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A Framework for Sustainable Tourism Development in Honduras: Strategic Environmental Assessment of the Tourism Strategy for the North Coast, Bay Islands, and Copán Valley

A Framework for Sustainable Tourism Development in Honduras: Strategic Environmental Assessment of the Tourism Strategy for the North Coast, Bay Islands, and Copán Valley

Commissioned by
The World Bank

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ACCRONYMS

EIA	Environmental Impact Assessment
GoH	Government of Honduras
IHT	Instituto Hondureño de Turismo
SECTUR	Secretaría de Turismo
SEA	Strategic Environmental Assessment
UGA	Unidad de Gestión Ambiental
UMA	Unidad Municipal Ambiental
UMT	Unidad Municipal de Turismo

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Executive Summary

Abstract

The government of Honduras is in the process of developing a tourism strategy that aims to make the country the number one destination in Central America in 2021. In order to ensure environmental and social sustainability, several studies have been commissioned that will serve as inputs to this strategy. This paper is a framework Strategic Environmental Assessment of the top priority areas for tourism development in Honduras. The focus of the study is on outlining the linkages between different sectors affected by tourism and on assessing the impacts of growth in the industry. As a final exercise, we develop three scenarios that foreshadow future developments.

Background

Tourism ranks third in importance in the Honduran economy in terms of share of Gross Domestic Product (GDP), behind *maquilas* and remittances. The Government of Honduras aims to make the country the number one tourist destination in Central America by 2021. In planning for this growth, the Honduran Institute of Tourism (IHT) is preparing a Regional Tourism Strategy for the North Coast that will later be extended to a National Strategy. It has been agreed that a strategic analysis of the tourism sector that incorporates environmental and social sustainability considerations and an analysis of alternative growth scenarios will be central to the development of the government's tourism strategy. In this paper, a framework analysis will be conducted for the North Coast, the Bay Islands, and the Copán Valley.

Problem statement

> *The objective of this paper is to provide IHT with an overview of the environmental and social implications of developing tourism in the North Coast, the Bay Islands, and the Copán Valley.*

Conclusion and recommendation

Conclusions

- Honduras is blessed with natural and cultural assets that make the country an attractive tourist destination. If managed properly, the tourism industry can prove to be an important engine for economic growth in the country.

- However, as we see it, the Government of Honduras' strategy exhibits two particularly worrisome features. One is the potential failure to distribute the

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benefits of growth in the tourism sector to the Honduran society at large. This failure is likely to occur unless targeted measures are taken to develop micro-enterprises and increase human capital in the sector.

- The other potential threat of the government's growth strategy is its level of ambition. We see it as unlikely that the necessary measures to protect the natural environment will be taken in due course. The result, already apparent in a number of locations, is the degradation and over-exploitation of natural resources.

- Developing tourism in Honduras implies a range of environmental risks. We consider particularly precarious the problems of disposal of wastewater and solid waste, deforestation and beach erosion, and the degradation of coral reefs and natural habitats.

- There is a particular potential for damaging ecosystems and impacting on the country's biodiversity, given the government's strategy of expanding tourism in fragile areas (such as Tela Bay).

- Environmental degradation is likely to affect the very reasons tourist come to Honduras. That is, there is potentially negative feedback from the impacts of tourism on the drivers of tourism.

- A factor complicating the prediction of impacts is the presence of linkages: Tourism indirectly affects many sectors of the economy, and the total effect of tourism development is the sum of all the direct and indirect impacts. Some of the most important linkages are those between tourism and poverty, tourism and infrastructure needs, tourism and education, and tourism and health.

- In conclusion, tourism holds both great promise and the potential for failure in the context of sustainable economic growth in Honduras. The emphasis in this paper on the negative environmental effects of tourism should not be interpreted as a stigmatization of the industry. It is simply a warning that if the process is not managed properly, it will fail to produce the expected results of improved living conditions for all citizens of Honduras.

Recommendations

- The Government of Honduras should reconsider the growth ambitions of the tourism sector with an eye to ensuring sustainability. Our estimates suggest that several of the scenarios imply an inflow of tourist that is above the carrying capacity of the country.

- The Government's tourism strategy should be focused on environmental issues. The relationship between tourism and the environment cannot be overemphasized: Most of the country's tourism is nature-based, whether on beaches, coral reefs, or forests, and a deterioration in these resources will inevitably lead to a decline in the number of visitors.

- The other focal point of the strategy should be on the link between tourism and poverty. If tourism development is to contribute to poverty reduction in Honduras, it is imperative to involve the poorest segments of society in this

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development. This can be done by organizing workshops and training programs, and by helping to organize and finance micro-enterprises[1].

- The government should pursue further opportunities for strategic social and environment impact assessments, particularly as the proposal for a national tourism strategy is developed. A detailed SEA involving all stakeholders and with a sufficient time frame to allow the study of all available information is highly recommended.

- The GoH should develop its tourism strategy in tandem with the capacity of municipalities to tackle the increased inflow of tourists. It is imperative that the government ensures sufficient financing and training of the municipal environmental units (UMAs)[2]. Without this capacity, programs and directives will be left unimplemented. Local environmental capacity is not an add-on to tourism growth; it is a prerequisite for such growth.

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[1] In the study of socioeconomic aspects of tourism development related to this project (*Informe Socioeconomico – borrador, Abril 2004),* the lack of a formal status of most of the existing micro-enterprises, is pointed to as an important weakness of the current situation. The aforementioned study should be consulted for more detailed recommendations in the area of micro-enterprise development.

[2] According to *Aspectos Legales e institucionalidad que se relaciona con turismo y ambiente en Honduras – Borrador Informe Final,* one of the major institutional problems related to the environment in the tourism sector is that regulations are not enforced and punishments are not carried out. A lack of resources and capacity at the municipal level is largely at fault.

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1   Introduction

Without adequate environmental protection, tourism development in particular, and development prospects in general, are undermined, compromising the present and future prospects of tourism organizations, tourist guests and host destinations alike (Cater, 1995)

The tourism sector ranks third in importance in the Honduran economy in terms of share of Gross Domestic Product (GDP), and the Government of Honduras aims to make the country the number one tourist destination in Central America by 2021 (IHT/Sectur, 2003). In planning for this growth, the Honduran Institute of Tourism (IHT) is preparing a Regional Tourism Strategy for the North Coast that will later be extended to a National Strategy. In addition to the North Coast, the Bay Islands and the Copán Valley are high priorities for tourism development. The Government is also preparing a National Ecotourism Strategy.

This paper provides a *framework Strategic Environmental Assessment* (SEA) of the Honduran tourism sector. It is not an exhaustive or comprehensive assessment. Rather, the paper outlines a framework SEA process with a focus on scenario development and the examination of key linkages and impacts. The goal of this Framework SEA is to stimulate a more informed debate regarding the development and implementation of Honduras' tourism strategy.

The paper is structured as follows: First we look at aspects of methodology and key baseline information. We then outline the government's strategy for the North Coast, the Bay Islands, and the Copán Valley. In chapter 3, a planning model is introduced. The model seeks to characterize some of the key linkages between sectors affected by tourism along with major social and environmental impacts. Then, three scenarios for how tourism might develop in the North Coast and Copán Valley are sketched out, based on the government's top priorities and various outside factors. Finally, conclusions and recommendations are outlined in the closing chapter.

1.1   Methodology

The methodology of this SEA study is based on a planning model (see section 3.1). This model was developed using a 'soft systems' mapping technique ideal for identifying linkages, impacts, synergies and feedback. In addition, we employ scenario modeling techniques to attempt to "look into the future" of Honduras

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Tourism Sector Development (see chapter 1). Finally, we make use of a method for characterizing impacts suggested by Dalal-Clayton & Sadler (2003)[3]. It is important to note that due to the limited scope of this paper, it is not practical to develop these analyses in great detail. Rather, our intention is to give impetus for further work in this area and suggest ways forward.

1.1.1   Brief review of SEA

Since its development in the late 1960s, environmental impact assessments (EIA) have become a feature of environmental planning and management systems worldwide. In recent years, it has been argued that a process similar to the EIA practiced at the project level could improve the quality of 'strategic' public policy instruments (e.g., policies, legislation, programs, plans) prior to their implementation. Strategic environmental assessment (SEA) has subsequently been promoted as a distinct form of EIA concerned with "the application of environmental impact assessment at the level of policies, plans and programs" (Therivel, *et al*, 1992: 19). Therivel *et al* provide one of the most widely cited definitions of SEA:

…[T] he formalized, systematic and comprehensive process of evaluating the environmental impacts of a policy, plan or program and its alternatives, including the preparation of a written report on the findings of that evaluation, and using the findings in publicly accountable decision-making (1992: 19-20).

Among the most important benefits of SEA are that it ensures identification of key environmental and social issues early on in the process, with the potential to examine them cumulatively rather than on a project-by-project basis. As in project-based EIA, the objective of SEA is to improve the process and outcomes of public policy decision-making, with the added benefit of a 'trickle down' impact on projects and project EIAs. "By influencing the context within which project decisions are made", argue Therivel and Partidario, SEA "can incorporate environmental issues intrinsically into project planning" (1996:9).

Tourism development seems to be a fruitful arena for employing this planning tool. In a review of coastal tourism and environmental issues in Goa (Teri, 2002, pp.8), it is stated that "the planning and management of coastal tourism can be improved through more careful understanding of social and ecological systems and their linkages, with a view to ensure a development that 'lasts', not only for tourism but also for the host destination".

1.1.2   What makes this study different from a traditional SEA?

This paper attempts to articulate an overarching *framework* for the strategic environmental assessment (SEA) of the Honduran tourism sector. It is not an exhaustive or comprehensive assessment. Rather, the paper will outline the SEA process with a focus on scenario development and examination of key linkages

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[3] Impacts are characterized according to various criteria, such as whether they are positive or negative, accumulative, long- or short- term, etc.

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and impacts. The goal of this Framework SEA is to stimulate a more informed debate regarding the development and implementation of Honduras' tourism strategy.

1.1.3   Useful definitions

The analysis in this paper is framed in terms of *linkages, impacts*, and *externalities* of tourism activity. We now briefly review what we mean by these concepts: We can think of tourism as having a primary role of producing tourism services, while also being the source of other commodity and non-commodity outputs and externalities. A possible framework for discussing effects of tourism development could be to think linearly in terms of linkages – effects – externalities, where one is a subset of the other. That is, externalities are a subset of effects (their costs are external to the decision-maker), which again are a type of linkage (causation in addition to correlation). For instance the fact that the number of rare species in a national park will decrease as a result of higher visitation rates is an **externality** of tourism development. It is also an **impact** on the natural environment, and it illustrates the **linkage** between the environmental and tourism sectors. Three caveats to this example need to be made, however:

First, there is another meaning to linkages in this project, namely **linkages** between tourism and other economic sectors (industries supplying the tourism sector both with goods (e.g. accommodation and meal supplies) and services (e.g. water and sanitation)).

Second, regarding **impacts,** we consider not only environmental impacts, but also social impacts of tourism development. In particular, we include impacts on poverty alleviation and social cohesion/cultural heritage.

Finally, it is important to note that impact assessment is concerned with both intended and unintended consequences of development, and that while impact assessment often focuses on minimizing **negative impacts**, the most effective studies also consider opportunities for reinforcing **positive impacts** and opportunities to realize key synergies.

Others key concepts include:

- **Tourist Carrying Capacity**: "Carrying capacity is commonly considered as the threshold of tourist activity beyond which facilities are saturated (physical carrying capacity), the environment is degraded (environmental carrying capacity) or visitor enjoyment is diminished (perceptual or psychological carrying capacity)" (Pearce, 1989, p.169)

- The various **stakeholders** or interests involved in tourism development can be grouped into four categories: the host population, tourist guests, tourism organizations, and the natural environment (Cater, 1995).

- Ecotourism: Purposeful travel to natural areas to understand the culture and the natural history of the environment, - taking care not to alter the integrity of the eco-system, while producing economic opportunities that make the conservation of natural resources beneficial to local people (Epler Wood, 1991).

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- Cumulative Impacts "occur in those situations where individual projects or actions may not have a significant effect, but when combined with other projects or actions, the individual project's incremental contribution of adversity may cause an overall adverse cumulative effect" (Bowers Marriott, 1997, pp. 11). Cumulative Impact Assessment seeks to address these impacts in a systematic and coordinated manner, although this is a notoriously difficult undertaking, particularly at the strategic level (that is, in SEAs).

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2   Baseline Information

2.1   The Government's Strategy[4]

The tourism strategy for Honduras is in the planning stages only. The first step in this process, taking place at the moment, is the development of an ecotourism strategy[5], and a regional strategy for the North Coast. Due to the lack of a fully developed strategy, this paper can therefore only refer to the likely *elements* of the forthcoming strategy that are apparent to us at this point.

A good illustration of the forthcoming strategy is the official tourism slogan: "Honduras – one small country, three wide worlds" – where the three worlds referred to are tropical nature, Maya renaissance, and Caribbean creation [6][7]. The aim is, by 2021, to be the regional (Central-American) leader in the tourism sector. The country intends to reach this goal through developing and diversifying its markets, products, and destinations in a balanced and sustainable fashion (IHT/Sectur, 2003). An emphasis will be placed on creating jobs, increasing incomes (for instance by developing more upscale tourism, increasing the average stay, and convincing cruise ship passengers to make trips within the country), and developing the regional and local economies.

For the purposes of this study, we asked to focus at the North Coast, the Bay Islands, and the Copán Valley regions. Other areas, such as the Lenca route and Lake Yojoa, are also important, but mainly in the medium- to long-term. Thus, our mandate coincides with the government's top priority areas. The government's strategy for the three regions in question is based on the following geographical products:

The North Coast
- The Tela Bay project is the government's focal point at this juncture (referred to as "*detonante de la actividad turistica en tierra firme*"). 7 hotels

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[4] This section is based on information gathered on a field trip to the North Coast and the Copán Valley in January 2004, discussions with IHT, as well as Louis Berger (2003) and other written material.

[5] The final version of this strategy was published in January 2004. The study was carried out by Planta Consulting Group.

[6] The text in this chapter is based, among other, on observations during field visits, personal communication with tourism officials, and "Politica de estado sector turismo (2002-2005)" by Sectur/IHT.

[7] These are what the IHT considers Honduras' primary tourism resources. In addition, there are other types of tourism that are being promoted, but where the consensus is that it is more difficult to compete. These secondary resources include *colonial towns, living cultures*, and *modern cities and conventions*.

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(four- and five-stars) with capacity for 2000 beds and a golf course will be constructed. The project is still in the planning stages and the government is looking for investors. Emphasis is on the high-budget spender who comes to enjoy the beaches, play golf, and visit the surrounding national parks (Jeanette Kawas national park and the protected areas of Jardin Botanico Lancetilla and Punta Izopo).

- The government is planning a cruise ship terminal in Tela. The objective is to redirect ships from Roatán and consequently reduce pressure there. As a consequence, tourism is expected to increase in Tela and the neighboring nature reserves.

- In La Ceiba, tourists will continue to come for nature tourism in Pico Bonito National Park, Río Cangrejal, and the wildlife refuge "Cuero y Salado". Visits can be made by boat to Cayos Cochinos national park. Furthermore, the intention is for the city to become a "hub" and departure point to the Bay Islands, the Copán Valley, as well as the Mosquitia area. La Ceiba is the largest city on the coast and is therefore well positioned for business and convention tourism, although the tourist infrastructure is insufficient at this point.

- Trujillo: The government is promoting this town as a tourist destination mainly due to its fortress (Santa Bárbara), currently under restoration, and the national park of Capiro y Calentura and Lake of Guaimoreto. It is on the so-called "*Garifuna Coast*" with a large Garifuna population. It is considered to be the most beautiful bay on the coast, but due to poor access (two and a half hour by car from La Ceiba), and a lack of tourism infrastructure, is considered less of a development priority than Tela Bay.

- Omoa also has a Spanish fortress, which the government is planning to restore. It has beaches, and is strategically well positioned close to the border with Guatemala. It is a part of the Mundo Maya program and will have a strategic location once the commercial road interconnecting Guatemala and Puerto Cortes is constructed.

The Bay Islands

- Roatán is the best-known tourism destination in Honduras. The island is popular mainly due to its coral reefs and tropical nature. Tourism is already very developed and "damage control" is needed. The focus in the future will be to prevent coral reef destruction, beach erosion and haphazard real estate developments. The island receives some 2000 cruise ship visitors weekly. The government has expressed in interest in diverting some of this activity to Tela.

- Utila is smaller and less developed. It is popular for diving, mangroves, and eco- and scientific tourism (for instance, Turtle Harbor wildlife refuge (iguana), and whale sharks off the coast). It is not conducive for "sun & sand" tourism, due to a lack of beaches. The government wants to play up scientific tourism since the Jacques Cousteau Foundation and the Shark Research Institute have shown interest in developing a research facility. The island has an airstrip and will soon invest in an airport terminal. It is expected that Utila will continue to be a "backpackers' island", with most accommodations being family-run and small in scale.

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- Guanaja is the "upscale cousin" of Utila. A number of luxury resorts are planned and the island is popular with Honduras' own elite. Nature tourism (pine forests and mangroves) is popular, despite much damage done by Hurricane Mitch. Sun & sand, diving, and an archaeological site provide further impetus for visiting Guanaja. A road project is planned (none at the moment), as is an airport terminal (only an airstrip at present).

Copán Valley

- The Copán Valley is best known for its Maya ruins, which form part of the Maya World Corridor. In addition, the government wants to emphasize nature and rural tourism (such as visits to bird parks, coffee plantations, and hiking), cultural tourism (Santa Rosa de Copán is a colonial town and two ethnic groups live in the area - the Lencas and the Chorti), and health tourism (spas to be built close to natural hot springs). An airport will be built to ease access.

2.2   Baseline tourism information

Table 2.1 outlines some basic data on the tourist sector in Honduras.

Table 2.1   Key indicators of Honduras Tourism Development

	1998	**1999**	**2000**	**2001**	**2002**	**2003***
Total number of visitors (x 1000)	321.1	428.1	688.4	672.0	792.9	921.1
Tourists (spend the night) (x 1000)	317.8	370.8	470.7	517.9	611.1	721.1
Day visitors (x 1000)	3.3	57.3	217.7	154.1	181.8	200.0
Income (million US $)	164.4	195.0	259.8	274.6	350.0	413.0
Average daily spending per tourist (US $)	95.0	119.0	52.8	49.1	60.1	N/d
Average stay (in days)	8.6	9.3	10.4	10.8	10.6	N/d

Source: Resumen de Bahia de Tela, December 2003   *indicates projections

We see that the number of tourists that visit the country has increased steadily since 1998, with the exception of 2001. Table 2.2 shows projections in the total number of visitors until 2006[8]. The projected growth rate for these years is 15.8 per cent.

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[8] Note that the figure for 2003 differs slightly between the two sources. This is due to differences in how IHT defines tourist, visitors, day visitor, etc.

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Table 2.2   Projected number of Tourist visitors, 2006

Year	2003	2004	2005	2006
Tourist arrivals	879,883	1,018,044	1,179,053	1,366,818

Source: IHT/Sectur, 2003

Table 2.1 also shows that the number of day visitors is significant (23 per cent in 2002). In 2002, tourists spent an average of $60 per day and stayed for an average of 10 days. Note that these figures include all kinds of visitors, including those that come for business (28 per cent) and to visit relatives (14 per cent)[9]. A total of 54 per cent of the visitors are from Central America, 32 per cent are from the US and 9 per cent from Europe[10]. Compared to Costa Rica, for instance, Honduras receives relatively more Central Americans and fewer Americans and Europeans. This is probably one of the reasons Costa Rica generates more income per visitors: it receives a little more than twice the number of tourists, but tourism generates six times more revenue (*ibid*). On the other hand, tourists seem to like Honduras enough to return for more visits: roughly 50 per cent of those that come have been to the country before (although it is likely that a significant proportion of these repeats are primarily visiting to see relatives or conduct business) [11].

2.3   Relevant ongoing projects related to tourism

The Government of Honduras is supporting a number of projects designed to promote tourism. They include:

- A project to generate and distribute tourism-related statistics;
- A fund specifically designed to support tourism-related activities;
- A marketing program to promote Honduras as a tourism destination;
- A tourism support and security program (including a tourism police force);
- A training program for developing human resources within the sector.

Some large projects are co-financed with international institutions, and include:

- Bay Islands Environmental Management Program (PMAIB) (IHT / IDB). This program, financed by the IDB, was designed to maintain and improve the environmental quality of the Bay Islands, with a particular emphasis on sustainable economic development and ecotourism.
- Sustainable Coastal Tourism Project (IHT/ World Bank). This project was established to develop a strategy for sustainable tourism in the North Coast of Honduras. A draft report was produced in October 2003.

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[9] Source: Honduras, Survey of Tourists.

[10] Source: Resumen de Bahia de Tela, December 2003.

[11] Source: Honduras, Survey of Tourists

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- National Sustainable Tourism Strategy (IHT/IDB). This project will commence in April 2004 and complements the Sustainable Coastal Tourism Project by covering the rest of the country.

- Regional Development in the Copán Valley Project. The development objective of this project is to achieve sustainable tourism development based on the cultural and natural patrimony of the Copán Valley.

- National Ecotourism Strategy. The objective of this project was to design a national ecotourism strategy for Honduras. A final report was released in January 2004.

- Garifuna Coast Project (IHT/AECI). The main objective of this project is to develop sustainable cultural tourism in the Garifuna communities along the Northern Coast.

- Small Hotels Program (IHT/OAS). This project supports the development of small hotels (5-10 rooms) in the region, thus fostering the development of small enterprise activity.
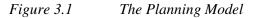
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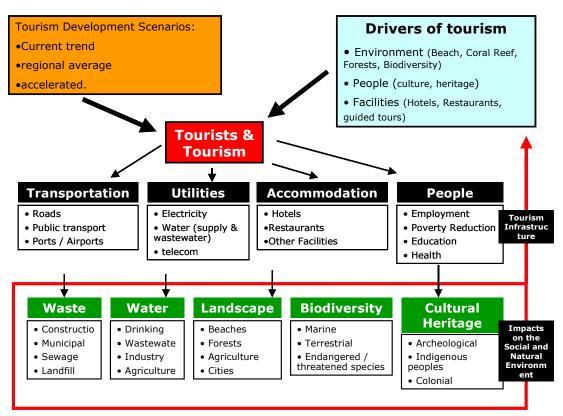
3   Planning Model and Linkages

3.1   Planning Model

This framework SEA is based on a planning model - a characterization or "frame" that provides the basis for more detailed investigations into key issues, linkages, impacts, and externalities.

The planning model was generated using a "systems thinking" technique known as cognitive mapping. This technique recognizes the complex and dynamic nature of tourism development in Honduras, including the potential for positive and negative feedback. The overarching goals of these and other cognitive mapping techniques are to illuminate and examine (often implicit) assumptions about social and organizational change and development, emphasizing complexity, interconnectedness, and risk. The overarching goal of the approach is to stimulate critical thinking and learning. These techniques therefore provide an ideal foundation for complex public policy decision support studies, including framework SEAs.

The planning model seeks to show what <u>drives</u> tourism development, beginning with the number and type of tourists that arrive (box in upper left-hand corner) and their motivations for coming (box in upper right-hand corner). The model also shows the <u>implications</u> of tourism, both in terms of linkages to other productive sectors and inputs needed for development (the first row of boxes, labeled *tourism infrastructure*) and the social and environmental impacts (the last row of boxes) of tourism activity.

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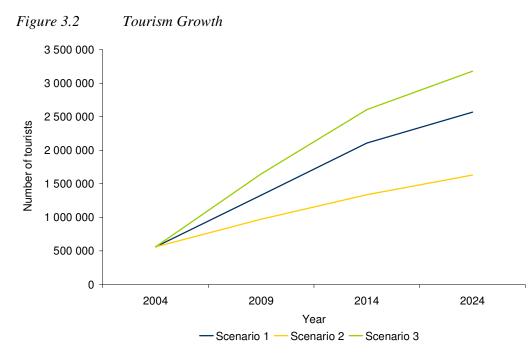
Figure 3.1   *The Planning Model*

Three growth scenarios provide further inputs into the planning model, and are represented by the box in the upper-left corner of Figure 3.1. The three scenarios have growth rates of 15, 8, and 20 percent respectively. These rates are assumed to apply to the short term (defined here as 2004-2009). In the medium to long term, in is anticipated that growth rates in the sector will slow to between 2 and 8 percent[12]. (see Table 3.1).

Table 3.1   *Growth Scenarios*

Assumed Annual Growth Rates		
	Scenario 1	Scenario 2	Scenario 3
Short term: 2004-2009	15 %	8 %	20 %
Medium term: 2009-2014	8 %	5 %	8 %
Long term: 2014-2024	2 %	2 %	2 %

The total numbers of tourists implied by these growth rates are illustrated in Table 3.1 (see appendix for details).

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[12] The World Tourism Organization predicts a regional annual growth rate of approximately 4 percent until 2020 (http://www.world-tourism.org/market_research/facts/menu.html)

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Figure 3.2   *Tourism Growth*

We see that in the medium term (to 2014), the total number of tourists visiting Honduras will be between 1.3 and 2.6 million, depending on the scenario. In the longer term, scenario 3 implies over 3 million tourists by 2024[13].

As envisaged at the outset, the planning model illustrates the presence of linkages and impacts. Key linkages are illustrated by the first set of boxes, while key impacts are shown in the second set. Again, as indicated previously, this is not an exhaustive or comprehensive model; rather, it is a framework that captures some of the key dimensions of tourism sector development.

It is also important to note that there is feedback from impacts to the drivers of tourism. For instance, if tourism negatively impacts on the beauty of a national park, few visitors are likely to feel compelled to visit it. Conversely, efforts to reduce negative impacts have the potential to reinforce key drivers.

Due to the limited scope of this framework SEA exercise, it is not possible to explore this model in full detail. Rather, it serves as a visualization of the context surrounding tourism development, and as a suggestion of a methodology that can be used in a future more comprehensive studies. We now turn to discussing some of the key linkages.

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[13] Note that this only includes those going to tourist destinations (such as the North Coast) and not those coming for business or only to visit relatives. This is how we arrived at the figures: the projected total number of visitors to the country in 2004 is 1,018,044 (IHT). Of these, approximately 50 per cent come for tourism only. Since some of the ones that come to visit relatives combine this with tourism, we estimate that 55 per cent go to tourist destinations. That equals 559,924 visitors. For the following years, we have followed a similar procedure, but allowing for the fraction of visitors that are tourists to increase to 65 percent in 2009, and 70 per cent in 2014 and 2024.

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3.2   Linkages

In this section we concentrate on linkages between the various sectors affecting, and affected by, tourism development. A number of the linkages were identified in a workshop held in Tegucigalpa[14], others emerged during the field visits and through reviewing other countries' experiences. As noted above, we do not explore all of linkages listed in Figure 3.1, but limit our attention to a subset of these, including what we regard to be some of the most significant and interesting linkages.

Poverty and Tourism

Tourism has the power to benefit the local economy and relieve poverty if done properly. The more one is able to involve the local population in tourism development, the greater the chance of spreading its benefits. In Honduras, one way of doing this is by establishing a local handicrafts industry that can replace goods imported from Guatemala. Other ways of including the local population is by employing them in hotels and guide-related activities[15].

Typically, large resorts that are foreign-owned benefit local communities less than smaller locally owned businesses. In Utila, hotels and other tourism-related services are in the hands of local families. As a result, revenues remain on the island and are generally well distributed (Louis Berger, 2003). An example of what could turn in to an opposite experience is the large-scale Tela Bay development. The local Garifuna community already expresses reticence towards the project and towards what they believe will profit outside investors and not the locals.

Poverty and Tourism in Honduras

- Income from tourism: $475.6 million (2004)

- Income projected to increase 15 per cent annually (given 15 per cent growth in visitors)

- Fundamental objective of Honduras' poverty reduction strategy: reduce the proportion of the population living below the poverty line from 66 per cent in 2000 to 42 per cent in 2015

- *Elasticity* between economic growth and poverty is currently 0.65 – insufficient to reach poverty reduction target

- Goal must be to increase the elasticity between growth in the economy, or tourism, and poverty. One way of doing this is by improving the involvement of the poor in tourism.

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[14] As part of the study, relevant stakeholders were invited to a one-day workshop on January 19, 2004. Participants included government officials, tourism developers and NGOs.

[15] Training and other supportive measures are in most cases necessary for these activities to take place (see the discussion on education)

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> • The Government of Honduras could consider creating an indicator of the *tourism-poverty elasticity* - this could be a useful way to track the success of tourism growth as a pro-poor strategy.
>
> Source: (GoH/WB, 2003), IHT/Sectur (2003)

Conversely, the presence of poverty can affect the potential for tourism. This link is particularly clear when looking at nature-based tourism: the population living in poor areas often times are subsistence farmers or in other ways use nature's resources in an unsustainable way. For instance, they may cut down trees to use as firewood in cooking. Poor communities that lack proper sanitation may pollute and degrade surrounding beaches. If an area is not properly taken care of, tourists will not find it worthwhile to go there. Poverty may also motivate the sale of illegal goods, such as coral[16]. This obviously has a negative feedback on the attractiveness of, for instance, the North Coast and the Bay Islands as a tourist destination.

Another link between poverty and tourism involves the presence and rates of crime. In Honduras this has already been an issue, where the government has taken steps, such as the creation of a tourist police force, to improve conditions. However, it might be argued that the establishment of a special police force mainly tackles the symptoms of the problem. Crimes rates, at least aspects of criminal activity, may be expected to decrease when poverty rates drop. One way to contribute towards this to take steps to ensure that the entire population has the potential to benefit, directly or indirectly, from the economic benefits that a vibrant tourism industry can provide.

Education and Tourism

Education is important for tourism development. This holds for both formal education and training (such as in languages and hotel management) and informal customs and manners. Several times during our field visits, key stakeholders pointed out the lack of a tourism- or service- culture (for instance in taxi drivers). A survey[17] of the topic shows that:

- 65 per cent of the owners of small hotels have no formal training in hotel management or tourism;

- Restaurant establishments are generally poorly managed and with high rates of personnel turnover;

- There is a lack of tour guides with proper training, partly due to the low-status perception of this profession;

- Surveys show that business owners view training as an expense rather than an investment;

- Small- and medium-sized enterprises have few resources to devote to training.

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[16] We were, on several occasions during our field trip, approached by people attempting to sell us illegally harvested coral.

[17] See the study on human resources related to this study (*Mejoramiento de las Capacidades de Educación y Entrenamiento para el Desarollo Sostenible del Sector Turístico en Honduras*)

If the country is to develop according to the ambition of the IHT, massive investments in human capital will be needed. At present, IHT only has one staff member devoted to this issue on this full-time basis[18]. Staff that require further training include natural park guides (language and environmental training) and hotel and restaurant personnel (various). Particular emphasis should be placed on the needs of small- and medium-sized enterprises, since they tend to be over-represented in the industry and tend to have the least resources to spend on such activities[19].

Employment, Local Benefits, and Tourism

Involving local communities in tourism development makes economic and social sense. By "getting their share" of the benefits of tourism, the local population are likely to be more supportive of new developments. As incomes grow, education and health conditions will improve, which again will impact positively on tourism. Using the local population in providing goods and services to the tourist sector makes economic sense, since they have the best knowledge of local conditions and culture. The Garifuna community on the North Coast is an example of the latter. However, despite its obvious benefits, involving the local population is often very challenging. The reason for this is that they tend to lack the proper training, making it especially hard to include locals in, for instance, hotel management positions[20].

Employment and Tourism

- Total employment in tourism: 93,473 (2004)

- Employment projected to increase 10 per cent annually (given 15 per cent growth in visitors)

- The relationship between growth in revenues and local employment is not necessarily linear

- Efforts should be made to strengthen the link between tourism growth and growth in local employment

- The Government of Honduras should consider increasing training programs that focus on the needs of small-and medium sized enterprises and on low-skilled workers. The result of these training programs should be monitored and evaluated, and the programs modified accordingly.

Source: IHT/Sectur (2003)

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[18] *ibid*

[19] *ibid*

[20] The Garifunas could doubtlessly do more than guiding tourists to the Jeanette Kawas national park and selling coconut bread on the beach, yet due to a lack of skills and organization, they do not manage to move ahead.

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Transportation, Energy, Telecom and Tourism

Honduras does not have particularly good infrastructure services[21]. Yet, the transport sector is perhaps where most development is taking place at the moment. A new road is being planned that improves the connection between Tegucigalpa and the Copán Valley. Another one is being considered that would considerably shorten the distance between La Ceiba and Trujillo. An airport will be constructed in Copán, and most of the airports on the north coast are in the pipeline for improvement. All these improvements are important for tourism. The road linking Copán to the North Coast is used by heavy trucks and personal vehicles alike and could represent a problem if tourism increases significantly.

Less emphasis seems to have been placed on how to develop the energy sector. In particular, electricity provision to cater to tourists who demand air-conditioning and a number of other amenities will be important. Also, as tourism contributes positively to economic development, electricity demand by the local population will increase in the medium and long term. At this point, most of Honduras' electricity supply is thermally (diesel/oil) generated. Coverage in the areas in question is quite good (88.3 per cent Utila, 71 per cent (mostly private generators) in Guanaja, 86.6 per cent in La Ceiba, and 57.4 per cent in Tela (Louis Berger, 2003)), but much comes from private stand-alone generators. In addition, pollution by existing plants is an issue: For instance, the facility run by the local utility on Roatán is apparently quite polluting[22]. On Utila and Guanaja, there is no environmental regulation of the privately owned generators. It is questionable how sustainable this type of provision is in the long run.

Another important link between the energy sector and tourism is illustrated by the discussions around the plans in La Ceiba to construct a hydropower station on the Rio Cangrejal. This plant would greatly reduce the flow of the river and impact negatively on tourism prospects, as rafting is one of the main attractions of the river.

Telecom services are also important to the modern traveler. Many international tourists are accustomed to being able to access phone and internet facilities, and will increasingly demand these facilities from a quality tourist destination. In Honduras, the coverage of these services is uneven. Access and coverage is particularly poor on the Bay islands, in terms of access to ATMs and the internet. Also, there is no cellular phone network. A failure to improve telecommunications could negatively affect visitation rates in the future.

Water provision

Access to freshwater is an issue on the Bay Islands (on Utila it is already a problem, and on Roatán it is likely to become one in the very near future), where resources are scarce. Given that tourists tend to use at least twice as much water as local residents[23], tourism growth is particularly important in predicting future

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[21] Source: PRSC, revision 30 de enero 2004.

[22] Personal communication with IHT staff, and observation during field visit.

[23] see http://www.panda.org/about_wwf/where_we_work/mediterranean/tourism_threats.cfm (April 21, 2004).

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water needs in the region. An example of a development that will require large amounts of water is the golf course planned in Tela Bay.

In Table 3.2) projected water needs are shown by region. It is assumed that each tourist consumes 440 liters per day[24], and that the tourists are spread across the region according to Table A5 (see appendix). The estimates given are for scenario 1, and we assume that each tourist stays on average 10 days (seeTable 3.2)[25].

Table 3.2   Water Needs for Tourism Purposes by Region

Year	Area		No. of tourists	Water needs (m3/year)
2004	North Coast	Tela	112 000	492 800
		La Ceiba	112 000	492 800
		Trujillo	28 000	123 200
	Bay Islands	Roatan	336 000	1 478 400
		Utila	84 000	369 600
		Guanaja	28 000	123 200
	Copán Valley	Copán Valley	112 000	492 800
2009	North Coast	Tela	332 700	1 463 880
		La Ceiba	266 200	1 171 280
		Trujillo	66 500	292 600
	Bay Islands	Roatan	798 600	3 513 840
		Utila	266 200	1 171 280
		Guanaja	66 500	292 600
	Copán Valley	Copán Valley	332 700	1 463 880
2014	North Coast	Tela	526 500	2 316 600
		La Ceiba	421 200	1 853 280
		Trujillo	105 300	463 320
	Bay Islands	Roatan	1 053 000	4 633 200
		Utila	421 200	1 853 280
		Guanaja	105 300	463 320
	Copán Valley	Copán Valley	631 800	2 779 920
2024	North Coast	Tela	513 500	2 259 400
		La Ceiba	513 500	2 259 400
		Trujillo	128 400	564 960
	Bay Islands	Roatan	1 155 300	5 083 320
		Utila	513 500	2 259 400
		Guanaja	128 400	564 960
	Copán Valley	Copán Valley	770 200	3 388 880

Geographical links

Developing tourism in one area is likely to affect tourism activities in other parts of the country. The link can be positive – for instance by developing the Lenca Route, tourists will have a greater incentive to visit nearby Copán, as they can readily combine the two. A potentially negative link is the effect on tourism in La Ceiba of the Tela Bay project[26]: Will beach tourism in Tela Bay imply reduced prospects for tourism development in La Ceiba? Whether the link is positive or

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[24] *Ibid.*

[25] Please note that these are preliminary estimates only and should be revised in a more detailed study.

[26] This issue was raised by a representative of an NGO in La Ceiba.

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negative seems to depend on whether tourism activities are *competing* or *complementary*: beaches in La Ceiba would compete with beaches in Tela Bay, while Maya ruins in Copán would complement cultural tourism on the Lenca Route.

Another geographical link is, for instance, the need for raw materials from other parts of the country to construct tourism resorts. This need creates economic activity (positive impact through employment and income generation) as well as environmental impacts (noise, pollution, and depletion from mining activities and access roads) in the areas from where resources are extracted. This is an *input linkage*, that is, a linkage to a sector that provides input to the production of tourism services.

Health and Tourism

Health and tourism are also inextricably linked. In the case of Honduras, these linkages relate to the prevalence of HIV/AIDS, malaria, dengue fever, and sand flies. The latter have been a big problem on the Bay Islands for a long period. The government is currently taking a implementing a number of measures to confront the problem, both through research projects on causes and via short-term solutions such as spraying the beaches with insecticides. AIDS is a serious problem affecting the Garifuna population (GoH/WB, 2001).

Improving health-related problems such as the sand fly will positively affect tourism growth. Conversely, it is possible to imagine that expanding tourism will improve health conditions through improved economic conditions and infrastructure in the area. However, it is also possible to imagine a negative effect: tourism expansion can exacerbate wastewater problems if proper systems are not built that can accommodate increased demand. Water pollution and health problems such as cholera may ensue.

Another negative link that was pointed out at the workshop in Tegucigalpa is the potential for tourism to lead to the spread of sexually transmitted diseases.

Protected Areas, Local communities, and Tourism

According to the World Bank[27], the National System for Protected Areas (SINAPH) suffers from weak public management, which is leading to the degradation of protected areas, and the loss of biodiversity and potential employment and economic benefits. Representatives of NGOs in La Ceiba confirmed this view – for instance, they referred to the lack of control regarding entry into national parks.

National parks, if properly established and managed, can generate local employment and revenue and should form an integral part of regional tourism and poverty-reduction strategies.

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[27] *Official PRSC – Matriz en Español,* January 30, 2004.

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Success stories of managing national parks using local resources exist. One example is the marine park off the island of Bonaire[28]:

- Management of the park is in the hands of a local non-governmental foundation (STINAPA)

- Various user groups (hoteliers, dive operators, fishermen, tourist office) have a seat on the board of STINAPA.

- The Park is entirely self-financing and receives no funding or subsidies from the government.

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[28] See http://www.bmp.org/

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4 Key impacts and externalities

In this chapter we review the key social and environmental impacts of tourism development as described in the Government's regional strategy. At the end of the chapter, we summarize the impacts in a table, using a set of relevant impact typologies.

4.1 Background

In a recent paper, the World Bank/ European Commission (2000) identified the following impacts of tourism on the environment in the Caribbean region:

- Solid waste;

- Liquid waste;

- The tendency to build in environmentally sensitive areas;

- High demand on energy and freshwater resources;

- Adverse environmental impacts in particularly sensitive ecological systems (e.g. coral reefs).

Along with the impacts identified in the planning model, this provide are useful basis for exploring potential environmental problems related to tourism in Honduras. In the following sections we discuss what we believe to be the most important potential impacts in the North Coast, the Bay Islands, and Copán regions. This is not an exhaustive list, nor is each issue discussed in great detail. A full SEA, building on the analysis in this framework paper, could examine should be considered to consider these impacts in more detail.

4.2 Impacts

Wastewater

The lack of access wastewater treatment services is a recurring problem in the region. Basic infrastructure services are generally poor in Honduras, and the regions considered in this study are no exception. According to the 2001 *Census of Population and Households*, 25 per cent of urban households have no sanitary facilities or only a simple latrine. The rates in rural areas, and especially among the rural poor, are much higher.

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For example, the town of Santa Rosa de Copán has approximately 5000 inhabitants, while the valley as a whole houses about 15,000. The oxidation pond currently under construction is designed for 5000 and is chiefly meant to service the urban area. An increase in tourism will quickly exceed the capacity of the current pond. And even with possibilities for expanding it, due to its large land requirements, oxidation ponds seem to represent a short-term solution to a long-term problem[29].

Sanitation problems have been identified as a prime concern on the Bay Islands, and have implications for the health of the surrounding ocean and coral reefs. For instance, only 11 per cent of households on both Utila and Guanaja have sanitation services. The corresponding figure for La Ceiba and Tela is about 25 per cent[30]. With tourism currently growing at 15 per cent annually, wastewater will be an important issue that the government will have to deal with. A failure to properly address this issue will result in the continued deterioration of coral reefs (essentially an irreversible effect) and beach water quality.

Table 4.1 gives projections of the generation of wastewater from tourism over the next 20 years[31][32].

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[29] See the study on wastewater options for Honduras related to this study: *Wastewater Disposal Strategies for the Honduran North Coast – Draft*, March 2004.

[30] 2001 Census of Population and Households

[31] We assume that each tourist produces 200 liters per day on average and that the tourists are spread across the regions according to Table A5 (see appendix). The estimates given are for scenario 1, and we assume that each tourist stays on average 10 days (see Table 2.1).

[32] Please note that these are preliminary estimates only and should be revised in a more detailed study.

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Table 4.1   Wastewater from Tourism by Region

Year	Region		No. of tourists	Wastewater
				m3/year
2004	North Coast	Tela	112000	224 000
		La Ceiba	112000	224 000
		Trujillo	28000	56 000
	Bay Islands	Roatan	336000	672 000
		Utila	84000	168 000
		Guanaja	28000	56 000
	Copán Valley		112000	224 000
2009	North Coast	Tela	332700	665 400
		La Ceiba	266200	532 400
		Trujillo	66500	133 000
	Bay Islands	Roatan	798600	1 597 200
		Utila	266200	532 400
		Guanaja	66500	133 000
	Copán Valley		332700	665 400
2014	North Coast	Tela	526500	1 053 000
		La Ceiba	421200	842 400
		Trujillo	105300	210 600
	Bay Islands	Roatan	1053000	2 106 000
		Utila	421200	842 400
		Guanaja	105300	210 600
	Copán Valley		631800	1 263 600
2024	North Coast	Tela	513500	1 027 000
		La Ceiba	513500	1 027 000
		Trujillo	128400	256 800
	Bay Islands	Roatan	1155300	2 310 600
		Utila	513500	1 027 000
		Guanaja	128400	256 800
	Copán Valley		770200	1 540 400

Solid waste

Solid waste is another important concern related to tourism development: Tourists in the Caribbean have been estimated to generate twice as much solid waste per capita as local residents, and cruise ship passengers generate up to four times local levels (World Bank & European Commission, 2000).

According to the 2001 Census, 62 per cent of urban households in Honduras have access to private or public garbage collection. However, these figures tend to be lower in rural and poor areas. Waste disposal is an obvious problem on the Bay Islands where there are space limitations. The final disposal sites in Tela, Utila, Roatan and Guanaja can be characterized as open dumps[33]. A similar characterization can be made of the one in Copán, whereas the one in La Ceiba is "an orderly effort to improve the operation at a landfill site that does not meet established landfill siting standards, as the facility is located too close to La Ceiba"[34].

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[33] See the study on solid waste related to this study (*Environmental Issue Paper No. 2b: Solid Waste Policy Analysis and Management Plan for the Honduran North Coast, Bay Island and Copán Valley - Draft Report)*

[34] *ibid*, pp.7.

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Table 4.2 outlines projections for solid waste generation from tourism over the next 20 years[3536].

Table 4.2   Solid Waste from Tourism by Region

Year	Region		No. of tourists	Waste
				tons/year
2004	North Coast	Tela	112000	1 792
		La Ceiba	112000	1 792
		Trujillo	28000	448
	Bay Islands	Roatan	336000	5 376
		Utila	84000	1 344
		Guanaja	28000	448
	Copán Valley		112000	1 792
2009	North Coast	Tela	332700	5 323
		La Ceiba	266200	4 259
		Trujillo	66500	1 064
	Bay Islands	Roatan	798600	12 778
		Utila	266200	4 259
		Guanaja	66500	1 064
	Copán Valley		332700	5 323
2014	North Coast	Tela	526500	8 424
		La Ceiba	421200	6 739
		Trujillo	105300	1 685
	Bay Islands	Roatan	1053000	16 848
		Utila	421200	6 739
		Guanaja	105300	1 685
	Copán Valley		631800	10 109
2024	North Coast	Tela	513500	8 216
		La Ceiba	513500	8 216
		Trujillo	128400	2 054
	Bay Islands	Roatan	1155300	18 485
		Utila	513500	8 216
		Guanaja	128400	2 054
	Copán Valley		770200	12 323

A failure to properly dispose of solid waste negatively affects both the health of the local population and the quality of visits to, for instance, national parks. Efforts need to be made to include solid waste sites as part of the planning process for tourism development in the region. Detailed recommendations on this topic can be found in a separate study focusing on solid waste options[37].

Under-regulated Housing Developments

This is a recurring problem in many developing country contexts and is not limited to tourism development. The latter exacerbates the problem however, with what are

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[35] We assume that each tourist produces 1.6 kg per day (*ibid*) and that the tourists are spread across the regions according to Table A5 (see appendix). The estimates given are for scenario 1, and we assume that each tourist stays on average 10 days (see Table 2.1).

[36] Please note that these are preliminary estimates only and should be revised in a more detailed study.

[37] *Environmental Issue Paper No. 2b: Solid Waste Policy Analysis and Management Plan for the Honduran North Coast, Bay Island and Copán Valley - Draft Report)*

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often large and aesthetically unpleasing buildings (as for instance on the Spanish Costa del Sol). A lack of zoning laws (for instance in Utila) and the fact that land is almost exclusively privately owned (in Roatán) lead to a *frontier mentality* on the islands and result in unplanned construction activities and architectural mismatches (for instance in Roatán). This is potentially also a problem in Santa Rosa de Copán, where a lack of construction guidelines could jeopardize the colonial look of the town as it expands accommodations to receive more tourists.

Deforestation

According to IEA-SERNA (2001), Honduras has the highest deforestation rate in the region. The estimate in 1996 (most recent available figure) was of 108,000 hectares annually[38].

As for the regions considered in this study, deforestation is an important problem on the Bay Islands and in the Copán Valley. For instance, mangroves are cut to improve the beaches on Utila and Roatán, resulting in beach erosion. Deforestation is potentially a problem in any new tourism developments where land is cleared to build facilities. However, if new developments take place in a controlled environment, measures can be taken to compensate for the loss of forests – for instance by planting new ones. This is obviously easier to do on the mainland than on the islands, where space is limited.

There exists, however, a subtle and potentially positive impact from tourism on deforestation as well. This can occur when tourism offers alternative means for making a living and replaces activities that cause deforestation: A traditional source of income for people in the area has been tobacco plantations. For the plantations, land has to be cleared. And to dry the tobacco, massive amounts of (locally cut) wood are used in inefficient stoves. As tourism increases, economic activity can shift away from tobacco and subsistence agriculture.

Furthermore, in certain areas of the Copán Valley, the local population has realized that sustainable tourism relies on the presence of well-kept natural habitats, and that it is in their own interest to prevent deforestation:

According to local sources in Copán, as tourism grows, people increasingly realize the value of the local forests and other natural assets, and treat them with more care and respect. An example of this are locals involved in bird-watching activities for tourists: after witnessing bird populations decrease in response to the pesticides used by chili-growers, measures have been taken to stop the use of these pesticides.

Biodiversity

The biodiversity of Honduras will be affected by tourism through various channels. One of these is the increased visitation to national parks, which will change the habitats of rare species. Another channel is through water pollution.

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[38] The estimate in 1986 was 80,000 has/year and in 1990 87,586 has/year – showing an accelerating rate of deforestation. In a more detailed study, deforestation rates should be broken up regionally and updated.

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On our field visit, we observed trash littered around the Jeanette Kawas National Park. Many tourist developments (such as the Tela Bay project, or the Bay Islands) take place in close vicinity to fragile ecosystems and are bound to affect them. Stakeholders in La Ceiba mentioned this as a particularly worrisome issue. Note, however, that if tourism is developed carefully, it could actually contribute to certain species being saved: this is perhaps the case with the manatees and sharks on the Bay Islands, and tropical birds through initiatives such as the Miramundo Bird Park in Copán (where the intention in the long run is to reintroduce the birds into their natural habitats).

In conclusion, Honduras' biodiversity could be jeopardized by tourism, but this need not be the case if a gradual approach is taken – in particular one where foreign resources can be used to fund scientific projects that protect certain species.

4.3   Externalities

Some impacts are unintended by-products of tourism. We group these under the label of externalities[39].

Migration

One example of a negative externality is migration to the Bay Islands. The Bay Islands score higher than average on the Human Development Index: for instance 0.76 (Utila), 0.77 (Guanaja), compared to the national average of 0.638. The relative wealth of these islands and the prospects for continuing developments, can make moving there attractive to many Hondurans. Given the limited carrying capacity of the islands in terms of space and infrastructure, in addition to cultural differences, migration can become a potentially important problem.

Influx of temporary workers

Uncontrolled influx and settlements of migrant workers to, for instance Tela Bay is another potentially negative byproduct of tourism development. In order to first build 7 new hotels, and then run them, Tela will need a significant amount of labor. Temporary settlements are usually a strain on the local community, with waste disposal, erosion, and conflicts with the local population being some common problems.

Growth in Municipalities

The municipalities of Tela, Roatán, and other tourism hotspots will experience increased pressures on their services as tourism increases in these areas. This includes demands on infrastructure services as well as increased pressures on ecosystems through waste generation. There is already generally very limited capacity in the municipal governments to deal with infrastructure and environmental issues[40]. Additionally, coordination problems exist between the

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[39] As pointed out in the introduction to this paper, the line distinguishing impacts from externalities is blurry, and several of the impacts just listed could be classified as externalities.

[40] See *Aspectos Legales e institucionalidad que se relaciona con turismo y ambiente en Honduras – Borrador Informe Final*, which points to the UMA of Roatán as being particularly weak.

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municipal entities for tourism (UMT) and the environment (UMA). Given the current precarious situation in this respect, it is likely that growth in tourism will exacerbate the problem further.

Environmental Awareness

An important positive externality of tourism development is increased environmental awareness, both in the local population and governments on municipal as well as national levels. The main attractions of Honduras are nature-based, and if natural resources dwindle, then so will the inflow of tourists. As a consequence, environmental issues are treated with increasing attention. In Honduras, this seems to be mostly evident at the national level (the creation of UGA in IHT, and the emphasis on ecotourism and *responsible tourism*), and less so on municipal and community levels or in the population in general (for instance evidence of lack of civic duty regarding throwing garbage)[41].

Diversification of the local economies

Another positive externality of developing tourism, that at least is true for the Copán Valley and other agricultural regions, is that by diversifying, the local economy becomes less vulnerable to changes in commodity prices. In addition, the growing of agricultural products has its own environmental problems that would diminish if this activity becomes less important.

In Table 4.3, we have summarized the impacts and used a classification scheme as suggested by Dalal-Clayton & Sadler (draft September 2003):

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[41] See *Aspectos Legales e institucionalidad que se relaciona con turismo y ambiente en Honduras – Borrador Informe Final* for details.

Table 4.3   *Classification of impacts/externalities[42]*

Characteristic/ Impact	Positive, negative	High, medium, low	Short- or long-term	Local, national, international	Reversible, irreversible	Cumulative	Readily Available mitigation techniques and technologies?
Wastewater	*Predominately negative, although wastewater can be put to productive uses (irrigation)*	*Generally low-medium immediate impacts, although high in terms of cumulative impact*	*Ranging from short term impacts - longer term impacts (e.g., groundwater)*	*Local-regional*	*Reversible*	*Yes*	*Yes*
Solid waste	*Predominately negative, although can be put to productive uses (waste to energy)*	*Medium-high*	*Short-long*	*Local*	*Reversible*	*Yes*	*Yes*
Under-regulated	*Negative*	*Low-medium*	*Long*	*Local*	*Reversible*	*Yes*	*Yes*

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[42] The scores given can and should be subject to discussion

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Housing Development							
Deforestation	*Negative*	*Medium-high*	*Long*	*Local-regional*	*Reversible*	*Yes*	*Yes, but difficult to reverse the trend*
Biodiversity	*Negative*	*Medium-high*	*Long*	*Local-global*	*Irreversible*	*Yes*	*No*
Migration to the islands	*Negative*	*Medium-low*	*Medium*	*Local-national*	*Reversible*	*Yes*	*No (not easy to dictate migration patterns)*
Influx of workers to Tela Bay	*Negative*	*Medium-low*	*Medium*	*Local-national*	*Reversible*	*Yes*	*No*
Rapid growth in municipalities	*Negative*	*Medium*	*Short*	*Local*	*Reversible*	*Yes*	*No*
Local environmental awareness	*Positive*	*Low*	*Long*	*National*	*Reversible*	*Yes*	*-*
Diversification of economy away from agriculture	*Positive*	*Low*	*Long*	*National*	*Reversible*	*Yes*	*-*

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5   Scenarios

The use of scenarios in planning and decision-making is gaining attention in many sectors and settings. In this particular case, we use the concept of scenarios in a rather limited way, where the main concern is to consider are *how fast* and *where* tourism development will take place (that is, both spatial and temporal considerations). Note that the scenarios are hypothetical – they are not predictions, but rather snapshots of community futures based on an extrapolation of current trends and likely developments.

We have been asked to consider the alternatives of current growth rate (15 per cent), accelerated growth rate (20 per cent) and decreased growth rate (8 per cent), and the relative emphasis between ecotourism, sun & sand, and cultural tourism. The locations are the Bay Islands, various locations on the North Coast, and the Copán Valley. To introduce the scenarios, we have used a simple model (see Figure 5.1) to contrast what we believe to be two of the most important driving forces in tourism development in Honduras today.

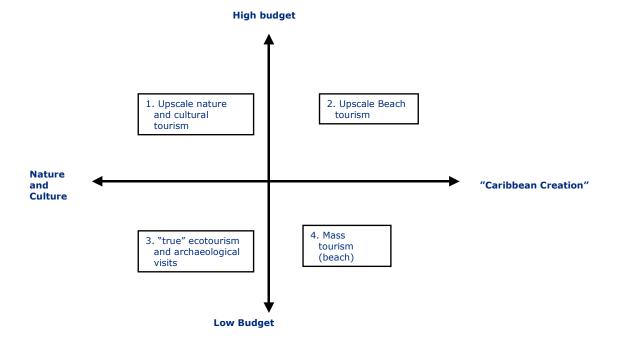*Figure 5.1   Tourism development in Honduras*

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Figure 5.1 contrasts the type of tourism (Caribbean Creation (or diving and sun & sand) and nature and culture grouped together)[43], and the type of tourist (high and low budget). Many other dimensions could have been chosen, but we believe these to be among the most important drivers. The *tourist products* that result from combining the two driving forces are labeled 1 through 4. We believe that the government of Honduras is interested in developing products 1 through 3, but would like to avoid product 4. Obviously, there are no sharp lines dividing these, and some elements of mass tourism are probably inevitable.

The difference between a strategy and a scenario lie in events and trends that are beyond the control of the government and that determine the actual outcome of a strategy. These external factors include international tourism trends, fears of terrorist attacks, and world economic trends. Thus, the scenarios are hypothetical outcomes of strategies and external factors combined. We have arrived at three such scenarios, distinguished by the sector's growth rate (in incoming visitors). We consider three distinct time horizons: short (5 years), medium (10 years), and long (20 years) term.

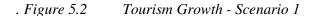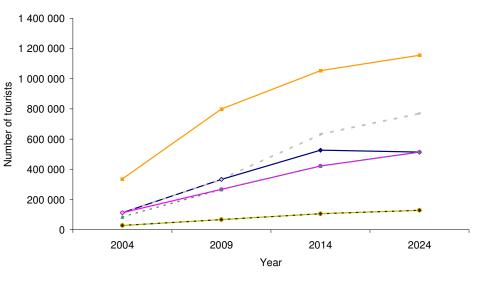## 5.1.1 Scenario 1: trend / moderate growth

Background:

Tourism is currently growing around 15 per cent annually in Honduras (IHT/Sectur, 2003). In this scenario, we project this growth rate to continue until 2008, after which it will gradually decrease to a more sustainable level of 2 per cent (see Table 3.1). This implies 1,331,000 tourists arriving in Honduras in 2009, 2,106,100 tourists in 2014 and 2,567,300 tourists in 2024. A projection of the geographical spread of these tourists is shown in Figure 5.2[44].

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[43] In tourism it is quite common to divide the market into those that want intellectual stimulus, through discovering culture and nature, and those that come mainly to relax on the beach.

[44] Note that if for any given year the numbers for all the destinations are added, they add up to more than the number of tourists entering the country (e.g. 1,331,000 for 2009). This is because tourists are assumed to visit more than one destination.

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. *Figure 5.2   Tourism Growth - Scenario 1*

A growth rate of 15 per cent is rather high, but the government is aiming for more. In this scenario, we are suggesting that this is not achieved due to, on the one hand, stiff competition from other countries in the region (failure of demand), and on the other hand, a failure to attract necessary investments to improve tourism infrastructure (failure of supply). Note that it may seem odd to consider 15 per cent growth a "failure" – in fact it is just a failure *relative to* a growth rate of 20 per cent.

The following are the main features of Scenario1:

- The Bay Islands

Roatán still manages to attract tourists, but more "mass" tourism than before. Sand fly problem is controlled but not cured. In the medium term, cruise ships are increasingly redirected to Tela Bay, but in the short term they continue to disembark around 2000 passengers per week[45]. Solid and liquid waste pose problems both to this island and to neighboring Utila. In the long term, as these are not controlled (the *Plan de Uso de Arrecifes* failed to be implemented) and coral reefs and marine habitats deteriorate, quality-conscious tourists turn away[46]. The islands are also lagging behind in telecommunications: internet, telephones and bank facilities are rudimentary only. Water supply is limited and shortages are becoming commonplace in the long run. In this scenario, the Bay Islands remain a popular spot for amateur divers and medium-spending sun worshippers who do not generally appreciate the difference between a degraded and intact reef and who do not mind that hotel accommodation and other tourist infrastructure are only of moderate quality. Environmental impacts on reefs, mangroves, and landscape beauty are quite significant in the long run.

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[45] 2002 figure (source: IHT, *ingreso de turistas via cruceros, 2002*)

[46] According to IHT/WB (2000) "the health and vitality of the coral reef around the island of Roatan presents serious deterioration….if this trend continues the reefs could eventually disappear…"

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- The North Coast

The Tela Bay project takes off, but low occupancy rates threaten the long-term viability. Competition from all-inclusive beach hotel complexes in Mexico, Cuba and other Caribbean locations prove to be too stiff. Difficulties finding properly trained hotel staff and guides represent a problem, as does the *lethal yellowing* of the palm tree (lessens the aesthetic attractiveness of the beaches). The Garifuna community resents not being included in the management of the tourism activities and blames it on a lack of proper training and employment incentives by the government. The resort developers in turn complain of the Garifuna's resistance to change their ways and to take menial jobs. The high-budget profile of the visitor fails to benefit the local economy as the visitors usually stay within the resort (except for visits to the surrounding national parks) and the resorts are foreign-owned. A positive aspect of this scenario is that since the number of visitors is moderate, negative environmental impacts are contained. In the long run, however, the resorts start closing down, leaving behind a frustrated local population and "ghost-hotels".

The rest of the coast does not develop according to the government's wishes: competition from other Caribbean destinations proves too tough. Trujillo fails to develop into an important tourist destination. The relative isolation of the town, both in terms of lack of other tourist destinations in the immediate vicinity and the failure to build a new and more direct road from La Ceiba, is largely at fault. As a consequence, the economy of the region remains under-developed also in the long run. Another consequence is that the government prioritizes investments elsewhere, leading to continued poor handling of solid and liquid waste, which again negatively impact on the natural environment.

- The Copán Valley

Copán gets its airport and is attracting more tourists. Private tourist attractions such as the Miramundo Bird Park combined with visits to the three Maya ruins sites are proving to be a good sell. Still, IHT's aim of increasing revenues is not reached, as most tourists come for the day, or stay only one night, before going back to Guatemala or the North Coast. The tourists are almost equally split between high budget (from the cruise ships and the coast) and low budget (students and backpackers coming through Guatemala). The local population resents that the revenues from the entrance fees to Copán Ruins go to the central government (Honduran Institute of Anthropology and History) and do not benefit locally. Even with moderate visitation rates, however, disposal of liquid and solid waste becomes a significant problem in the medium and long term. The oxidation ponds do not have the necessary capacity and landfills are overflowing with garbage. However, given the good management of the ruins and certain other attractions, and the fact that these attractions are practically unaffected by the waste problems, tourists continue to come. It is mainly the local population that suffers from the overuse of the existing infrastructure.

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Summary of Scenario 1

Environmental Sustainability[47]: Low

Economic Sustainability[48]:   High

Benefit of scenario:	Popular tourism leads to economic boom on Bay Islands in short and medium term
	Copán Valley tourism flourishes
Disadvantage of scenario:	Quality-conscious tourists shy away from Bay Islands due to environmental degradation
	Tela Bay not a long-run success and rest of the North Coast remains underdeveloped.
Major Environmental Issue:	Waste disposal on Bay Islands and Copán
	Damage to coral reefs
Cumulative Effects:	On a range of environmental resources and natural capital, including coral reefs, biodiversity and water resources

Particular Recommendation: Emphasize solutions to waste disposal problems

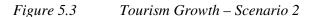# 5.1.2   Scenario 2: "low" growth [49].

Background

In this scenario, we project growth rates to be 8 per cent until 2008, after which it will gradually decrease to 2 per cent (see Table 3.1). This implies 972,300 tourists in 2009, 1,336,400 tourists in 2014 and 1,629,000 tourists in 2024. A projection of the geographical spread of these tourists is shown in Figure 5.3
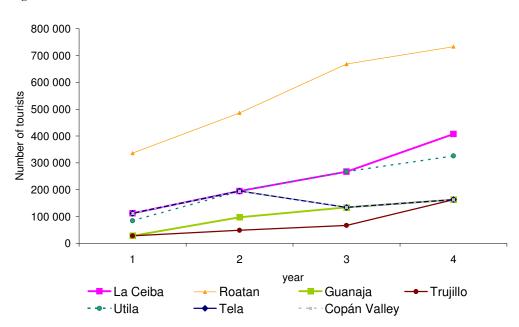
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[47] The rating assumes a continuation of the current government policy and capacity to tackle environmental problems. Any improvement relative to the current situation would result in an improvement in the rating.

[48] By this we mean the ability to generate economic growth.

[49] We believe it is important to include a scenario where growth is projected to decrease compared to current levels. Unforeseen circumstances or another event such as "9/11" or political turmoil in a neighbouring country could make this scenario likely.

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Figure 5.3   Tourism Growth – Scenario 2

In this scenario, Honduras does not reach its goal of becoming the prime Central American tourist destination in 2021. Mass tourism takes off in Mexico, Cuba and Panama, and eco-tourism destinations in Costa Rica and Belize are viewed as superior to those in Honduras. In short, Honduras underperforms relative to its neighbors, partly due to the lack of tourism infrastructure. The continued flow of national and regional visitors cannot compensate for the decrease in number of American and European visitors. In this scenario:

- The Bay Islands

In terms of impacts on the environment, the islands are doing rather well – Roatán is more "under control" as far as resort development and reef damages are concerned, and the government followed a gradual and careful approach to developing Guanaja for upscale sun & sand, and Utila for nature tourism. In Utila, scientific tourism has become important through the research centre set up by Jacques Cousteau Foundation and the Shark Research Institute. However, due to fears of another hurricane Mitch, investors are not financing as much as expected, which in turn is holding back tourism development. This is especially true for Guanaja. Waste problems are contained, not because of a conscious effort on behalf of the authorities to solve them, but because there is less pressure on the system.

- The North Coast

Tela Bay project never secured the necessary financing. As a result, only two hotels were built in the Bay (3 and 4 star), and occupancy rates are low. However, tourists continue as before to come to the town of Tela, to enjoy the beaches and visits to the national parks of Jeanette Kawas, Punta Izopo and the biological reserve Lancentilla. The quality of the national parks and the Lagoon of los Micos, however, continue to deteriorate as a result of continued production of palm oil in the vicinity, that uses large quantities of pesticides

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and toxic chemicals and that produces waste that cause problems regarding biological oxygen demand (BOD). Due to a lack of high-quality accommodations, the tourists that arrive are generally not big spenders. On the positive side, the local population has become more involved with selling tourist activities – finding that this is easier in a more decentralized and low-budget tourist environment. Several micro-enterprises have been created that sell local foods and handicrafts as well as trips to nearby tourist attractions.

La Ceiba develops into a nature tourism hotspot (after publicity in international press). Visits increased to Pico Bonito, Río Cangrejal, and the wildlife refuge Cuero y Sal. This type of tourism takes off particularly in the long run, as visitors increasingly look for genuine and nature-related experiences: they are for instance willing to travel to Honduras just to see the endangered manatees.

- The Copán Valley

Copán did not "take off" as part of the "Mundo Maya". This was partly due to a lack of visitors, as European and Americans failed to arrive in great numbers. Besides, the area was not successfully advertised: Mundo Maya was not an easy product to sell – tourists with an archaeological interest preferred to go to the better-known ruins in Mexico and Guatemala. Also, as the new government that took over in 2005 had a different attitude towards tourism development (more mass tourism and less emphasis on sustainability), the necessary infrastructure investments were not made in the region. For instance, the road linking Copán to the Coast was not improved and made connection between these two destinations difficult as trucks and other heavy traffic used the same roads. As tourism failed to produce the expected economic boom, the local population turned to other sources of livelihood and some emigrated to San Pedro Sula to look for higher-paying jobs. In the medium to long term, subsistence farming, and tobacco growing proved to be the only viable options for making a living, which deteriorated soil quality and caused deforestation. In the long run, the region became one of underused potential from a tourism perspective, and abuse, from an environmental point of view.

Summary of Scenario 2	
Environmental Sustainability:	High
Economic Sustainability:	Low
Benefit of scenario:	Environmental damages limited due to limited tourist activity.
	Ecotourism becomes important niche in the long run.
Disadvantage of scenario:	Tourism does not become engine for economic growth.
Major Environmental Issue:	Deforestation in Copán Valley.

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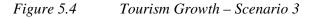Assessment of the Tourism Strategy

	Palm oil production degrading national parks
Cumulative Effects:	National parks (and biodiversity) impacts due to pressures from other sectors

Particular Recommendation: Develop small-scale niche markets for tourism that can compensate for lack of large-scale tourism development and prevent environmental degradation from subsistence activities.
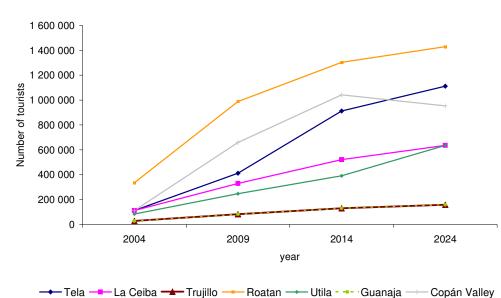
5.1.3   Scenario 3: High/ accelerated growth

Background

A sound economic situation in both Europe and the US brings increasing numbers of international visitors to the country. Higher purchasing power and more leisure time results in greater demand for vacationing in general, and new destinations in particular. Honduras manages to profile itself as a versatile destination with something to offer both the demanding "seen-it-all" and the young and urban looking for genuine nature experiences. The more classical mass tourists also come, as a result of budget hotels and cheap diving opportunities on the North Coast and on the Bay Islands.

In this scenario, we project growth rates to be 20 per cent until 2008, after which it will gradually decrease to a more sustainable level of 2 per cent (see Table 3.1). This implies 1,646,600 tourists in 2009, 2,605,500 tourists in 2014 and 3,176,100 tourists in 2024. A projection of the geographical spread of these tourists is shown in Figure 5.4.

Figure 5.4   Tourism Growth – Scenario 3

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The Bay Islands

In the short-to medium term, Roatán became a prime destination for wealthy baby-boomers looking for a tropical paradise in which to retire. They bought houses in private enclosed communities. At the same time, mass tourism arrived, linked to the development of major hotel chains. In general, accommodation developments were under-regulated and posed a threat to the sustainable development of the island. Despite most cruise ships being officially redirected to Tela, many still prefer Roatán. They represent a problem as the inflow of visitors is too great compared to the carrying capacity of the island's resources. One particular problem is the damage made to coral reefs as cruise ships anchor illegally.

In the long term, Roatán became increasingly unattractive as coral reefs deteriorated, and overpopulation and beach congestion took away the "small-island charm". Starting in the medium term, the other two islands suffered the same fate: In Utila, beach erosion resulted after too much of the mangroves were cut to provide resorts. Another problem in Utila was the unregulated inflow of cars. Nature tourism declined as stress led to the extinction of several species. The continuing lack of "waste culture" in the populations on the islands, together with poor regulatory enforcement, led to environmental degradation both on land and in the surrounding sea bodies.

- The North Coast

Tela Bay turned into "Cancun II" and Honduras is on the list of standard international tourism destinations (capacity of new hotels: 2000 beds). Mass tourism has both positive and negative implications. The negative implications include environmental degradation of the national parks and marine environment, given the failure to invest sufficiently in waste disposal. Also, the situation remains precarious regarding the supply of basic infrastructure such as electricity and water. The golf course requires its share of the latter, and in addition, attracts sand flies. As a result of the massive influx, Tela loses its "banana-look", and tourists looking for authenticity cease to come. Positive results include a flourishing local economy, especially in the long term, as ownership of the resorts went from foreign to national investors. Also, a new airport was built with capacity to receive international flights. Other developments include the arrival of cruise ships to the town of Tela after being redirected from Roatán. A new pier was built to receive the ships and the oil pipeline that runs parallel to it was closed down.

Nature tourism in La Ceiba and La Mosquitia became popular. Tela Bay "put Honduras on the map" and tourists "trickled down" to the rest of the coast. However, the development is not well regulated – too many tourists arrive compared to the carrying capacity, and the necessary measures regarding waste are not taken. This impacts negatively on the biodiversity of these regions

- The Copán Valley

Copán is flourishing. The government's expectation of an increase of 50,000 visitors per year is surpassed. Some tourists come from Guatemala, and

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continue onto the Lenca Route after Copán. Others fly in from the Bay Islands to the newly opened airport. They buy souvenirs produced locally, and micro-enterprises abound. Nature and rural tourism (coffee growing, hiking, bird watching in the Miramundo bird park) as well as health tourism (hot springs) have proved very successful. A large number of the tourists are European, which has positive effects on the local economy, since they tend to stay longer and spend more money. On the negative side, the Maya ruins in the long run are showing signs of stress due to high visitation rates. Disposal of liquid and solid waste is a problem that in the long run affects tourism negatively. Also, the local population has mixed feelings about the surge in visitation: to some extent they resent the "invasion" of foreign tourists that, due to the "integrated" form of tourism (that is, they mingle with the locals and do not stay in isolated resorts), leaves a mark on the region and its people.

Summary of Scenario 3	
Environmental Sustainability:	Low
Economic Sustainability:	High in short run, then decreasing.
Benefit of scenario:	Economic growth in short and medium term
Disadvantage of scenario:	Environmental degradation due to unsustainable pressures
Major Environmental Issue:	National parks and biodiversity suffer from over-use
	Coral reefs, beach erosion, and unregulated housing developments on the Bay Islands
Cumulative Effects:	Impacts on reef systems, loss of mangroves and associated biodiversity.

Particular Recommendation: Develop municipal capacity to face environmental challenges. Without this investment, environment faces bleak prospects.

5.2   Conclusion

The three scenarios provide very different outlooks for the tourism sector in Honduras. Yet, certain conclusions can be drawn from all of them.

One is that there seems to be a tradeoff between environmental and economic sustainability. That is, in scenario 3 for instance, the economy is booming in the short run, but at the expense of the environment. However, it need not be like this: by developing the sector gradually, and in tandem with local capacity for handling environmental issues, tourism can prove a win for both the economy and the environment. Scenarios 1 or 2 hold the best promise in this respect.

Secondly, the major environmental issues in scenarios 1 and 3 relate to the added burden of tourists on natural assets and infrastructure. Key recommendations therefore are to expand municipal services and regulatory capacity. The recommendation in the low-growth scenario, however, relates to how to handle

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the results of the *failure to develop* tourism: Environmental problems don't disappear with the tourists, rather they change their nature.

Table 5.1 uses the list of impacts from Table 4.3 and indicates whether the impact is considered to be significant in the each of the three scenarios. As we can see, most impacts are believed to be significant in all scenarios, with the possible exception of the low-growth scenario.

Table 5.1   Impacts by scenario

Characteristic/ Impact	Scenario 1	Scenario 2	Scenario 3
Wastewater	√	√	√
Solid waste	√	√	√
Housing development	√		√
Deforestation	√	√	√
Biodiversity	√		√
Migration to the islands	√	√	√
Influx of workers to Tela Bay	√		√
Growth in municipalities	√		√
Local environmental awareness	√	√	√
Diversification of economy away from agriculture	√		√

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6   Conclusion and Recommendations

Conclusions

- Honduras is blessed with natural and cultural assets that make the country an attractive tourist destination. If managed properly, the tourism industry can prove to be an important engine for economic growth in the country.

- There exist opportunities for making tourism benefit all Hondurans. These opportunities include the involvement of local communities in resort development, in management of national parks, and in micro-enterprises catering to the tourists.

- However, as we see it, the Government of Honduras' strategy exhibits two particularly worrisome features. On the one hand, it is in danger of failing to make all Hondurans benefit from growth in the tourism sector. This failure will occur unless targeted measures are taken to develop micro enterprises and increase human capital in the sector.

- The other major threat of current government thinking is its level of ambition. We see it as unlikely that the necessary measures to protect the natural environment will be taken in due course. The result, already apparent in a number of locations, is the degradation and over-exploitation of natural resources.

- Related to the previous point, we believe that the accelerated growth scenario, and even the scenario based on current trend, is unsustainable in the long run. For instance, over 3 million tourists in 2024 (scenario 3) is a much higher figure than the 1.1 million judged sustainable by IHT[50].

- The growth scenarios imply a range of critical environmental risks. We consider particularly precarious the problems of disposal of wastewater and solid waste, deforestation and beach erosion, and the degradation of coral reefs and natural habitats.

- There is a particular potential for damaging ecosystems and impacting on the country's biodiversity, given the government's strategy of expanding tourism in fragile areas (such as Tela Bay).

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[50] *Personal communication, February 2004*

- Environmental degradation is likely to affect the very reasons tourist come to Honduras. That is, there is potentially negative feedback from the impacts of tourism on the drivers of tourism.

- However, the relationship between tourism arrivals and environmental impacts is not a linear one. That is, a doubling of tourists does not necessarily imply a doubling of impacts. The marginal damages of additional tourism will depend on the level of existing damages. It is therefore difficult to predict impacts with certainty. Further study in this area is needed.

- Another factor complicating the prediction of impacts is the presence of linkages. Tourism indirectly affects many sectors of the economy, and the total effect of tourism development is the sum of all the direct and indirect impacts. This is why sectoral analyses, such as an SEA, are useful, since they analyze cumulative effects of strategies and plans.

- Also note that, if done properly, tourism development can in many instances benefit the natural environment: Nature-based tourism increases environmental awareness in the population and can lead to better protection of natural assets.

- In conclusion, tourism holds both great promise and the potential for failure in the context of sustainable economic growth in Honduras. The emphasis in this paper on the negative environmental effects of tourism should not be interpreted as a stigmatization of the industry. It is simply a warning that if the process is not managed properly, it will fail to produce the expected results of improved living conditions for all citizens of Honduras.

Recommendations

Growth Scenarios and Environmental Impacts

- The Government of Honduras should reconsider the growth ambitions of the tourism sector with an eye to ensuring sustainability. Our estimates suggest that several of the scenarios imply an inflow of tourist that is above the carrying capacity of the country.

- The Government's tourism strategy should be focused on environmental issues. The relationship between tourism and the environment cannot be overemphasized: Most of the country's tourism is nature-based, whether on beaches, coral reefs, or forests, and a deterioration in these resources will inevitably lead to a decline in the number of visitors.

- All projects with potential significant social and environmental impacts should be subject to a rigorous EIA process[51]. Attempts should be made at assessing cumulative effects from other related projects. This can, to a certain degree, compensate for the lack of an SEA on the regional level.

- Related to the above point, the government should consider adapting the rule of thumb that any new tourist facility should leave the surrounding natural environment in equal or better shape compared to before

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[51] According to a study of the legal aspects of the tourism strategy *(Aspectos Legales e institucionalidad que se relaciona con turismo y ambiente en Honduras – Borrador Informe Final)*, an EIA still hasn't been carried out for the Tela Bay project, although the search for investors has started long ago.

construction. This can be achieved by specifying guidelines that minimize the use of energy, water, and non-local materials, that achieve the full reprocessing of wastes, and that ensure the preservation of surrounding habitats (in particular, mangroves, forests and coastlines)[52]

Economic

- The emphasis of the tourism strategy should be on increasing the value of tourism, not the number of tourist arrivals: 10 000 tourists spending $100 a day is likely to be better for the environment than 20 000 tourists spending $50 a day. This line of thinking seems to have general acceptance in the Ministry of Tourism already.

- Another way of making tourism more beneficial to Honduras is to devise methods for capturing the resource rents arising from tourism. This can be done by increasing hotel and airport taxes, and by increasing user charges in national parks[53]

- If tourism development is to contribute to poverty reduction in Honduras, it is imperative to involve the poorest segments of society in this development. This can be done by organizing workshops and training programs, and by helping to organize and finance micro-enterprises[54].

The Road Ahead

- A series of studies looking at particular issues related to tourism development in the context of sustainability have been undertaken as part of the *Tourism Development as a Poverty Reduction Strategy Trust Fund* process. Due to space considerations, we cannot do justice to all the recommendations made in the issue papers here. We therefore highly recommend reading the issue papers in conjunction with this study.

- The government should pursue further opportunities for strategic social and environment impact assessments, particularly as the proposal for a national tourism strategy is developed. A detailed SEA involving all stakeholders and with a sufficient time frame to allow the study of all available information is highly recommended.

- Related to the previous point, the government should continue and strengthen its current strategy of consulting stakeholders. A sense of participation in and ownership of tourism developments in the country is essential for ensuring support and spreading the benefits of growth. An example here is the Garifuna population's involvement in the Tela Bay project.

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[52] See Levett and McNally's (2003) recommendations for Fiji.

[53] The differential pay scheme for entry in to Copán Ruins is an excellent example of the latter. The international airport tax of $20 is in line with recommendations by The World Band & European Commission (2000).

[54] In the study of socioeconomic aspects of tourism development related to this project (*Informe Socioeconomico – borrador, Abril 2004),* the lack of a formal status of most of the existing micro-enterprises, is pointed to as an important weakness of the current situation. The aforementioned study should be consulted for more detailed recommendations in the area of micro-enterprise development.

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- The government could consider developing an impacts and results-oriented tourism sector monitoring and evaluation (M&E) system for informing ongoing policy reform and renewal. There are opportunities to link this work with broader environmental M&E (e.g., state of the environment reporting) and poverty M&E (PRSP) . The focus should be on developing key economic (e.g., employment) social (e.g., education and training) and environmental (e.g., waste disposal, water consumption) indicators.

- The GoH should develop its tourism strategy in tandem with the capacity of municipalities to tackle the increased inflow of tourists. It is imperative that the government ensures sufficient financing and training of the municipal environmental units (UMAs) . Without this capacity, programs and directives will be left unimplemented. Local environmental capacity is not an add-on to tourism growth, it is a prerequisite for such growth.

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Annex 1   Map of Honduras

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Annex 2   Tourism Growth

Table A. 1   *Growth in number of visitors to Honduras*

Year	Visitors Scenario 1	Visitors Scenario 2	Visitors Scenario 3
1996	263300	263300	263300
1997	306600	306600	306600
1998	321100	321100	321100
1999	428100	428100	428100
2000	688400	688400	688400
2001	672005	672005	672005
2002	761240	761240	761240
2003*	879883	879883	879883
2004*	1018044	1018044	1018044
2005*	1170751	1099488	1221653
2006	1346363	1187447	1465983
2007	1548318	1282442	1759180
2008	1780565	1385038	2111016
2009	2047650	1495841	2533219
2010	2211462	1570633	2735877
2011	2388379	1649164	2954747
2012	2579449	1731623	3191127
2013	2785805	1818204	3446417
2014	3008670	1909114	3722130
2015	3068843	1947296	3796573
2016	3130220	1986242	3872504
2017	3192824	2025967	3949954
2018	3256681	2066486	4028953
2019	3321815	2107816	4109532
2020	3388251	2149972	4191723
2021	3456016	2192972	4275558
2022	3525136	2236831	4361069
2023	3595639	2281568	4448290
2024	3667552	2327199	4537256

Table A. 2   *Scenario Growth Rates*

	Total number of visitors to Honduras		
Year	Scenario 1	Scenario 2	Scenario 3
2004	1018044	1018044	1018044
2009	2047650	1495841	2533219
2014	3008670	1909114	3722130
2024	3667552	2327199	4537256

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Table A. 3   *Growth in number of visitors to Honduras*

Assumed Annual Growth Rates			
	Scenario 1	Scenario 2	Scenario 3
Short term: 2004-2009	15 %	8 %	20 %
Medium term: 2009-2014	8 %	5 %	8 %
Long term: 2014-2024	2 %	2 %	2 %

Table A. 4[55]   *Growth in number of tourists to Honduras*

Number of tourist arrivals			
Year	Scenario 1	Scenario 2	Scenario 3
2004	559900	559900	559900
2009	1331000	972300	1646600
2014	2106100	1336400	2605500
2024	2567300	1629000	3176100

The difference between tables A3 and A4 is that A3 shows the total number of
visitors to Honduras, whereas A4 shows the number of tourists. Approximately 55
per cent of those that visited in 2003, came for tourism. This percentage is
allowed to increase to 65 per cent in 2009 and 70 per cent in 2014 and 2024.

Table A. 5   *Regional Tourist Projections (note: have not yet received*
feedback from IHT on this. Numbers need to be revised).

Year			Scenario 1		Scenario 2		Scenario 3	
			% going to	Number	% going to	Number	% going to	Number
2004	North Coast	Tela	20	111985	20	111985	20	111985
		La Ceiba	20	111985	20	111985	20	111985
		Trujillo	5	27996	5	27996	5	27996
	Bay Islands	Roatan	60	335955	60	335955	60	335955
		Utila	15	83989	15	83989	15	83989
		Guanaja	5	27996	5	27996	5	27996
	Copán Valley		20	111985	20	111985	20	111985
2009	North Coast	Tela	25	332743	20	194459	25	411648
		La Ceiba	20	266195	20	194459	20	329318
		Trujillo	5	66549	5	48615	5	82330
	Bay Islands	Roatan	60	798584	50	486148	60	987955
		Utila	20	266195	20	194459	15	246989
		Guanaja	5	66549	10	97230	5	82330
	Copán Valley		25	332743	20	194459	40	658637
2014	North Coast	Tela	25	526517	10	133638	35	911922
		La Ceiba	20	421214	20	267276	20	521098
		Trujillo	5	105303	5	66819	5	130275
	Bay Islands	Roatan	50	1053035	50	668190	50	1302746
		Utila	20	421214	20	267276	15	390824
		Guanaja	5	105303	10	133638	5	130275
	Copán Valley		30	631821	10	133638	40	1042196
2024	North Coast	Tela	20	513457	10	162904	35	1111628
		La Ceiba	20	513457	25	407260	20	635216
		Trujillo	5	128364	10	162904	5	158804
	Bay Islands	Roatan	45	1155279	45	733068	45	1429236
		Utila	20	513457	20	325808	20	635216
		Guanaja	5	128364	10	162904	5	158804
	Copán Valley		30	770186	10	162904	30	952824

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[55] Numbers are rounded off to the nearest 100.