

GLOBAL ENVIRONMENT FACILITY

Country:	Antigua and Barbuda
Project Title:	<i>National Biodiversity Strategy and Action Plan, and Report to the CoP</i>
GEF Focal Area:	Biodiversity
Country Eligibility:	Convention Ratified April 1993
GEF Financing:	US\$ 139,000
Government Contribution	in kind
GEF Implementing Agency:	UNDP
National Executing Agency:	Office of the Prime Minister
GEF Operational Focal Point:	Office of the Prime Minister
CBD Focal Point:	Ministry of Foreign Affairs
Estimated Starting Date:	April 1997
Project Duration:	12 months

1. Background:

Antigua and Barbuda lies in the northern section of the Caribbean Leeward Islands and consists of two inhabited islands and numerous uninhabited small islands and coral islets. Whilst the total land mass is relatively small, 441 km², reef areas cover 1,122 km² and the total shelf area of 3,400 km² is the largest of the OECS (Organization of Eastern Caribbean States) states. The largest island, Antigua, with 280 km², is made up of a volcanic region in the south west, central plains in the centre and limestone hills in the north and east. The highly indented coastline is fringed with some of the most extensive coral reefs in the Caribbean. Barbuda (160 km²) in contrast, has a low-lying, more uniform, non-volcanic topography with large areas of sand dunes and a lagoon running along most of the western part of the island. The coast line is less indented but is also fringed by a coral reef that extends along the entire eastern shore.

Nearly three hundred years of deforestation and land clearing for intensive agricultural use, mainly sugar, have resulted in the removal or degradation of much of Antigua's original highly diverse vegetation and contributed to habitat destruction and subsequent loss of species. Only 15% of the land is presently covered with forest. In the valleys in the SW of Antigua evergreen deciduous forests, dominated by the cita tree (*Ceiba pentandra*), are found. Dry woodland, widely lost in other Caribbean islands, occur in small scattered clumps over the entire island in Antigua and more extensively in Barbuda. Significant areas of mangrove forest ecosystems, including those characterised by the red mangrove (*Rhizophora mangle*), the white mangrove (*Laguncularia* spp) and the black mangrove (*Avicennia*) are found in both islands. A variety of scrubland and grassland covers the remaining areas of the islands that are not under cultivation.

Despite the high degree of deforestation and low unpredictable rainfall, *terrestrial* species biodiversity has several unique characteristics albeit lower in absolute terms than some tropical islands. 106 and 74 bird species are found on Antigua and Barbuda respectively, 17 and 14 mammals, 3 and 1 amphibians and 17 and 15 reptiles, one of which the grass snake *Asopis antiguae* is endemic. There is a large population of seabirds with the most well-known being the colony of Magnificent Frigatebird (*Fregata magnificens*)

with 2,500 nesting pairs on Barbuda island, thought to be a core from which other colonies within the West Indies become established or replenished. The numerous wetlands and coastal habitats provide critical feeding and nesting habitats for migratory birds with over 100 migrant species regularly recorded.

With its extensive coastline and coral reefs, Antigua and Barbuda supports a rich but poorly documented range of both habitat and species marine biodiversity. The coral reefs, although recently reported as being under stress, support the highest biomass for commercially exploited reef fish in the OECS. Large seagrass beds of turtle grass (*Thalassia testudinum*), manatee grass (*Syringodium filiforme*) and shoal grass (*Halodule wrightii*) provide shelter and feeding grounds for fish species including the commercially important queen conch (*Strombus gigas*) and spiny lobster (*Panulirus argus*). The mangrove ecosystems also support many species for example mullets (*Mugil curema*), snappers (*Lutjanus* spp) and mojarras (*Gerres cinereus*)

An estimated 64,000 and 2,000 people, with an average per capita income of US\$ 4,720, live in Antigua and Barbuda. Once largely dominated by mono-culture, export-oriented agriculture, principally sugar, the economy now depends heavily on tourism. Over 60% of the GDP is now derived from this sector reflecting the dramatic change in the economy that has occurred over the last 30 years. An extremely high increase in tourism ventures and related infrastructure in the last ten years has exerted severe pressures on both terrestrial and marine biodiversity. Habitat destruction is increasingly widespread from marina construction, sand-mining for building materials and over-diving on coral reefs. Water quality is decreasing from inadequately treated effluents and solid waste disposal. These pressures are exacerbated by agricultural related impacts such as deforestation and overgrazing causing soil erosion and sedimentation and water contamination from the high level of agrochemicals used to increase production, and by construction related impacts

Aware of this growing environmental degradation and subsequent biodiversity loss, the Government of Antigua and Barbuda (GoA&B) has taken steps to address the situation. A National Environmental Profile (NEP) was undertaken in 1990. The Ministry of Economic Development and Tourism was changed in 1993 to become the Ministry of Tourism, Culture and Environment. In 1994 a draft Environmental Action Plan was formulated but is still to be implemented and there is presently a proposal for an Environmental Agency under discussion.

Despite this progress however, there is still not a wide appreciation of the multi-sectoral dimension of biodiversity nor its importance as the support on which much of the country's economy is based. A full understanding of the CBD and the implications for its implementation in the country is largely restricted to the specific sectors that were directly involved with the Convention formulation process and biodiversity is viewed as an issue that should fall exclusively under the charge of government environment agencies and conservation NGOs rather than part of sectoral plans and public and private sector responsibility

In addition to this restraint, clear policies for conservation and sustainable use of biodiversity have been hindered by an extensive but fragmented and often overlapping legislative and regulatory framework. The incorporation of biodiversity issues throughout the economy is exacerbated by the absence of specific sectoral policies. Furthermore the information that exists on biodiversity is often incomplete and dispersed in a wide range of institutions both within the country and throughout the region.

The GoA&B, aware of these restraints, is looking for strategic approaches to promote the conservation and sustainable use of biodiversity within the context of the nation's development and determine priority actions that will facilitate the implementation of the CBD in the country.

2. Project Objectives and Brief Summary

The main objective of this proposal is the formulation of a National Biodiversity Strategy and Action Plan through a fully participatory process that will include line ministries, the private sector and NGOs. In order to attain this participation, the first and most essential step of the process will be to undertake an awareness-building programme, aimed at key target groups including the tourism, agriculture and construction sectors, in order to inform on the CBD and on the process of elaborating a national BSAP. In parallel to this, and under the guidance of a project co-ordinator and a multi-sectoral Steering Committee, existing information on biodiversity-related issues will be collected and reviewed (see Activity Matrix) to fit in the NBSAP process.

The identification of options and strategic approaches to the conservation and sustainable use of biodiversity will then be undertaken in consultations held in Antigua and in Barbuda. Participation of a wide range of public and private sector stakeholders in these consultations will be enhanced by the awareness-building campaign that will have been undertaken previously. The first draft of a National Biodiversity Strategy and Action Plan (BSAP) will be drawn up by a team of national consultants with the assistance of an international consultant, preferably from the Caribbean region, under the guidance of the project co-ordinator. A national meeting will be held to review and validate this draft. Findings from this meeting will be incorporated to a final version of the BSAP which will be reviewed by the Steering Committee before being submitted to the GoA&B for final approval. The final version will be disseminated through a public awareness campaign designed to facilitate widespread support and enhance implementation

The first report to the CBD will be developed by the project co-ordinator and national consultants. In view of the 31 December 1997 deadline for submitting this report, the Antigua and Barbuda Report will be based on existing information and on the progress achieved by then in preparing the BSAP.

3. Operational Criteria:

Coverage without Duplication: The project will build on information available in the NEP and on that being produced in the UNDP-UNCHS (HABITAT) Land-use planning project. It will complement the recently started GEF-UNEP Country Case Study on Climate Change Impacts and Adaptation Assessments and the A&B case study in the GEF-World Bank-OAS project "Planning for the Adaptation to Global Climate Change". In view of this no duplication is expected.

Appropriate Sequencing of Activities:

Month	1	2	3	4	5	6	7	8	9	10	11	12
Formation of team, definition of methodology and planning training	X	X										
Sectoral awareness building		X	X	X								
Stocktaking and Assessment		X	X	X	X							
Identification of options					X	X						
1. First draft							X	X	X			
2. National Meeting										X		
3. Final version BSAP											X	X
4. Public Dissemination BSAP												X
First National Report								X	X			

Best Practice. The preparation of the strategy will follow the recommendations established in the document "National Biodiversity Planning: Guidelines Based on Early Country Experiences" prepared by WRI, IUCN and UNEP (1995) and will be centred firmly within the context of national development. The multi-sectoral nature of the steering committee and the sectoral awareness building campaign will facilitate the integration of the strategy into sectoral plans. The majority of activities will be undertaken by national consultants and NGOs. Input from international experts will be sought for biodiversity planning instruction and strategy preparation.

Deviations from Cost Norms: Although there are no deviations from the cost norms as stipulated in the operational criteria, the project might have been expected to be somewhat lower given the demographic size of the country. However, the GoA&B is placing great emphasis on stimulating the participation of key sectors that have not previously been involved with biodiversity but that directly impact and depend on it. This requires a sectoral awareness-building campaign at the outset of the project and a wide dissemination of the BSAP once finalised. In addition transport and consulting fees are well known to be high in the Caribbean region.

4. Institutional Framework

Environmental issues fall under the responsibility of several different government agencies including the Ministry of Tourism, Culture and Environment, the Ministry of Agriculture, the Pesticides Control Authority, the National Parks Authority and the Historical, Conservation and Environment Commission (HCEC). In view of this fragmented authority and the high priority that the GoA&B has placed on the development of the BSAP, the project will be developed by the Office of the Prime Minister and specifically through the GEF Focal Point. To ensure multi-sectoral dimension and facilitate the incorporation of the BSAP into sectoral plans, the GEF Focal Point will select a Steering Committee of representatives of key private and public sectors to convene periodically and provide overall guidance to the project. At the operational level, the Office of the Prime Minister will designate a project coordinator who will be responsible for overseeing project execution acting on the advise of the Steering Committee. Project activities will be undertaken by government agencies, national consultants, NGOs and where necessary international consultants preferably from the Caribbean region.

At the start of the project, the steering team, project co-ordinator and consultants will take part in a biodiversity-planning instruction session held with the assistance of an international expert. This will allow the members to become more familiar with the guidelines prepared by WRI, IUCN and UNEP (1995) and establish a more uniform level of knowledge that will facilitate the careful detailing of the work schedule and consultations to be held throughout the process

5. Budget

	Product	Process	Total
<i>Stocktaking and Inventory Existing Information</i>	18,000		18,000
1.1 National consultants	15,000		
1.2 Documentation and miscellaneous.	3,000		
<i>Identification and Analysis of Options</i>	10,000	35,000	45,000
1.1 National Consultants	7,000		
1.2 Sectoral awareness-building campaign		15,000	
1.3 Biodiversity Planning Training		4,000	
1.4 Regional Expert (for training and planning exercises)		7,000	
1.5 Consultations for identification of option		9,000	
1.6 Travel, misc	3,000		
<i>Preparation of a Strategy and Action Plan (BSAP)</i>	21,000	39,000	60,000
1.1 First draft of Strategy and Action Plan (National consultants, preparation, dissemination etc.)	15,000	21,000	
1.2 Regional expert to advise on first draft		7,000	
1.3 National Meeting for Consultations on first draft		3,000	
1.4 Preparation of Final version of Strategy and Action Plan (editing, printing)	6,000		
1.5 Dissemination and public awareness campaign for BSAP		8,000	
<i>First National Report</i>	6,000		6,000
1.1 Preparation, publication and translation	6,000		
<i>Co-ordination and Management</i>	10,000		10,000
TOTAL	65,000	74,000	139,000

STANDARD ACTIVITY MATRIX

ENABLING ACTIVITY	OUTPUT	CAPACITY BUILDING		PUBLIC PARTICIPATION	COMMENTS
Commitment	Product	Institutional Strengthening	Training		
1. Stocktaking and Assessment, based on Existing Information					
1.1. Biodiversity and biological resources	NEP / X				1
1.2. Cross-sectoral Issues	HCEC / X				2
1.3. Policy and Regulatory Framework	X				3
1.4. Institutional and Human Capacity	CRMI / UNDP				4
1.5. Analysis of root causes of BD loss	X				
1.6. Technologies for Conservation and SU	X				
1.7. Activities with Adverse Impact	X				
1.8. Existing Measures and Programmes	X				
1.9. Preliminary Statement of Objectives	EAP / X				5
1.10. Identification of Gaps	X				
1.11. Assessment of Existing Needs	X				
2. Identification and Analysis of options to Meet the Objectives of the CBD					
2.1. Strategies for Conservation in situ, ex situ	X	X	EAG / X	X	6,7,8,9
2.2. Strategies for Sustainable Use	X	X	X	X	7,8,9
2.3. Strategies for Benefit Sharing	X	X	X	X	7,8,9
3. Planning and Preparation of a Strategy and Plan					
3.1. National Strategy	X			X	10,11
3.2. National Action Plan	X			X	10,11
4. Preparation of First National Report to CBD					
4.1. First National Report	X				

X = Activity Undertaken Within Enabling Activities Proposal

NEP= National Environmental Profile undertaken in 1991 funded by WB and USAID; HCEC= Historical, Conservation and Environment Commission; CRMI=Coastal Resource Management Initiative funded by OECS; UNDP-UNCHS Land-use and spatial planning project; EAG= Environmental Awareness Group (NGO)

Footnotes

1. The National Environmental Profile, 1991, provides an overview of the biodiversity and biological resources citing the grey literature that exists in this area. This project will review these sources and more recent information.

2. The HCEC, composed of representatives from 22 government and NGO sectors, was formed to coordinate and advise on national environmental policies and encourage links between Ministries to effect their implementation. It has recently been activated with a Chairman and Environmental Officer but has no legal mandate and has yet to address biodiversity matters. A second intersectoral body, The Pesticide Control Authority deals specifically with pesticide control but not biodiversity. Cross-sectoral linkages and issues are rarely addressed and will be fully evaluated in this project.

3. A&B has an extensive but highly fragmented policy and regulatory framework that impinges on

biodiversity issues. Amongst these are the Beach Control ordinance (1957), Wildlife Birds Protection Ordinance (1931), Turtle Ordinance (1927), Marine Areas Act (1972), Fisheries Act (1983), National Parks Act (1984), Forest Ordinance Act (1984), and Pesticides Control Act. These will be fully reviewed in this project to determine duplications, overlaps and gaps.

- 4. The Coastal Resource Management Initiative of the OECS is undertaking an audit of the planning and national resource agencies and professionals to determine existing capacities. The results are expected in November 1996. Additionally, as part of a UNDP-UNCHS Land-use planning project, a recent review on institutional necessities for a more effective environmental management, proposes the establishment of an Environmental Management Agency. These results and proposals will be reviewed in the light of CBD implementation needs.*
- 5. A draft National Environmental Action Plan was formulated in 1994 and makes some initial objectives in relation to biodiversity. This will need to be evaluated in this project in the light of developments since that time.*
- 6. The NGO Environmental Awareness Group (EAG) has undertaken some capacity building within the local NGO sector in the area of biodiversity data collection and storage.*
- 7. In order to facilitate participation of key sectors in the formulation of the strategy, especially tourism and agriculture, a sector-oriented awareness campaign will be undertaken in parallel to the stocktaking exercises. This will entail target meetings and information packages for each key sector outlining the importance of biodiversity for their sector as a resource base and the need to limit impact on this. It will also outline the obligations of the CBD and the implications its implementation will have in each sector and the nation at large. At a different level, the steering team, project co-ordinator and consultants will take part in a biodiversity planning instruction session held with the assistance of an international expert at the start up of the project. This will allow the members to become more familiar with the guidelines prepared by WRI, IUCN and UNEP (1995) and establish a more uniform level of knowledge that will facilitate the careful detailing of the work schedule and consultations to be held throughout the process.*
- 8. A series of consultations will be held to review the findings of the stocktaking exercise and to initiate the definition of options for CBD implementation in the country. It is expected that at least one consultation will be held in Barbuda and one in Antigua and will count on the participation of a wide range of stakeholders including NGOs, government sectors and community leaders.*
- 9. A range of stakeholders from the public and private sector will have strengthened capacities for the management of biodiversity related issues and heightened awareness to CBD implementation, indirectly through participation in the consultations and directly through the awareness building campaign and biodiversity planning (see 7)*
- 10. A national meeting will be held with a range of public and private sector stakeholders to review the draft BSAP.*
- 11. The final version of the BSAP will be disseminated through a public awareness campaign designed to facilitate widespread support and enhance implementation.*

C. 6



Communications on this subject
should be addressed to:

Ministry of Planning
Cross Street
St. John's

and the following
Number quoted.

.....13 March.....19..97..

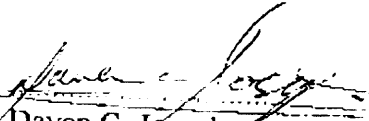
Ms Lita Paparoni
GEF Coordinator
Latin America & the C'bean

Dear Ms Paparoni

Re: Enabling Activities - GEF Programme

I am please to inform you that I have endorse the above Proposal regarding Enabling Activities for Antigua and Barbuda under the GEF agreement.

We do hope that consideration will be given to the expeditious implimentation of this initiative.


Daven C. Joseph