



# TOURISM AND RECREATION

## Growth of Global Tourism

Tourism has significant value and benefits to both local and global economies. Travel and tourism—encompassing transport, accommodation, catering, recreation, and services for travelers—is the world’s largest industry and generator of quality jobs. Worldwide, analysts estimate travel and tourism to have generated US\$3.5 trillion and almost 200 million jobs in 1999 (WTTC 1999:3). Tourism is the fastest growing sector of the global economy, and, in most countries, coastal tourism is the largest sector of this industry. In many countries, notably small island developing states, tourism contributes a significant and growing portion of GDP and is often the major source of foreign exchange. If properly managed, tourism and recreation activities in the coastal zone can promote conservation of ecosystems and economic development.

On a global basis, it is not possible to differentiate inland from coastal tourism. Most statistics related to tourism are aggregated by country, and agencies and organizations compiling statistics typically do not make this distinction. This section of the report will focus on the Caribbean, where tourism is mostly coastal or marine in nature. Additionally, because of the significant role that tourism plays in the region, relatively good and detailed statistics are available regarding this sector.

## Status and Trends of Tourism in the Caribbean

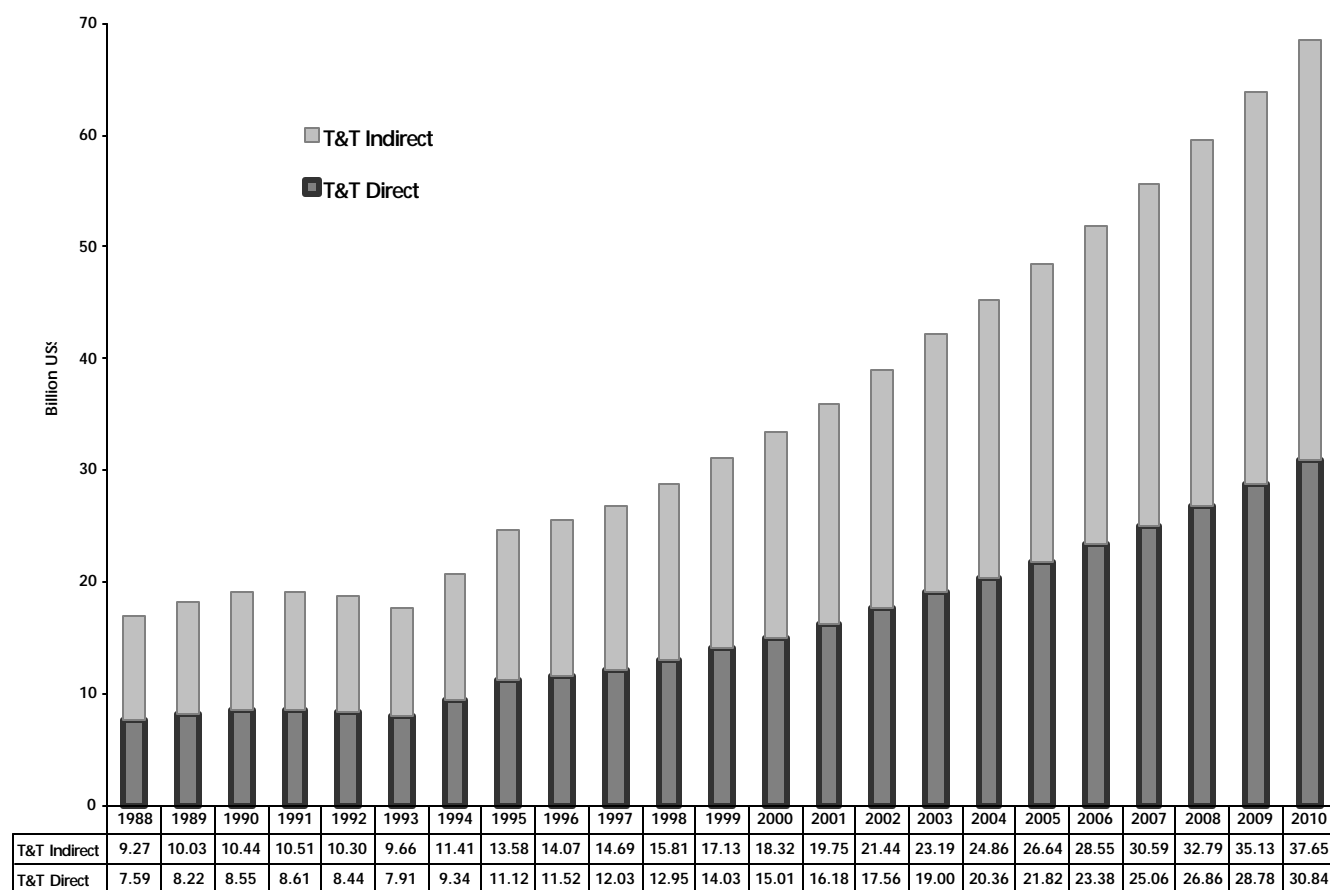
The Caribbean is a diverse region that includes 12 continental countries bordering on the basin, 14 island nations, and 7 dependent territories. The diversity of cultures, languages, and stages of economic development within the region makes generalization difficult. For most countries, tourism is the largest single source of foreign exchange earnings.

The World Travel and Tourism Council (WTTC 1999) compiles detailed accounts for the overall economy and travel and tourism sector, in addition to modeling future demand. In 1998, direct and indirect GDP from travel and tourism was over US\$28 billion, accounting for about 25 percent of the region’s total GDP. GDP from travel and tourism has risen from US\$19 billion in 1990, and is expected to reach over US\$48 billion by 2005 (WTTC and WEFA 1999). (See *Figure 14*.) The share of GDP coming from travel and tourism is expected to stay relatively constant within the Caribbean, at around 25 percent, and in real terms, to grow by 35 percent over the next decade (WTTC 1996:4).

The success of tourism in the Caribbean has been built upon the traditional appeal of excellent beaches, a high-class marine environment suitable for a range of recreational activities, and

Figure 14

Travel and Tourism GDP in the Caribbean



Source: WTTC and WEFA 1999.

Note: Figures for 1998-2010 are estimates.

Table 19

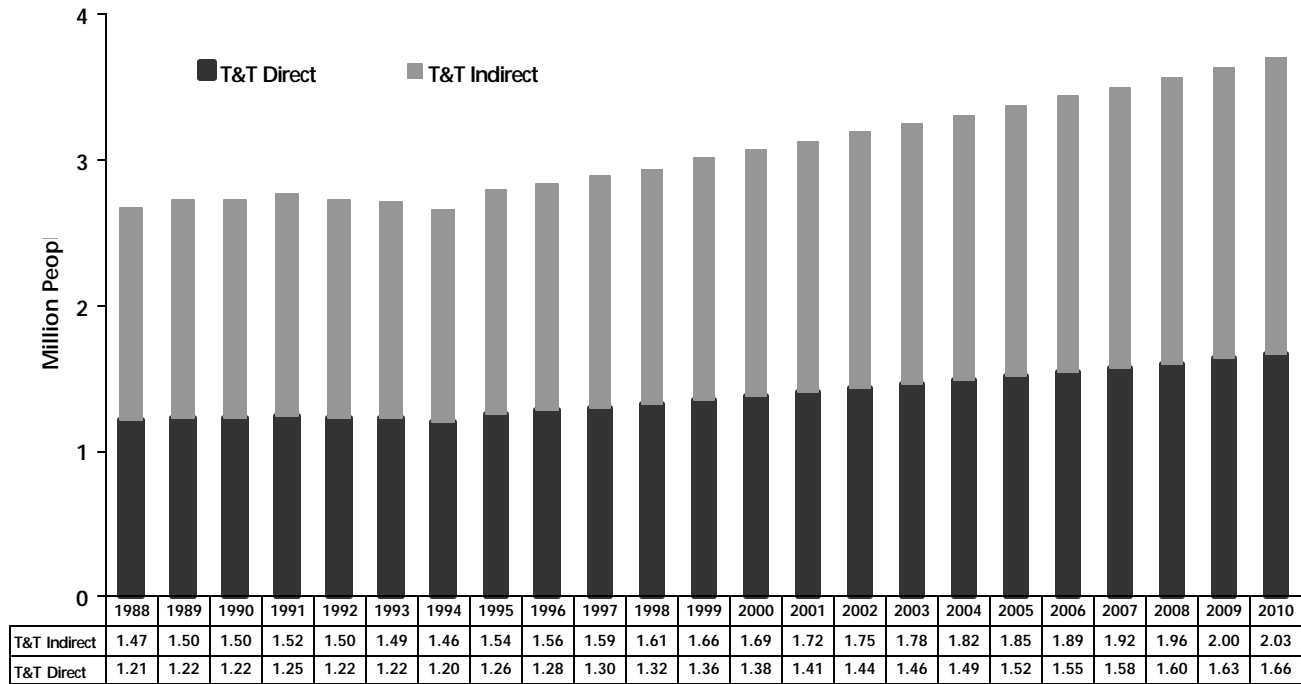
Tourist Arrivals in the Caribbean by Main Market (thousands)

Country of Origin	1993	1994	1995	1996	1997
United States	8,401.3	8,631.7	8,531.6	8,738.9	9,165.9
Canada	890.3	879.1	933.1	940.8	1,008.9
Europe	2,868.3	3,197.2	3,388.7	3,725.5	4,154.4
Caribbean	1,007.3	1,101.3	1,193.6	1,230.7	1,285.9
Other/Unspecified	2,442.6	2,674.1	2,900.6	2,880.2	3,258.2
Total	15,609.8	16,483.4	16,947.6	17,516.1	18,873.3

Source: CTO 1997a.

Figure 15

Travel and Tourism Employment in the Caribbean



Source: WTTC and WEFA 1999.

Note: Figures for 1998-2010 are estimates.

warm weather conditions year round. The attractiveness of the region makes it an “up market” high-spending destination. Average spending by tourists is US\$861 per visit, which is 31 percent higher than the world average (CTO and CHA 1997).

Travel and tourism is human-resource intensive, creating quality jobs across the employment spectrum, many of them in small businesses and in urban or rural areas where structural unemployment is highest. As Figure 15 shows, in the Caribbean travel and tourism provided over 2.9 million jobs in 1998 (more than 25 percent of total employment); this number is expected to grow to over 3.3 million (27 percent of total) by 2005 (WTTC and WEFA 1999). These estimates include those jobs directly related to tourism (hotel and tour services) and those that indirectly support tourism (such as food production and housing construction).

The number of tourists arriving in the Caribbean is growing rapidly. (See Table 19.) In 1997, over 18.8 million tourists visited the region, the majority coming from the United States and Europe (CTO 1997a). Over the next decade, an estimated 36 percent increase in tourist arrivals is anticipated (CTO 1997b).

Although tourism is an important industry across the Caribbean, its significance varies by country. Figure 16 reflects tourism as a percentage of GDP for selected Caribbean countries,

indicating the level of dependency of their economies on tourism revenues. Most of the countries with relatively high per capita GDP have a high percentage (more than 30 percent) of GDP derived from this industry.

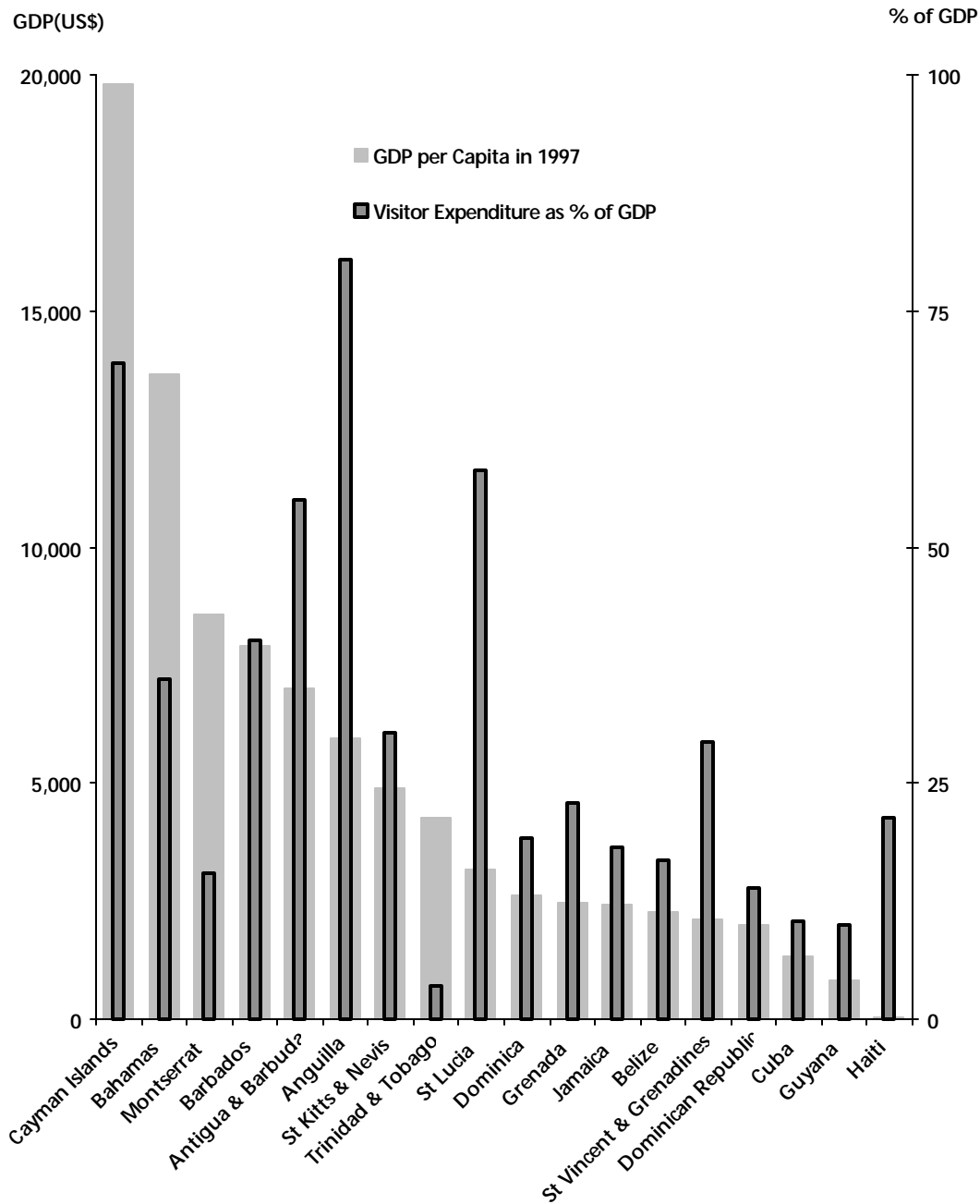
### Impacts of Tourism on the Environment and the Economy

The natural beauty and environmental quality of vacation areas has a positive influence on tourists. A survey of tourists in Spain revealed beautiful landscape (51 percent), water quality (27 percent), unspoiled nature (23 percent), and air quality (22 percent) as the four environmental factors that most influence their choice of destination (Boers and Bosch 1994). A survey of Japanese tourists put enjoying nature (72 percent) as the primary purpose of the trip (WTTC et al. 1997).

As much as the tourism industry benefits from a pristine environment, uncontrolled expansion and mismanagement can harm the very resources on which it is based (WTTC et al. 1997). This is particularly true for more nature-based activities such as dive tourism. If a tourism-dependent economy suffers a loss of natural resources and environmental degradation, it may result in significant socioeconomic consequences, such as loss of

Figure 16

Per Capita GDP and Tourism as a Percentage of GDP for Selected Countries in the Caribbean



Source: CTO 1997a.

jobs, reduction in private sector and government revenues, and worsening balance of payment problems (UNEP 1997b).

**TOURISM TYPES AND IMPACTS ON ECOSYSTEMS**

The impacts of tourism in the Caribbean are extremely diverse, depending on differences among state economies, the relative

and absolute size of the tourism sector, the rate of growth in tourism, and the nature of the tourism facilities involved (IRF 1996). Adverse impacts of the tourism industry on coastal resources are caused by all subsectors of the industry, primarily the construction and operation of facilities (UNEP 1997b). Tourism-related impacts include scarring of mountain faces with

housing and road construction, filling in of wetlands and mangroves for resort properties, beach loss and lagoon pollution from sand mining, dredging, and sewage dumping, and damage to coral reefs from anchoring, sedimentation, and marina development (McElroy and de Albuquerque 1998a:146). These impacts have been, for the most part, documented only qualitatively.

A 1996 study by Island Resources Foundation (IRF) on tourism and coastal resource degradation concluded that “virtually every state of the Wider Caribbean suffers from sewage pollution of coastal waters, most suffer some contamination from oil spills and production leakages...and most of the low income states of the region report solid waste contamination of coastal areas. In addition, many states report inadequate monitoring and assessment systems to understand the causes, dimensions, and impacts of coastal pollution.” Tourism directly contributes to sewage and solid waste pollution in virtually every country. In tourism-dependent countries, it is the prime contributor to coastal erosion and sedimentation (IRF 1996). Additionally, the industry contributes to coastal habitat degradation through anchor damage, boat groundings, clearing of natural habitat, dredging and sand removal, diver damage, and trampling of coral reefs. (Hoagland et al. 1995). Most tourism-related environmental degradation occurs locally. Marine debris aside, the major “international” environmental effect of coastal tourism in the Caribbean may be the impact of yachts, charter boats, and cruise ships in near-coastal and marine environments (IRF 1996).

### INTENSITY OF TOURISM

Coastal degradation from tourism also depends upon the level of intensity, which is often expressed using a range of indicators, from number of tourists per arable land area to the rate of growth of the industry. For instance, tourism growth rates vary greatly even among Caribbean states, and this variety needs to be taken into account when developing the appropriate management plan for the region (IRF 1996). Concerning growth rates for 1990–94 (IRF 1996:Table 3), Dominican Republic, Jamaica, U.S. Virgin Islands, and Puerto Rico were at 15–19 percent, while Grenada, Aruba, Trinidad and Tobago, and the Caymans experienced 33–37 percent growth over that period, and Belize, St. Lucia, and Guadeloupe had 50–65 percent growth.

There is no single standard integrated measure of size, scale, and degree of overall impact of tourism in a given destination (McElroy and de Albuquerque 1998b). Measures of tourism intensity and impact are linked to the concept of tourism carrying capacity discussed below and, hence, need to encompass environmental as well as sociocultural consequences of tourism development.

Commonly used indicators, such as visitor density or average length of stay tend to correlate with the economic indicators and fail to capture tourism’s range of adverse impacts on

Table 20

### Leakages of Gross Tourism Expenditures

Country	Leakage (% of gross tourism receipts)	Year of estimate
Antigua	25%	1978
Aruba	41%	1980
Jamaica	40%	1991
St. Lucia	45%	1978
US Virgin Islands	36%	1979

Source: Smith and Jenner 1992, reproduced in Wells 1997.

the environment through different types of tourism activities. There is also a need to measure social impacts, some of which are difficult to quantify: crime rate, real estate inflation, erosion of cultural traditions, and level of frustration felt by local residents (McElroy and de Albuquerque 1998a).

### DISTRIBUTION OF TOURISM BENEFITS AND ENVIRONMENTAL COSTS

Different types of tourism operations have varying levels of socioeconomic and environmental impacts on local populations. While large-scale commercial tourism operators from abroad or from larger cities often capture much of the economic benefit, environmental degradation is more likely to be felt locally. In such cases, the consequences of the trade-offs are not fairly distributed among all the stakeholders.

Relatively few local communities have realized significant benefits from nature tourism on their own lands or in nearby protected areas. Their participation in nature tourism has been constrained by a lack of relevant knowledge and experience, lack of access to capital for investment, inability to compete with well-established commercial operations, and simple lack of ownership rights over the tourism destinations (Wells 1997).

One way of looking at the tourism benefit that reflects the true contribution to the local economy is to examine “tourism leakages.” Leakages are the proportion of foreign exchange revenue derived from tourism, which is collected by nonlocal service providers. The items commonly included in analyses of leakages are imported materials and capital goods for the tourism industry, imported consumables, the employment of foreigners, and the repatriation of benefit by foreign companies. The rate of leakage is often higher in relatively underdeveloped locations where those services are not available locally (Wells 1997). Estimates of leakage are presented in Table 20 for a limited number of Caribbean islands for which statistics are available.

### Tourism Carrying Capacity

“Carrying capacity” in tourism is a term used often to measure the level of tourism development an area can accommodate with-

out adverse effects on the resident community, the natural environment, or the quality of visitor experience (UNEP and WTO 1992). This concept can be broken down into types of limits, such as ecological or environmental, physical (threshold limit for space or accommodation), and social (level of tolerance of the host population to the presence of tourists) (Lim 1998:3).

Tourism is growing rapidly, but the local capacity to deal with it does not grow as fast. When local capacity to deal with the level of tourism intensity is saturated, negative consequences occur. The threshold of the capacity can depend on the level of physical infrastructure, such as waste treatment, as well as social infrastructure, such as regulations or codes of conduct, that make tourism activities less harmful to the natural environment and local culture.

The measure of carrying capacity has been examined with limited success. Important factors include land area, soil and habitat types, and availability of freshwater, in addition to a range of cultural and socioeconomic factors. Perhaps there is no simple indicator of tourism carrying capacity in terms of number of tourists, but rather it is the type of tourism and nature of tourist consumption and activities that really matter.

There have been some attempts to develop carrying capacity indicators by combining the type of tourism impact indicators discussed above. It is difficult to establish the threshold at which carrying capacity is exceeded because different natural and sociocultural settings can sustain vastly different levels of visitation (McElroy and de Albuquerque 1998a).

## Sustainable Tourism

Current efforts to develop indicators in this area are important, as are certification programs that encourage tourist facilities to adopt more efficient and environmentally sound practices.

“Sustainable tourism” has the potential for longer-term economic benefits for a community and serves to limit environmental degradation. According to the definition by WTTC, World Tourism Organization (WTO), and Earth Council, “sustainable tourism development is envisaged as leading to management of all resources in such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity, and life support systems.” (WTTC et al. 1997:30).

The tourism industry recognizes the importance of maintaining the quality of the natural environment and the cultural integrity of a local community as a resource base of tourism attractions. Some certification of “best practices” or “ecolabeling” schemes has been developed as self-regulatory and voluntary measures to promote sustainable tourism. The certification criteria vary depending on the focus area of each scheme: from energy efficiency and waste treatment, to staff training and edu-

cation (UNEP 1998). The following are examples of the criteria used by the schemes particularly relevant to coastal tourism.

In 1994, the WTTC launched Green Globe, a worldwide environmental management and awareness program for the travel and tourism industry. The program includes a series of packages designed to help staff at all levels bring about environmental improvements. A number of national tourist associations and businesses are participating in this program, which provides standards and mechanisms for “green” certification of hotels and resorts (UNEP 1998; Green Globe Website: <http://www.greenglobe.org/>).

Foundation for Environmental Education in Europe (FEEE) manages the Blue Flag Campaign, currently in 21 European countries, focusing on environmental management performance of beaches and marinas (FEEE Website: <http://www.blueflag.org>). In 2000, 1,873 beaches and 652 marinas were awarded the Blue Flag, a dramatic increase from 244 beaches and 208 marinas in 1987 (FEEE 2000), indicating increased interest by beaches and marinas in participating in the campaign. (*See Box 5 for an example of voluntary guidelines for sustainable tourism.*)

## The Role of Protected Areas

Ecotourism, or nature-based tourism, although accounting for a small fraction of the fast-growing tourism industry, has a high potential to generate revenue and employment for local populations, and provide incentives for protecting natural ecosystems. Protected areas are often a desirable aspect of a tourist destination and, therefore, a valuable component of nature-based tourism.

Although often thought of as areas protected from tourism and other intrusions, parks and protected areas throughout the Wider Caribbean are major factors in attracting and managing tourists and tourism. Throughout the eastern Caribbean, cruise ship visitor surveys indicate that 30 percent of passengers who go ashore want to visit natural areas and parks (OAS and CTRDC 1988, cited in IRF 1996). The negative environmental effects of tourism in parks and protected areas tend to be small, but the ability to tolerate such impacts is also small (IRF 1996).

However, some marine protected areas (MPAs) have failed to capture their share of the growing tourism revenue. Some often lack sufficient funding to enforce protection of the areas and monitor environmental quality. A World Bank report examining nature tourism and economic development concluded that many protected areas that often supply the most valuable part of the nature tourism experience, charge relatively low entry fees and therefore capture little of the economic value of tourism. Although many governments have successfully increased tourist numbers by marketing their country’s nature tourism destinations, most have not invested sufficiently in managing

## Box 5

**Voluntary Guidelines for Sustainable Coastal Tourism Development in Quintana Roo, Mexico**

Tourism represents one of the most important sources of revenue and foreign exchange for Mexico: it is the driving force for economic development in the state of Quintana Roo. For example, 25 years ago the small fishing village of Cancun in Quintana Roo was transformed into a popular international tourist destination, which today hosts over 2 million visitors annually and over 300,000 residents. Although Cancun's development has resulted in environmental problems for the area, the economic importance of tourism makes further development desirable, but necessitates development in a more environmentally sustainable manner—where environmental impact is limited and economic benefits are derived locally.

Invariably, there are trade-offs between the economic benefits of tourism development and the negative impacts to cultural amenities and environmental services. The new frontier for tourism development in Quintana Roo is now Costa Maya along the southern coast, a region of high biodiversity and rich coastal ecosystems. The region is bordered by the Sian Ka'an Biosphere Reserve, Belize's Hol Chan Marine Reserve, and the Mesoamerican reef system. With tourism development investment rapidly increasing, the state is working to improve the balance of costs and benefits by promoting "low-impact" tourism development that both protects the long-term sustainability of tourism investment and preserves the coastal environment.

Quintana Roo has an extensive regulatory system of legal instruments for resource management and development which is aimed at limiting inappropriate development, but needs to be more consistently implemented to be truly effective. The state is on the "vanguard" with its system of protected areas and the first ecological land zoning plans adopted in Mexico. The strategy for promoting low-impact

tourism development complements these regulatory approaches—which often lack adequate resources for effective implementation and enforcement—with a voluntary approach. A proven-effective tool of the voluntary initiative is a practitioner's manual of guidelines for low-impact tourism development practices.

The guidelines address issues concerning management of beaches, dunes, wetlands, vegetation, wastewater, solid waste, and use of energy and water resources. They are based on a comprehensive assessment of the coastal resource base and ecosystem dynamics, incorporating design and management techniques that have proven effective in other regions around the world. One of the key messages is the benefit to both industry and society of mitigating damage from natural hazards through low-cost and straightforward preconstruction practices, such as use of construction setbacks, incorporating vegetated dunes with native vegetation, and taking into account previous hurricane and erosion history in development planning.

The guidelines have reached a constituency of private sector developers and government officials in Costa Maya and have initiated a constructive dialogue on local coastal stewardship and resource conservation. Government, non-governmental organizations, and the private sector are using these guidelines in workshops and field demonstrations to define and incorporate specific techniques into development practices, environmental impact assessments, land zoning ordinances, and urban plans at both the site and regional levels. In the future, they may be used as part of industry-based incentive programs, as well as criteria to guide public land development.

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the natural assets that attract tourists or in the infrastructure needed to support nature tourism. This has exposed ecologically or culturally sensitive sites to the risk of degradation by unregulated development, too many visitors, and the impact of rapid immigration linked to new jobs and business opportunities (Wells 1997).

On the other hand, there are parks where tourism has proven a valuable means of preserving biological diversity. Protected areas, such as the Great Barrier Reef Marine Park, in Australia, and Antarctica, have long been used to bring in income from tourism, while protecting the environment (WTTC et al. 1997).

## Information Status and Needs

Conventional economic statistics do not properly capture the contribution of a pristine environment to the growth of coastal tourism. The relative importance of nature-based tourism to the whole tourism sector needs to be measured not only in terms of total foreign exchange revenue but also in nonmonetary indicators, such as local employment. Currently, basic statistics, such as GDP and employment, are not collected specifically for coastal tourism. Because diverse types of businesses constitute the industry, it is not easy to differentiate tourism as an economic sector. Moreover, the value of ecosystems to sustain the tourism industry has been underappreciated because of information limitations.

Although tourism plays a vital role in the economies of many countries, the existing information does not provide a comprehensive view of the full costs and benefits of the industry. This is due to a lack of information on both sides of this equation: *benefits* from income and employment generation; and environmental and sociocultural *costs* from adverse impacts of rapid, uncontrolled tourism development. Reliable data or an adequate framework to measure the actual benefits of tourism to the local economy and people are currently lacking. Many of the benefits often go to foreign investors and outside service providers. Identifying who benefits from tourism development and who bears the environmental cost would lead to more rational and

conscious decisions on the trade-offs involved in tourism development, which are key to more equitable and sustainable management of the ecosystems.

One can only assess the effectiveness of existing sustainable tourism initiatives and certification programs if one develops the criteria and the indicators of “sustainability.” Since each program has its own concerns about what to “sustain,” such criteria and measures can also vary. Although some useful concepts such as carrying capacity have been developed, there are critical gaps in the type of information that is necessary to quantify them.