>
- employment statistics off annual Labor Force Sample Survey			