

**FRAMEWORK FOR A
NATIONAL PARKS COMMISSION**

FINAL REPORT



Commissioned by:

**The Caribbean Tourism Organization
Sir Frank Walcott Building, 2nd Floor
Culloden Farm Complex
St. Michael, Barbados**

Prepared by:

**Ecotech Inc. Limited
10 Central Road
Kingston 10, Jamaica**

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Lloyd Gardner
Ecotech Inc. Limited

List of Acronyms

CARICAD	Caribbean Centre for Development Administration
CBO	Community Based Organisation
CDB	Caribbean Development Bank
CEP	Country Environmental Profile
CTO	Caribbean Tourism Organization
EIA	Environmental Impact Assessment
GDP	Gross Domestic Product
GOG	Government of Grenada
MOU	Memorandum of Understanding
ENGO	Environmental Non-governmental Organisation
ISO	The International Organization for Standardization
IUCN	The World Conservation Union
MPA	Marine Protected Area
NEAP	National Environmental Action Plan
NGO	Non-Governmental Organisation
NIMOS	National Institute for Environment and Development in Suriname
OECS-NRMU	Organisation of Eastern Caribbean States - Natural Resources Management Unit
PACT	Protected Area Conservation Trust
SDC	Sustainable Development Council
TA	Technical Assistance
UNDP	United Nations Development Programme
UNEP-CEP	United Nations Environment Programme - Caribbean Environment Programme
WCPA	World Commission on Protected Areas

Executive Summary

INTRODUCTION

There is increasing realisation that environmental resources form one of the pillars of Caribbean tourism, both as individual resources used for visitor attractions, and as general environmental quality. There is also increased recognition of the fact that not only can environmental quality result in both positive and negative impacts on tourism, but tourism can also make positive and negative contributions to environmental quality. This awareness has resulted in increased efforts to effect greater integration of environmental considerations into tourism planning and development.

However, the policy, legislative, and institutional frameworks for integration of tourism and environment is inadequate in many countries of the Caribbean. Yet, a more integrated approach to tourism development and environmental management is increasingly being pursued.

In an effort to address the above considerations, the Caribbean Tourism Organization (CTO), within the framework of the Regional Tourism Product Development Project, has undertaken to identify the "*most appropriate institutional framework for environmental protection and management in Caribbean Countries*".

This initiative is designed as a study for the development of a framework for a National Parks Commission, or equivalent body, which can serve as the model institutional framework. This body is perceived to be a national body "*responsible for environmental policy formulation and coordination of the management and operation of individual resources, areas, sites, and the regulation of the diverse entities involved*".

This study is aimed at two levels. First, is the regional level represented by the membership of the CTO, to which the model institutional framework will be offered for possible adoption. Secondly, the current environmental management situation in three countries would receive more detailed attention.

Approach to Study

The Study Team was comprised of Ms Joy Douglas and Mr. Lloyd Gardner, both regional consultants.

The approach used by the Study Team involved the following:

- ◆ Review of relevant publications dealing with the subject of tourism and the environment and/or sustainable tourism;

- ◆ Review of publications and other materials pertinent to the three focus countries;
- ◆ Working with the national tourism organisations in each country to conduct consultations with relevant organisations; and
- ◆ Conducting a “workshop” in each country in order to present the findings of the consultations, agree on relevant issues, identify solutions to specific problems, and agree on the institutional arrangements to be used in implementing the agreed solutions.

MODEL INSTITUTIONAL FRAMEWORK

Literature on environmental management and sustainable development in the Caribbean identifies clearly the limitations that create the inadequate institutional frameworks often in evidence in Caribbean countries.

In reviewing the experiences and/or proposals for environmental policy integration in the Caribbean region, the Study Team identified both an institutional model and a process that is considered to be appropriate.

The institutional model is known as the Island System Management (ISM) framework, and was developed by the Natural Resources Management Unit (NRMU) of the Organisation of Eastern Caribbean States (OECS) for use in the OECS countries. The process is the establishment and operation of a sustainable development council (SDC).

The ISM framework proposes a three-tiered system with the following composition:

- ◆ Tier 1 - a national policy advisory body (a multi-sectoral forum that provides advice on sustainable development);
- ◆ Tier 2 - secretariat to the policy advisory body (a government agency with responsibility for coordination of natural resources management); and
- ◆ Tier 3 - line agencies (charged with specific implementation responsibilities).

This study recommends that the three-tiered ISM model be adopted as a general model for ensuring environmental policy formulation and coordination. However, based on the specific needs of this study, the model developed comprises the following components:

- ◆ An institutional framework for environmental policy formulation and coordination;
- ◆ An environmental management authority, for coordination of environmental management programmes; and
- ◆ A protected area authority, for coordination of protected areas management.

Institutional Framework for Environmental Policy Coordination

The sustainable development council (SDC), established by several Caribbean Countries, is considered by the Study Team to be analogous to the Tier 1 policy advisory body proposed by the ISM model. The SDC format fulfills two of the basic criteria for successful coordination of environmental policy and management; that is:

- ◆ Existence of a multi-sectoral, and participatory, forum; and
- ◆ Establishment of the policy formulation body outside of the confines of a single ministry of government.

The experience from around the Caribbean since 1994 is that SDCs have been fairly successful in making a positive impact on the decision-making and development processes, with the sustained inputs from the civil society sector as a major achievement. The positive impact on tourism policies and development has also been noted in the cases of Dominica, Grenada, and the British Virgin Islands.

The Sustainable Development Council format is therefore recommended as an appropriate format for the environmental policy formulation body, and similarly an appropriate forum for ensuring integration of tourism and environmental policies.

National Parks Framework

The study notes that, similar to the situation with environmental management, protected areas management in the Caribbean is constrained by resource shortages and policy and institutional inadequacies. The experiences of countries presently operating "apex" national parks bodies is cited in order to underscore that the mere presence of such a body does not automatically lead to integration of tourism and environmental policies.

Based on the above, the study recommends the following approaches to protected area management:

- ◆ That a systems approach be taken; and
- ◆ That the "national parks commission" operates within a SDC framework.

Noting the perception of national parks being used to support tourism and to "lock away" resources, the study recommends that the term "protected areas" be substituted for "national parks"

Given that most countries currently possess several institutions that manage protected areas, it is recommended that the new body be made a statutory authority with a coordination role. Management of the sites would remain the responsibility of the line agencies (both public and private sector). The responsibilities defined for this coordinating institution are the following:

- ◆ Development of the policy framework for all aspects of protected area planning and management;
- ◆ Development of procedures, guidelines, and criteria for all aspects of protected area planning, establishment, and operation;
- ◆ Approval of protected area management and operational plans (where prepared by other organisations);
- ◆ Assess the capabilities and needs of institutions identified for management of sites;
- ◆ Provision of technical assistance to management organisations, particularly in the areas of site planning, design of cost recovery systems, design of research and monitoring programmes, and legal services;
- ◆ Coordination of any permit and licence system for the system of protected areas;
- ◆ Design and implementation of a programme of monitoring to ensure performance effectiveness of management institutions, maintenance of system integrity, and achievement of system objectives;
- ◆ Coordination the activities of the different institutions involved in environmental monitoring relating to the system of protected areas;
- ◆ Development and management of an information system and resource centre for the system of protected areas;
- ◆ Coordination of a public education programme relating to the system of protected areas;
- ◆ Coordination of bilateral and multilateral initiatives related to the system of protected areas;
- ◆ Assumption of management responsibility for sites of national significance for which no other management entity exists, or for which management effectiveness is inadequate to protect the environmental resources and/or meet the management objectives; and
- ◆ Development of mechanisms (such as a trust fund) to ensure adequacy of financial support for the system of protected areas.

Given the resource constraints experienced by many environmental management institutions, the issue of financial sustainability was addressed. The following sources of resources were noted:

- ◆ Government direct contribution;

- ◆ Debt-for-nature swaps;
- ◆ Capital campaign (grants and donations);
- ◆ Special appeals;
- ◆ Cost recovery mechanisms at the sites;
- ◆ Sales, merchandising, etc;
- ◆ Tourism head or departure taxes;
- ◆ Projects;
- ◆ Investment in site management by private sector firms;
- ◆ Fiscal incentives to encourage cash and in-kind support, or direct investment;
- ◆ Tax and/or duty exemptions on equipment, vehicles, supplies, etc.; and
- ◆ Volunteerism (local and international).

However, the recommended mode for ensuring consistency of financing for protected area management is the establishment of a protected areas trust fund, which can be capitalised from a number of the sources listed above.

It is noted that having the institutional structures does not automatically guarantee the achievement of the stated objectives. In this regard, the following relevant issues were identified as requiring attention:

- ◆ Institutional coordination requires changes in management arrangements initially and over time;
- ◆ Coordination and integration have to take place both horizontally and vertically;
- ◆ Legislative underpinnings strengthen coordination;
- ◆ The relevant authority for specific approvals has to be clearly identified;
- ◆ Coordination/integration requires clearly defined mechanisms;
- ◆ Institutional coordination arrangements should be compatible with existing customs and traditions (at least initially);
- ◆ The support of highly placed politicians and technocrats/managers is required for success;
- ◆ Civil society inputs generally act to improve policy formulation and programme implementation successes; and
- ◆ Implementation of new institutional arrangements require careful design, time for building partnerships and trust, consistent and constant reminders of the objectives and benefits, conflict resolution mechanisms, and information flows.

Modalities for Integrating Tourism and Environmental Policies

In addition to the opportunities offered by the SDC and protected areas management, a number of mechanisms were identified through which tourism and environment policy integration and/or programme coordination could take place. These include:

- ◆ National environmental action plans;
- ◆ Bioregional planning and management strategies;

- ◆ Integrated coastal area management; and
- ◆ National development plans

SITUATION IN THE FOCUS COUNTRIES

The policy and institutional scenarios in the three countries are essentially similar, being characterised by:

- ◆ Inadequate macro-economic and land use planning frameworks;
- ◆ Inadequate policy and legislative support;
- ◆ Inadequate institutional capacity to plan, implement, and monitor programmes effectively;
- ◆ The existence of a variety of mechanisms for information sharing that are mostly informal. Even then, few mechanisms exist for some degree of institutional coordination;
- ◆ A general willingness at the institutional level to foster linkages and try new approaches; and
- ◆ Increasing dialogue and partnerships between the public sector and the private and civil society sectors.

Grenada and Suriname have established national environmental policy formulation bodies, and Belize is in the process of creating such a body. The three countries are in somewhat similar positions with regard to the management of protected areas, in that protected area management is undertaken by several institutions. Two important differences exist in the case of Grenada. First, the implementing institutions are faced with severe resource shortages and lack of policy support. Secondly, civil society organisations play a more reduced role in protected area management, compared to Belize and Suriname.

Belize

The main findings by the Study Team were:

- ◆ There are a number of policy gaps (such as the absence of a national development plan);
- ◆ The institutions responsible for tourism and environmental management required additional capacity;
- ◆ The current protected area system plan required revision; and
- ◆ A number of major initiatives were being undertaken in order to address a number of the planning and institutional issues.

The recommendations emanating from this study include the following:

- ◆ Finalise the National Development Plan;
- ◆ Establish the proposed National Council for Sustainable Development;

- ◆ Establish a Protected Area Authority;
- ◆ Update the National Protected Area System Plan; and
- ◆ Establish a policy and planning unit within the Ministry of Tourism, Youth, and Broadcasting.

Grenada

The main findings from the Grenada consultations were:

- ◆ There are a number of policy gaps (such as the absence of a national development plan);
- ◆ Land use planning and environmental management is not implemented in a coordinated manner;
- ◆ Protected area planning is not guided by the existing policy guidelines;
- ◆ A number of the relevant institutions lack adequate capacity and policy support; and
- ◆ The ongoing attempts to revive the tourism sector.

The recommendations made to address the above issues include:

- ◆ Prepare the national physical plan;
- ◆ Establish a lead environmental management agency;
- ◆ Revise the physical planning and development control processes;
- ◆ Establish the proposed National Parks Authority; and
- ◆ Re-position the Sustainable Development Council, and provide it with a secretariat.

Suriname

The study noted the main issues as being the following:

- ◆ The instability of the present macro-economic framework;
- ◆ The presence of policy gaps;
- ◆ The inadequate coordination in land use planning;
- ◆ The recent initiatives to revive the tourism sector; and
- ◆ The recent initiative to improve the environmental policy and management framework.

In the above context, the following recommendations were made:

- ◆ Merge the National Council for Environment and the Nature Protection Commission, and broaden representation on the new body;
- ◆ Prepare a national physical plan;
- ◆ Revise the development control process;

- ◆ Promulgate additional legislation to enable NIMOS to adequately discharge its coordinating function;
- ◆ Prepare a national protected areas system plan; and
- ◆ Provide institutional strengthening support (for environmental planning) to the Suriname Tourism Foundation.

Conclusion

The Study Team relied to a great degree on the available literature and the in-country consultations, rather than on detailed analyses of the existing situation in each focus country. None-the-less, the Team is confident that the situation described is fairly accurate.

In a number of cases, the recommendations are in keeping with the results of work being undertaken in the particular country, and it is therefore assumed that a significant degree of ownership of the proposed solutions will result.

PART I: INTRODUCTION AND BACKGROUND

1. INTRODUCTION

The tourism product in the Caribbean is based primarily on environmental resources, with marketing strategies of the previous two decades portraying the image of sand, sea, and sun as the main attractions. However, the demand for other attractions, especially nature-based activities, has increased steadily. At the same time that this demand for environmental attributes is increasing, the Caribbean is faced with increasing environmental degradation.

Worsening environmental conditions globally has resulted in greater global efforts to protect environmental resources and quality, and by extension, ensure development processes that are sustainable. The importance and positioning of environmental resources as the basis for development has been recognised, and related philosophies, policies, programmes, and procedures have been developed to guide sustainable use of environmental resources, and the equitable sharing of the resulting benefits thereof among and across generations.

Strategies to ensure the above objectives have focused primarily on integrating environmental policies, procedures, and standards into the policies and activities of the other sectors of an economy.

One such sector, the tourism industry, utilises environmental resources to a significant degree, and the inter-linkages are increasingly being recognised. However, tourism activities can result in significant negative impacts on the environmental resources on which it depends (UNEP, 1997). Given the afore-mentioned inter-linkages between the two sectors, and the fact that tourism has become the major source of foreign exchange in many Caribbean economies, there is urgent need to integrate tourism and environmental policies and programmes.

1.1 Purpose of the Study

The Caribbean Tourism Organisation (CTO), as the primary regional organisation mandated to promote sustainable tourism in the Caribbean, recognises this need to integrate tourism and environmental policies, and therefore commissioned this study to develop a framework through which the necessary policy integration can be pursued.

The objectives of the project, as set out in the Terms of Reference prepared by the CTO (Appendix 1), "*is to assist the Caribbean region in general and individual countries in particular to strengthen their institutional framework for the formulation and coordination of a national environmental policy as well as the management of environmental resources in an integrated and sustainable manner*". The study is also intended to "*assist in the process of integrating tourism and environmental management*".

The Study Team was required to:

- a. Determine the respective roles of the public sector, private sector, and civil society in the ownership, regulation, and management of environmental resources;
- b. Recommend a suitable framework for an apex national environmental body, such as a national parks commission, to serve as a model for adoption by interested CTO member countries; and
- c. Review the existing institutional structures in Belize, Grenada, and Suriname and make appropriate recommendations to address the main issues related to;
 - ◆ Management of environmental resources,
 - ◆ The status and powers of the national parks commission or equivalent body, The activities, sources of finance, and prospects of self-sustainability, and
 - ◆ The human development needs for the national parks commission.

1.2 The Approach

The Study Team was comprised of the following persons.

- ◆ Lloyd Gardner - Team Leader
- ◆ Joy Douglas

The approach taken in conducting the study included the following:

- a. Review of relevant publications dealing with the subject of tourism and the environment and/or sustainable tourism;
- b. Review of publications and other materials pertinent to the three target countries;
- c. Working with the national tourism organisations in each country to conduct consultations (see Appendix 2 for standard questions) with relevant organisations; and
- d. Conducting a “workshop” in each country in order to present the findings of the consultations, agree on relevant issues, identify solutions to specific problems, and agree on the institutional arrangements to be used in implementing the agreed solutions.

1.3 Factors Affecting the Country Assessments

The visits to the three focus countries were affected by a number of factors, which proved to be constraints.

- a. The compressed time for the country visits made it impossible for the Study Team to consult with all the relevant public, private, and civil society groups.
- b. In most cases, the Team was not given access to policy makers, who were expected to provide a significant amount of information on general policy directions, as well as guidance on the scenarios that could be pursued/accommodated.
- c. Many of the institutions were not adequately prepared for the visit by the Study Team. This was particularly so in the case of Grenada, where a change in the timing of the visit by the Study Team resulted in a number of key persons not being available.
- d. Though the published information on the focus countries was dated in some instances (see bibliographical listings), it formed the most reliable source, as information provided by individuals during the consultations sometimes could not be verified, or worse, was challenged by others.
- e. Many persons were reluctant to provide information and discuss possible policy and institutional changes, as they considered the time and nature of the assignment inadequate and inappropriate to deal properly with such complex issues.

The Study Team was therefore forced to rely heavily on the views of the persons consulted, rather than its own detailed assessment of the relevant issues and, policies, and institutions. The conclusions arrived at in the country summaries (Parts III-V) should therefore be interpreted in the above context.

2. TOURISM - ENVIRONMENT LINKAGES

2.1 Natural Resource Use

Both individual resources (animals, plants, etc.) and ecosystems are used in the many and varied activities carried out in support of human existence. Resource utilisation falls within three basic groups:

a. Provision of Raw Materials

This includes direct consumption of resources (such as plants, animals, air, water, etc.) as well as the provision of raw materials (such as minerals, forest products, fuels, etc.).

b. Waste Assimilation

This involves mainly the disposal of wastes at sea, in rivers, in wetlands, and in soil. Traditionally, the basic philosophy behind this action was "out of site, out of mind". In some cases, this action is based on the capacity of ecosystems to assimilate small amounts of different types of waste. More recently, "natural systems" are being created for the treatment of wastes, such as sewage.

c. Provision of Life-support Services

Most of these ecosystem functions occur independently of human activities, though said activities could affect the proper functioning of the receiving systems. Life support services include disaster mitigation, pest control, provision of oxygen, and similar services. Humans have also depended on these services to fulfill a range of desires, from purely recreational to spiritual.

Natural resources are used to meet the basic needs of the general population in a country, as well as to support the diverse, and often conflicting, development patterns of each sector of the economy. Unfortunately, the current planning processes and management systems produce development strategies, and associated patterns of resource use, that result in the deterioration of environmental resources. This dilemma takes on greater significance for the tourism sector in the Caribbean, as it depends to such a large extent on environmental quality.

2.2 Tourism and the Environment

As stated previously, the tourism product in the Caribbean is largely dependent on the natural resource base. The advantage of having good environmental quality is reflected in the traditional marketing approach for Caribbean destinations; that is, the "sand, sea, and sun" concept. This has resulted in the concentration of tourist facilities and activities in coastal areas. This means that as a leading sector in many Caribbean economies, tourism probably makes the greatest use of coastal resources. There is a rapidly growing body of literature on

Caribbean tourism, all of which agree that both the costs and benefits of tourism (Table I-1), as presently practiced, are very high. Additionally, the literature also indicates that it is difficult to determine a direct cause-effect relationship. This is due to the fact that other activities take place in the same areas and/or use the same resources, and a number of the impacts result from systemic inadequacies.

Table I-1: Costs and Benefits of Tourism

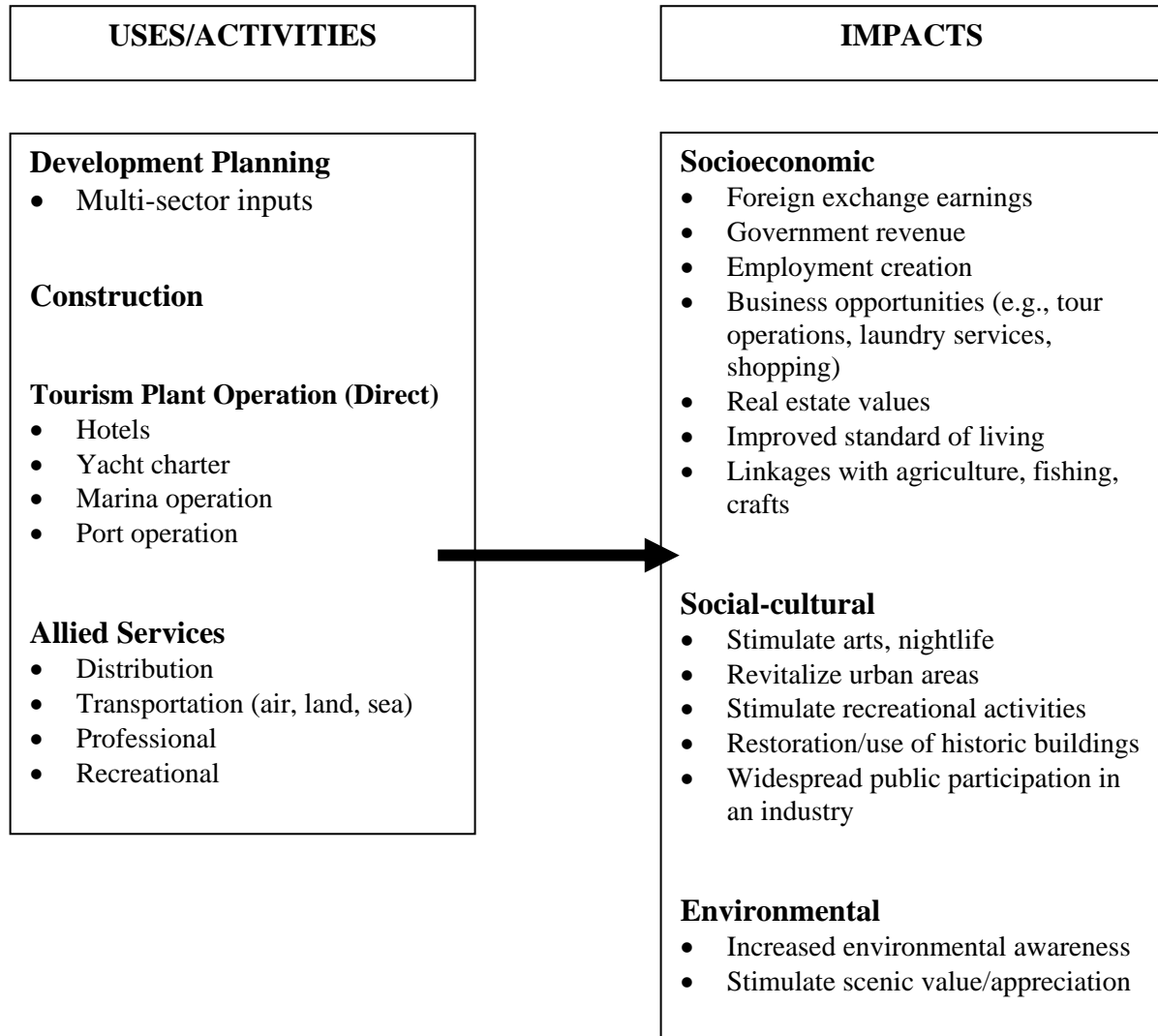
Benefits	Costs
<ol style="list-style-type: none"> 1. Improved port facilities 2. Improved road networks 3. Better communications 4. Increased revenues 5. Improved recreation facilities 6. Preservation of historic sites 7. Increased cultural offerings 8. Stimulation of crafts 9. Improved social infrastructure 10. Employment and business opportunities 11. Capacity building for some sectors 	<ol style="list-style-type: none"> 1. Exhaustion of water resources 2. Pollution of coastal areas 3. Beach erosion 4. Damage to corals and other coastal systems 5. Loss of important land and marine habitats 6. Overfishing 7. Decreased aesthetic value 8. Noise pollution 9. Increased social conflicts 10. Erosion of traditional values 11. High land costs 12. Loss of agricultural productivity 13. Capital transfer to metropolises 14. Increased consumption of foreign products 15. Shifting investments in infrastructure from more populated areas 16. Conversion to mono-sector economy largely dependent on external inputs

Source: UNEP, 1997

2.2.1 Contribution of Tourism to Caribbean Economies

Though it is well recognised that tourism plays an increasingly important role in the economies of Caribbean countries, the existing information on the economic impacts of tourism does not provide a comprehensive view of the full costs and benefits (CDB, 1996). This is due primarily to the lack of reliable data, as well as the absence of a system to adequately measure the benefits of tourism to a country's economy. None-the-less, the range of economic, social, and environmental benefits can be categorised (Figure I-1).

Figure I-1: Positive Impacts of Tourism



Source: Modified from Caribbean Conservation Association, 1991

Even though the potential benefits of tourism are more than purely economic, it is the direct economic benefits that are most often quoted. Data published by the CTO (1999) shows that Caribbean tourism grew by 7.3%, from 1997 to 1998, with the associated visitor expenditure estimated US\$17.9 billion (Table I-2).

Direct economic benefits from tourism are usually grouped as follows:

◆ **Foreign Exchange Earnings**

Tourism is often said to be the leading source of foreign exchange earnings for small Caribbean economies, contributing as high as 75% in foreign exchange earnings (Bahamas), and up to 60% of GDP (Antigua/Barbuda) (UNEP, 1994).

◆ **Government Revenue**

Revenue from tourism is vital to the economies of Caribbean countries, as it help to pay the Region's import bill. It also makes up an increasing percentage of the balance of payment budget. Available data on tourism contribution to balance of payments suggests that in 1985/86 tourism paid for approximately 40% of the Caribbean's US\$4 billion worth of imports from the United States of America (CTRC, 1987).

◆ **Employment**

Tourism is a labour-intensive industry, and is therefore becoming a preferred strategy to address high unemployment levels. Information provided by the national and regional tourism organisations suggest that tourism directly and indirectly employs 25% of the workforce in the Caribbean.

2.2.2 Negative Environmental Impacts of Tourism in the Caribbean

UNEP (1997) identifies the negative impacts from tourism on coastal resources as resulting from five categories of causal factors (Table I-3), namely:

- ◆ Wastes, primarily sewage;
- ◆ Recreational activities;
- ◆ Physical change/mechanical action;
- ◆ Resource overuse or misuse; and
- ◆ Beach activities.

Based on certain criteria, the most detrimental tourism practices impacting on coastal resources were identified as:

- ◆ Physical change (damage to habitats);
- ◆ Sewage disposal; and
- ◆ Solid waste disposal.

Table I-2: Estimates of Visitor Expenditure* (US\$millions)

Destination	1994	1995	1996	1997	1998
Commonwealth Caribbean	5,077.7	5,176.3	5,462.8	5,633.5	5,884.0
OECS Countries	1,001.4	986.9	1,078.3	1,062.8	1,095.6
Anguilla	51.0	48.5	48.0	57.2	58.1
Antigua and Barbuda	293.4	246.7	257.9	269.4	255.6
British Virgin Islands	197.7	205.4	267.6	210.2	232.0
Dominica	31.4	34.1	36.6	39.5	38.2
Grenada	59.3	58.3	59.5	59.4	62.7
Montserrat	23.6	19.9	9.7	5.5	8.0
St. Kitts and Nevis	76.9	65.1	66.8	67.3	75.7
St. Lucia	224.1	267.8	268.5	283.7	291.3
St. Vincent & Grenadines	44.0	41.1	63.7	70.6	74.0
Other Commonwealth	4,076.3	4,189.4	4,384.5	4,570.7	4,788.4
Bahamas	1,332.6	1,346.2	1,450.0	1,415.9	1,402.8
Barbados	597.6	661.8	632.9	657.2	703.0
Belize	71.4	77.6	83.6	88.0	99.0
Bermuda	525.3	487.9	472.3	477.5	486.8
Cayman Islands	334.1	394.0	368.0	436.0	450.2
Guyana	85.0	78.2	70.3	59.6	52.4
Jamaica	973.0	1,068.5	1,100.0	1,131.0	1,197.0
Trinidad and Tobago	87.3	72.6	108.1	192.6	201.2
Turks and Caicos Islands	70.0	52.6	99.3	112.9	196.0
Dutch West Indies	1,089.4	1,082.3	1,163.2	1,291.5	1,432.4
Aruba	450.7	521.2	613.5	668.3	715.0
Bonaire	32.4	36.9	42.3	44.1	43.4
Curacao	186.5	175.4	185.5	200.5	261.1
St. Maarten	419.8	348.8	321.9	378.6	412.9
French West Indies	709.1	795.2	764.5	768.5	786.5
Guadeloupe	330.2	380.4	353.9	371.5	371.5
Martinique	378.9	414.8	410.6	397.0	415.0
US Territories	2,701.9	2,664.4	2,711.2	3,019.1	3,077.0
Puerto Rico	1,782.3	1,842.1	1,930.2	2,125.0	2,155.6
US Virgin Islands	919.6	822.3	781.0	894.1	921.4
Other Destinations	3,487.4	4,272.4	5,227.3	5,951.7	6,696.9
Cancun (Mexico)	1,339.0	1,370.6	1,704.6	2,051.8	2,430.0
Cozumel (Mexico)	110.9	146.4	281.2	327.4	398.3
Cuba	850.0	1,100.0	1,380.0	1,353.0	1,626.2
Dominican Republic	1,147.5	1,568.4	1,765.5	2,099.4	2,141.7
Haiti	27.0	56.0	58.0	57.0	57.0
Suriname	13.0	31.0	38.0	63.1	43.7
TOTAL CARIBBEAN	13,065.5	13,990.6	15,329.0	16,664.3	17,876.8
CARICOM	3,912.5	4,018.9	4,245.6	4,402.8	4,504.6
* A number of the figures are estimates					
Source: Modified from CTO, 1998					

Table I-3: Sources of Tourism Impacts on Coastal Resources

Causal Factor	Source	Type of Activity
Waste	<ul style="list-style-type: none"> • Hotels • Cruise ships • Yachts/boats • Marinas • Restaurants • Laundries • Shops • Merchants/ vendors 	<ul style="list-style-type: none"> • Sewage disposal directly to coastal waters • Sewage disposal to coastal wetlands • Sub-surface disposal and irrigation of green areas using sewage effluent • Solid waste disposal in coastal garbage dumps • Solid waste disposal in unauthorised areas • Disposal of used oils in drains and sewage systems • Boat/engine operation and repair • Inadequate sourcing of materials (food, products, etc.)
Recreation	<ul style="list-style-type: none"> • Hotels • Beaches • Clubs • Individual operators 	<ul style="list-style-type: none"> • Water sports • Nightlife • Noise • Illumination of beach
Mechanical Action/ Physical Change	<ul style="list-style-type: none"> • Hotels • Marinas • Piers/jetties/ wharves • Groynes / breakwaters • Airports • Roads / seawalls • Boats 	<ul style="list-style-type: none"> • Landfilling • Dredging • Anchor damage and groundings • Construction of facilities • Beach construction • Snorkeling/diving • Sand mining
Resource Over-use/ Misuse	<ul style="list-style-type: none"> • Construction • Beach repair/ construction • Craft production 	<ul style="list-style-type: none"> • Over-fishing • Sand mining • Thatch harvesting • Coral harvesting
Beach Management	<ul style="list-style-type: none"> • Hotels • Public beaches 	<ul style="list-style-type: none"> • Over-crowding of beaches • Removal of dune vegetation • Construction of protective structures • Raking (grading) • Removal of seagrasses

Source: UNEP, 1997

2.3 Tourism and Protected Areas

Travel to natural areas for the purpose of viewing a spectacular scenery (or site) and/or for the spiritual value has been a part of tourism from its very beginning. Following the emergence of a new environmental ethic in the 1970s and 1980s (McCormick, 1989; Pearce & Turner, 1990), greater emphasis has been placed on the protection of natural areas, especially those determined to be ecologically sensitive. This increased awareness also resulted in greater use of natural areas for recreation and relaxation/inspiration.

The picture of global resource protection generated by the IV World Congress on National Parks and Protected Areas (1992) was that development pressure was rapidly degrading natural areas. This prompted the increased promotion of protected areas as a viable strategy for maintaining biological diversity and protecting the integrity of natural areas. More importantly, it provided a stimulus for a more concerted effort to articulate the linkages between protected areas and sustainable development (Munasinghe & McNeely, 1994). Results of this renewed drive include the revision of the guidelines for establishment of protected area categories (IUCN, 1994), and the production of guidelines for national protected areas system planning (Davey, 1998) (Appendix 3).

In maintaining the integrity of natural areas, protected areas also became more attractive, and hence the focus for increased recreation and tourism use. As such, protected areas can provide a significant resource base for tourism, while conversely, because of increased visitation, tourism can provide the financing required to ensure proper management of the resource. Tourism and protected areas are therefore mutually beneficial constructs (Ceballos-Lascuráin, 1996). Unfortunately, tourism has the potential to produce a number of negative impacts that cumulatively pose a serious threat to the areas. This dichotomy has produced new terminology that reflects both the new environmental philosophy as well as the increased tourism dependence - Ecotourism.

Though the Caribbean has embraced the ecotourism concept since the early 1990s, there are different positions on whether the tenets are completely followed and the benefits fully realised (Munt & Higinio, 1997; Woodfield, 1998). Ceballos-Lascuráin (1996) produced the following guidelines to determine whether an activity qualifies as ecotourism:

- a. It promotes positive environmental ethics and fosters "preferred" behaviour in its participants;
- b. It does not degrade the resource;
- c. It concentrates on intrinsic rather than extrinsic values;
- d. It is oriented around the environment in question and not around man;
- e. It must benefit the wildlife and environment;

- f. It provides a first-hand encounter with the natural environment;
- g. It actively involves the local communities in the tourism process;
- h. Its level of gratification is measured in terms of education and/or appreciation, rather than in thrill-seeking or physical achievement; and
- i. It involves considerable preparation and demands in-depth knowledge on the part of both leaders and participants.

2.4 Important Trends

The growing demand for good environmental quality by the tourist has prompted a number of initiatives by the tourism industry internationally, as well as by the private and public sectors in the Caribbean. These include:

- a. The preparation of Codes of Conduct and guidelines for the different actors in the tourism sector;
- b. The promotion of Best Management Practices for design and operation of tourism facilities;
- c. The promotion of environmentally friendly properties and operations by tour operators;
- d. Promotion of ecolabel schemes as mechanisms for self-regulation by the industry;
- e. The use of award schemes (environmental awards) to encourage actions that reduce the environmental impact of tourism operations;
- f. The increasing move towards adoption and use of standards for environmental management and environmental auditing (ISO 14000) within the accommodations sub-sector;
- g. The move towards more macro-level planning for the industry at the national level (tourism master plans); and
- h. The establishment of regional support systems, such as the Caribbean Ecotourism Support Network.

3. APPROACHES TO ENVIRONMENTAL MANAGEMENT

The factors that influence environmental policy development and implementation at the national level in Caribbean countries are both promotional and inhibitory. Ragster & Gardner (1993) identified the major factors as:

- a. Crises;
- b. Potential economic benefits;
- c. Size of the resource base (to be affected/managed);
- d. Political pressure;
- e. Political willingness;
- f. Adequacy of the information base; and
- g. Availability of appropriate technology.

However, the beginning of the 1990s witnessed significant efforts in the development of rational and long-term environmental policy frameworks in the Caribbean. These efforts usually took the following forms:

- ◆ National conservation strategies;
- ◆ Country environmental profiles;
- ◆ National environmental action plans;
- ◆ Forestry action plans;
- ◆ Watershed management strategies; and
- ◆ Biodiversity strategies and action plans.

Other policy documents that may contain elements of environmental policy include:

- ◆ National physical plans;
- ◆ National and regional development plans; and
- ◆ Sectoral plans.

Programmatic approaches to environmental planning and management have included the following:

- ◆ Attempts at integrated planning;
- ◆ Creation of umbrella environmental management institutions;
- ◆ Protected areas system planning;
- ◆ Integrated coastal area management initiatives;
- ◆ Disaster/contingency planning; and
- ◆ Public education/environmental curriculum development.

In the implementation of the above environmental policies and programmes, environmental managers have used the following approaches and tools:

- ◆ Environmental impact assessment procedures;
- ◆ Restoration of degraded ecosystems;
- ◆ Use of economic/financial instruments;
- ◆ Closed seasons for protected species;
- ◆ Protected species listing;
- ◆ Establishment of protected areas;
- ◆ Use of regulatory instruments;
- ◆ Use of regulatory standards;
- ◆ Wider partnerships with civil society; and
- ◆ State of the environment reporting.

Despite the many and varied approaches used, there are several factors that reduce the effectiveness with which environmental policy is translated to achievement of desired objectives. The major factors affecting implementation of environmental policy (Ragster & Gardner, 1993) are:

- ◆ Weak institutional frameworks;
- ◆ Weak regulatory frameworks;
- ◆ The absence of clear policies;
- ◆ Lack of political consensus;
- ◆ Lenient judicial practices;
- ◆ Concentration of power at ministerial positions;
- ◆ Inadequate information; and
- ◆ Insufficient public support.

The above issues related to environmental policy development and implementation serve to underscore the fact that the greatest challenge faced by environmental managers is the integration of environmental policies and procedures into the policies and practices of public and private sector institutions.

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PART II: POLICY INTEGRATION-ISSUES AND MODELS

4. INTEGRATION OF TOURISM AND ENVIRONMENTAL POLICIES

The need for revised institutional arrangements as a pre-requisite for improved environmental management and sustainable development has long been recognised and articulated. The West Indian Commission's Working Paper on Environment and Development (Cropper et al, 1991) forcefully supports this view by stating that, *"The absence of a multi-sectoral model for planning and management of natural resources is undoubtedly the main obstacle to the achievement of the goal of sustainable use of resources"* (P. 19).

In recommending a possible solution, the report made it clear that a *"super-ministry with exclusive responsibility for resource management and environmental protection"* was not necessarily the answer. Instead, the report stated that, *"it is desirable that all ministries and departments of a national administration be seized of the issues and be actively arranging their business to reflect the demands of sustainable use of resources and protection of the environment. What is critical to their harmonious and effective operation is a unifying ethic, a cohesive approach to planning, a framework for multi-sectoral inputs and for incorporation of inputs from special groups, and unambiguous location of authority and responsibility for policy formulation and for executive action. This suggests an institutional arrangement in the form of a National Environment and Development Authority, as an independent statutory body, which would function outside the confines of a single Ministry to bring together all the relevant entities and unify the approach at the national level"*.

The above recommendation stems from the recognition that the environment, whether as resource base or maintenance of human health and general well being, forms the basis of economic and social development. As such, it should form a constant in all sectoral planning.

Tourism, as practiced in the Caribbean, faces a similar dilemma of almost equal magnitude. Because tourism depends on, and has linkages with, other sectors, the quality of the product is therefore dependent on other sectors and external factors. More importantly, because Caribbean tourism is inextricably bound to the quality of the natural resources and environment generally, it requires essentially the same treatment as environmental management.

Therefore, integrating tourism and environmental policies, and ensuring infusion across and into sectoral policies and programmes, require the following:

1. The establishment of a body responsible for environment and development policies, that operates outside of the confines of a single ministry.

2. A macro-economic planning framework that clearly sets out the various development policies of the government (land use, infrastructure, settlement, etc.) and how to integrate environmental policies into the related development strategies.
3. A budgetary/corporate planning mechanism that responds to the degree to which environmental policies, procedures, and standards are incorporated into the policies, programmes, and practices of ministries and line agencies.
4. Capacity within the relevant tourism management agency to ensure that environmental resources required to support tourism are given special protection and support within the environmental policy and management process, and for ensuring that environmental policies and standards are integrated into tourism policy and practices throughout the industry.
5. A mechanism that facilitates consistent access and input by civil society as part of a process of planning and evaluation.

The above issues and requirements were never doubted. The problem Caribbean countries have been grappling with is how exactly to design and maintain these structures and processes, especially under conditions of apparent resource shortages, or in extreme cases, externally-directed structural adjustment programmes.

4.1 Potential Mechanisms

The development of mechanisms for integrating tourism and environment policies and programmes depend not only on the strategies used in environmental management, but also on a determination of what constitutes sustainable tourism. A review of recommendations concerning the principles of sustainable tourism (Martin, 1995 - Annex II-2), general guidelines for development of the tourism sector (Sweeting et al, 1999 - Annex II-3), and guidelines for improving the tourism-environment relationship (Ceballos-Lascuráin, 1996 - Annex II-4), identifies a number of themes common to all the guidelines and principles. These are:

a. Ecological Sustainability

The ecological integrity and harmony of sites must be preserved through the use of appropriate materials, siting, design, and management of facilities and activities. Where necessary, tourism resources should be used to restore damaged ecological systems.

b. Cultural Appropriateness

Tourism must be sensitive to the societal norms and cultural practices of the host community, maintaining the rights of indigenous peoples where such rights exist.

c. Proper Planning and Management

Proper management planning and management is required to guide the development of the industry to ensure environmental, economic, and social sustainability, which can only be achieved through the integration of tourism into sectoral and cross-sectoral planning and programmes.

d. Economic Viability

Tourism must be managed as a well-run business, with proper accounting for the costs as well as the benefits. Just as important, tourism can only be economically viable if it does not generate net social and economic costs (in other sectors).

e. Social Equity

Tourism development strategies must promote and facilitate participation by local communities, thereby ensuring that the benefits of tourism demonstrably contribute to the development of the contributing communities.

Initiatives and/or mechanisms that have been used to incorporate the above principles of tourism sustainability, while reducing the adverse impacts, include the following:

- ◆ Incorporating supporting policies for tourism in environmental policy documents, such as national environmental action plans, biodiversity strategies, protected area system plans, national conservation strategies, etc. (see Section 3).
- ◆ Incorporating supporting policies for tourism in physical planning policies and plans, including national development plans, national physical plans, regional development plans and orders, etc.
- ◆ Development of an environmental basis (carrying capacity, limits of acceptable change, environmental management systems, codes of conduct, etc.) for tourism, and incorporation into tourism strategies, site design and operation, and corporate management plans (greening of tourism).
- ◆ Increased adoption of strategies that incorporate environmental and community considerations (ecotourism, community tourism, etc.).

Lessons learned from the different initiatives suggest that a number of supporting factors and systems are required, including:

- ◆ Policy support;
- ◆ Legislative basis;
- ◆ Political will (politicians and technocrats);
- ◆ Sustained financing (to relevant institutions);
- ◆ Implementation mechanisms (institutional framework);
- ◆ Public awareness programme;
- ◆ Prepared/informed civil society institutions; and
- ◆ Public acceptance and support.

5. FRAMEWORK MODELS

As stated in the Terms of Reference for the study, the framework model should focus on the "*institutional framework for environmental policy formulation and coordination and regulation of the operation and management of environmental resources*". As such, the issues to be addressed by the model include the following:

- ◆ Coordination of environmental policy formulation;
- ◆ Integration of environment and tourism policies;
- ◆ Coordination of environmental management programmes;
- ◆ Management of protected areas; and
- ◆ Involvement of civil society groups in policy formulation and resources management.

Additionally, the above issues have to be addressed within the context of particular institutional scenarios. The existing institutional frameworks can be grouped as follows:

- a. Absence of any central policy formulation or programme coordinating institution;
- b. Existence of national policy formulation and coordinating institutions;
- c. Existence of a policy formulation mechanism, but no coordinating organisation;
- d. Existence of consultation mechanisms, but no central coordinating institution; and
- e. Policy formulation by an external institution or mechanism, as in the case of the Organisation of Eastern Caribbean States (OECS) and the "overseas dependent territories".

Based on the need to address dual imperatives, environmental policy formulation and coordination, as well as coordination of management of environmental resources supporting tourism (primarily protected areas), the model requires two implementation modes. The proposed model therefore encompasses the following:

- a. An institutional framework for environmental policy formulation and coordination;
- b. An environmental management authority; and
- c. A protected area authority.

5.1 Institutional Coordinating Mechanism for Environmental Policy

The requirements for policy integration and programme coordination identified in Section 4 suggest that the framework model could not consist of a single institution. The OECS-Natural Resources Management Unit (OECS-NRMU) has developed a framework for natural resources management known as Island Systems Management (ISM). The ISM framework recommends a three-tiered institutional system for environmental policy formulation and coordination of environmental management interventions (Chase & Nichols, 1998). The three tiers are:

Tier 1: National Policy Advisory Body

The National Policy Advisory Body is a multi-sectoral forum, including private sector and civil society groups, that deals with policy formulation and provides advice on natural resources management and sustainable development.

Tier 2: Secretariat to the policy advisory body

The Secretariat is a government agency responsible for coordination of natural resources management and sustainable development programming.

Tier 3: Line Agencies

The line agencies are existing institutions that have specific responsibilities for natural resources management. These agencies would function in the implementation role.

The three-tiered system proposed by the ISM framework is being used to different degrees by countries other than those in the OECS. The establishment of Sustainable Development Councils is clearly an attempt to institute the Tier 1 body. However, in the initiatives thus far, the Sustainable Development Council (SDC) does not always have a secretariat, and where it exists, it may not be a full-fledged agency with coordinating functions.

This study recommends that the three-tiered approach proposed by the OECS-NRMU be adopted as the model for ensuring environmental policy formulation and coordination.

The model could conceivably have two versions, with the difference being whether a statutory organisation is used as the secretariat to the policy advisory body, or in the case where such an institution does not now exist, a line agency performs the secretariat role (Figure II-1). The deciding factor would be the additional cost of establishing and financing a new statutory organisation if one does not exist.

Scenario 1: The SDC would be a multi-sectoral advisory body reporting directly to Cabinet. The secretariat (the national environmental management agency) to the SDC would be a statutory organisation, reporting directly to the SDC, and having the responsibility for coordination and system monitoring. It would interact with the ministries and line agencies

primarily through an Inter-Agency Technical Advisory Committee (Figure II-1A). Implementation would remain with the line agencies.

Scenario 2: The SDC would be a multi-sectoral advisory body reporting directly to Cabinet. The secretariat to the SDC would be an existing environmental or planning department (that reports to Cabinet through a ministry). The Inter-Agency Technical Advisory Committee would then interact directly with the SDC (Figure II-1B). As before, implementation would be the responsibility of the line agencies.

Figure II-1A: Model Framework - Scenario 1

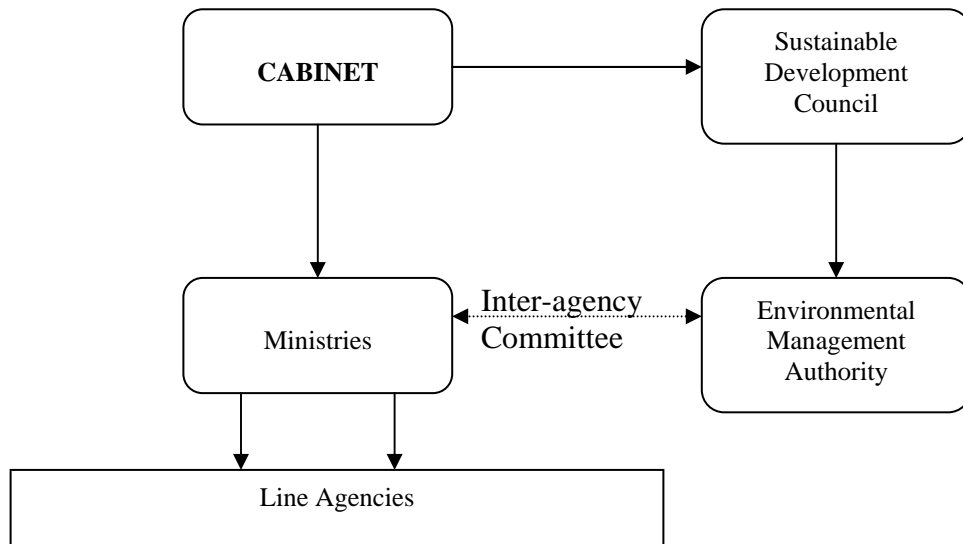
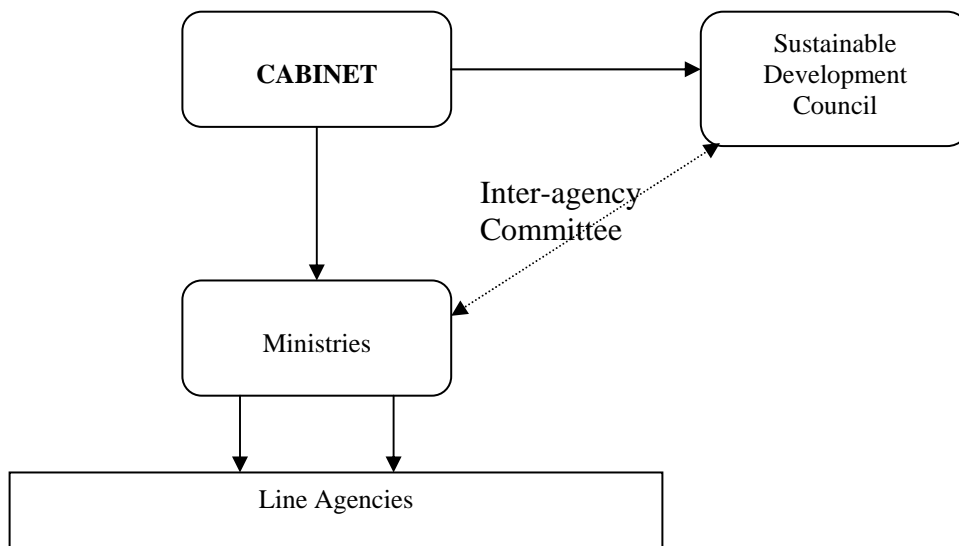


Figure II-1B: Model Framework - Scenario 2



Scenario 1, with the statutory coordinating organisation, is the preferred model.

However, as the current Caribbean experience with SDCs has shown, the existence of these institutional elements does not necessarily guarantee that the desired results will be achieved. Two critical issues have to be considered. First, though the advice of the SDC may be conveyed to Cabinet, that advice may not result in any substantial change in either macro-economic policy or sectoral policies, programmes, and operating procedures. Secondly, even where a coordinating institution exist, that institution may not possess the necessary political capital, technical expertise, resources, or "legitimacy" (perception of history of competency) to effectively discharge the coordinating function.

The following issues related to institutional coordination must be considered and addressed:

- a. It is possible to use a range of approaches to achieve institutional coordination;
- b. Institutional coordination requires changes in management arrangements initially and over time (institutional culture, decision-making systems, established times and procedures, etc.);
- c. Coordination and integration have to take place both horizontally and vertically;
- d. Shared information collection and management systems promote coordination;
- e. Legislative underpinnings strengthen coordination (e.g. land use planning, development control, environmental permit and licence system, public sector investment project approval process, special programme implementation activities, etc.);
- f. The relevant authority for specific approvals has to be clearly identified;
- g. Coordination/integration requires clearly defined mechanisms;

- h. Institutional coordination arrangements should be compatible with existing customs and traditions (at least initially);
- i. The support of highly placed politicians and technocrats/managers is required for success;
- j. Civil society inputs generally act in the medium to long term to improve policy formulation and programme implementation successes; and
- k. Implementation of new institutional arrangements require careful design, time for building partnerships and trust, consistent and constant reminders of the objectives and benefits, conflict resolution mechanisms, and information flows (communication and general awareness building, as well as evaluation and monitoring data feedback).

5.1.1 Lessons From the Caribbean

A number of Caribbean countries have established Sustainable Development Councils (SDCs) or similar structures. Six countries (Barbados, British Virgin Islands, Dominica, Grenada, Jamaica, and Saint Lucia) conducted their initiatives within the context of the Capacity 21 programme implemented by the United Nations Development Programme (UNDP). The Capacity 21 programme was implemented during the period November 1994 to March 1998, and the information presented in this section is drawn from a review of the evaluation report. Supplementary information was generated by discussions with persons associated with the SDC, or similar, process in Jamaica, Grenada, Suriname, and Belize.

The evaluation report (Impact Consultancy Services, 1998) notes that the initiatives related to sustainable development were implemented in an ad hoc manner prior to the Capacity 21 programme. The report identifies the following characteristics of sustainable development programming during that era:

- a. The absence of national sustainable development strategies that:
 - i. Are developed in consultation with the private sector and civil society;
 - ii. Articulate policies, programmes, projects and activities that seek to routinely integrate economic and environmental considerations;
 - iii. Take account of inter-sectoral linkages; and
 - iv. Recognise the varying nature of the institutional requirements concerned.
- b. The absence of national environmental action plans and environmental quality criteria that describe how renewable and non-renewable natural resources will be managed to sustain the development process.
- c. A multiplicity of governmental agencies with responsibility for the environment and the absence of institutional mechanisms to coordinate their

policies and programmes, avoid duplication of effort and wastage of scarce resources.

- d. A proliferation of outdated environmental laws often weakly enforced by disparate Government agencies.
- e. Limited national development planning capacity, as manifested by the absence of development policy, weak policy analysis and advice, lack of development strategising and the absence of development plans.
- f. A lack of personnel trained in critical areas such as Environment Economics, Natural Resource Management, Project Cycle Management, Environmental Engineering, Coastal Zone Management, Collaborative Management, Conflict Resolution, Environmental Impact Assessment; Policy Analysis and Design.
- g. The absence of institutional arrangements to facilitate structured and sustained dialogue among the partners in the development process.
- h. Weak and undeveloped systems of governance at national and community levels, as reflected by ineffective local government and public administration systems.
- i. A weak tradition of community participation in planning and decision-making at the national and local levels respectively, due in part to a culture of dependency and alienation which facilitates and perpetuates control by outsiders and the politics of exclusion.

The SDC process was therefore created for the purpose of "*strengthening public environmental and economic planning*".

The Capacity 21 evaluation noted the following major issues:

- a. A relatively immature state of national institutional arrangements for sustainable development;
- b. The SDCs, or similar coordinating mechanisms, functioned with varying degrees of effectiveness; and
- c. Countries that tailored the programme to suit national circumstances, and in which there was strong commitment from various participants, enjoyed a greater level of success.

However, the following major lessons were noted:

- a. Interest and commitment at the highest political level is critical to the success of the change management process;
- b. The issue of the location of the SDC within a central Government agency with coordinating functions, is not nearly as important as having committed persons leading and supporting the process;
- c. The SDCs that were most effective were those that addressed issues which were of direct relevance to the people;
- d. The design of new institutions should be based on the results of a detailed analysis of the pre-existing and current situation, to ensure that these institutions do not duplicate past and current efforts. Full use should be made of local level experience to provide lessons on what has worked and what is not likely to work;
- e. To be effective, SDCs and other similar bodies should be given detailed terms of reference, clearly stipulating their mandates, structures, modes of operation and the resources which will be made available to facilitate their work;

Possible structures for the sustainable development council and the environmental management coordinating institution are shown as Annex II-5.

5.2 Protected Area Management Framework

As stated above (Sections 4 and 5), the existence of an apex national park institution responsible for policy formulation and management does not necessarily ensure integration of tourism and environmental policies. This is borne out by the experience of a number of Caribbean countries that possess such institutions, including the British Virgin Islands (National Parks Trust), St. Lucia (St. Lucia National Trust), Jamaica (Natural Resources Conservation Authority), and the United States of America (National Parks Service). This is primarily the reason for recommending that of a national park commission operate within the framework of the sustainable development commission model outlined above.

A protected area is defined as "*an area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means*" (IUCN, 1994). The main purposes for establishment and management of protected areas are identified as:

- ◆ Scientific research;
- ◆ Wilderness protection;
- ◆ Preservation of species and genetic diversity;

- ◆ Maintenance of environmental services;
- ◆ Protection of specific natural and cultural features;
- ◆ Tourism and recreation;
- ◆ Education;
- ◆ Sustainable use of resources from natural ecosystems; and
- ◆ Maintenance of cultural and traditional attributes.

The 1,359 sites identified in the Wider Caribbean Region (UNEP, 1996) includes all the categories of protected areas defined by IUCN (Table II-1). These sites were found to provide the following benefits:

- ◆ Wildlife habitat;
- ◆ Recreation;
- ◆ Fishing income;
- ◆ Research activities; and
- ◆ Protection of endangered species.

Table II-1: Wider Caribbean Protected Area Summary

Category		Insular Caribbean		Wider Caribbean Region	
		Total	Coastal/Marine	Total	Coastal/Marine
I	Nature Reserves & Wilderness Areas	15	9	55	17
II	National Parks	49	31	239	73
III	National Monuments	7	4	28	9
IV	Wildlife Sanctuaries	104	47	335	111
V	Protected Landscapes	26	18	165	33
VI	Multiple Use Areas	66	4	471	49
	Biosphere Reserves	8	3	38	13
	World Heritage Sites	0	0	8	5
	Ramsar Sites	9	6	20	14
Totals		284	122	1,359	324

Source: Modified from UNEP, 1996

Despite the obvious benefits provided by protected areas, the present level of protection is deemed to be inadequate. UNEP (1996) found that in the Wider Caribbean Region, only 15% of the sites were completely protected, 51% had partial protection, and 32% were unprotected.

Protected area management in the Wider Caribbean Region is characterised by the following:

- ◆ Several agencies with mandates impinging on protected area management;

- ◆ Several pieces of legislation that affect protected area policy and management;
- ◆ Inadequate legislation and/or absence of appropriate regulations;
- ◆ Inadequate management of sites, resulting primarily from insufficient capacity and financial resources;
- ◆ Outdated management plans, or lack thereof;
- ◆ The presence of a significant level of intrusive uses (encroachment, pollution, resource harvesting, etc); and
- ◆ Many of the recommended sites have not been properly surveyed or demarcated.

Due to the increasing number of protected areas, the increased demand on protected area resources, and the recognition that many threats originate outside the protected area, there is increasing pressure to adopt a systems approach to protected area management. The establishment of national systems of protected areas is supposed to rationalise the approach to protected area planning, as well as link conservation priorities and efforts to other development strategies and activities (Box II-1).

Box II-1

Reasons for Adopting a System Approach to Protected Area Planning

Adrian Davey, 1998

- ◆ To relate protected areas to national priorities, and to prioritise different aspects of protected area development;
- ◆ To facilitate access to international and national funding, by defining priorities for investment in protected areas and increasing the level of confidence in the efficient use of funds and resources.
- ◆ To get away from a case by case, ad hoc, approach to resource management decision making;
- ◆ To target proposed additions to the protected area estate in a more rational and persuasive manner than ad hoc planning;
- ◆ To facilitate integration with other relevant planning strategies, such as those for national tourism, national biodiversity conservation, or sustainable development;
- ◆ To help resolve conflicts, assist in making decisions relating to trade-offs, clarify roles and responsibilities of different stakeholders, and facilitate diverse stakeholder involvement;
- ◆ To provide a broader perspective for addressing site-specific issues, such as tourism management;
- ◆ To enhance the effectiveness and efficiency of the way in which budgets are developed and spent;
- ◆ To assist in meeting obligations under international treaties;
- ◆ To assist countries to be more proactive in conservation management, and in developing effective protected area systems;
- ◆ To encourage consideration of a "system" which incorporates formal protected areas and areas outside of protected areas;
- ◆ To provide a structured framework for a system of protected areas, ranging from areas managed for strict conservation to areas managed for a range of conservation and appropriate ecologically-sound activities;
- ◆ To assist protected area agencies to build political support for protected areas as a worthwhile concern;
- ◆ To define a better process of decentralisation and regionalisation of protected area activities, resources and responsibilities, including the involvement of NGOs and the private sector; and
- ◆ To foster transboundary collaboration.

5.2.1 Institutional Arrangements

The existing institutional framework for protected area management in the Wider Caribbean Region has a number of configurations; namely:

- ◆ A three-tiered system comprising an advisory council/commission, a central coordinating agency, and line (implementing) agencies/institutions;
- ◆ A two-tiered system comprising an advisory council/commission and line institutions;
- ◆ A two-tiered system comprising an advisory council/commission and a central management agency;
- ◆ A two-tiered system with a central management agency and line institutions;
- ◆ Implementing (line) agencies with no central policy or coordinating body; and
- ◆ A central body (statutory agency of government-established NGO) with management responsibility for the entire protected area/national park "system".

This study requires the definition of a National Parks Commission or similar body. A change in nomenclature is required for the following reasons:

- ◆ To many persons, use of the term "commission" implies an advisory role, which is not in keeping with the coordination and regulatory responsibilities envisioned; and
- ◆ Many persons relate national parks with recreational use (with a perception in the Caribbean that such sites are established primarily for tourism purposes). As such, use of the term "national parks" creates the impression that only one category of protected area is subject to the management regime developed.

This report therefore recommends that the national coordination institution for protected areas be called a Protected Areas Authority, or alternatively a Trust as exists in many countries in the Caribbean.

The positioning recommended (below) for this new institution assumes that it functions within the sustainable development council (SDC) model described above. As such, the articulation of protected areas policy and management as a conservation strategy should take place with the SDC process, while protected area policy formulation and system management would fall within the purview of this new Protected Areas Authority.

5.2.2 Role and Responsibilities of the Protected Areas Authority

The Authority would (as its name implies) be a statutory body, with its own board of directors. The Authority would be expected to report to Cabinet (or Council of Ministers) through the relevant Minister.

The Authority would be the lead agency, having overall responsibility for the (national) system of protected areas, ensuring that all protected areas meet their various management objectives. Site management would be the responsibility of the agreed public, private, and non-governmental institutions. As such, the Authority would need to be given the legislative authority to provide general policy direction to the management institutions, approve management plans, and assume management responsibility for specific sites when deemed necessary.

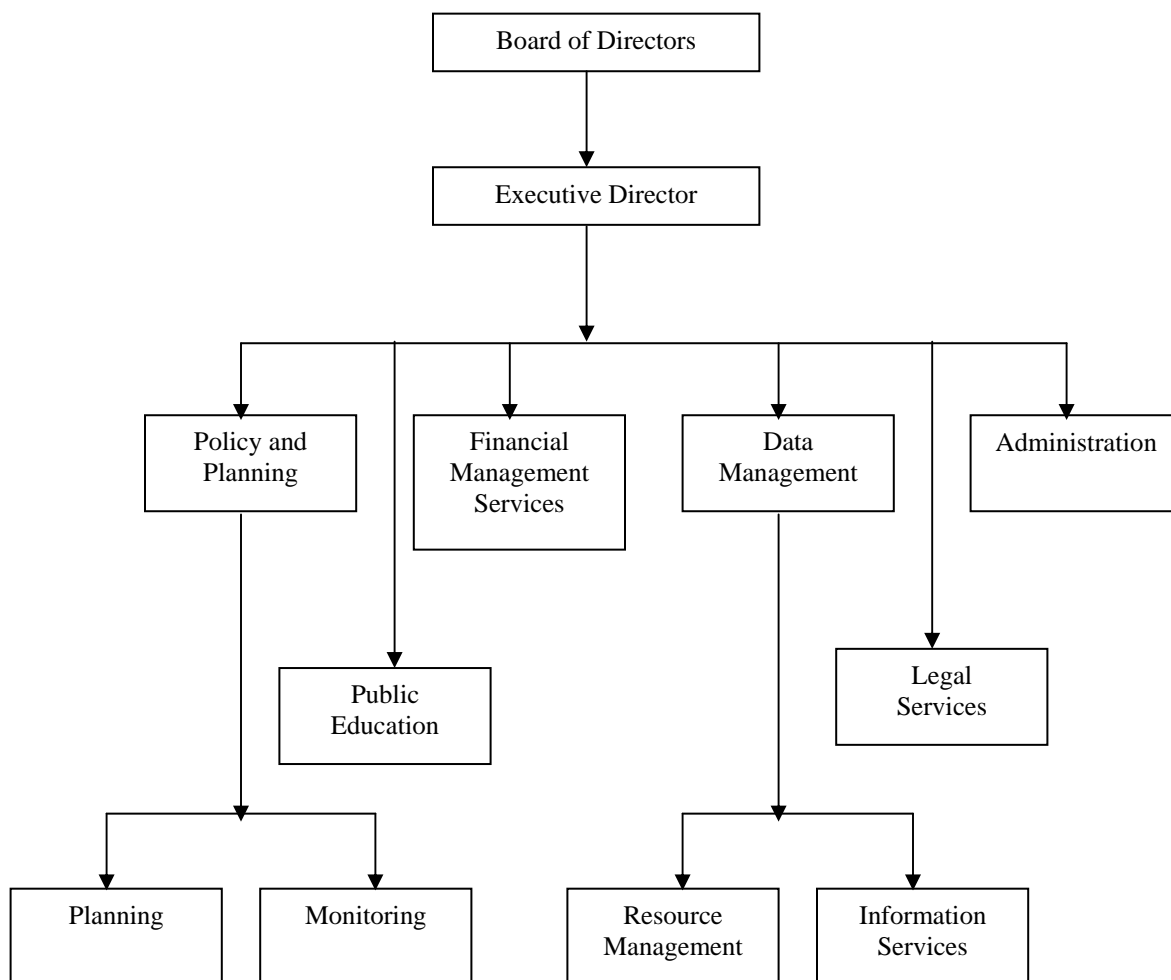
Specifically, the Authority would have the following responsibilities:

- ◆ Development of the policy framework for all aspects of protected area planning and management;
- ◆ Development of procedures, guidelines, and criteria for all aspects of protected area planning, establishment, and operation;
- ◆ Approval of protected area management and operational plans (where prepared by other organisations);
- ◆ Assessment of the capabilities and needs of institutions identified for management of sites;
- ◆ Provision of technical assistance to management organisations, particularly in the areas of site planning, design of cost recovery systems, design of research and monitoring programmes, and legal services;
- ◆ Coordination of any permit and licence system for the system of protected areas;
- ◆ Design and implementation of a programme of monitoring to ensure performance effectiveness of management institutions, maintenance of system integrity, and achievement of system objectives;
- ◆ Coordination of the activities of the different institutions involved in environmental monitoring relating to the system of protected areas;
- ◆ Development and management of an information system and resource centre for the system of protected areas;
- ◆ Coordination of a public education programme relating to the system of protected areas;
- ◆ Coordination of bilateral and multilateral initiatives related to the system of protected areas;

- ◆ Assumption of management responsibility for sites of national significance for which no other management entity exists, or for which management effectiveness is inadequate to protect the environmental resources and/or meet the management objectives; and
- ◆ Development of mechanisms (such as a trust fund) to ensure adequacy of financial support for the system of protected areas.

The organisational structure shown below (Figure II-2) is recommended in order to allow the protected area authority to carry out the functions described above.

Figure II-2: Proposed Structure for the Protected Area Authority



The proposed staffing for the protected areas authority is:

- a. Office of the Executive Director
 - i. Executive Director (M.Sc. in natural or social sciences)
 - ii. Executive Assistant
 - iii. Internal Auditor

- b. Administration
 - i. Director of Administration (MPA/MBA)
 - ii. Personnel Officer (BA or postgraduate certification in HRD)
 - iii. Administrative Assistant
 - iv. Accountant
 - v. Accounting Clerk
 - vi. Driver
 - vii. Attendant

- c. Legal Services
 - i. Legal Officer
 - ii. Paralegal/Legal Secretary

- d. Data Management
 - i. Director (M.Sc. Information Management)
 - ii. Data Manager (GIS Specialist - ARCInfo)
 - iii. System Administrator (B.Sc. computing sciences)
 - iv. Biologist
 - v. Data Entry Clerk
 - vi. Administrative Assistant

- e. Financial Management Services
 - i. Financial Analyst
 - ii. Fundraising Specialist
 - iii. Administrative Assistant

- f. Policy and Planning
 - i. Director (Ph.D. - environmental policy analyst)
 - ii. Environmental Planner (M.Sc.)
 - iii. Urban & Regional Planner (MURP)
 - iv. Project Management Specialist
 - v. Engineer (B.Sc. civil engineering)
 - vi. Ecologist
 - vii. Protected Area Specialist (B.Sc. natural resource/forestry/protected area management)
 - viii. Architect
 - ix. Management Consultant (MPA/MBA)
 - x. 2 Administrative Assistants

- g. Public Education
 - i. Public Education Officer (B.Sc. Mass Communication)
 - ii. Administrative Assistant

As stated previously, the above structure and staffing assumes that the protected area authority will approach management of the system of protected areas through the activities of other government, private, and community organisations. In this regard, the Authority will enter into agreements with the latter institutions for the management of specific sites.

5.2.3 Requirements for Establishment of the Protected Areas Authority

The elements required to support the establishment of a protected areas authority include the following:

- a. Legal/Policy Changes;
 - i. Policy and legislation to enable the development of the system of protected areas,
 - ii. Enabling legislation for the establishment of the new statutory authority,
 - iii. New legislation and regulations giving the new institution the coordinating function, including the authority to assume control of sites previously managed by other institutions if warranted,
 - iv. The new legislation and regulations must also address the issues of private land ownership (designated lands and inholdings), public participation, financing (including tax and other investment incentives), etc.,
 - v. Legislation to establish a trust fund, and
 - vi. Revision of related legislation currently administered by existing line agencies in order to enable the coordinating function of the new institution.

- b. Development of Procedures and Criteria to guide;
 - i. Establishment of sites,
 - ii. Establishment of advisory committees (local and technical),
 - iii. Process for listing and delisting of sites,
 - iv. Monitoring and evaluation,
 - v. Research,
 - vi. Management of protected, threatened, and invasive species,
 - vii. Etc.

- c. Financing;
- i. Financial management systems to standardise fund management across the system (especially important for accessing international financing),
 - ii. Cost recovery systems, and
 - iii. Establishment of a source of sustained funding.
- d. Staffing;
- Very few countries and Caribbean professionals have experience in protected area system development. As such, the recommended staffing strategy is to use Caribbean (rather than national or international) professionals to head critical units (except for the post of Executive Director) of the new institution. A major component of the consultants' job descriptions would be training of local counterparts to assume full responsibility for the particular areas within a two-year period. Specialised components of the organisation (such as the data management unit) can be projectised initially.

5.2.4 Financing Requirements

Jamaica's policy paper for its system of protected areas defines financial sustainability as "*the ability to support the management, enhancement and operational requirements of the system without continuing reliance on regular infusions of grant funds*" (GOJ, 1997). However, given the resource shortages of most governments, it is unreasonable to expect that public sector budgetary support can be the sole source of funds to achieve this financial sustainability. It is therefore expected that the entire society, as well as external entities that receive benefits and/or encourage protected area development, will participate in the financing of the system of protected areas.

The most reliable source of funds on a sustained basis is the income generated by a trust fund. However, it can be difficult and expensive to capitalise trust funds. Sources of funding for trust funds include the following:

- ◆ Government direct contribution;
- ◆ Debt-for-nature swaps;
- ◆ Capital campaign (grants and donations);
- ◆ Special appeals;
- ◆ Cost recovery mechanisms at the sites;
- ◆ Sales, merchandising, etc; and
- ◆ Tourism head or departure taxes.

All of the above also form sources of income at the site level. In addition to the above, other direct and indirect means of mobilising resources exist, including:

- ◆ Projects;
- ◆ Investment in site management by private sector firms;
- ◆ Fiscal incentives to encourage cash and in-kind support, or direct investment;
- ◆ Tax and/or duty exemptions on equipment, vehicles, supplies, etc.; and

- ◆ Volunteerism (local and international).

The management of the financial management system will involve the input of several institutions (in the de-centralised management model proposed), and will therefore require clear policy, legislative, and procedural guidelines.

5.3 Integration of Tourism and Environmental Management

The model presented above does not immediately result in improved environmental management, nor does it automatically ensure that tourism considerations will form a major component of either environmental policy or protected area management. To ensure greater success in this area, not only must tourism interests become involved in the shaping of the relevant policies, but must also articulate clearly and truthfully the needs and requirements of the industry, while at the same time demonstrating how tourism can support environmental management in general and/or specific resource management strategies.

The operation of the SDC can facilitate integration of tourism and environmental policies and operations in the following ways:

- ◆ Establish (one of) the main focus of the SDC as the environmental dimensions of sustainable development strategies. In this way, the priority sectors, including tourism, will be given priority attention, ensuring that environmental considerations are incorporated in sectoral policies and programmes. This mechanism has been used in the SDC process in Dominica, Grenada, and the British Virgin Islands to examine the tourism sector. In one case a study was commissioned, and in all three cases the resulting recommendations were subsequently incorporated into sectoral policies.
- ◆ Tourism sector representatives can become involved in the process of preparation of national and regional development plans, as well as physical plans. Tourism industry representatives would also be able to make inputs during the subsequent debates in the SDC.

As discussed in Sections 2 & 4 (see also Annex II-4), the integration of tourism and environmental policies can be implemented through a variety of mechanisms. In addition to the usual means of development of environmental guidelines for tourism operations, the following planning approaches can be utilised:

- ◆ Placing tourism requirements as a priority focus in environmental management strategies such as coastal zone management, protected areas system planning, wildlife management, and other such strategies.

The planning process used in integrated coastal area management is supposed, not only to reduce conflicts between resource uses in the coastal area, it is also supposed to address

major issues beyond the control of single sectors, such as systemic inadequacies, infrastructure investment, and development control.

◆ Adopting a bioregional approach to planning.

The bioregional approach to planning is being given increasing attention in the Caribbean. Traditionally, bioregional planning in the Caribbean is practiced mainly as watershed planning and management.

A more recent approach to bioregional planning is the Island System Management (ISM) approach developed by the OECS-NRMU. ISM was developed as a mechanism to facilitate multi-sectoral management of linked ecosystems on the small islands of the Eastern Caribbean States. Newer still is the Environmental Policy Framework (EPF) approach developed by Jamaica. Like ISM, the EPF process allows for multi-stakeholder participation in the determination of actions to address priority environmental issues in the bioregion. The process has facilitated the identification and delineation of environmental resources, at a very fine scale, to be used in support of tourism.

Annex II–1:References

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Annex II-2: Principles and Objectives of Sustainable Tourism

C. Martin, 1995

1. Tourism development should be based on the criteria of sustainability. It should be: ecologically bearable, economically viable, and ethically and socially equitable for local communities.
2. Tourism should contribute to sustainable development and be integrated with all aspects of the environment, respecting fragile areas and promoting the assimilation of impacts so that these lie with capacity limits.
3. Tourism must consider its effects on the cultural heritage and traditions of local communities.
4. Participation of all actors in the process is essential.
5. Conservation of the natural and cultural heritage involves cooperation, planning, and management.
6. The satisfaction of tourists and preservation of destinations should be determined together with local communities and informed by sustainable principles.
7. Tourism should be integrated into local economic development.
8. Tourism development should improve the quality of life.
9. Planning tourism is important.
10. Equity of the benefits and burdens of tourism should be sought.
11. Special priority should be given to environmentally and culturally vulnerable areas and areas already degraded.
12. Alternative forms of tourism compatible with sustainable principles should be promoted.
13. Research should be promoted.
14. Environmentally compatible management systems should facilitate a sustainable tourism policy.

15. The travel industry should promote sustainable development, exchange experiences, etc.
16. Particular attention should be paid to transportation and the use of non-renewable energy.
17. Codes of conduct should be established for the main actors.
18. All necessary measures should be implemented to promote awareness of sustainable tourism among all involved in tourism.

Annex II-3: Guidelines for Development of the Tourism Sector

J. Sweeting, A. Bruner, & A. Rosenfeld, 1999.

1. Develop national, regional, and local land use plans.
2. Conduct early and thorough environmental and social impact assessments.
3. Ensure that development is appropriate to the specific location.
4. Design an environmental and social strategy to guide operations.
5. Promote education and awareness building among all stakeholders.
6. Use and dispose of resources in an efficient and responsible manner.
7. Minimise the negative impact of tourist activity on local ecosystems and cultures.
8. Identify ways to increase local benefit from tourism.
9. Increase public sector capacity to manage and regulate the tourism sector.
10. Enact environmental and social legislation to guide development.
11. Utilise economic and financial tools to promote responsible tourism.
12. Cooperate with other sectors and stakeholders.

Annex II-4: Guidelines for Improving the Tourism-Environment Relationship

Hector Ceballos-Lascuráin, 1996

1. Environmental considerations should be fully incorporated in tourism development plans, especially with respect to air and water (potable and recreational) quality, soil conservation, the protection of natural and cultural heritage, and the quality of human settlements.
2. Tourism goals should be based on the carrying capacity of sites and environmental sustainability, and compatible with regional development, social concerns, and land use planning.
3. Decisions should be based on the fullest available information with respect to their environmental implications. Environmental impact assessment (EIA) should be applied to proposed major developments, to evaluate the potential damage to the environment in the light of forecasted tourism growth and peak demand. Alternative sites for development should be considered, taking into account local constraints and carrying capacity. This capacity includes physical, ecological, social, cultural, and psychological factors.
4. Adequate environmental measures at all levels of planning should be defined and implemented. Particular attention should be paid to peak demand, sewerage, solid waste disposal, noise pollution, building, and traffic density control. In the most endangered zones, comprehensive improvement programmes should be formulated and implemented.
5. Incentive schemes should be applied in both the public and private sectors to spread tourism demand over time and space in order to make optimal use of accommodation.
6. Regulatory power should be used to limit developments in sensitive areas, and legislation should be drawn up to protect rare, endangered, and sensitive environments.
7. As part of general efforts to prevent environmental degradation, but also in its own interests, the travel and tourism industry should:
 - a. Oppose (by refusing to take part in unsustainable developments, withdrawing investment, lobbying governments and industry bodies, working together with NGOs):
 - ◆ Dumping of untreated sewage into the sea;
 - ◆ Unsustainable fishing, including blasting, long lining, and whaling;
 - ◆ Coral mining and collecting;

- ◆ Unsustainable forestry, tropical forest clearance for ranching and clear-cutting;
 - ◆ Unsustainable farming methods;
 - ◆ Siting of nuclear power plants near tourist areas;
 - ◆ Siting of tanker shipping lanes near bathing beaches; and
 - ◆ Continued use of CFCs.
- b. Support (with finance, complementary investments, lobbying):
- ◆ Efforts by governments and NGOs to protect the environment;
 - ◆ Measures to reduce power station and factory emissions;
 - ◆ Installation of oil containment and clean-up equipment at strategic locations to fight oil spills;
 - ◆ Direct negotiations with representatives of indigenous peoples before undertaking any developments which would affect their land or way of life.

Annex II-5: Possible Structures for the Coordinating Institutions

Sustainable Development Council

The SDC could be composed of persons selected from the groups listed below.

Ministries responsible for: Finance and Planning
Environment
Housing
Agriculture
Education
Mining
Transport
Industry and Commerce
Health
Works

Coordinating institution for environmental management

Labour Unions

Chambers of Commerce

NGOs

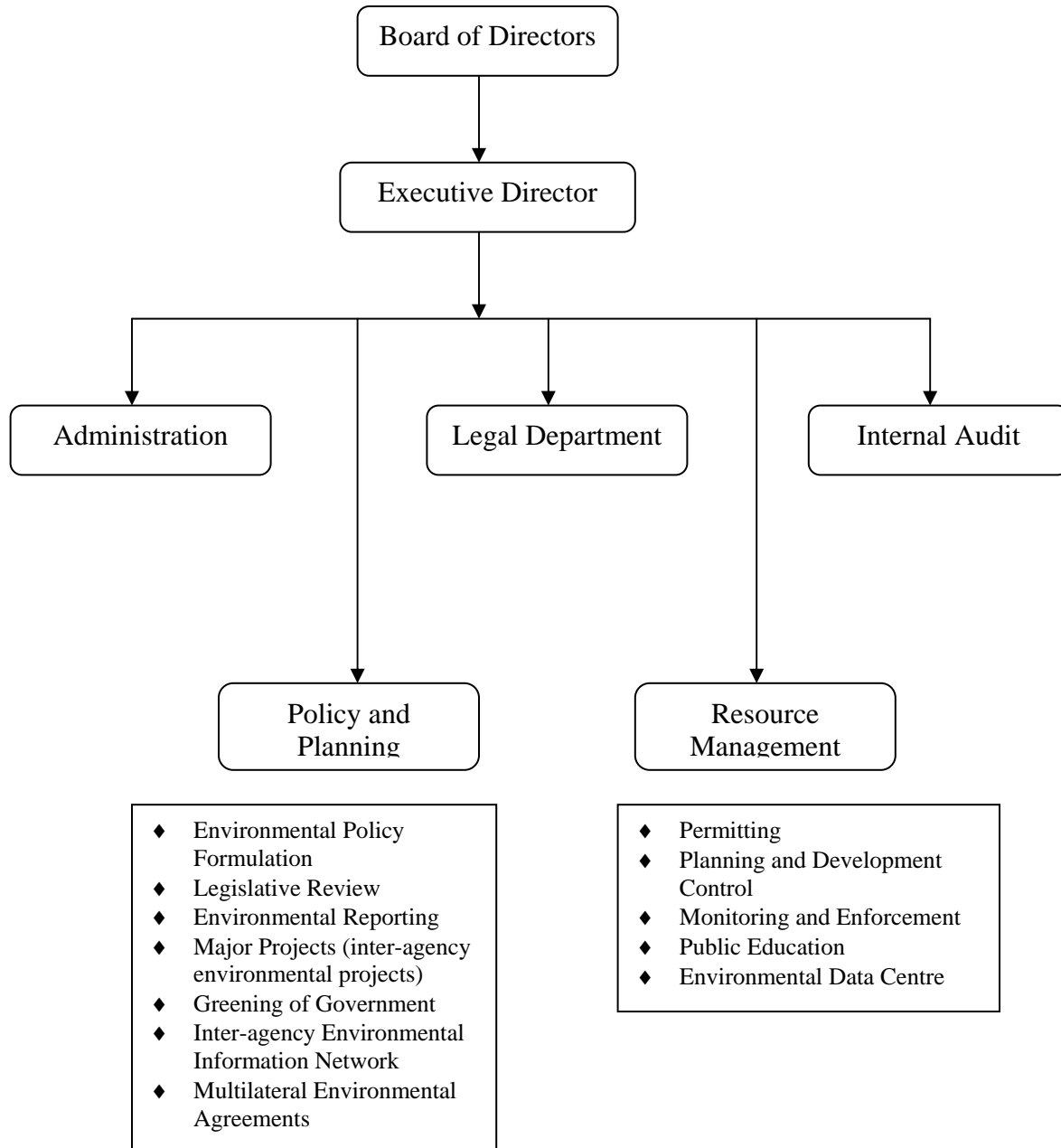
Tourism industry associations

Universities and research institutions

Ministers' fraternity/clergy

Professional associations

Environmental Management Coordinating Institution



PART III: BELIZE Country Report

6. PRIORITY ISSUES

The overview of the environmental management and tourism approaches presented in this report was generated from information contained in a number of documents; primarily:

- a. The Belize National Environmental Action Plan (1996);
- b. The Tourism Strategy Plan for Belize (1998);
- c. The State of the Coastal Zone Report Belize 1995 (1996);
- d. The National Protected Areas Systems Plan for Belize (1995);
- e. Management plans for several protected areas;
- f. Other documentation provided by a number of government agencies;
- g. Consultations held with a number of governmental and non-governmental organisations during the period September 29 to October 5, 1999; and
- h. A workshop with tourism and conservation organisations held on October 5, 1999.

The Study Team identified the following as the priority issues concerning environmental management and tourism in Belize:

1. There is no approved National Development Plan for Belize

A preliminary Economic Development Plan for Belize has been presented to Cabinet for review. However, the plan has not been completed, and the old National Development Plan (1990-1994) is under review. There is thus no approved macro-economic plan to guide the development process, leading to occasional resource use conflicts.

2. There is no National Physical Plan for Belize

The bio-physical data required for physical planning is available, but land use zoning is not presently guided by land capability information. There is therefore a significant degree of inappropriate land use. However, tourism use classes are designated under special development plans.

3. The tourism planning and management agencies require additional capacity

There is no tourism planning capacity within the institutions responsible for tourism. Additionally, with ecotourism as the stated strategy for tourism development, the

agency responsible for product development requires environmental planning support.

4. The protected area system require revision

Approximately 36%-48% of Belize is under some form of protection, and with the need for economic growth, areas are de-listed based on purely economic reasons. The protected area system plan was not formally adopted by government, and thus does not form the basis for the management of lands proposed as protected areas.

5. Inter-agency consultation on environmental issues is not institutionalised

Inter-ministerial communication and coordination on environmental issues is not institutionalised, but takes place on an informal basis. With institutional roles and responsibilities not completely clear, this periodically leads to duplication of effort. However, consultations have been initiated on the need to establish a National Council for Sustainable Development.

Other relevant issues and/or concerns identified during the consultations include the following:

- a. Given the new focus on tourism, tourism considerations may over-ride other natural resource management objectives, thus more planning is required in the future.
- b. A locational strategy is required for directing local versus external investment in tourism, as there is a need to reduce potential social conflict.
- c. The planning function in the Ministry of Housing and Planning is to be removed, but there is no clear sense of which agency will assume the planning responsibilities.
- d. Despite the focus on ecotourism, protected areas are not presently legally designated for tourism uses.
- e. Private land owners can develop private reserves, but the government has no control over the management of private reserves unless the private land owners invite the government to enter into collaborative management arrangements.
- f. Approximately 36%-48% of the land space is designated protected areas, but with the demand for land for other economic activities, de-listing of some areas may become necessary. This is particularly true where large communities use protected area resources. It is thought that the de-listing of such areas may be difficult in the absence of a plan to protect endangered species and sensitive ecosystems.
- g. The greater income-generating potential of tourism (versus other resource-exploitation activities) has not been clearly demonstrated to local communities.

- h. The capacity of NGOs to manage protected areas varies, with the large institutions having adequate capacity and the small community-based organisations requiring time to build capacity. However, support to NGOs should not result in weakening of public sector agencies.
- i. A number of public sector agencies are targeting the tourism industry as the means to achieve financial self-sufficiency.

7. DESCRIPTION OF THE EXISTING SITUATION

The Belizean economy is said to be highly dependent of industries (agriculture, fisheries, and tourism) that are based on natural resources (GOB, 1996), with the largest industry being tourism, followed by agriculture (McField et al, 1996). However, less than 50% of the land suitable for sustainable agriculture is being used.

Approximately 39% of the population of Belize reside in the coastal zone, and the greater portion of commercial, industrial, and tourism activities are also concentrated in the coastal area. Though there is no national physical plan, the significant effort placed into coastal zone planning signifies a commitment to macro-level planning. Additionally, the formation of the Ministry of Rural Development and Culture to coordinate rural development is an indication that the development push into the interior of the country will be guided by a coordinated macro-economic planning process.

7.1 Macro-Economic Planning

7.1.1 Policy and Planning

There is no approved National Development Plan or National Physical Plan for Belize, resulting in resource use decisions that sometimes create conflicts. Initiatives to improve the macro-economic planning framework include the following:

- a. Review of the 1990-1994 National Development Plan and preparation of an Economic Development Plan are ongoing;
- b. A Coastal Zone Management Programme has been developed, which has become the driving force for coastal zone planning in Belize. Part of that process has involved making changes in the institutional framework to improve management of coastal resources, including the establishment of the Coastal Zone Management Authority.

- c. The establishment of a National Council for Sustainable Development is underway. The process thus far has involved holding a number of regional and sectoral workshops to present information on the rationale, structure, and functioning of the proposed council.
- d. A Land Information Centre has been established, which will eventually function as the national centre for digitally mapped data. Based on the variety of sources, scales, and data formats available, the standardisation of mapping format and habitat classification has been contemplated.
- e. There is increased public participation in the planning process; effected through increased involvement in the preparation and implementation of plans for special development areas, through the EIA process, serving on advisory or management committees for protected areas, and by participation in environmental NGOs.

The State of the Coastal Zone Report, 1995, contains an extensive set of recommendations to improve policy, planning, and management of the coastal zone and coastal zone resources.

7.1.2 Land Use

In the absence of a National Physical Plan or comprehensive land use plan, development takes place in a haphazard fashion. Additionally, though land capability data is available, it is not used as the basis for land use zoning. Due to the fact that public lands constitute approximately 58% of total land space in Belize, there is less impetus for comprehensive land use planning and zoning. Inappropriate land uses are said to result from the following factors:

- ◆ Uncontrolled allocation of land;
- ◆ Inadequate infrastructure (mainly drainage and access roads);
- ◆ Lack of a land zoning framework;
- ◆ Inadequate land title security;
- ◆ Low land taxes (leading to land speculation); and
- ◆ Rapid privatisation of public lands (mainly to stimulate commercial farming);

The above land management problems also produce environmental problems. Responses to the above issues have included the following:

- ◆ Establishment of Special Development Areas to provide for land use zoning, subdivision and land lease, and development control within targeted areas;

- ◆ Declaration of the whole country (in 1995) as an Interim Planning Area in order to allow the Central Housing and Planning Authority to prepare development plans for targeted areas. This also provides the basis for the preparation of a comprehensive land use plan;
- ◆ The inability of the traditional planning system to adequately deal with issues such as submerged lands in the coastal zone is to be addressed. One of the first steps in the process is the development of a Marine Resource Classification System;
- ◆ The development of a Tourism Land Use Framework as a development concept with which to conduct spatial planning for tourism; and
- ◆ The use of EIA procedures to assess development proposals.

The above initiatives demonstrate not only that there are attempts to improve the planning and development control processes, but also that continued rationalisation of the policy and institutional frameworks is a basic requirement for improved development planning and control.

7.1.3 Institutional Arrangements

Responsibility for development and land use planning is shared among several institutions and ministries, with poor coordination between the different institutions. The main institutions responsible for land use planning and development control include the following:

- ◆ The **Central Housing & Planning Authority** (Ministry of Housing, Urban Development and Transportation), concentrates on land use planning, urban planning, and housing.
- ◆ The **Land Utilization Authority** and the **Lands Department** (Ministry of Natural Resources) are responsible for land use planning and land utilisation decision making.
- ◆ The **Ministry of Rural Development and Culture** is a new ministry created to deal with rural development, covering the provision of infrastructure and social services. The Ministry plans to operate primarily through the establishment of urban development corporations (such as the Toledo Development Corporation).
- ◆ The **Coastal Zone Management Authority** is responsible for coordinating management of the coastal zone.

- ◆ A **National Environmental Appraisal Committee** (composed of technical agencies of government) advises the Department of Environment on environmental screening and approval of EIAs.
- ◆ The **Belize City Council** and the **Town Boards** (Ministry of Labour, Public Service, and Local Government) function unofficially as local planning/development control agencies.

Other relevant institutions include:

- ◆ The Ministry of Works (provision of infrastructure);
- ◆ Ministry of Economic Development (provision of investment incentives);
- ◆ Forest Department (management of forest reserves and national parks).

7.2 **Tourism**

Tourism is said to be the second highest earner of foreign exchange for Belize, accounting for approximately 22-25% of foreign exchange earnings. Its contribution to the local economy in 1997 was approximately 17.5% of GDP, and accounted for approximately 19,000 jobs. However, the Tourism Strategy Plan for Belize (1998) notes that there has been a downturn in tourism, which the strategy is expected to correct.

7.2.1 **Product**

Belize's tourism industry started in the mid-1960's when Belize became known as a (scuba) diving destination. Today, approximately 77% of visitors still participate in scuba or snorkeling activities. With the marine-based activities being the main attractions, approximately 80% of the accommodations became concentrated in the coastal area. With the increasing dependence of tourism on natural areas, Belize adopted an ecotourism approach in the late 1980s to early 1990s.

The main issues concerning the tourism product were identified as the following:

- ◆ Belize has an abundance of sites to support heritage tourism, with the Mayan ruins being the second most popular attraction.
- ◆ The concentration of activities in the coastal area results in overuse of the resource, and thus the Limits of Acceptable Change for particular sites need to be determined.
- ◆ The poor road conditions restrict visitation to many archeological sites.

- ◆ Visitation to the major national parks has decreased by approximately 40% since 1993; due to a combination of factors such as the development of private reserves, use of non-park areas for bird watching and other recreational activities, concerns about security, and inadequate accounting systems.
- ◆ Development of the tourism product is not adequately supported by the relevant policies, best practices within the sector, and the land use/physical planning process/mechanism.
- ◆ Public infrastructure is often inadequate.
- ◆ Despite the importance of tourism, the sector has weak linkages with the other sectors, with limited direct interaction and cooperation.
- ◆ Many of the potential attractions have not yet been developed, and thus expansion and continued diversification of the product is possible.
- ◆ Increased technical and financial support from the government is required.
- ◆ Institutional capacity for land use and environmental planning and management is inadequate.
- ◆ There is a substantial community-based component to the local industry, but the marketing and linkages with the other sub-components are inadequate.
- ◆ Environmental attributes (such as the length of the rainy season and the threat of storms) are also said to be factors that impact negatively on the industry.

A number of actions have been recommended or initiated to address the major issues facing the industry.

7.2.2 Policy and Planning

The policy direction for tourism in Belize has remained consistent, in that, the country is still being marketed as an ecotourism destination. However, in trying to address the concerns about the carrying capacity of the attractions, further refinement of the approach has been recommended. The strategy plan indicates that the focus will be on smaller-scale, nature-based tourism with an underlying environmental ethic. The tourism strategy plan identifies ten policy directions for the next ten years. The ones most relevant to the policy integration issue are:

- ◆ Encouraging Belizean participation and ownership in the management and operation of tourism facilities;

- ◆ Strengthening the tourism planning and management capacity within the public sector;
- ◆ Providing increased public sector services and infrastructure;
- ◆ Enhancing the product ;
- ◆ Establishing standards and best practices for the industry;
- ◆ Ensuring responsible and sustainable tourism development; and
- ◆ Strengthening inter-sectoral linkages.

Other policy directions include:

- ◆ Preparation of Best Management Practice guidelines;
- ◆ Articulation of the use of Limits of Acceptable Change as a site assessment/planning tool;
- ◆ The identification of 9 tourism development zones, in which the Tourism Land Use Framework concept is to be used as the main planning tool; and
- ◆ Increased public sector support to the industry.

7.2.3 **Institutional Arrangements**

The tourism strategy plan for Belize states that the institutional setting for tourism is weak, exhibiting inadequate integration/coordination between public sector agencies, and inadequate capacity within the tourism management agencies to carry out the required planning. The major issues identified include:

- ◆ The absence of a policy and planning department for tourism within the (now) Ministry of Tourism, Youth and Broadcasting; and
- ◆ There is inadequate inter-agency coordination, despite the strong linkages between the sectors.

The main institutions responsible for aspects of the tourism industry in Belize include the following:

- ◆ The **Ministry of Tourism, Youth and Broadcasting** is responsible for tourism policy and planning. The location of the **Department of Archaeology** within this ministry also addresses one of the other critical needs of the industry; that is, management of heritage resources.
- ◆ The **Belize Tourism Board** has responsibility for tourism marketing, collection of tourism statistics, and more recently, product development.

- ◆ The **Ministry of Agriculture and Fisheries** is responsible for management of marine reserves.
- ◆ The **Ministry of Natural Resources** has overall responsibility for the establishment and management of protected areas (though actual day-to-day management may be delegated to other organisations). Its responsibility for land use planning is also critical for the tourism sector.

Other relevant institutions include:

- ◆ Department of Environment;
- ◆ Ministry of Economic Development;
- ◆ Ministry of Housing, Urban Development and Transportation;
- ◆ Coastal Zone Management Authority;
- ◆ Ports Authority;
- ◆ Programme for Belize;
- ◆ Protected Areas Conservation Trust;
- ◆ Belize Audubon Society;
- ◆ Belize Hotel Association;
- ◆ Belize Tourism Industry Association;
- ◆ Belize Tour Guides Association;
- ◆ Belize Tour Operators Association; and
- ◆ Belize Ecotourism Association.

The many linkages between tourism and the environment, and between the institutional roles, are enumerated in the tourism strategy plan, and actions to address the related issues have been recommended. The major recommendations include separation of the tourism and environment portfolios into different ministries (which was recently accomplished), re-organisation of the Belize Tourism Board, creation of a tourism product development unit, and creation of a tourism commission/council.

7.3 Protected Areas

7.3.1 System Components and Interactions

Approximately 14% of the Belize land space is designated as national parks or strict nature reserves, with the total area under one form or other of protection approximating 36% of land space. The categories of protected areas identified in the National Protected Areas System Plan (1995) are said to fit within the IUCN categories. Of these, the barrier reef is a site of international importance, and has been designated as a World Heritage Site. Though there is this substantial coverage,

there are a number of issues related to protected area planning and management. Foremost among these are the following:

- ◆ Protected area management is generally weak, with 16 of the 26 sites without proper management.
- ◆ Gaps have been identified in the proposed system of protected areas, and other potential sites for inclusion have been identified. For example, though the available documentation on protected areas list 26 sites, the coastal zone status report identifies 124 archaeological sites. The gap analysis is therefore incomplete.
- ◆ The financial and human resources required to ensure adequate management of the system are unavailable.
- ◆ The system of protected areas has not achieved its full potential contribution to the national or local economies.
- ◆ Marine protected areas form an integral part of the coastal zone programme, yet the infrastructure and enforcement are inadequate.
- ◆ The available information for protected area management varies considerably, with some sites having no baseline data and others having extensive data sets.
- ◆ Some proposed sites are privately owned, and the issue of compensation has to be addressed if such sites are designated by the government as protected areas.
- ◆ The boundaries of sites, or zones within the site, need to be re-assessed.
- ◆ The training in protected area management, and the public awareness, is inadequate.

The Government of Belize is currently addressing a number of the above issues.

7.3.2 Policy and Planning

Protected areas are considered to form the core of the ecotourism initiative for Belize, and as such, a number of initiatives to improve management of sites, and the system, have been recommended or are underway. These include:

- ◆ Revision of the National Protected Areas System Plan (1995). Though the system plan was not formally approved, it is used as a guide. Additionally, the system

plan contains 26 concrete recommendations for the full development of the system of protected areas;

- ◆ Creation of the Protected Areas Conservation Trust (PACT) to provide sustained funding to the system of protected areas;
- ◆ Permitting more parks to collect user fees, and to retain a substantial portion of fees (up to 70%) at the site level;
- ◆ Development of guidelines for preparation and contents of management plans;
- ◆ Delegation of management responsibility to a number of NGOs (such as Belize Audubon Society and Programme for Belize); and
- ◆ Establishment of a National Protected Area Policy Committee (1999) to provide advice on the steps and support systems required for the full development of the system of protected areas. Recommendations emanating from the Committee thus far include:
 - Review of the relevant policies and legislation to provide for coordinated management of the system, rather than individual sites,
 - Establishment of a Protected Areas Authority.

In addition to the review presently being undertaken by the National Protected Area Policy Committee, the coastal zone management programme has identified a number of actions required to improve management of coastal and marine protected areas.

7.3.3 Institutional Arrangements

The main institutional issues for protected area management are:

- ◆ Administration is divided along sectoral lines;
- ◆ The management institutions are relatively weak; and
- ◆ The financial resources are inadequate.

In an effort to address the above, several protected areas are managed through agreements between public agencies and private organisations. Institutions with responsibility for protected area management include the following:

- ◆ The **Forestry Department** (Ministry of Natural Resources) is responsible for administering the National Parks System Act, and management forest reserves. However, the management function is usually carried out by other institutions, based on written agreements.

- ◆ The **Fisheries Department** (Ministry of Agriculture and Fisheries) administers the Fisheries Act, and therefore the establishment of marine protected areas (MPAs). However, the Fisheries Act has no provision for delegation of management responsibility, and thus development of MPAs is undertaken through the **Coastal Zone Management Authority**.
- ◆ The **Department of Archaeology** (Ministry of Tourism, Youth and Broadcasting) is responsible for Archaeological Reserves.
- ◆ The **Protected Area Conservation Trust** (PACT) is a trust fund established by the Government of Belize to ensure the availability of a sustained source of funds for protected area activities.
- ◆ The **Belize Audubon Society** is an NGO that has been involved in the management of protected areas since 1982. Presently, the Society manages 8 sites under agreement with the Government of Belize.
- ◆ The **Programme for Belize** is a non-profit organisation dedicated to promoting the conservation of the natural heritage of Belize. The organisation manages the 97,128 hectare (240,000 acres) Rio Bravo Conservation and Management Area.

Other institutions whose mandates or activities have significant impact on the establishment and/or management of protected areas include:

- ◆ Department of Environment;
- ◆ Coastal Zone Management Authority;
- ◆ Lands and Survey Department;
- ◆ Land Information Centre;
- ◆ Belize Tourism Board;
- ◆ Belize Ecotourism Association;
- ◆ The Association of Friends of Five Blues;
- ◆ The Association of Traditional Healers;
- ◆ Belize Center for Environmental Studies;
- ◆ The Siwa-ban Foundation;
- ◆ The Belize Tourism Industry Association;
- ◆ The Belize Zoo and Tropical Education Center; and
- ◆ The Toledo Ecotourism Association.

Mechanisms used to ensure coordination and public participation in protected area policy, development, and management include the following:

- ◆ Public consultation and user surveys at the community level prior to site establishment and during operation;
- ◆ Establishment of advisory or management committees for specific sites; and
- ◆ Volunteer activities, such as trail maintenance and beach clean up.

7.4 Environmental Management

Belize is quite rich in renewable natural resources, with approximately 57% of its terrestrial space (23,000 Km²) under forest cover, and with its marine territory being as large as its terrestrial space.

7.4.1 Main Issues

The national environmental action plan (NEAP) and state of the coastal zone report identify the most serious environmental problems in Belize as the following:

- a. Absence of a national land management programme;**
Many environmental problems result from inappropriate land management practices.
- b. Increasing waste management problems;**
Collection systems for solid waste are poor in most areas, except Belize City, resulting in indiscriminate dumping in the streets, mangroves, and other open spaces. The official disposal sites are open dumps, in which burning is practiced. Both problems create public health concerns.
- c. Increased unsustainable agricultural practices;**
There is increasing deforestation resulting from increased logging, land clearing for agriculture, and collection of fuel wood.
- d. Periodic outbreaks of environment-related diseases;**
Inadequate supply of water and sanitation services to rural areas result in periodic outbreaks of water/sanitation related and other diseases (such as malaria).
- e. Degradation of coastal resources from land-based sources of pollution;**
The concentration of urban areas and industrial activity in the coastal zone results in the discharge of industrial effluents (primarily organic in nature), sewage effluent, oil and grease, and other contaminants directly into the coastal and marine area.
- f. High development pressure on coastal areas; and**

g. Inadequate capacity to manage natural resources, some of which are of global significance.

The financial and human resources required to manage particular resources (such as forests) are inadequate. As a result of these resource shortages, only two parameters (coral reef health and water quality) are used in the environmental monitoring programme at the national level. There is also inadequate enforcement of laws.

7.4.2 Policy and Planning

Past and ongoing initiatives to address the issues and problems identified above include a number of actions, including:

- ◆ A process to establish a National Council for Sustainable Development has started.
- ◆ An integrated coastal zone management programme has been developed.
- ◆ A number of critical policies and strategies have been developed, foremost among them being;
 - National Biodiversity Strategy and Action Plan,
 - Cayes Development Policy,
 - Integrated management strategy for coastal resources, and
 - National Environmental Education Strategy.
- ◆ The coming into force of the Environmental Protection Act (1993) allowed for the introduction of an environmental permit and licence system. Industrial effluent limitation standards have been set, and industries wishing to discharge trade effluent require licences.
- ◆ Resource mapping has been undertaken, using a GIS system, and a marine habitat classification system is being developed.
- ◆ Approximately 40 pieces of legislation dealing with environment/coastal zone issues exist. Several reviews of the legislation have been undertaken, and recommendations made for revisions. As part of this process, policies and guidelines to address specific needs have been developed within a number of government agencies.

7.4.3 Institutional Arrangements

As can be assumed from the large number of environment-related legislation, a number of institutions have responsibilities that impact on general environmental management. Institutional issues include the following:

- ◆ Unclear institutional roles and responsibilities, often resulting in duplication of effort.
- ◆ Inter-ministerial communication and coordination on environmental issues take place on a limited and informal basis.
- ◆ The technical and financial resources of the relevant institutions are inadequate. However, the NEAP (1996) identified a number of institutional strengthening projects that were being undertaken to improve the situation.

The main institutions responsible for aspects of environmental management in Belize include the following:

- ◆ The **Department of Environment** deals primarily with the environmental aspects of the development control process, natural resources management, environmental education and public awareness, and pollution control. One coordinating mechanism used by the Department of Environment is the establishment of the National Environmental Appraisals Committee, an inter-agency technical advisory committee that provides advice on environmental screening and EIAs.
- ◆ The **Ministry of Natural Resources** (Forestry Department, Land utilization Authority, Lands Department) is responsible for land use planning and management of protected areas.
- ◆ The **Ministry of Agriculture and Fisheries** has overall responsibility for management of marine resources.
- ◆ The Coastal Zone Management Authority uses an inter-agency technical advisory committee to provide advice on the coastal zone management project.
- ◆ The **Ministry of Housing** is responsible for land use planning, urban planning, and area-specific development plans.
- ◆ The **Water and Sewerage Authority** has the dual roles of potable water supply and treatment and disposal of sewage.
- ◆ The **Solid Waste Management Authority** was established to address the problems of solid waste collection and disposal. However, the institution has not

been made fully functional because of the lack of government financing and the absence of a national solid waste management plan.

- ◆ The **Ministry of Health and Sports** is responsible for monitoring the state of the social services (drinking water, solid and liquid wastes, public awareness, etc.).

Other institutions relevant to the environmental management process include:

- ◆ Ministry of Economic Development;
- ◆ Belize Center for Environmental Studies;
- ◆ Belize Enterprise for Sustainable Technology;
- ◆ Belize Zoo and Tropical Education Center;
- ◆ Programme for Belize; and
- ◆ Belize Audubon Society.

8. APPROACH TO BE ADOPTED

The requirements for integration of tourism and sustainable development policies were identified as (Section 4):

- a. An independent body responsible for environment and development;
- b. Clear macro-economic policies and strategies;
- c. A mechanism to ensure integration of environmental policies into sectoral and corporate policies and plans;
- d. Capacity within the National Tourism Organisation to inform environmental policy and set environmental standards for the industry; and
- e. A relevant public participation process.

The State of the Coastal Zone Report 1995 lists a comprehensive set of recommendations designed to address the important issues. As Section 7.4.2 indicates, some of the critical work required to support legislative changes, improved environmental policy formulation, and institutional coordination has started. The workshop was therefore used as an opportunity to discuss the work of the National Protected Area Policy Committee and the process for the National Council for Sustainable Development, and therefore to reach agreement on the next steps.

It was generally agreed that major changes are likely to emerge from the work of the various national committees, and that it would be premature for the CTO study to recommend major changes that the ongoing review processes have not suggested.

With this consideration setting the limits of the approach to be adopted, the following interventions are recommended:

- a. Finalisation of the National Development Plan**
- b. Establishment of the National Council for Sustainable Development as proposed**
- c. Establishment of a Protected Area Authority**
The National Protected Area Policy Committee also made this recommendation.
- d. Update the National Protected Area System Plan for Belize**
With the emphasis on protected areas forming the basis of the ecotourism strategy, it is imperative that the system gaps be closed, that the public and private land ownership situations be rationalised, and that the wider community clearly appreciates the need to ensure sustainability of the natural resource base.
- e. Establishment of a policy and planning unit within the Ministry of Tourism, Youth and Broadcasting**
Dealing with issues such as the proposed establishment of tourism development zones, concerns about whether Belize is truly an ecotourism destination, the major dependence of the tourism sector on protected areas, and other similar issues require a well structured and methodological approach. Skills in systems analysis and environmental planning must be brought to bear on the design of the tourism policy planning and management processes.

9. IMPLEMENTATION ARRANGEMENTS

Interim supporting measures that could be implemented are listed below.

- a. Revision of the system protected area system plan**
The revision process for the protected area system would require a project team consisting of a protected areas specialist, legal officer, economist, GIS expert, and information/outreach officer (with administrative support). The project team could be attached to PACT or to the Conservation Division. The host institution would be supported by a project technical advisory team, which would also facilitate the

linkages with the other relevant institutions. This (2-year) project would require external funding and technical assistance.

b. Provision of interim secretariat/technical support to the National Protected Area Policy Committee

The process of establishment of the proposed Protected Area Authority will require the definition of institutional mandate, at the very least. It is recommended that the Committee assist with this definition and related tasks. For this purpose, the Committee will require both technical and secretariat support. The participants in the workshop suggested that the Conservation Division would be the appropriate organisation in which to locate the interim secretariat. Both the secretariat and the technical support would require funding from external sources. The alternative is to locate the interim secretariat within PACT^Φ, utilise some of PACT's funds to support the secretariat, and use the external funds to pay for the technical assistance. This project would have a 1-year duration.

c. Establishment of a policy and planning unit within the Ministry of Tourism, Youth and Broadcasting

This (3-year) project would basically be a technical assistance project, in which each consultant would be assigned a local counterpart. The project would necessarily include a major training component for the local counterpart personnel.

^Φ PACT was considered by several persons to be a reasonable alternative host because of its mandate to support the system of protected areas, and because it could conceivably use funds presently available to the institution to support the secretariat.

Annex III-1: Persons Consulted

1. Belize Tourism Board
Mr. Pedro Perez
2. Department of Archaeology
Mr. Allan Moore
Mr. Bryan Woodeye
3. Forest Department
Ms Natalie Rosado
Mr. Oswaldo Sabido
4. Fisheries Department
Mr. Jose Perez
5. Ministry of Natural Resources
Mr. David Aguilar - Permanent Secretary
Ms Malukah Cardona
Mr. Genaro Barrera
Ms Noreen Fairweather
6. Belize Audubon Society
Mr. Osmay Salas
7. Department of Environment
Mr. Martin Alegria
Mr. Jose Mendoza
8. PACT
Mr. Humberto Paredes
9. National Protected Area Policy Committee
Mr. Evaristo Avella - Consultant
10. Programme for Belize
Ms Joy Grant
11. Belize Tourism Industry Association
Mr. Mark Panton
12. Coastal Zone Management Authority
Mr. Stewart Cruz

Persons Attending Workshop of October 5, 1999

Name	Institutional Affiliation
AUGUST, Rick	Help for Progress
AVELLA, Evaristo	National Parks Committee
CASTAÑEDA, Anselmo	Envic Consultancies
DOUGLAS, Joy	CTO Consultant
GARDNER, Lloyd	CTO Consultant
LIZÁRRAGA, Emelda	PACT
PARKEY, Teresa	Belize Hotels Association
PEREZ, Jose	Fisheries Department
PEREZ, Pedro	Belize Tourist Board
ROSADO, Natalie	Forest Department

Annex III-2: Relevant Legislation

The State of the Coastal Zone Report Belize, 1995 provides a comprehensive listing of relevant legislation, and the related administrative responsibilities. The main bits of legislation are shown below.

Physical Planning

- ◆ Crown Lands Act (1886)
- ◆ Land Acquisition Act (1947), with amendments
- ◆ National Lands Act (1992)
- ◆ Land Utilisation Act (1981), with amendments, Development Orders, and Regulations
- ◆ Housing and Town Planning Act (1947), with amendments
- ◆ Belize Land Development Authority Ordinance (1980)
- ◆ Local Government (District Boards) Act (1939), with amendments and Orders

Forest Management

- ◆ Forests Act (1927), with amendments, Rules, and Regulations
- ◆ Private Forests (Conservation) Act (1945)
- ◆ Forest Bill (1994)
- ◆ Draft Forest Regulations (1995)

Protected Areas

- ◆ National Parks System Act (1981), with amendments and Orders
- ◆ Protected Areas Conservation Trust Act (1985)
- ◆ Ancient Monuments and Antiquities Act (1972)

Wildlife Protection

- ◆ Wildlife Protection Act (1981), with amendments and Regulations

Water Supply and Sewerage

- ◆ Water and Sewerage Act (1971), with amendments and Orders
- ◆ Water Resources Bill (1994)

Tourism

- ◆ Belize Tourist Board Act (1990), with amendments and Regulations
- ◆ Hotels Act (1978), with amendments

Marine Resources

- ◆ Fisheries Act (1948), with amendments, Regulations, and marine reserve orders
- ◆ Port Authority Act (1976), with amendments and Regulations
- ◆ Maritime Areas Act (1992)

Agrochemicals

Pesticides Control Act (1985), with Regulations

Waste Management/Pollution Control

- ◆ Public Health Act (1943), with amendments
- ◆ Solid Waste Management Authority Act (1991)

Environmental Management

- ◆ Environmental Protection Act (1992), with Regulations

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PART IV: GRENADA Country Report

10. PRIORITY ISSUES

The information used to generate the profile of environmental management and tourism in Grenada was derived from a number of sources; namely:

- a. The Country Environmental Profile (1991);
- b. The Master Plan for the Tourism Sector (1997);
- c. The Plan and Policy for a System of National Parks and Protected Areas (1988);
- d. Other documentation provided by different government agencies;
- e. Consultations held with a number of government agencies during the period September 20-23, 1999 (Annex IV-1); and
- f. A workshop held on September 23, 1999.

The following priority issues, related to environment and tourism, were noted by the Study Team:

1. There is no National Development or Physical Plan for Grenada

In the absence of either a physical or development plan, sectoral plans and policies are used to guide the development control process. Thus, it is not uncommon to find examples of resource use conflicts.

2. Land use planning and environmental management are not implemented in a coordinated manner

The absence of national development and land use plans also affect the institutional arrangements that are responsible for land use and environmental planning. Institutions and Councils are created, become defunct, and are revived without clear policy directions. In this scenario, institutional mandate and "power" change based on political and bureaucratic changes. This results in both overlapping responsibilities and gaps in policy and management application.

3. Environmental and protected area planning and programmes are not linked to the policy guidelines set out in the related policy documents

The major recent studies dealing with environmental management and protected areas provide clear directions for policy development and management. However, these are apparently not used to guide the policies and programmes of the line agencies.

This results in a situation where policies and programmes are apparently influenced to a significant degree by the personal strengths and preferences of technocrats in the different agencies.

4. Inter-agency consultation on environmental issues does not take place on a consistent basis

Environmental management responsibility is dispersed among approximately 15 agencies, yet there is no provision for obligatory coordination or consultation. The Sustainable Development Council was formed in 1998 to address this issue, but the focus of the Council has since been broadened from purely environmental matters to include all matters affecting the development of Grenada. As such, environmental matters require more focused inputs and discussions, which is not forthcoming. Additionally, line agencies work together on a project basis or to resolve specific problems, not on the basis of on-going programme planning and implementation.

Other major issues identified during the consultations include the following:

- a. Technical support in the area of protected areas should be provided to the private owners/operators of attractions.
- b. The separation of policy formulation and management functions for natural resource management has not been fully examined.
- c. More inter-agency consultation and coordination is required, especially among the agencies dealing with environment and tourism.
- d. The institutional arrangements, present and in the immediate future, for management of natural and heritage sites do not provide adequate coverage for the range of sites identified as potential protected areas.
- e. The Land Development Control Act (1968) needs to be revised to include provisions for environmental protection and procedures (such as the use of environmental impact assessment).
- f. The development of zoning ordinances and building codes needs to be finalised as soon as possible.
- g. The inter-agency approval/consultation mechanism for development control needs to be formalised.

11. DESCRIPTION OF THE EXISTING SITUATION

The Grenada Country Environmental Profile (1991), lists the 5-year strategic goals of the Government of Grenada as focusing on three main areas:

- a. Incentives for food producers;
- b. Tourism upgrading, especially in the attractions and accommodations sub-sectors; and
- c. Encouraging the development of an increased number of manufacturers and other industries.

In the absence of any indication that the development focus of the Government of Grenada has changed, the above strategic goals therefore provide the context for the interpretation of the existing planning and management systems. Additionally, there is evidence to suggest that the Government of Grenada recognises that a number of policy and institutional deficiencies exist, and have been taking steps to correct them.

11.1 Macro-Economic Planning

11.1.1 Policy and Planning

There is no approved National Development Plan or National Physical Plan for Grenada, which places a number of constraints on the development planning process, and creates conflicts in the use of land and other resources. The Grenada Country Environmental Profile notes that Grenada, with the support of international institutions such as the Organization of American States (OAS) and the United Nations Development Programme (UNDP), has undertaken a number of projects in the past two decades related to systems planning and institutional coordination. Most of the resulting reports and strategies were neither approved nor adopted by the Government of Grenada, with the result that there has been very little change in the development planning and environmental management processes. The major initiatives included:

a. Preparation of a Physical Development Strategy for Grenada (UNDP, 1977)

The Government of Grenada never approved the strategy, but local planners have used the guidelines contained in the report. Unfortunately, much of the data is now dated or lost.

b. Preparation of a Draft Interim Development Plan (PPU, 1988)

It is argued that this plan is more strategic in focus, and lacks the detail required to guide planning in specific areas.

More recent initiatives include the following:

- ◆ Draft St. Georges Development Plan (1991);
- ◆ Integrated Physical Development and Environmental Management Plan for Carriacou and Petite Martinique (1998); and
- ◆ Urban renewal/historical preservation project for St. Georges.

The absence of a comprehensive database or land information system is a common thread running through various studies on Grenada. Obviously, information systems are required to support land use planning, environmental planning and management, tourism planning, and the policy/development planning processes.

11.1.2 Land Use

The Grenada Country Environmental Profile (CEP) notes the history of problems with land use planning and development control, which have remained virtually unchanged. The main issues include the following:

- ◆ There is no detailed map of current land use for the entire country. Mapping is usually done for specific projects.
- ◆ There is no zoning ordinance, which often results in land use conflicts.
- ◆ Land use decisions are made on an ad hoc basis.
- ◆ Development control is guided primarily by sectoral policies and programmes.
- ◆ The system of development control is inadequate;
 - i. Institutional conflicts and overlaps are not uncommon,
 - ii. The Land Development Control Act (1968) does not contain adequate provisions to deal with environmental concerns,
 - iii. Enforcement of illegal developments is poor,
 - iv. The use of environmental impact assessment (EIA) procedures is uncommon.
- ◆ The preparation of cadastral maps is extremely difficult, because persons carrying out subdivision of lands do not have to register the subdivided parcels.

Policy responses previously recommended include:

- ◆ Preparation of a National Physical Development/Land Use Plan;
- ◆ Revision of the Land Development Control Act, to ensure better inter-agency coordination, and protection of natural resources;

- ◆ Promulgation of legislation requiring EIAs for development applications, especially for major projects within the coastal zone, and institution of EIA procedures; and
- ◆ Creation and maintenance of a functional land use database.

Current responses to the issues enumerated above include the following:

- ◆ Building codes are presently under preparation;
- ◆ A vulnerability mapping and mitigation planning project is in progress;
- ◆ An informal inter-agency committee to review EIAs for large development projects has been formed in Grenada. A similar arrangement for Carriacou has now been formalised.
- ◆ The Physical Planning Unit routinely provides technical support to the Board of Tourism and other agencies.

11.1.3 Institutional Arrangements

An institutional framework assessment of Government of Grenada (GOG) resource management agencies conducted in 1987 (CEP, 1991) summarised that the institutional problems include, in part, the following:

- ◆ Inadequate human resources;
- ◆ Several agencies involved in land use and resource management activities;
- ◆ Poor coordination between government departments;
- ◆ Little evidence of long-term planning.

GOG responses to these issues have included:

- ◆ Establishment of the Sustainable Development Council as a mechanism for exchange of information between relevant public and private sector institutions, and for review of specific development issues.
- ◆ Formation of inter-agency committees to review EIAs for large development projects.

The main institutions responsible for land use planning and development control include:

- ◆ The **Land Development Control Authority** has overall legislative responsibility for planning and land development control.
- ◆ The **Physical Planning Unit** (Ministry of Finance) performs the functions of planning and development control, and is expected to function as the technical arm of the Land Development Control Authority.

- ◆ The **Land Use Division** (Ministry of Agriculture, Lands, Forestry and Fisheries) advises on agricultural land use planning and zoning.
- ◆ The **Ministry of Works and Communications** is responsible for implementing major infrastructure projects, for beach protection, and for approval of mining of beach aggregates.
- ◆ The **Forestry Department** (Ministry of Agriculture, Lands, Forestry and Fisheries) is responsible for management of forest reserves on state-owned lands, including any development occurring within them.
- ◆ The **Lands Division** (Ministry of Agriculture, Lands, Forestry and Fisheries) is responsible for development control, management, and use of all state-owned lands.
- ◆ The **National Housing Authority** has the legislative authority to carry out housing developments without the approval of other agencies.

Other relevant agencies include:

- ◆ The Industrial Development Commission;
- ◆ The Grenada Ports Authority;
- ◆ The Environmental Health Department;
- ◆ The Grenada Model Farms Corporation; and
- ◆ The National Water and Sewage Authority.

11.2 **Tourism**

11.2.1 **Product**

The tourism product in Grenada was initially based on the sand, sea, and sun concept. The steady growth in the industry (13.9%) was interrupted by the 1979 revolution, but has been slowly recovering since. This is demonstrated by the fact that tourism contribution to gross domestic product (GDP) has increased from 5.5% in 1986 to 8.5% in 1997 (reaching a high of 9.7% in 1994) (CDB, 1999).

Unfortunately, this growth has produced both positive and negative results. The negative impacts include:

- ◆ Discharge of sewage effluent into coastal waters, thereby reducing the water quality;
- ◆ Exacerbating the solid waste disposal problem;
- ◆ Resource use conflicts (especially beach resources); and

- ◆ Damage to coastal resources (wetlands, coral reefs, and beaches).

To a significant extent, some of these tourism-related problems result from general systemic problems, including:

- ◆ Sub-standard infrastructure;
- ◆ Inadequate planning;
- ◆ Lack of standards;
- ◆ Inadequate capacity in the planning and management institutions;
- ◆ Inadequate institutional arrangements; and
- ◆ Few attractions and beaches are available, with those operating above the available amenities, natural resource support systems, and sometimes available space.

Despite the above, the growth potential of tourism in Grenada is still deemed to be substantial. This is based primarily on the shift in the tourism development approach from sand, sea, and sun to the use of natural and heritage resources.

11.2.2 Policy and Planning

The policy approach to tourism development is to create and promote historical and environmental attractions. This is to be carried out through the establishment of 25 tourism development zones, 20 of which will be in Grenada and 5 on Carriacou.

In addition to the continued use of beach/coastal resources to support tourism development, the major policy overlaps with environmental management are:

- a. The tourism master plan recognises that the natural resources that support ecotourism should be protected within a national system of protected areas; and
- b. Improved environmental planning is required to reduce or prevent the negative environmental impacts of tourism.

The tourism master plan also identifies measures to reduce the negative environmental impacts of the different tourism sub-sectors (Table IV-1).

An example of this awareness is the formation of a Management Committee and Technical Working Group to deal with the management of the Gran Anse Bay and Beach area. Institutions involved in the Technical Working Group include the Coast Guard, Port Authority, Water Taxi Association, dive tour operators, Board of Tourism, water sports operators, and the Grenada Hotel Association.

Table IV-1: Measures to Reduce Adverse Environmental Impacts

Tourism Sub-sector	Legal & Institutional	Macro Measures	Micro Measures
Beach Resort Tourism	<p>Updating of pollution control legislation.</p> <p>Amendment of Land Development Control Act.</p> <p>Enactment of coastal zone legislation.</p> <p>Allocate Environment to the Ministry of Planning & Development.</p> <p>Establish Committee on Sustainable Development.</p> <p>Strengthen LDCA and PPU.</p> <p>Enhance inter-agency cooperation.</p>	<p>Prepare statutory Physical Development Plan.</p> <p>Build EIAs into the planning approvals process.</p> <p>Develop and codify pollution control standards.</p> <p>Integration of tourism into development planning.</p> <p>Demarcate tourism development zones.</p> <p>Develop central sewage system.</p>	<p>Enforce setback standards.</p> <p>Promote on-site natural sewage treatment systems.</p> <p>Institute stricter standards for sewage treatment plants.</p> <p>Promote supplementation of water supply with desalination plants.</p> <p>Establish strict controls for dry scrub removal.</p>
Cruise Ship Tourism		Develop facilities for ship-generated waste.	
Marine Tourism (Yachting & water Sports)		<p>Institute code of conduct for yachtsmen.</p> <p>Institute requirement for holding tanks.</p> <p>Prohibit spearfishing.</p>	<p>Establish strict controls for mangrove removal.</p> <p>Make mandatory the establishment of on-site pumping out facilities for visiting yachts.</p>
Special Interest Tourism (Nature, Cultural, & Heritage)	<p>Amendment of the Natural Trust Act.</p> <p>Transfer National Parks back to the Ministry of Agriculture.</p> <p>Establish tripartite management of heritage sites.</p> <p>Revision of the Forest Ordinance.</p>	<p>Allocate more resources to special interest tourism.</p> <p>Promote community participation and stakeholding in tourism development.</p> <p>Enlargement of Grand Etang national Park.</p>	

Source: Master Plan for the Tourism Sector-Grenada, 1997

11.2.3 Institutional Arrangements

The national organisations responsible for tourism planning and management in Grenada are:

- ◆ The **Ministry of Tourism** has overall responsibility for tourism, particularly policy formulation, legislative reform, and monitoring. The Ministry, through administrative oversight of the National Parks Unit, is also currently responsible for development and management of national parks.
- ◆ The **Grenada Board of Tourism** is responsible for the development and promotion of the tourism industry.

As the tourism master plan points out, there is need for clear demarcation in the responsibilities of the above two organisations. Private sector institutions involved in the sector include:

- ◆ Grenada Hotel Association
- ◆ Grenada Water Taxi Association
- ◆ Grenada Chamber of Commerce
- ◆ National Advisory Council for Nature Tourism

Non-sector organisations whose responsibilities impact the tourism sector are listed under Sections 11.1.3, 11.3.3, and 11.4.3.

11.3 Protected Areas

11.3.1 System Components and Interactions

The Grenada National Parks System Plan (1988) proposes, in addition to forest reserves, five new categories of protected areas; these being, National Parks, Natural Landmarks, Cultural Landmarks, Protected Seascapes, and Multiple Use Management Areas. However, though the National Parks and Protected Areas Act (1990) makes provision for the creation and management of a system of protected areas, and the system plan contains detailed policy guidelines for tourism and forest, soil, and water conservation, the system plan was never formally adopted. As such, no national park has been officially designated in Grenada, and the natural areas are still designated as forest reserves. However, a number of these forest reserves are being managed as if they are in fact national parks.

With the present focus in tourism being the development of nature tourism, the problems and issues related to the creation and management of a network of heritage and natural areas (the system plan lists 126 sites that merit protection) to meet a range of objectives and uses are once again brought to the fore. Major issues to be addressed include the following:

- ◆ A number of sites considered to be important are not included in the existing system plan.
- ◆ The laws to protect cultural heritage are inadequate, and important sites are damaged or changed. For example, the lack of building codes and design guidelines results in changes being made to buildings that affect the character of historic sites or areas, such as St. Georges.
- ◆ Most of the lands within the proposed system are privately owned, and since the National Parks and Protected Areas Act provides for all lands declared as protected areas to be vested in the Crown, the government would require major financial resources to provide compensation for acquisition of properties or loss of development rights by private land owners.
- ◆ Loss of marine heritage resources continues.
- ◆ Inadequate institutional arrangements and support, and weak capacities, prevent the proper management of protected area resources.

11.3.2 Policy and Planning

The Grenada CEP notes that the protected area system plan is the first attempt to integrate historical and cultural resources within a long-term management plan/framework. The various studies, including the tourism plan, have made the following recommendations:

- ◆ Adopt and implement the national system of protected areas as soon as possible. Special attention would be given to system financing and land acquisition in the revised system plan;
- ◆ St. Georges should be declared a historic district;
- ◆ Protected areas and heritage laws should be strengthened; and
- ◆ The land use/development/protected area plan must adequately protect important sites and buildings.

Initiatives presently being undertaken include:

- ◆ Preparation of a policy and proposal by the Forest Department concerning recreational use and environmental education in forests; and

- ◆ The Physical Planning Unit is in the process of preparing a historical preservation plan for St. Georges.

11.3.3 Institutional Arrangements

The institutions with responsibility for areas proposed as protected areas include the following:

- ◆ The **National Parks Unit** (Ministry of Tourism) is charged with responsibility for the development and management of the system of protected areas. The tourism master plan notes that the Unit receives inadequate support from the Ministry of Tourism, and recommends that administrative responsibility for the National Parks Unit be returned to the Forestry Department. That recommendation is being pursued, and the Ministry of Tourism has prepared a Cabinet Submission to effect the transfer of the National Parks Unit to the Forestry Department.
- ◆ The **Forestry Department** (Ministry of Agriculture, Lands, Forestry and Fisheries) functions to protect the areas designated as forests and/or watersheds, flora, fauna, and soil and water resources. The National Parks Unit was housed within the Forestry Department prior to being transferred to the Ministry of Tourism, and the Department has been making policy and administrative changes to accommodate the return of the National parks Unit.
- ◆ The **Fisheries Division** (Ministry of Agriculture, Lands, Forestry and Fisheries) does not manage protected areas at present. Under the proposed system of protected areas, they are expected to manage protected seascapes and marine multiple use management areas.
- ◆ The **National Water and Sewage Authority** (NAWASA) shares responsibility with the Forest Department for the management of water catchment areas.
- ◆ The **Grenada National Trust** (Ministry of Education) has the legislative mandate to protect and preserve sites of historical or cultural interest, or of natural importance. The functioning of the Trust has been severely hampered by lack of substantive authority and administrative and political support.

Other institutions whose activities in some way impact on protected area management include the following:

- ◆ Grenada Board of Tourism;
- ◆ National Advisory Council for Nature Tourism;
- ◆ Ministry of Works and Communications;
- ◆ Land Development Control Authority;

- ◆ Land Use Division; and
- ◆ Lands Division.

There is a concern that the reversion of the National Parks Unit to the Forestry Department will result in a concentration of focus on forest reserves at the expense of beach and other coastal and marine resources/areas. This concern is well founded, as the Forest Department stated very clearly that while it will assume responsibility for the National Parks Unit, it has no expertise or interest in managing heritage sites or marine/coastal areas, and recommends that management of such areas be placed within the relevant line agencies. Thus, the shifting of the National Parks Unit to the Forestry Department will not solve the institutional problems related to protected area management.

The National Parks and Protected Areas Act provides for the establishment of a National Parks Authority and a National Parks Advisory Council. The Advisory Council was formed, and quickly became defunct.

During the consultations for this assignment, a number of individuals supported the recommendation that the National Parks Unit should be returned to the Forestry Department. However, there was no support for the other recommendations dealing with the establishment of the Authority, despite the obvious institutional and legislative gaps. Obviously, management effectiveness will not be improved as long as institutions and individuals continue to promote their own interests. Additionally, there seemed to be no appreciation for the differences between policy/regulatory, management, and ownership responsibilities.

If the tourism industry in Grenada is to be based on the use of natural and heritage resources, the institutional arrangements for the management of such areas must be resolved as a matter of priority, and such arrangements are best determined within the context of the establishment and management of a national system of protected areas.

11.4 Environmental Management

The environmental management programme in Grenada is faced with a number of major challenges. While the problems are not unique to Grenada, the country suffers the disadvantage of not having a single institution with responsibility for either overall land use planning or overall environmental management. There is therefore very little system planning or monitoring.

11.4.1 Main Issues

The main issues related to environmental management in Grenada include the following:

- ◆ The environmental legislation is seriously outdated, lack appropriate supporting regulations, are dispersed among a range of institutions, and generally lack enforcement.
- ◆ Despite many initiatives to improve environmental management, a strong institutional framework for environmental management does not exist. Management responsibility is dispersed among approximately 15 agencies, with no provision for mandatory consultation or coordination.
- ◆ No solid waste management plan exist, resulting in solid waste collection and disposal being inadequate. The quality of the garbage dumps fluctuates, periodically creating public nuisances.
- ◆ The major threat to wildlife species is the loss of habitat, caused mainly by agriculture and developmental activities.
- ◆ There is a significant level of deforestation and soil erosion, resulting mainly from agricultural, forestry, fuel wood cutting, and road construction activities.
- ◆ Surface runoff from the watersheds generates periodic inputs of contaminants to the coastal marine environment.
- ◆ Industries (agrochemical, agricultural waste, and sewage) also contribute to coastal water pollution.

11.4.2 Policy and Planning

At the time of preparation of the Grenada CEP in 1991, it was noted that the general sensitivity to, or awareness of the environmental needs or consequences of public sector activities was not well developed. Though there has since been some improvement, the general level of awareness and concern is still unacceptably low. As such, recommendations made by previous studies to address the problems of solid waste management, pollution control, public education, registration and disposal of pesticides, absence of pollution control standards, and myriad other issues have generally not been adopted.

Recent initiatives include the following:

- ◆ The Public Health ordinances, which provide the basis for pollution control, are being revised.
- ◆ The formation of the Sustainable Development Council in 1998.
- ◆ Formation of inter-agency committees to review EIAs for large development projects.
- ◆ A watershed diagnostic survey (of the watershed draining into the Grand Anse Bay) conducted in 1999 by the Ministry of Health and Environment.

11.4.3 **Institutional Arrangements**

As mentioned above, approximately 15 institutions have responsibilities that are related in some form to environmental management. Previous assessments of this institutional framework have identified the following problems:

- ◆ Lack of inter-agency coordination;
- ◆ A weak legislative base;
- ◆ Frequent shuffling of ministerial responsibility for environmental management; and
- ◆ Absence of an approved national physical development plan.

The main institutions involved in environmental policy formulation and programme implementation include the following:

- ◆ The **Land Development Control Authority** has overall legislative responsibility for planning and land development control.
- ◆ The **Physical Planning Unit** (Ministry of Finance) performs the functions of planning and development control, and is expected to function as the technical arm of the Land Development Control Authority.
- ◆ The **Land Use Division** (Ministry of Agriculture, Lands, Forestry and Fisheries) advises on agricultural land use planning and zoning.
- ◆ The **Ministry of Works and Communications** is responsible for implementing major infrastructure projects, for beach protection, and for approval of mining of beach aggregates.

- ◆ The **Forestry Department** (Ministry of Agriculture, Lands, Forestry and Fisheries) is responsible for management of forest reserves on state-owned lands, including any development occurring within them.
- ◆ The **Fisheries Division** (Ministry of Agriculture, Lands, Forestry and Fisheries) does not manage protected areas at present. Under the proposed system of protected areas, they are expected to manage protected seascapes and marine multiple use management areas.
- ◆ The **National Water and Sewage Authority** (NAWASA) shares responsibility with the Forest Department for the management of water catchment areas.
- ◆ The **Environmental Health Department** (Ministry of Health and Environment) is responsible for health and sanitation, covering solid waste, water quality control, pollution control, and the usual sanitary and occupational health issues.
- ◆ The **Pesticide Control Board** approves applications for importation of pesticides into Grenada.
- ◆ The **Grenada Board of Tourism** is responsible for tourism product development, and appears to be the lead agency coordinating management of beaches used for tourism purposes.

As one measure to address the problem of institutional coordination, the Ministry of Health and Environment indicated that it plans to establish an Environmental Protection Unit in 2000 to increase coordination on environmental health matters.

12. APPROACH TO BE ADOPTED

The recommended approach for Grenada must be framed against the general requirements for integrating tourism and environmental policies and programmes. These requirements include:

- a. An independent body responsible for environment and development;
- b. Clear macro-economic policies and strategies;
- c. A mechanism to ensure integration of environmental policies into sectoral and corporate policies and plans;

- d. Capacity within the National Tourism Organisation to inform environmental policy, and set environmental standards for the industry; and
- e. A relevant public participation process.

As the description of the existing situation indicates, none of the above prerequisites are in place in Grenada. In order to improve the development planning and environmental management processes in Grenada, the following actions are recommended:

a. Prepare, and implement, a National Physical Plan

The National Physical Plan is expected to provide a basis for physical planning and land use, integrating the land resource demands of the different sectors as well as the social demands of the citizenry, thus providing the spatial framework for economic and social planning.

b. Establish an institution with overall environmental management responsibilities

This institution would be a coordinating institution with responsibility for environmental policy formulation, development of environmental legislation, development of environmental standards and procedures, monitoring and data management, environmental education, and state of the environment reporting. The institution would also be mandated to ensure that environmental policies, procedures, and practices be integrated into sectoral policies and programmes, rather than assume the management responsibilities of the different agencies. As such, the existing line agencies must be strengthened to properly execute their environmental management functions (within an updated policy and institutional framework).

c. Revise the physical planning and development control processes

The relationship between the Land Development Control Authority, the Physical Planning Unit, and the Land Use Division has to be rationalised. The preferred structure will no doubt be determined by the GOG. However, as recommended elsewhere, there should be one legislated Authority, with the relevant technical and management support. Issues that require immediate action include:

- ◆ Development and implementation of EIA guidelines and procedures;
- ◆ Establishment of an obligatory consultation mechanism within the development control process; and
- ◆ Revision of the Land Development Control Act to incorporate provisions for environmental planning and standards.

d. Establish the proposed National Parks Authority

Given the institutional conflicts and inadequate capacities, management gaps, lack of information systems, and yet the central positioning of natural and heritage sites in the tourism strategy, it is strongly recommended that a coordinating institution for protected areas be established. As with the umbrella environmental management

institution, this National Parks Authority would be a coordinating institution with responsibility for policy formulation, system planning and management, monitoring, and data management. Site management would therefore remain with the relevant line agencies. The new Authority would be expected to carry out the following functions:

- ◆ Review policies relevant to protected areas to close existent policy gaps, and ensure consistency across management agencies;
- ◆ Undertake the revision of the protected areas system plan;
- ◆ Coordinate a public consultation process as part of the system plan revision;
- ◆ Identify priority sites for declaration and management;
- ◆ Recommend legislative changes required to support a system of protected areas;
- ◆ Prepare reports on the status of Grenada's protected areas at agreed time intervals;
- ◆ Examine sustainable funding options for protected area management, including the establish of a national protected areas trust fund;
- ◆ Review research, monitoring, and evaluation protocols for all protected areas, to ensure data completeness, compatibility, and integrity;
- ◆ Identify or design a data/information management system/centre that will support protected area management;
- ◆ Design and conduct a programme of monitoring to include:
 - Gap analysis to ensure that all important ecosystems are represented in the system,
 - Periodic checks on the activities/programmes of the line/site management agencies to ensure system integrity;
- ◆ Develop formal mechanisms for the inclusion of civil society groups in protected area policy development; and
- ◆ Identify strategies for including lands under private ownership in the protected area system without the requirement of outright purchase by government.

e. Re-position the Sustainable Development Council

The Sustainable Development Council (SDC) presently deals with a wide range of national development issues, but reports to the Ministry of Finance via meeting reports sent to the Permanent Secretary. As stated in Section 4, this body should be an independent statutory body, which would function outside the confines of a single Ministry to bring together all the relevant entities and unify the approach at the national level. Additionally, the experience with similar bodies in the Caribbean suggests that the Council requires additional resources, especially dedicated staff.

Given the fact that the approaches recommended above are not entirely new, it is unlikely that, by themselves, they will serve to catalyse the required changes. Additionally, several of the initiatives would require time and a substantial investment of human and financial resources. As such, a number of modest, interim actions related specifically to tourism and the environment are proposed, involving:

a. Provide a Secretariat to the Sustainable Development Council

The SDC presently functions by setting up ad hoc committees to deal with specific issues. The Convenor of a committee then makes a presentation to the SDC. Secretariat support would allow for more in-depth work to be done on each issue, while providing the human resources required to promote the programmes of the SDC, and coordinate follow-up actions. The persons attending the workshop on September 23, 1999, agreed that for the SDC to be fully informed of the environmental management and tourism issues, a diagnostic report should be prepared. An independent consultant should undertake such a diagnostic study, as it is likely to be time consuming and hold major implications for future institutional arrangements and programmes.

b. Provide institutional strengthening support to the Grenada National Trust

With no other public sector institution having responsibility for protection of heritage resources, and considering that those resources are being damaged, changed, and exported, improved capacity and legislative support must be provided to the Grenada National Trust. This is absolutely necessary if heritage tourism is to form a major plank of the Grenada tourism product. No assessment was made of this institution, and thus apart from the need for legislative reform, there is no clear design for the level or form of support that is required.

c. Establish an Interim Protected Area Advisory Council within the Ministry of Tourism

Given the focus of the tourism strategy on the use of natural and heritage sites, and the recognition that the targeted sites should be managed within the context of a protected area system plan, it is recommended that the Ministry of Tourism establish a Protected Areas Advisory Council to ensure that tourism considerations are given due regard in the design and management of protected areas. It was agreed at the September 23 workshop that this Council would also function as a forum that facilitates the periodic sharing of information among the agencies responsible for protected area management.

d. Provide technical assistance to the Grenada Board of Tourism

The tourism strategic plan recognises the need to prevent or reduce the adverse environmental impacts of tourism. Additionally, given the market demand for pristine environmental quality, incorporating environmentally sustainable designs into the tourism product is now a requirement for sustaining the industry. The technical assistance would concentrate on the development of environmental standards to be incorporated into facilities design, infrastructure design, site management, and recreational operations.

e. Revise and adopt the protected area system plan

If the protected areas are to form the basis of nature tourism in Grenada, the system of protected areas has to be properly developed, managed, and financed on a sustained basis. Additionally, there is general agreement that the system plan needs to be updated.

13. IMPLEMENTATION ARRANGEMENTS

The recommended implementation arrangements for the short-term (interim) measures identified in Section 12 above are given below.

a. Provide a Secretariat to the Sustainable Development Council

The institutional support to the SDC should take two forms:

- ◆ A Research Assistant (for an initial period of 2 years) to provide administrative support, and to assist with the transition to an advisory body to Cabinet; and
- ◆ A Consultant to conduct the environmental framework diagnostic study.

b. Provide institutional strengthening support to the Grenada National Trust

The support may have to take the form of technical assistance to address legislative reform, site inventory, and development of management systems.

c. Establish an Interim Protected Area Advisory Council within the Ministry of Tourism

The advisory council would be composed of the heads of departments responsible for protected area management, heads of relevant tourism organisations, and relevant civil society groups. The council would be supported by a Coordinator, which would be attached to the Ministry of Tourism.

d. Provide technical assistance to the Grenada Board of Tourism

The technical assistance to the Grenada Board of Tourism would take the form of provision of an Environmental Planner or Environmental Management Specialist for a period of 2-3 years.

e. Revise and adopt the protected area system plan

The revision process for the protected area system would require the formation of a project team (protected areas specialist, economist, legal officer, GIS specialist, information/outreach officer, and administrative support). The team could have reporting responsibilities to the Ministry of Tourism. The process, inclusive of the public consultation process, would take approximately 3 years.

Annex IV-1: Persons Consulted

1. Grenada Tourist Board
Ms Theresa La Touche
Mr. Rickie Morain
2. Ministry of Tourism
Ms Lima Fedricks
3. Forestry Department
Dr. Justine Dunn
Mr. Rolax Federick
Mr. Robert Dunn
Mr. Alan Joseph
4. Ministry of Health and Environment
Dr. Raphael How-Chung
Mr. Patrick Moore
5. Sustainable Development Council
Dr. Spencer Thomas
6. Physical Planning Unit
Mr. Cecil Fedrick
Mr. Fabian Purcell

Persons Attending Workshop of September 23, 1999

Name	Institutional Affiliation
DUNN, Justine DUNN, Robert HOSCHTIALEK, Johann HOW-CHUNG, Raphael ISSAC, Ann	Consultant - Forestry Department Forestry Adviser - Forestry Department Allied Director - Grenada Hotel Assoc. Ministry of Health & Environment Ministry of Tourism
JEREMIAH, Anthony JOSEPH, Allan MITCHELL, Norris MOEL, Glen MOORE, Patrick	National Parks Division, Ministry of Tourism Forestry Department The Willie Redhead Foundation GRENCODA/SADO Environmental Health Dept. - Min. of Health
MORAIN, Rickie SYLVESTER, Gillian THOMAS, Spencer	Grenada Tourist Board Friends of the Earth/Fisheries Division Sustainable Development Council

Annex IV-2: Relevant Legislation

A detailed listing of the natural resources management legislation in Grenada is provided in the Grenada Country Environmental Profile (1991). Only the main bits of legislation are listed here, without the various associated amendments.

Physical Planning

- ◆ Town and Country Planning Ordinance (1946), amended 1966
- ◆ Town and Country Planning Regulations (1965)

Development Control

- ◆ Land Development (Control) Act (1968), amended 1983, Regulations 1988
- ◆ Industrial Development Corporation Act (1985)

Crown Lands Management

- ◆ Crown Lands Ordinance (1896)
- ◆ Crown Lands Rules (1934), amended 1965

Agrochemicals

- ◆ Pesticides Control Act (1973), amended 1979, Regulations 1979

Forest Management

- ◆ Forest, Soil and Water Conservation Ordinance (1949), amended 1984
- ◆ Crown Lands Forest Produce Rules (1956)
- ◆ Protected Forests Order, and Rules

Water Supply

- ◆ Water Supply Act (1969), amended 1979

Tourism

- ◆ Tourist Trade Development Board Ordinance (1947)
- ◆ Tourist Industry (Protection) Act (1972), amendments 1975 and 1986
- ◆ Tourist Board Act (1988)

Beach Protection

- ◆ Beach Protection Law (1979)

Protected Areas

- ◆ Grenada National Trust Act (1967)
- ◆ National Botanical and Zoological Gardens Act (1968), and Rules (1968)
- ◆ National Parks and Protected Areas Act (1990)

Wildlife Protection

- ◆ Wild Animals and Birds (Sanctuary) Ordinance (1928)
- ◆ Birds and Other Wildlife (Protection of) Ordinance (1957), amended 1964

Marine Resources

- ◆ Grenada Fisheries Act (1986), Regulations (1987)

Waste Management/Pollution Control

- ◆ Public Health Ordinance (1925), amended 1956, 1957, 1973, 1981, Regulations (1957)
- ◆ Abatement of Litter Act (1973)
- ◆ Solid Waste Management Authority Act (1995)

Annex IV-3: Bibliography

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PART V: SURINAME Country Report

14. PRIORITY ISSUES

The sources of information used generate a profile of environmental and tourism management in Suriname, as well as to identify the priority issues, include the following:

- a. Documentation provided by the different government departments;
- b. Information provided by the Government of the Republic of Suriname to the 5th Session of the United Nations Commission on Sustainable Development;
- c. Consultations held with government and non-governmental organisations in Suriname during the period October 17-21, 1999 (Annex V-1); and
- d. Final workshop held on October 21, 1999.

The documentation received was mainly in Dutch, and the inability of the Consultants to read Dutch proved to be a significant limiting factor in gleaning relevant background information.

However, the Study Team was able to identify the following issues as the most critical:

- 1. The current macro-economic framework is fairly unstable**
Little structural change has taken place in the economy over the past two decades, with bauxite mining and processing accounting for approximately 70% of exports, and approximately 40% of income tax revenues. There has been a small, but increasing, diversification into gold mining, crude oil production, and lumber activities. With the downturn in bauxite earnings, coupled with significantly reduced support from the Government of the Netherlands, the economic situation has been deteriorating. This economic situation is likely to lead to increased exploitation of natural resources (gold mining and commercial forestry), with the concomitant potential to impact negatively on the new thrust in eco-tourism.
- 2. There is no National Physical Plan for Suriname**
The national physical plan would be expected to reflect the macro-economic, social, infrastructure, and land use policies of the government. In the absence of such a plan, it is difficult to determine with certainty the likely impact of the macro-economic thrust on the biophysical and social environment. For example, the presence of tens of thousands of persons in the interior, engaged in gold mining, will require the provision of infrastructure to reduce the health risks to the population. In the absence of a settlement strategy, this can result in the establishment of unplanned human settlements in these areas.

3. Land use planning is not implemented in a coordinated manner

It is estimated that approximately 90% of the population of Suriname is to found in the coastal areas, with more than 70% within 30 km of the primary city, Paramaribo. As a result, manufacturing, commercial agriculture, and other economic activity are concentrated within the coastal area. However, the more recent shift of the development locus to the east-central area of the country, based on increased exploitation of gold and timber resources, is apparently not accompanied by a land use or development plan for the new “development” area.

4. Tourism is a fairly new development sector

Tourism, and in particular the facet normally referred to as nature tourism/eco-tourism, is in a very early stage of development in Suriname. As such, the ability of the sector to deliver major tangible economic benefits (especially revenues) in the short term has not been clearly demonstrated. As a result, tourism does not enjoy the same level of support as do activities such as mining, though the latter can greatly alter the biophysical and social-cultural environment of the country. Just as important, the integration of tourism into sectoral, physical, and infrastructure planning is limited. This is demonstrated by the fact that (except for Paramaribo) development plans have not yet been prepared for the six tourism zones proposed in the Suriname Tourism Development Plan (1998).

5. Environmental management framework and capacity require additional support

There have been recent attempts to improve the environmental management capacity through the establishment of the National Institute for Environment and Development in Suriname (NIMOS). However, much more work is required in the areas of integrating environmental issues into the planning and development control processes, improving the capacities of line agencies to plan and implement environment-related programmes, development of standards and procedures, and improved enforcement.

In addition to the main policy and planning issues identified by the Study Team, the following issues were raised by the stakeholders (government and NGOs) consulted:

- a. The need for the development of an information sharing mechanism in the area of environment; to facilitate advocacy, development of public education and awareness programmes, and research.
- b. Need for the development and continuous implementation of a public awareness campaign to focus on environmental issues, particularly in the area of cleanliness – littering, waste management, and the related legislation where it exists.

- c. The need to establish environmental standards with the attendant legislation and regulations.
- d. The need to effectively utilize the capacities within the public, private, and NGO sectors in the areas of natural resource and environmental management, public awareness, and training.
- e. The need to understand the broad construct of the tourism industry and the role that a protected area system can play in the sector.
- f. The need for a National System Plan for Protected Areas.
- g. The need for a proper land use information database, based on the use of geographic information system (GIS) to facilitate proper planning and management.
- h. The need to sensitize the commercial and development banking sector to the needs of the ecotourism sector.
- i. The need to develop community-based co-management models for natural resource management, as well as ecotourism development.

15. DESCRIPTION OF THE EXISTING SITUATION

The Government of the Republic of Suriname recognises the need for improved macro-economic planning and management, as well as the necessities of improved environmental policy and management, institutional coordination, and tourism planning. As such, a number of steps have been taken during the past two years to address the deficiencies identified and create changes in the development and management strategies pursued.

15.1 Macro-Economic Planning

15.1.1 Policy and Planning

The issue of macro-economic instability is being addressed with the assistance of a number of donor institutions, with the focus being on improved tax and financial management systems.

The policy and planning framework as it relates to sustainable development is also being reviewed and updated. Specific instruments being developed/reviewed in that process include the following:

- a. 1996-2000 National Development Plan presently being reviewed;
- b. A Mineral Sector Policy has been prepared (awaiting approval), and the associated laws and codes are being developed; and
- c. The creation of a minerals institute is being contemplated.

15.1.2 Land Use

Land use planning is not being implemented in a coordinated way. The Planning Act of Suriname, which should guide these activities, originates from 1973, and has never been fully implemented. The land use planning decisions are therefore based on the information available on prevailing soils, forests, and geology. Unfortunately, the institution responsible for regional and land use planning possess inadequate capability and capacity in spatial planning. Conversely, GIS-based systems are available in other government departments.

This situation is being addressed through the following initiatives:

- ◆ An Ecological Economic Zoning project is being developed to deal with integrated planning and land use planning;
- ◆ The Government is in the process of introducing a new technology for planning, zoning, and monitoring of land use, but has indicated that the process will need substantial institutional support;
- ◆ An integrated Land Use Policy is being prepared; and
- ◆ The preparation of a Physical Development Plan (1998-2003) is under discussion.

The land use planning scenario has resulted in a number of problems for the development control process; mainly:

- ◆ A low level of conformity to development guidelines;
- ◆ Inadequate monitoring and post-audit of development projects;
- ◆ Inadequate enforcement; and
- ◆ A discretionary institutional consultation process for development approval.

15.1.3 Institutional Arrangements

The following institutions have responsibilities for development and land use planning and development control:

- ◆ The **Land Service** (Ministry of Natural Resources) is responsible for granting all land issues, and can provide various land titles and user rights to private and public entities.
- ◆ The **National Planning Bureau** (Ministry of Planning and Development Cooperation) is responsible for regional and physical planning. The Bureau is the coordinating body with regard to zoning and land use planning.
- ◆ The **National Institute for Environment and Development in Suriname** (NIMOS) is the new agency charged with responsibility for overall environmental monitoring of land management.
- ◆ The **Ministry of Regional Development** is responsible for regional planning and provision of physical infrastructure in the interior of the country.
- ◆ The recently formed **District Cabinets** also participate in the planning and development control process.
- ◆ The **Ministry of Public Works** coordinates the development control process, and deals with approvals for subdivision of land.
- ◆ The **different Ministries** are represented in an inter-departmental advisory council.

15.2 **Tourism**

15.2.1 **Product**

The tourism industry in Suriname is said to have started in the 1970s. However, the industry experienced a hiatus in the 1980s, and was only repositioned as a priority sector in 1996. The product is based primarily on nature and heritage assets, and the underlying philosophy of ecotourism. There is no written policy addressing the issue of the involvement of environmental non-governmental organisations (ENGOS) or community based organisations (CBOs) in tourism policy development. However, the unofficial position of the national institutions that manage or impact on tourism development is that community tourism is to be supported wherever possible.

The strategy to pursue a nature-based tourism was based on the observation that a significant amount of land is under protected area status, but those areas were not supporting the economy to an acceptable level. Tourism was therefore perceived as the main mechanism for increasing the income from protected areas. This policy

direction also resulted in increased penetration of tourism activities into the hinterland.

The heritage component of the tourism product is based primarily on the built environment. At the centre of this is the historic inner city of Paramaribo, which has been proposed as a world heritage site. An inventory of the buildings to be protected and restored within Paramaribo has been completed, as a result of which 244 monuments were designated. A development plan for the heritage “district” has been prepared, one objective of which is to rationalise the use of the historic buildings for tourism purposes. Additionally, there are major sites outside the “district” of Paramaribo. For example, the Jodensavanne Archaeological Site is included on the List of 100 Most Endangered Sites.

As an example of the link between tourism and protected areas, the proposed Monuments Act (presently at the Council of Ministers) contains a provision for urban and rural sites to be declared as protected areas.

As an indication of the priority given to the industry, the Government of the Republic of Suriname prepared its Suriname Tourism Development Plan in 1998. The Plan, which recognises that the sustainability of the sector is based on sound environmental management, identifies six tourism zones for concentration of tourism development; namely:

1. Downtown Paramaribo;
2. The PARA district;
3. Brownsberg Nature Park;
4. Upper Suriname River;
5. Raleighfalls (later merged with two other nature reserves to form the large Central Suriname Nature Reserve); and
6. Galibi and Wia Wia Nature Reserves.

As in other tourism destinations, the product is threatened by other development activity, such as:

- ◆ Gold and bauxite mining (especially within or adjacent to protected areas);
- ◆ Community exploitation of natural resources;
- ◆ Increasing urbanisation (with its attendant problems such as inadequate waste collection);
- ◆ Rain forest degradation (from logging, other commercial activities, clearing for subsistence agriculture, etc.);
- ◆ Agriculture and the inappropriate use of agro-chemicals;
- ◆ Increasing contamination of surface and ground water; and
- ◆ Poor road conditions.

15.2.2 Policy and Planning

The Tourism Development Plan (1998) notes that there is no “tourism law”, though regulations exist to deal with the registration and licensing of the “accommodation sector, travel agents, tour operators, air and water transport, as well as casinos”^Φ. The report also identified the following areas as requiring attention in a tourism policy framework:

- ◆ The role of tourism in the economy;
- ◆ Tourism policy;
- ◆ Management framework and organisational structure;
- ◆ Tourism zones;
- ◆ Classification, grading, and licensing;
- ◆ Training and education in the tourism sector;
- ◆ Tourist protection; and
- ◆ Taxation and public sector tourism funding.

Other tourism issues identified by the consultations that require policy attention include the following:

- ◆ The lack of coordination between various Ministries dealing with tourism matters;
- ◆ An inadequate level of coordination between the public and private sector programmes and initiatives;
- ◆ The use of natural resources to support tourism instead of traditional community exploitative practices (most relevant to communities in the interior of the country);
- ◆ The development of cooperatives to manage community tourism operations; and
- ◆ The use of, and impact on, culture and cultural forms in tourism.

In making the link between tourism and the environment, the Tourism Development Plan identifies the following environmental objectives:

- ◆ To encourage responsible management of the environment;
- ◆ To protect environmentally sensitive areas; and
- ◆ To encourage the conservation of the national and cultural heritage.

^Φ The difference between the desired “tourism law” and the regulations governing the other associated activities was not clarified. One assumes therefore that the regulations are contained within other legislation.

15.2.3 Institutional Arrangements

The national tourism institutions in Suriname include the following:

- ◆ The **Ministry of Transport, Communications, and Tourism** is responsible for formulation of tourism policy. The Ministry has, since 1996, overseen the re-organisation of the tourism sector; including re-organisation and strengthening of sector organisations, removing money exchange blockages, introducing tourism-related legislation, and initiating a number of major tourism events in Suriname.
- ◆ The **Suriname Tourism Foundation** is the body responsible for product development, marketing and promotions locally and internationally, development of standards, tourism awareness building, and data collection and dissemination.
- ◆ The **Urban Heritage Foundation** was established in 1991 by the Minister of Education and Community Development, and is responsible for the establishment of a monument management institute, and supports the Commission on Monuments Preservation with the identification and designation of monuments. It has been recommended that the Foundation be transformed into a statutory body, the Suriname heritage Management Corporation, in order to manage the historic districts and control building changes on historic buildings..
- ◆ The **Commission on Monuments Preservation** is an advisory body to the Ministry of Education and Culture, advising on institutional arrangements, legislative requirements, and policies.
- ◆ The Tourism Development Plan proposes the formation of a Regional Tourism Development Authority in each proposed tourism zone, for stimulating tourism development in each region.

Private sector tourism associations include the following:

- ◆ Association of Suriname Travel Agents (ASRA);
- ◆ Suriname Association of Tour Operators (VESTOR);
- ◆ Suriname Tour Guides Association (STASS);
- ◆ Association of Taxi Drivers (VETAHOS);
- ◆ Suriname Hotel Association (SHA); and
- ◆ Chamber of Commerce and Industry.

15.3 Protected Areas

15.3.1 System Components and Interactions

There are 16 protected areas (14 Nature Reserves, 1 Nature Park, and 1 Multiple Use Management Area) in Suriname (Annex V-3), covering approximately 12% of the land surface. Of this, the Central Suriname Nature Reserve (1.6 million hectares) represents approximately 83% of the total protected area space, or 10% of the land surface. Plans to add another five sites would raise the area under protection to 14% of land surface.

Nature reserves were originally established to protect wildlife and wildlife habitat, heritage, and ensure protection of water supply. The perspectives on the role of reserves are changing, as reserves have been identified as a major component of the national development thrust. Though the tourism focus in reserves is fairly new, some sites (such as Raleighfalls) have long accommodated recreational activity, and have the infrastructure to function as parks. Other sites (such as Galibi) have recently built facilities (huts) as part of this new focus.

The main linkages between the reserves and tourism were identified as:

- ◆ Development and management of recreational facilities;
- ◆ Limited tour operating to fill accommodations (in "parks"); and
- ◆ Income generation from biological research.

This new focus on tourism use of natural resources, and protected areas in particular, has highlighted a number of issues, including:

- ◆ The protected areas are under threat from gold and bauxite mining. Additionally, 10% of the reserves have been designated for mining purposes;
- ◆ There is no legal basis for declaration of national parks, and creative administrative provisions are being used to facilitate the change of use of sites;
- ◆ In the absence of a national physical plan, protected area designation is being used to protect large tracts of land;
- ◆ Public awareness of the role and benefits of protected areas has to be raised;
- ◆ Botanical gardens, which are increasingly being used by locals and tour operators, are inadequately managed;
- ◆ Litter control in protected areas is inadequate;
- ◆ Tour operators are beginning to target certain areas (such as Suriname River/Maroon Village and Tapahoni River), leading to occasional overcrowding^Φ;
- ◆ Interpretative material is inadequate;

^Φ The notion of overcrowding is here based on a perception that visitors to a site should encounter few other individuals. The possibility of undertaking carrying capacity assessments is being discussed.

- ◆ There are occasional conflicts between the tourism use of areas and the traditional rights and uses of adjacent communities; and
- ◆ There is inadequate information sharing and collaboration between management institutions.

15.3.2 Policy and Planning

The decision of the government to utilise the resources contained in protected areas in support of its development drive has resulted in the legislation (Annex V-4) becoming outdated. Additionally, though the relevant government and non-governmental organisations (NGOs) apparently support the policy direction, the organisational practices and new initiatives require policy and procedural changes. Matters receiving or requiring policy and policy attention include the following:

- ◆ Reclamation of the 10% of the lands under nature reserves from mining interests.
- ◆ Determination of recreational carrying capacity limits for sites. Discussions with adjacent communities have resulted in a general consensus that the sites should not be used to support mass tourism.
- ◆ Restriction/change in traditional uses of particular resources or areas, and shifting to tourism uses.
- ◆ The involvement of indigenous/local populations in protected area planning and management (the associated activities undertaken by Jodensavanne and Galibi can provide useful lessons).
- ◆ The links established between tourism, protected areas, and communities should be part of a wider cultural and educational programme.
- ◆ The development banking sector need to be re-oriented to support investment opportunities in conservation.
- ◆ Development of a national framework for guiding the development of the proposed protected area trust fund, and the subsequent use of the funds to support activities by both government agencies and NGOs.
- ◆ An inventory of the ecosystems of the interior, as part of the Guiana Shield project.

The above issues clearly identify the need for the development of a National Protected Area System Plan.

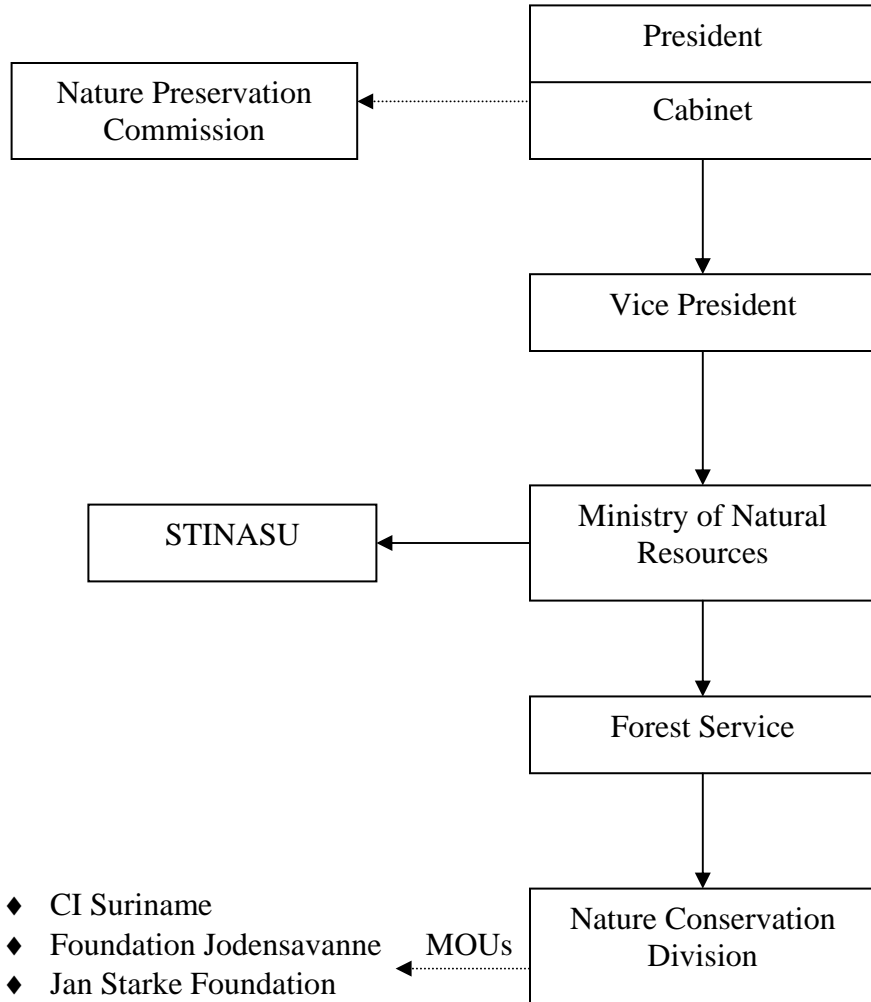
15.3.3 Institutional Arrangements

In keeping with the new development imperatives, and the changed focus in the use of protected areas, the institutional arrangements are also evolving. The main institutions involved in the planning and management of protected areas are the following:

- ◆ The **Nature Preservation Commission** was established by Government Resolution as an advisory body, to study conservation problems and to propose legislation concerning nature conservation.
- ◆ The **Ministry of Natural Resources** owns public lands, and grants user rights to public or private interests.
- ◆ The **Nature Conservation Division of the Forest Service** (Ministry of Natural Resources) is responsible for policy, monitoring, and enforcement.
- ◆ The **Foundation for Nature Preservation in Suriname** (STINASU) is an NGO formed by the government specifically to manage reserves for public education purposes. Management of reserves by STINASU is facilitated through the development of a Memorandum of Understanding (MOU) with the Forest Service. More recently, that focus has been broadened to include tourism.
- ◆ **Conservation International** (Suriname) is an international NGO that has entered into an agreement with the government (through an MOU) to manage the Central Suriname Nature Reserve, and establish a protected areas trust fund. Conservation International (Suriname) is also assisting with the Guiana Shield project.
- ◆ The **Jan Starke Foundation for Vocational Training and Recreation** is an NGO that manages a 460-hectare site in the Para District. The site, managed under an agreement with the Forest Service, is used primarily for high school and vocational training. Relevant subject areas, especially in courses for foresters, include environmental awareness, nature conservation, tourism, and ecology.
- ◆ **Foundation Jodensavanne** is a statutory body established more than 25 years ago by the Ministries responsible for tourism and education. The organisation was revitalised in 1998, and charged with the rehabilitation of Jodensavanne.

The reporting arrangements of the main institutions are shown by Figure V-1.

Figure V-1: Protected Area Institutional Arrangement



15.4 Environmental Management

The environmental policy and management frameworks have changed significantly in the recent past, and a number of the emerging issues are related to this evolving situation.

15.4.1 Main Issues

The main issues related to environmental quality, environmental policy and planning, and tourism include the following:

- ◆ The main environmental problem in Paramaribo, in which the tourism plant is mainly concentrated, is inadequate solid waste collection and disposal. Additionally, the main dump site is generating leachate and has to be relocated.
- ◆ A high level of non-conformity to building guidelines, compounded by inadequate enforcement, has impacted negatively on the delivery of social services and general environmental quality.
- ◆ Pollution control legislation and enforcement are inadequate.
- ◆ There is no national environmental standard.
- ◆ The breakdown of health services in the interior (resulting from the civil unrest at the beginning of the 1990s) has resulted in periodic outbreaks of malaria, and resource constraints are hampering total control of the problem.
- ◆ There are a number of problems related to natural resource exploitation, namely;
 - Gold and bauxite mining (especially within or adjacent to protected areas);
 - Community exploitation of natural resources;
 - Rainforest degradation (from logging, other commercial activities, clearing for subsistence agriculture, etc.);
 - Agriculture and the inappropriate use of agro-chemicals; and
 - Increasing contamination of surface and ground water.
- ◆ Tourism projects should incorporate environmental protection measures to a greater degree.
- ◆ There is no specific plan in critical government departments (such as the Environment Division, Ministry of Health) to deal with tourism-specific needs.

- ◆ There is no national environmental education programme in place, though there are a number of NGOs undertaking education and/or awareness programmes and periodic demonstration projects.
- ◆ The capacity in community organisations to undertake conservation/environmental projects is very limited.

15.4.2 Policy and Planning

The National Institute for Environment and Development in Suriname (NIMOS) was created as an umbrella environmental management agency for the purpose of coordinating the environmental policy and management framework. It is therefore the intention of the Government of the Republic of Suriname to address a number of the problems associated with environmental management, primarily environmental policy and planning, legislation, monitoring and enforcement, information management, education and outreach, and institutional coordination.

Some of the most important policy and planning activities underway include the following:

- ◆ The environmental legislation in each Ministry is being reviewed. Subsequently, NIMOS will develop legislation to allow it to coordinate environmental policy development and management, and line agencies will retain the implementation role.
- ◆ NIMOS is coordinating a series of workshops as part of the process of development of a national environmental management framework.
- ◆ The development of environmental standards has been initiated.
- ◆ A National Biodiversity Strategy and Action Plan is under preparation.
- ◆ The environmental policy and systems support for tourism is to be strengthened by;
 - Clearly identifying and articulating the linkages between tourism and environment,
 - Development of environmental guidelines for the tourism sub-sectors, especially ecotourism, and
 - Encouraging the use of Strategic Environmental Assessments in the planning of tourism zones.
- ◆ A national policy on environmental education is under preparation.

- ◆ Arrangements for environmental education programmes presently conducted on behalf of government agencies by NGOs, such as Milieubond, are to be formalised and strengthened.
- ◆ The articulation of an expanded partnership between the government and the Church in the delivery of social programmes, especially in the areas of public consultation processes, integrated rural development projects, and environmental education.

15.4.3 Institutional Arrangements

The institutional framework for environmental policy development and management changed in 1997 with the establishment of a national coordinating mechanism, namely the National Council for the Environment. The institutional framework for environmental management in Suriname includes both government agencies and NGOs. The main institutions are:

- ◆ The **National Council for the Environment** (NCE) was established by presidential resolution in 1997, for the purpose of advising the Cabinet of the President on environmental policy and coordinating the implementation thereof. The Council presently consists of five members, with an additional five, representatives from the labour unions, private sector, consumer groups, and communities in the interior, to be added in the near future.
- ◆ The **National Institute for Environment and Development in Suriname** (NIMOS) was legally established in late 1998 as the implementation arm of the NCE. NIMOS will therefore function as the coordinating institution for environmental policy implementation, drafting and implementation of environmental legislation, preparation and institution of environmental standards and procedures, monitoring compliance with environmental laws and procedures, and environmental data collection, storage, and dissemination. Additionally, NIMOS functions as the national focal point for multilateral environmental agreements to which Suriname is a party. The development of NIMOS is continuing, as only 50% of the units ("offices") within NIMOS are presently staffed.

Other relevant institutions include:

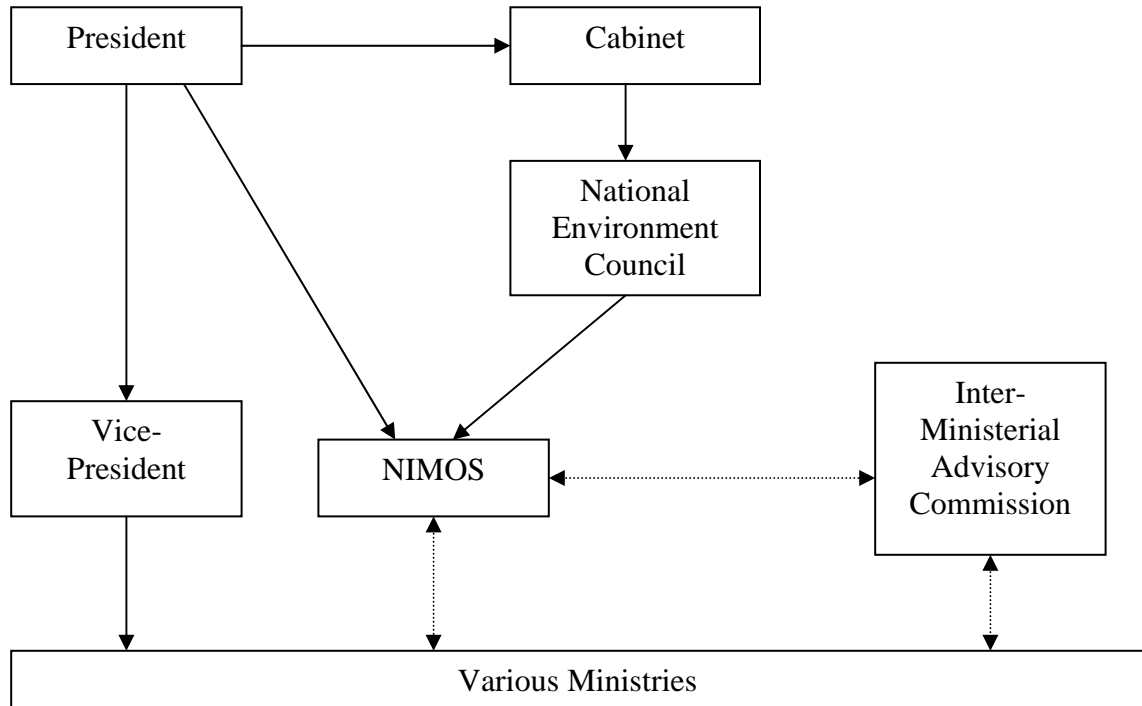
- ◆ The Ministry of Planning and Development Cooperation;
- ◆ The Environmental Division - Ministry of Health;
- ◆ The Ministry of Natural Resources;
- ◆ The Ministry of Public Works (Hydrological Department);

- ◆ The Ministry of Agriculture, Husbandry, and Fishery;
- ◆ Milieubond;
- ◆ STINASU;
- ◆ Conservation International (Suriname);
- ◆ The Tourism Foundation of Suriname;
- ◆ University of Suriname;
- ◆ Bauxite Institute;
- ◆ The Institute for Forest Management and Control;
- ◆ Foundation for a Clean Suriname;
- ◆ Movement for Ecotourism in Suriname;
- ◆ Ministry of Justice and Police (Police Department);
- ◆ World Wildlife Fund-Netherlands (Technical Assistance);
- ◆ CELOS/Narena
- ◆ Ministry of Health (Bureau for Public Health);
- ◆ Ministry of Rural Development; and
- ◆ Indigenous and Maroon organisations.

Though there are a large number of institutions involved in different aspects of environmental management, there is no mechanism for widespread consultation on a regular basis. Existing, sector/interest-based mechanisms include:

- ◆ Open meeting for tourism actors held once per week, and hosted by the Suriname Tourism Foundation;
- ◆ An informal, open-ended meeting of persons interested in environment and development (and the follow-up to Rio) held once per month;
- ◆ NIMOS conducts inter-agency consultations, which will later be formalised as an Inter-Ministerial Advisory Commission (Figure V-2);
- ◆ An informal Inter-agency Working Group to address the problem of non-conformity within the development control process;
- ◆ Formation of District Cabinets to decentralise the development planning and management process; and
- ◆ Formation of District Councils (comprised of elected officials) to advise both the regional administrative machinery and the Ministries.

Figure V-2: Institutional Arrangement for Environmental Policy Development



16. APPROACH TO BE ADOPTED

As stated in Section 4, the requirements for facilitating integration of tourism and environmental policies and programmes are:

- a. An independent body responsible for environment and development;
- b. Clear macro-economic policies and strategies;
- c. A mechanism to ensure integration of environmental policies into sectoral and corporate policies and plans;
- d. Capacity within the National Tourism Organisation to inform environmental policy, and set environmental standards for the industry; and

- e. A relevant public participation process.

In the case of Suriname, the first pre-requisite has been addressed; that is, an independent body, the National Council for the Environment (NCE), exists. However, a second national independent body, the Nature Protection Commission (NPC), also deals with natural resources/environmental issues. Obviously, at that level, two such bodies cannot have separate mandates.

The first institutional change recommended therefore is that the National Council for Environment and the Nature Protection Commission be merged. The new council should also have wider representation, and its mandate should be broadened to provide advice on all environment and development matters.

Apart from the presence of an independent environmental institution, none of the other pre-requisites are fully in place. However, the environmental legislation resident in each Ministry is under review, and it is anticipated that the revision of the legal framework will take place within the scope of the present Inter-American Development Bank support to NIMOS^Φ.

Therefore, in addition to the recommended merger of the NCE and NPC, the following approaches are suggested:

- a. **Prepare, as a matter of urgency, a National Physical Plan.**
A plan that sets out how land resources are to be used, and which demands are to be supported, is an essential ingredient in the process of economic and social development.
- b. **Revise the mechanisms for development control.**
A number of related issues have to be addressed immediately; including:
- ◆ Development of environmental standards, such as sub-surface discharge of effluents;
 - ◆ Development of environmental protection tools, such as the use of strategic environmental assessments and environmental impact assessment;
 - ◆ Formal inter-agency consultations in which environmental approval of projects is obligatory; and
 - ◆ Development of planning and building codes, to be used to determine the "ambience" of resort zones and other types of settlements.

^Φ The study team was asked not to submit recommended changes related to environmental policy and the structure of NIMOS, as the framework was under review.

- c. **Promulgate broad environmental legislation to enable NIMOS to adequately perform its coordinating role.**
The development of specific regulations, and changes to existing related legislation managed by other agencies, can proceed at a slower, more careful/calculated pace.
- d. **Prepare a National System Plan for Protected Areas.**
Given the emphasis on the role of protected areas in supporting the tourism sector, and the uses and impacts from other community activities, the system planning approach provides the link between macro-level planning and the wise use of particular environmental resources.
- e. **Develop and implement a participatory planning process.**
The use of certain strategic initiatives, such as the protected areas system planning, to facilitate this participatory planning process helps to focus the process, as very clear benefits and procedures can be identified, and the goals of the process are tangible and can be achieved in a relatively short timeframe.
- f. **Provide institutional strengthening support to the Suriname Tourism Foundation in the form of an environmental specialist.**
If tourism in Suriname is truly to be based on nature tourism, it is important that environmental standards for the industry be developed as soon as possible. These standards should be integrated into economic, spatial, and environmental planning, as well as site development and operation.

17. IMPLEMENTATION ARRANGEMENTS

Short-term, interim measures could be undertaken in the two areas discussed below.

- a. **Preparation of a National System Plan for Protected Areas**
NIMOS is the logical implementing agency, but presently lacks the capacity and capability to assume responsibility for an activity of this nature and magnitude. This project would require technical assistance in both design and implementation. During the implementation phase, a project management unit should be established, for which NIMOS would retain administrative oversight.

Ideally, the project would have a duration of three years, with the first 6 months involving a local consultant who would have the responsibility of identifying and compiling all the relevant literature (especially data from resource inventories), maps, plans, etc.

The Plan preparation process would also identify the legislative and policy changes required to support full system operation.

b. Provision of Technical Assistance to the Suriname Tourism Foundation

Technical assistance (TA) to the Suriname Tourism Foundation would conceivably be in the form of funding to hire an international consultant (Environmental Planner or Environmental Management Specialist) for a period of 2-3 years. The Consultant would be housed within the Foundation, working primarily with the product development unit, but would also need to work closely with NIMOS.

Annex V-1: Persons Consulted

1. Suriname Tourism Foundation
Mr. Henk Essed
Mr. Armand Li-A-Young
2. Environment Department (Ministry of Health)
Mr. Wolff
3. NIMOS
Ms Nancy del Prado
Mr. Soetjipto Verkuijl
4. STINASU
Mr. Harrold Sijlbing
5. Jan Starke Foundation
Ms S. Carol Bram
6. Conservation International – Suriname
Mr. Stanley Power
Mr. Stan Malone
Mr. Chuck Hutchinson
7. VESTOR
Mr. George Lazo
Mr. H. Hendrison
8. Ministry of Regional Development
Ms Nadia Ravales
9. Milieubond¹
Ms Jo-Anne Lakhisakan
10. Urban Heritage Foundation
Mr. Stephen Fokké
11. Foundation Jodensavanne
Mr. Guido Robles
Dr. James Ramlall
Mr. Henk Essed

¹ The names of 4 directors are missing from this list

12. Agricultural Experiment Station
Mr. Jaswant Sahtoe
Ms Patricia Millon
13. Ministry of Planning and Development Cooperation, Planning Office
Jr. Johannes Consen
14. Suriname Hotel Association
Mr. Gerald Wong
15. National Council for the Environment
Mrs. Ellen Naarendorp

Persons Attending Workshop of October 21, 1999

Name	Organisational Affiliation
BAAL, Fedinand	Nature Conservation Division-Forest Service
BOEDDHA, Ralin	Suriname Tourism Foundation
BRAM, Stephanie	Jan Starke Foundation
CRAIG, K.C.	STINASU
ESSED, Henk	Suriname Tourism Foundation
FOKKE, S.A.	Urban Heritage Foundation of Suriname
HENDRISON, H.L.	Hendrison's Bungalows
HUTCHINSEN, Chuck	Conservation International
JORDAN, H.M.	STINASU
LAKHISAKAN, Jo-Anne	Milieubond
LI-A-YOUNG, Armand	Suriname Tourism Foundation
MILTON, P. Y.	Ministry of Agriculture (LVV)
POWER, Stanley	CI-Suriname
del PRADO, Nancy	NIMOS
RAMLALL, James	Foundation Jodensavanne
SOELTAANSINGH, Frank	NIMOS
TELGT, H.	NIMOS
NELOM, C.	NIMOS

Annex V-2: Bibliography

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Annex V-3: Protected Areas in Suriname, 1990

Name of Site	Designation	Size [§] (hectares)
EXISTING		
1. Hertenrits	NR	100
2. Coppename	NR	12,000
3. Wia-Wia	NR	36,000
4. Galibi	NR	4,000
5. Brinck-heuvel	NR	6,000
6. Brownsberg	NP	8,400
7. Raleighvallen-Voltzberg	NR	78,170
8. Tafelberg	NR	140,000
9. Eilerts de Haan	NR	220,000
10. Sipaliwini	NR	100,000
11. Peruvia	NR	31,000
12. Boven-Coesewijne	NR	27,000
13. Copi	NR	28,000
14. Wanekreek	NR	45,000
15. Bigi Pan [⊠]	MA	68,000
16. Central Suriname Nature Reserve [¥]	NR	1,600,000
PROPOSED		
17. Kaboeri Kreek	NR	68,000
18. Nani	NR	54,000
19. Mac Clemen	FR	6,000
20. Snake Creek	FR	4,000
21. Estaurine Zone	MA	310,000 [‡]
FR = Forest Reserve MA = Multiple-Use Management Area NP = Nature Park NR = Nature Reserve § - Hectares listed are estimates of land surface only ⊠ - Excludes the adjacent sea area ¥ - Established in 1997, and includes areas 7,8, & 9 ‡ - 120,000 hectares are already protected (see areas 1, 2, 3, 4, & 15)		

Annex V-4: Relevant Protected Area Legislation in Suriname

1. Nature Protection Law, 1954
Forms the basis for establishment of nature reserves, and covers lands and waters belonging to the nation's domain.
2. Game Law, 1954
3. The Police Code, 1915
Provides for establishment of areas within which no hunting can take place.
4. The Law on Forest Management, 1992
Replaces the Timber Law of 1947, and allows for protection of three categories of forests.
5. The Laws on the Issuance of State-owned Lands, 1937
Allows for the leasing of natural areas to NGOs.
6. The Planning Law, 1973
Provides for the establishment of Multiple-Use Management Areas as protected areas.
7. Agrarian Law, 1936
Allows Crown lands to be issued for agricultural purposes.

Related Multi-lateral Environmental Agreements in which Suriname participates

- ◆ The Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere (Western Hemisphere Convention);
- ◆ The Convention on Wetlands of International Importance especially as Wildfowl Habitat (Ramsar Convention);
- ◆ The Convention on Biological Diversity;
- ◆ The United Nations Convention on Climate Change;
- ◆ The World Heritage Convention
- ◆ The United Nations Convention to Combat Dessertification;
- ◆ The Amazon Cooperative Treaty.

Appendix 1: Terms of Reference

FRAMEWORK FOR A NATIONAL PARKS COMMISSION

BACKGROUND AND JUSTIFICATION

Tourism in the Caribbean

As well as being the premier warm weather destination, the Caribbean is the most tourism dependent region in the world. Tourist arrivals in the Caribbean have increased from 6.9 million in 1980 to 18.9 million in 1997, while cruise passenger arrivals in what is undoubtedly the world's busiest cruising area have risen from 3.6 million to 11.9 million during the same period. Gross tourism earnings, which are vital for the region's balance of payments, reached US\$ 16.6 billion in 1997, as compared with US\$ 3.8 billion in 1980. According to CTO estimates, in 1997 tourism generated 690,000 direct and indirect jobs in the region. The extent of the Caribbean's dependence on tourism is also illustrated by the fact that tourism earnings in 1996 were equivalent to about 29% of all merchandise export earnings, and that in some countries tourism's share of the GDP is as high as 70%.

The tourism sector is rendered even more important by the fact that the export agriculture sector in several Caribbean countries has been beset by the banana crisis, as well as the fact that the manufacturing sector has been in decline. Against this macro-economic background, governments in the Caribbean have come to recognise tourism's actual and potential contribution to the economy and are giving this sector a higher political priority than hitherto. Thus, economic policy objectives increasingly centre on tourism's ability to generate employment, earn foreign exchange and contribute significantly to government revenue.

Integration of Tourism Development and Environmental Protection

Nevertheless, set against the economic imperative of expanding the volume and, particularly, the value of tourism to the Caribbean is the widespread recognition of tourism's dependence on the natural environment, both terrestrial and marine, and the realisation that environmental quality is now an indispensable and market-driven prerequisite of tourism product quality. Not only are individual resources visitor attractions in their own right, or can potentially become such, but virtually the entire environment of a country forms the basis of its tourism product. Indeed, within the tourism sector it is now generally accepted that the environment is simply the product, and that tourism is both a contributor to and a victim of environmental pressures. There is thus a need not only for closer co-ordination between tourism development and environment policies, but also for an integrated approach to the management of tourism and the environment.

This heightened awareness of the importance of integrated tourism and environmental management is evidenced by the growing number of projects supported by regional and international donors. Because of the increased emphasis on tourism as a major economic contributor in the region, many of these projects seek to address tourism's impact on the resources of the region.

However, in several Caribbean countries the institutional framework for environmental conservation is not always adequate. Public sector agencies such as those that have traditionally been responsible for agriculture, forestry, fisheries etc, have retained jurisdiction over corresponding natural resources that have been designated for protection. At the same time, new bodies have been set up within the wider public sector with a clear environmental mandate. In addition, a number of private sector and voluntary bodies, such as non-governmental organisations (NGOs), have emerged and become actively involved in the management of environmental resources in some of the countries. There is thus a multiplicity of entities, from both the public and private sectors, involved in the management of natural resources, often acting without proper co-ordination. There is clearly a need for an effective co-ordinating and regulatory mechanism at the national level.

At the same time, these diverse agencies often operate in a policy vacuum, in terms of overall national environmental policy, which exacerbates further the problem of co-ordination. There is thus an equally pressing need in many countries to define and enunciate clearly a national environmental policy.

Directly related to the policy issue is the need for a clear differentiation between, on the one hand, ownership and, on the other, operation and management of protected environmental resources. Natural and other resources owned by the state are rightfully considered to be integral parts of the national heritage. There is thus an understandable disinclination to allow "private" interests any role in their operation and management. Yet, practical ways and means can be found to differentiate between ownership and operation of a resource, as has already been successfully done elsewhere.

From the perspective of the tourism industry, it is increasingly felt that the scope of environmental protection needs to be widened. All those natural assets of the terrestrial and marine environment which make up the resource base for the tourism product, even if they are not formally designated as protected areas, should be brought within the scope of environmental management. For example, beaches are a vitally important natural asset for most Caribbean countries, serving as the very foundation of their tourism product. Whether they are part of a designated marine park or not, they need to be carefully developed and properly managed, in order to avoid degradation of the environmental quality of the product.

From the public sector's point of view, it is also important that environmental conservation does not become a burden on public finances for both capital investment and recurrent

expenditure. It is therefore essential that the development and ongoing management of protected environmental resources be put on a financially self-sustaining basis. Tourism is seen as a means of providing the necessary income to ensure the sustainable conservation of key resources. At the same time, other funding methods and sources for environmental projects need to be identified.

It is however recognised that, irrespective of the intrinsic environmental quality of individual resources and sites, not all of them will have the same, or high enough, revenue-generating potential. Thus, at any one time some protected environmental resources and sites will not be able to generate sufficient revenue to cover the costs of their operation and management. Therefore, some form of supplementary funding will be needed, either directly from public funds or by way of a cross-subsidy from other resources and sites. This situation reinforces the need for both a clear policy direction and a co-ordinating and regulatory mechanism at the national level.

All the above considerations are at the centre of the debate about the design of the most appropriate institutional framework for environmental protection and management in Caribbean countries. In summary, they are:

- the need for a clear and comprehensive environmental conservation policy;
- the need for close co-ordination of all players involved in the operation and management of protected areas and sites and regulation of their activities;
- the need to distinguish between ownership and operation of resources and the corresponding roles of the public and private sectors;
- the need to widen the scope of environmental resource management to cover the entire tourism product resource base; and
- the need to ensure financial sustainability of protected environmental resources.

OBJECTIVES AND SCOPE

The overall objective of this project is to assist the Caribbean region in general and individual countries in particular to strengthen their institutional framework for the formulation and co-ordination of a national environmental policy as well as the management of environmental resources in an integrated and sustainable manner. The study will, further, assist in the process of integrating tourism and environmental management.

In particular, the present study will focus on the design of a framework for a National Parks Commission, or similar body, to serve as a model for adoption by interested Caribbean countries. The proposed institutional structure is seen as a national apex body responsible for

environmental policy formulation and co-ordination of the management and operation of individual resources, areas and sites, and the regulation of the diverse entities involved.

In this connection, the respective roles and functions of the public and private sectors, including NGOs, will be defined, so as to be complementary and synergistic rather than competitive. In doing so, the close interdependence between tourism and the environment will be recognised, and the fact that the former is both a beneficiary of and, often, a contributor to the preservation of environmental quality through the income it helps generate for key environmental resources.

In addition to the above overall objectives, the project is specifically intended to assist the three focus countries of the study, namely Grenada, Suriname and Belize, to address and resolve specific institutional issues in this area.

TERMS OF REFERENCE

Within the framework of the above overall and specific objectives, the consultant will be required to carry out the following tasks:

- a) Drawing on best practice examples from within and outside the Caribbean region, determine the respective roles of the public and private sectors, including non-governmental organisations and voluntary associations, in the context of ownership, operation and management of environmental resources.
- b) Based on similar best practice examples, recommend a suitable framework for an apex national environmental body, such as a national parks commission, to serve as a model for adoption by interested CTO member countries. The recommended model should be sufficiently flexible in terms of organisational structure and functions to enable individual countries to adapt it to their particular circumstances and needs.
- c) In drawing up a framework for such a national body, due emphasis should be given to two central considerations. First, the need to ensure fuller integration of tourism product development and environmental management. Secondly, the need to widen the scope of environmental resources under active protection and management to include more of the resource base that underpins a destination's tourism product.
- d) In proposing a framework for a national parks commission, particular attention should be paid to the following issues:
 - i. Determine its legal status and powers within the wider public sector structure and indicate the necessary legislative and administrative steps to establish such a body.

- ii. Define its policy-making, co-ordinating and regulatory role and functions.
 - iii. Consider and determine whether and to what extent such a body should also be involved in the actual operation and management of resources, in addition to its policy-making, co-ordinating and regulatory functions.
 - iv. Examine and recommend ways in which the proposed body can become financially self-sustainable. In this respect, the issues of admission charges, licensing fees, concessions and other potential revenue and external funding sources should be considered.
 - v. Determine the workforce requirements of the proposed body in terms of specific technical skills and experience, and identify and recommend ways in which any human resource development needs can be met.
- e) In respect of the three focus countries of the study, i.e. Grenada, Suriname and Belize, the consultant will in each case review the existing institutional structure and make appropriate recommendations. This review will be conducted in the context of the main issues outlined above, namely:
- i. The respective roles of the public and private sectors and the separation of ownership and management of resources.
 - ii. The legal status and powers of the country's national parks commission or equivalent body, if any.
 - iii. Its functions and activities, sources of finance, and prospects of self-sustainable operation.
 - iv. Its human resource development needs.

APPROACH TO IMPLEMENTATION

For the purposes of carrying out this project, the consultant will perform all technical and other research and analysis required for attaining the objectives and completing the tasks identified above. Secondary research material and data can be obtained through desk research and by accessing relevant databases, including CTO's documentation centre in Barbados. The consultant will also review and analyse existing data, reports, and related literature, which will be made available by the national tourism organisations (NTOs) of the three focal countries of the study, namely Grenada, Suriname, and Belize. Supplementary information on

the wider Caribbean region may be obtained by means of written questionnaires and/or telephone interviews with government agencies, NTOs, NGOs, and private sector interests.

The consultant is however expected to carry out in-country fieldwork, including site visits and consultations with both government and private sector representatives in the three focus countries of this study. In this connection, it may be useful to consider holding a workshop in each of the countries to be attended by all interested parties, at which the consultant's findings are presented, and all relevant issues and proposals are discussed and a consensus is reached.

Appendix 2

Questions Used to Guide the Country Consultations

FRAMEWORK FOR A NATIONAL PARK COMMISSION

A. SUSTAINABLE TOURISM

1. What are the requirements for a sustainable tourism industry?
2. How would you characterize the tourism product in (country) e.g. nature, traditional sea, sand sun, health, heritage etc.
3. Has tourism development contributed to the deterioration of the physical environment in (country)?
If yes how?
4. What do you see as some of the threats to the sustainability of tourism in your country, and what do you think can be done to remove the threat?
5. Please outline the Public Sector Investment Programme, which relates directly to the tourism sector.
6. Do you think that the physical infrastructure in place is adequate to support all land uses in the country, particularly tourism?
If yes, please elaborate. If no, please specify infrastructure deficiencies.

B. TOURISM & ENVIRONMENTAL POLICY

7. Do you think that it is necessary to integrate tourism and environmental policy?
If yes, why? If no, why not?
8. Which are some of the other agencies and organizations that would have to be involved in such a process?

C. PUBLIC PERCEPTION OF TOURISM

9. How do you think the local population views tourism development?
10. What programmes are in place to bring a greater awareness to the local population about the benefits of tourism development?
11. Is there any attempt made to include local communities in planning for tourism?
12. If yes, please indicate specific mechanisms used.
13. Is there any attempt made to include local communities in natural resource management?
14. If yes, please indicate the specific mechanisms used.
15. Have you had any specific incidence where there was a conflict with the local population about access to a specific resource (e.g. beach, river, national park etc.)?

D. THE ROLE OF NGOs & THE PRIVATE SECTOR

16. What do you believe should be the role of non-governmental organizations in tourism and natural resource planning and management?
17. Is there any NGO in your country that you think have the capacity to become more actively involved?
18. If yes, please name.
19. What do you believe should be the role of the private sector in tourism and natural resource planning and management?
20. Are there private sector entities in your country that you think have the capacity to become more actively involved?
21. If yes, please name.

E. PLANNING & DEVELOPMENT CONTROL

22. Please describe the development control process in the country?
23. Please outline the policy coordination mechanism, which presently exists to ensure coordinated planning and environmental management.
24. Please outline the Land Use Planning Process of the country and indicate how considerations related to protected areas, tourism related developments, and environmental are integrated into the process and reflected in the final Land Use Plans.

F. INSTITUTIONAL RESPONSIBILITY & CAPACITY FOR NATURAL RESOURCE MANAGEMENT

25. According to the following legislation, regulation and policy documents, your agency/ministry has the following responsibilities regarding natural resource planning/management in (country).
26. Please indicate if the organization has a strong/weak institutional capacity to discharge its responsibilities and explain why this is so.
27. Please indicate if these responsibilities are duplicated or overlap with another agency. Please name the agency and the instrument, which empowers the organization.

G. PARKS & PROTECTED AREAS

28. Please provide the names, locations, and status of national parks and protected areas in the country.
29. Is there a management plan for the area?
30. Are adequate resources provided for the management of the area?
31. If no what are some of the problems?
32. What is the management structure of the park?

33. Is it fully staffed?
34. Is there a Systems Plan for Parks and Protected Areas?
35. Which protected areas should be given priority for integration into the tourism product?
Area (name), and explain why.
36. Should a new structure be put in place to ensure that the selected protected areas are properly developed and managed for tourism?
37. If no, why not.
38. If yes, What would be the nature of an umbrella organization if proposed? What should the new structure look like?
39. What will this mean for the existing legislative and management framework?

Specific agency information that will be solicited:

1. Organogram
2. Budgetary allocation over a 3 year period
3. Manpower – number and level of expertise
4. Resource availability
5. Work programme – targets against performance
6. Perception of effectiveness from general public – complaints, commendations, letters to the editor, general media

Appendix 3

Protected Area Categories and Management Objectives

The current IUCN WCPA categories (IUCN 1994) are as follows:

1. Strict protection
 - a. Strict Nature Reserve
 - b. Wilderness Area
11. Ecosystem conservation and recreation (National Park)
111. Conservation of natural features (Natural Monument)
- IV. Conservation through active management (Habitat/Species Management Area)
- V. Landscape/seascape conservation and recreation (Protected Landscape/ seascape)
- VI. Sustainable use of natural ecosystems (Managed Resource Protected Area)

The mix of management objectives relevant to each of the categories is summarised in the following table (IUCN 1994, p.8):

Management Objective	Ia	Ib	II	III	IV	V	VI
Scientific research	1	3	2	2	2	2	3
Wilderness protection	2	1	2	3	3	-	2
Preservation of species and genetic diversity	1	2	1	1	1	2	1
Maintenance of environmental services	2	1	1	-	1	2	1
Protection of specific natural/cultural features	-	-	2	1	3	1	3
Tourism and recreation	-	2	1	1	3	1	3
Education	-	-	2	2	2	2	3
Sustainable use of resources from natural ecosystems	-	3	3	-	2	2	1
Maintenance of cultural/traditional attributes	-	-	-	-	-	1	2

Key: I : Primary objective; 2 : Secondary objective; 3: Potentially applicable objective;
 - Not applicable

The definitions, objectives and selection criteria for the categories and sub-categories are summarised as follows (IUCN 1994, part 11 and p.9):

Category I - Strict Nature Reserve/Wilderness Area: protected area managed mainly for science or wilderness protection

Category Ia - Strict Nature Reserve: protected area managed mainly for science

Definition: Area of land and/or sea possessing some outstanding or representative ecosystems, geological or physiological features and/or species, available primarily for scientific research and/or environmental monitoring

Objectives of management:

- ◆ To preserve habitats, ecosystems and species in as undisturbed a state as possible;
- ◆ To maintain genetic resources in a dynamic and evolutionary state;
- ◆ to maintain established ecological processes;
- ◆ To safeguard structural landscape features or rock exposures;
- ◆ To secure examples of the natural environment for scientific studies, environmental monitoring and education, including baseline areas from which all avoidable access is excluded;
- ◆ To minimise disturbance by careful planning and execution of research and other approved activities;
- ◆ To limit public access.

Guidance for selection:

- ◆ The area should be large enough to ensure the integrity of its ecosystems and to accomplish the management objectives for which it is protected.
- ◆ The area should be significantly free of direct human intervention and capable of remaining so.
- ◆ The conservation of the area's biodiversity should be achievable through protection and not require substantial active management or habitat manipulation (c.f. Category IV).

Equivalent category, in IUCN (1978): Scientific Reserve/Strict Nature Reserve.

Category Ib - Wilderness Area: protected area managed mainly for wilderness protection

Definition: Large area of unmodified or slightly modified land, and/or sea, retaining its natural character and influence, without permanent or significant habitation, which is protected and managed so as to preserve its natural condition.

Objectives of management:

- ◆ To ensure that future generations have the opportunity to experience understanding and enjoyment of areas that have been largely undisturbed by human action over a long period of time;
- ◆ To maintain the essential natural attributes and qualities of the environment over the long term;
- ◆ To provide for public access at levels and of a type which will serve best the physical and spiritual well-being of visitors and maintain the wilderness qualities of the area for present and future generations;
- ◆ To enable indigenous human communities living at low density and in balance with the available resources to maintain their lifestyle.

Guidance for selection:

- ◆ The area should possess high natural quality, be governed primarily by the forces of nature, with human disturbance substantially absent, and be likely to continue to display those attributes if managed as proposed.
- ◆ The area should contain significant ecological, geological, physiogeographic, or other features of scientific, educational, scenic or historic value.
- ◆ The area should offer outstanding opportunities for solitude, enjoyed once the area has been reached, by simple, quiet, non-polluting and non-intrusive means of travel (i.e. non-motorised).
- ◆ The area should be of sufficient size to make practical such preservation and use.

Equivalent category in IUCN (1978): no direct equivalent.

Category 11 - National Park: protected area managed mainly for ecosystem protection and tourism

Definition: Natural area of land and/or sea, designated to (a) protect the ecological integrity of one or more ecosystems for present and future generations, (b) exclude exploitation or occupation inimical to the purposes of designation of the area, and (c) provide a foundation for spiritual, scientific, educational, recreational and visitor opportunities, all of which must be environmentally and culturally compatible.

Objectives of management:

- ◆ To protect natural and scenic areas of national and international significance for spiritual, scientific, educational, recreational or tourist purposes;
- ◆ To perpetuate, in as natural a state as possible, representative examples of physiographic regions, biotic communities, genetic resources, and species, to provide ecological stability and diversity;
- ◆ To manage visitor use for inspirational, educational, cultural and recreational purposes at a level which will maintain the area in a natural or near natural state;
- ◆ To eliminate and thereafter prevent exploitation or occupation inimical to the purposes of designation;
- ◆ To maintain respect for the ecological, geomorphologic, sacred or aesthetic attributes which warranted designation;
- ◆ To take into account the needs of indigenous people, including subsistence resource use, in so far as these will not adversely affect the other objectives of management.

Guidance for selection:

- ◆ The area should contain a representative sample of major natural regions, features or scenery, where plant and animal species, habitats and geomorphological sites are of special spiritual, scientific, educational, recreational and tourist significance.
- ◆ The area should be large enough to contain one or more entire ecosystems not materially altered by current human occupation or exploitation.

Equivalent category in IUCN (1978): National Park

Category III - Natural Monument: protected area managed mainly for conservation of specific natural features

Definition: Area containing one, or more, specific natural or natural/cultural feature which is of outstanding or unique value because of its inherent rarity, representative or aesthetic qualities or cultural significance.

Objectives of management:

- ◆ To protect or preserve in perpetuity specific outstanding natural features because of their natural significance, unique or representational quality, and/or spiritual connotations;
- ◆ To an extent consistent with the foregoing objective, to provide opportunities for research, education, interpretation and public appreciation;
- ◆ To eliminate and thereafter prevent exploitation or occupation inimical to the purpose of designation;
- ◆ To deliver to any resident population such benefits as are consistent with the other objectives of management

Guidance for selection:

- ◆ The area should contain one or more features of outstanding significance (appropriate natural features include spectacular waterfalls, caves, craters, fossil beds, sand dunes and marine features, along with unique or representative fauna and flora; associated cultural features might include cave dwellings, cliff-top forts, archaeological sites, or natural sites which have heritage significance to indigenous peoples).
- ◆ The area should be large enough to protect the integrity of the feature and its immediately related surroundings.

Equivalent category in IUCN (1978): Natural Monument Natural Landmark

Category IV - Habitat/Species Management Area: protected area managed mainly for conservation through management intervention

Definition: Area of land and/or sea subject to active intervention for management purposes so as to ensure the maintenance of habitats and/or to meet the requirements of specific species.

Objectives of management:

- ◆ To secure and maintain the habitat conditions necessary to protect significant species, groups of species, biotic communities or physical features of the environment where these require specific human manipulation for optimum management;
- ◆ To facilitate scientific research and environmental monitoring as primary activities associated with sustainable resource management;
- ◆ To develop limited areas for public education and appreciation of the characteristics of the habitats concerned and of the work of wildlife management;
- ◆ To eliminate and thereafter prevent exploitation or occupation inimical to the purpose of designation;
- ◆ To deliver such benefits to people living within the designated area as are consistent with the other objectives of management.

Guidance for selection:

- ◆ The area should play an important role in the protection of nature and the survival of species (incorporating, as appropriate, breeding areas, wetlands, coral reefs, estuaries, grasslands, forests or spawning areas, including marine feeding beds).
- ◆ The area should be one where the protection of the habitat is essential to the well-being of nationally or locally-important flora, or to resident or migratory fauna.
- ◆ Conservation of these habitats and species should depend upon active intervention by the management authority, if necessary through habitat manipulation (c.f. Category Ia).
- ◆ The size of the area should depend on the habitat requirements of the species to be protected and may range from relatively small to very extensive.

Equivalent category in IUCN (1978): Nature Conservation Reserve/Managed Nature Reserve/Wildlife Sanctuary.

Category V - Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation

Definition: Area of land, with coast and sea as appropriate, where the interaction of people and nature over time has produced an area of distinctive character with significant aesthetic, ecological and/or cultural value, and often with high biological diversity. Safeguarding the integrity of this traditional interaction is vital to the protection, maintenance and evolution of such an area.

Objectives of management:

- ◆ To maintain the harmonious interaction of nature and culture through the protection of landscape and/or seascape and the continuation of traditional land uses, building practices and social and cultural manifestations;
- ◆ To support lifestyles and economic activities which are in harmony with nature and the preservation of the social and cultural fabric of the communities concerned;
- ◆ To maintain the diversity of landscape and habitat, and of associated species and ecosystems;
- ◆ To eliminate where necessary, and thereafter prevent, land uses and activities which are inappropriate in scale and/or character;
- ◆ To provide opportunities for public enjoyment through recreation and tourism appropriate in type and scale to the essential qualities of the areas;
- ◆ To encourage scientific and educational activities which will contribute to the long term well-being of resident populations and to the development of public support for the environmental protection of such areas;
- ◆ To bring benefits to, and to contribute to the welfare of, the local community through the provision of natural products (such as forest and fisheries products) and services (such as clean water or income derived from sustainable forms of tourism).

Guidance for selection:

- ◆ The area should possess a landscape and/or coastal and island seascape of high scenic quality, with diverse associated habitats, flora and fauna along with manifestations of unique or traditional land-use patterns and social organisations as evidenced in human settlements and local customs, livelihoods, and beliefs.

- ◆ The area should provide opportunities for public enjoyment through recreation and tourism within its normal lifestyle and economic activities.

Equivalent category, in IUCN (1978): Protected Landscape.

Category VI - Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems

Definition: Area containing predominantly unmodified natural systems, managed to ensure long term protection and maintenance of biological diversity, while providing at the same time a sustainable flow of natural products and services to meet community needs. The area must also fit the overall definition of a protected area.

Objectives of management:

- ◆ To protect and maintain the biological diversity and other natural values of the area in the long term;
- ◆ To promote sound management practices for sustainable production purposes;
- ◆ To protect the natural resource base from being alienated for other land use purposes that would be detrimental to the area's biological diversity;
- ◆ To contribute to regional and national development.

Guidance for selection:

- ◆ At least two-thirds of the area should be in, and is planned to remain in, a natural condition, although it may also contain limited areas of modified ecosystems; large commercial plantations are not to be included.
- ◆ The area should be large enough to absorb sustainable resource uses without detriment to its overall long-term natural values.
- ◆ A management authority must be in place.

Equivalent category, in IUCN (1978): no direct equivalent.