

NATIONAL REPORT ON THE IMPLEMENTATION OF ARTICLE 6

(General Measures for Conservation and Sustainable Use)

CONVENTION ON BIOLOGICAL DIVERSITY

January 10, 2001

Government of Grenada
Ministry of Finance

GOVERNMENT OF GRENADA

NATIONAL REPORT ON THE IMPLEMENTATION OF ARTICLE 6 (General Measures for Conservation and Sustainable Use) CONVENTION ON BIOLOGICAL DIVERSITY

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EXECUTIVE SUMMARY

Pursuant to the obligation under Article 6 of the Convention on Biological Diversity, the Government of Grenada embarked on the preparation of its Biological Diversity Strategy and Action Plan. The process served to renew Government's commitment to sustainable management of the country's biological resources. The first report to the Conference of Parties seeks to provide a brief summary of the proposed action plan and detailed the national environment for issues relating to the protection and conservation of biological diversity.

The document lists a set of objectives with supporting activities to mitigate against the mainly human induced negative impacts. The key objectives are as follows:

- ❖ Provide broad-based support for conservation and sustainable use of biodiversity.
- ❖ Protect key ecosystems from negative human induced impacts.
- ❖ Develop and encourage sustainable utilisation of biological resources that are essential to the livelihood of local communities.
- ❖ Maintain, recover and promote genetic resources necessary for sustainable agriculture.
- ❖ Ensure a fair and equitable sharing of the benefits arising out of the utilisation of genetic and ecosystem resources.
- ❖ Provide information on key ecosystems for incorporation into national accounts and decisions on national development projects.

Several activities were identified in fulfillment of these objectives. Many of these activities were developed as priority project concepts and are recommended for implementation. These project concepts include:

- ❖ Building Awareness on Biological Diversity in Grenada
- ❖ Drafting a National Land Use Policy for Grenada
- ❖ Strengthening Management of Key Ecosystems
- ❖ Promoting Sustainable Use of Biological Resources
- ❖ Capacity Building for Germplasm Conservation
- ❖ Strengthening Biological Pest Control
- ❖ Incorporating Ecosystem Valuation into National Accounting
- ❖ Strengthening Existing Legislation for Biodiversity Protection

Implementation of the above is now under active consideration. There is a need to solicit resources for the successful implementation of the programme.

Table of Contents

| | | |
|-------------|---------------------------------------|----|
| 1.0 | National Context | 1 |
| 1.1 | Introduction | 1 |
| 2.0 | Background | 1 |
| 2.1 | Legal and Policy Framework | 1 |
| 2.2 | Biotic Resources | 2 |
| 2.2.1 | Flora | 2 |
| 2.2.2 | Fauna | 2 |
| 2.2.3 | Fishery | 3 |
| 2.2.4 | Coral Reefs | 3 |
| 2.2.5 | Institutional Capacity | 4 |
| 3.0 | Goals and Objectives | 4 |
| 3.1 | Identified Gaps | 5 |
| 3.2 | Strategies Recommended | 6 |
| 3.3 | Priorities | 6 |
| 4.0 | Partners | 6 |
| 4.1 | Major Partners | 7 |
| 5.0 | Action | 7 |
| 6.0 | Schedule | 7 |
| 7.0 | Budget | 12 |
| 8.0 | Monitoring and Evaluation | 15 |
| 8.1 | Environmental Related Indicators | 15 |
| 8.2 | Objectives Related Indicators | 16 |
| 8.3 | Evaluation | 17 |
| 9.0 | Sharing of National Experience | 18 |
| 10.0 | Conclusion | 19 |

1.0 NATIONAL CONTEXT

1.1 Introduction

The Government of Grenada signed the Convention on Biological Diversity (CBD) in December 1992 and ratified the Convention in August 1994. This act demonstrated the Government's concern for the conservation of biological diversity and its intention to develop and implement local action. To this end, much of the country's natural beauty, tourism appeal, economic and social well being depends on its biological diversity. The sustainable use of these resources will ensure sustained benefits for local communities, the tourism sector and the national economy in Grenada.

The CBD was designed as a legally binding instrument to secure commitments from governments for the conservation of biological resources and to serve as a facilitator of their prescribed activities through information sharing and technical and scientific guidance. The Convention served as a catalyst for the Government to prepare the Grenada Biodiversity Strategy and Action Plan (GBSAP). The GBSAP recognises the importance of peoples' participation and co-management of all aspects of biodiversity potential and conservation and reaffirms that key threats to biodiversity lies with human induced behaviour.

The aim of the GBSAP is to develop and implement practical measures for the conservation and sustainable use of biodiversity. The GBSAP is therefore targeted primarily to key government agencies as well as NGOs and local communities with responsibility for management of biological resources who utilise those resources or have an interest in the conservation of biodiversity.

2.0 BACKGROUND

2.1 Legal and Policy Framework

In Grenada the management of biological diversity is under the jurisdiction of several governmental and quasi-governmental agencies each having a legal mandate for its area of responsibility, and guided by policy prescribed by the government. Occasionally closely related responsibilities may be shared or may even be separated between or among agencies by selected legal instruments such as regulations or orders.

There are about 40 separate pieces of legislation that govern the protection and management of Grenada's biodiversity. These include forests, soil and water conservation, planning and development and use of lands; beach protection and control, management of fisheries, protection of marine reserves; protection of wildlife and habitats; control of pesticides, pollution and waste management.

In 1999, the Government of Grenada elaborated and approved a National Forest Policy. A key component of the Policy is the conservation of the Country's biodiversity. The policy provides for *inter alia*, building capacity of Grenadian institutions to participate in the conservation and management of the country's biodiversity, building awareness and appreciation of biodiversity and its importance, maintenance of representative samples of all forest ecosystems and the protection of all species which are important because of their endemism, rarity or value.

The Government is currently engaged in the preparation of a National Physical Development Plan. An Environmental Charter is being prepared under the auspices of the OECS.

2.2 Biotic Resources

2.2.1 Flora

There is little formal documentation available on the composition and status of Grenada's forests. Although some research has been conducted on a few species of trees, very little attention has been given to herbaceous and non-vascular plants. There is limited information available on threatened or endangered plant species. However, three endemic species of plants are known, the Grand Etang Fern (*Danaea* sp.), the Cabbage Palm (*Oxeodoxa oleracea*) and one endemic tree species (*Maythenus grenadensis*).

Timber production from natural forests has declined considerably over the past decade due to poor stocking depleted by more than 100 years of logging activities, clearance for agriculture and hurricane destruction. Commercial production of blue mahoe (*Hibiscus elatus*) which occupied 75% of the area under plantation was seriously damaged during an infestation of the pink mealybug between 1994-1997. Other plantation species include pine (*Pinus caribaea*), mahogany (*Sweitenia* sp.) and *Cupressus lusitanica*. Although the initial reasons for plantation establishment were to reforest and stabilise forest areas with serious hurricane damage, local demand presented an opportunity for income generation.

2.2.2 There is little baseline data about faunal species numbers, distribution and their current status. Grenada's terrestrial wildlife is thought to consist of four amphibian species, eight species of lizard and five species of snake, 150 species of birds, of which 18 species are thought to be threatened or endangered, four native species of terrestrial mammals and 11 native species of bats. There is little information available on invertebrates in Grenada but several species of fresh-water shrimps, and land crabs are noted. One possible endemic species of weevil (*Diaprepes* sp.) was reported by Groome (Groome Jr., 1974).

The dry forest found in the south and north of the island is considered prime habitat for two endangered and endemic species of birds - the Grenada Dove (*Leptotila wellsi*) and the Grenada Hook-billed Kite (*Chondrohierax uncinatus murus*). Grenada is also home to four bird species which are endemic to the Lesser Antilles - the Grenada flycatcher (*Myiarchus nugator*), the Scaly-breasted thrasher (*Margarops fuscus*), the Lesser Antillian bullfinch (*Loxigilla noctis*), and the Lesser Antillian tanager (*Tangara cucullata*).

2.2.3 Fishery

The marine and fresh water fish fauna for Grenada is recorded by The International Centre for Living Aquatic Resource Management (ICLARM) as 233 marine species, 69 marine/brackish water species and 17 species for fresh water. The near shore and offshore coral reefs provided the base for demersal fish such as snappers, groupers, grunts, doctorfish etc. while the offshore ocean provided Yellow-fin Tunas, Oceangar, Marlin, Dolphin fish, and King fish among others; mainly jacks and robins were harvested by beach seines very close to shore when such fish come off the ocean deep on a daily basis. Crustaceans and other shellfish such as lobsters, turtles and conch (lambi), were traditionally harvested by divers in significant quantities.

Although a significant segment of the national fishery remains semi-subsistence and small scale, the large majority of economical fishing effort and recorded fish catches are contributed by commercial operations. Species catch abundance generally reflects both natural abundance and also stocks targeted by fishers.

2.2.4 Coral Reefs

Most of the reefs around Grenada and the Grenadines, especially along the East and South East Coasts are in varying stages of degradation and recuperation. The islands adjacent to Levera Bay have reef systems with Sugar Loaf being in the best state of recovery and dominated by elkhorn coral (*Acropora palmata*). Small fringing reefs mainly of elkhorn coral exist along the south east and south coast to Point Salines. These reefs show some signs of recovery but most of them remain overgrown with algae.

On the north West Coast, the reef at Red Rock, originally dominated by elkhorn coral has suffered much physical damage probably from strong storm swells (Ground Sea) which frequently hit the area. Reefs also exist at Beausejour and Moliniere, but Moliniere is being steadily degraded by overuse mainly by tourists (snorkelling and scuba diving). At Grand Anse, the three fathoms reef is badly degraded, however, the six fathoms reef which consists of a combination of hard and soft coral is still in good shape. Large barrier reefs occur along the East coasts of Carriacou, Petit Martinique and some of the smaller islets of the Grenadines. These are strongly dominated by elkhorn corals in the shallow areas and boulder coral in the fore reef. Saline and White Islands have an excellent reef system and presently has the best species combination in the area.

2.2.5 Institutional Capacity

The key institutions that have a mandate for managing aspects of biological diversity include:

- ❖ The Ministry of Agriculture (Forestry Division, Fisheries Division, Pest Management Unit, Agronomy Division, Extension Division, Pesticide Control Board and the Land Use Division);
- ❖ Ministry of Tourism (National Parks Department);
- ❖ The Grenada Board of Tourism;
- ❖ Ministry of Finance (Economic Planning, Physical Planning Unit, Land Control Development Authority).

In addition there are five NGOs that have been involved in several aspects of environmental management and have partnered with the Government in several projects. During the elaboration of the National Biodiversity Strategy and Action Plan, the local human resource capacity to deal with biodiversity was enhanced. The process created a cadre of local professional capable of providing significant inputs in the post documentation and implementation stage.

However some deficiencies appear to be the lack of or inadequate training in database management, and human resource/operational management skills among many senior staff of critical ministries as well as limited facilities and community participation skills. In several cases, execution of operational activities are constrained by inadequate staffing, equipment, finances and changes in policy or unclear policy guidelines.

The recommendations of the GBSAP will be implemented through the coordinated efforts of the Ministry of Agriculture, particularly the Forestry and Fishery Divisions, National Parks Department, the Ministry of Finance and selected NGOs and community groups.

3.0 GOALS AND OBJECTIVES

The Government of Grenada pursuant to its obligation under the Convention is building on its existing institutional, policy and legal framework to support effective planning and management of biodiversity so as to ensure sustained national benefits from the conservation and sustainable use of biological resources. The conservation of biological diversity in Grenada will be achieved through the adoption of the following goals and objectives:

Goal 1: Conserve and sustainably use native biodiversity.

Objectives

- ❖ Provide broad-based support for conservation and sustainable use of biodiversity
- ❖ Protect key ecosystems from negative human induced impacts.
- ❖ Develop and encourage sustainable utilisation of biological resources that are essential to the livelihood of local communities.

Goal 2: Ensure a fair and equitable sharing of the benefits arising out of the utilisation of genetic and ecosystem resources.

Objectives

- ❖ Maintain, recover and promote genetic resources necessary for sustainable agriculture.
- ❖ Provide information on key ecosystems for incorporation into national accounts and decisions on national development projects.
- ❖ Develop economic instruments to promote the sustainable use of biological resources.

3.1 Identified Gaps

The conservation of biological diversity in Grenada will be improved if the following gaps can be addressed in a timely manner:

- ❖ The urgent need to develop a national policy for guiding land management (including a land use policy, and a national physical development plan) and incentives for protection of critical ecosystems.
- ❖ Lack of implementation of appropriate policies which contribute to the conservation of aspects of biodiversity and the need to modify policies with significant negative impacts on the environment.
- ❖ Lack of effective enforcement of existing legislation and at mitigating the adverse impact on environment due to human behaviour.
- ❖ Legislative revision for improved regulation of activities with significant adverse impacts on the integrity of key habitats and on resident and migratory species.
- ❖ Lack of effective enforcement of existing legislation and at mitigating the adverse impact on environment due to human behaviour.
- ❖ The need to build awareness on and understanding of the value, sustainable use, and need for immediate conservation of natural resources by decision makers and stakeholders.
- ❖ Lack of comprehensive and up to date baseline biological/environmental data and inventories on key species and habitats.
- ❖ The need to develop management plans for key ecosystems, biological and genetic resources.
- ❖ Institutional strengthening for key agencies with responsibility for management of biological resources.

- ❖ Genuine collaborative mechanism among state agencies, and between state agencies and stakeholders for joint management of environmental resources.
- ❖ The need to develop a local repository for representative samples of flora and fauna.
- ❖ The need to incorporate environmental costs into the planning process.

3.2 Strategies Recommended

The following strategies will be used during the implementation of the GBSAP:

- ❖ Build capacity of local institutions and target communities to sustainably manage selected biological resources through partnership arrangements.
- ❖ Greater public awareness on biodiversity issues and participatory planning would be employed to secure commitment for conservation of ecosystems, species and genome.
- ❖ Create the mechanism to ensure that resources users bear the cost of environmental degradation.
- ❖ Enabling activities will be put in place for national and locally based regional institutions to continue and expand on germplasm research and development, and biological pest control for agriculture.
- ❖ International, regional and local assistance will be sought for determining the valuation of ecosystems of national importance.
- ❖ Set aside representative samples of major ecosystems and establish controls to ensure that further degradation is minimised or stopped.

3.3 Priorities

The relative priorities assigned to these strategies are in the order of listing with a capacity building initiatives as the primary concern followed by public awareness and information programme.

4.0 PARTNERS

During the elaboration of the Strategy and Action Plan, numerous consultations were held at various levels and involved a wide cross section of the Grenadian community.

These consultations involved persons from the public sector, the private sector, the NGO community, community groups, special interest groups, farmers, fishermen, academics, the school and church communities and the public at large. The role of the media was very critical at the consultations. To a large extent however, there was not a sustained media programme to keep the issue topical.

In general, the NGO community, special interest groups and community based interest groups were most responsive to the issues and to agree to be responsible for particular activities to mitigate the negative impacts. There were no explicit commitments made other than the public sector to make specific investments along the broad categories of capacity building, information and research. Private sector individuals have expressed willingness to fund specific projects in localised situations.

4.1 The major partners are as follows:

Public Sector

- ❖ Ministers of Government
- ❖ Official of various line ministries
- ❖ Officials of several quasi-government organisations

Civil Society

- ❖ The Agency for Rural Transformation
- ❖ Farmers and fishermen organisations
- ❖ Grenada Community Development Organisations
- ❖ Grenada Citizens Advise and Small Business Agency
- ❖ Friends of the Earth
- ❖ St. Patrick's Development Organisation
- ❖ St. Andrew's Development Organisation

5.0 ACTION

The following activities, tasks and policies were identified as most important to be implemented in the first phase of the programme. A 5 year period was proposed for the completion of these activities. The recommended lead partner(s) to implement the respective action is/are hereby identified along with the action:

- ❖ Public discussions, media programmes, public service announcements, displays and marketing documents on biodiversity conservation in Grenada will be targeted to selected sectors of the public.
 - Grenada Citizens Advise and Small Business Agency
 - Ministry of Finance
 - Ministry of Education
 - Community groups
- ❖ Develop a mechanism for incorporating biodiversity issues into the schools' curriculum.
 - Ministry of Education
 - Ministry of Finance

- ❖ Community and public sector consultations will be used to help achieve consensus on biodiversity conservation and sustainable use policies, plans and programmes.
 - Ministry of Finance
 - Ministry of Agriculture
 - Grenada Community Development Agency
 - Friends of the Earth
 - Grenada Citizens Advise and Small Business Agency
 - Community groups

- ❖ Prepare, approve and promote a national land use policy that incorporates biodiversity conservation and sustainable use.
 - Ministry of Agriculture
 - Ministry of Finance
 - Agency for Rural Transformation
 - Grenada Community Development Agency

- ❖ Ecological survey of major ecosystems for conservation and legal status.
 - Ministry of Tourism
 - Ministry of Agriculture
 - Ministry of Legal Affairs
 - Friends of the Earth

- ❖ Assessment of past, current and future impacts on these sites.
 - Ministry of Tourism
 - Ministry of Agriculture
 - Friends of the Earth

- ❖ Determine if designated protected areas are adequate for protection of major ecosystems.
 - Ministry of Agriculture
 - Ministry of Tourism

- ❖ Identify preferred management options for these ecosystems.
 - Ministry of Agriculture
 - Ministry of Tourism

- ❖ Upgrade the botanical gardens and establish a national herbarium as the repository for research on local plant species.
 - Ministry of Agriculture

- ❖ Strengthen existing legislation for improved protection of biodiversity.
 - Ministry of Legal Affairs
 - Ministry of Agriculture
- ❖ Determination of priority habitats and biological resources for utilisation.
 - Ministry of agriculture
 - Agency for Rural Transformation
 - Community Groups
- ❖ Develop sustainable use plans and programmes for inland and coastal fishery, mangroves, forest resources, and wildlife species through community consultations and technical expertise. These should be linked to or be part of the National Physical Development Plan.
 - Ministry of Agriculture
 - Ministry of Finance
- ❖ Provide relevant support for key groups.
 - The Government as a whole
- ❖ Implement sustainable use plans and programmes.
 - All partners
- ❖ Policy, legislation and incentives will be developed to support germplasm and biological pest control research and development.
 - Ministry of Agriculture
 - Ministry of Legal Affairs
- ❖ The capacity of key institutions will be enhanced to collect, identify, characterise, store and document plant genetic resources.
 - Ministry of Finance
 - Ministry of Agriculture
- ❖ A national germplasm programme will be developed, to include awareness, certification and standards for seed exchange.
 - Ministry of Agriculture
 - GRENCASE

- ❖ Biological pest control will be actively promoted through an education and awareness programme for farmers.
 - Ministry of Agriculture
 - Ministry of Education
 - Community groups

- ❖ Linkages will be strengthened with the FAO and its Global System on Plant Genetic Resources, the Caribbean Seed and Germplasm Resources Information Network (CSEGRIN), and other relevant agencies and networks.
 - Ministry of Agriculture

- ❖ Identify different ecosystems of national importance through consultations with the major stakeholders.
 - All partners

- ❖ Identify and procure technical assistance for conducting the valuation of these ecosystems.
 - Ministry of Finance
 - Ministry of Agriculture

- ❖ Train personnel from relevant ministries in valuation methodologies.
 - Ministry of Finance
 - Ministry of Agriculture

- ❖ Package and present the results of the valuation to selected senior government decision makers.
 - Ministry of Finance
 - Ministry of Agriculture

- ❖ Determine and encourage the most appropriate mechanism for incorporation of the valuation results into the national accounts.
 - Ministry of Finance
 - Ministry of Agriculture

- ❖ Review the incentives require to promote biodiversity preservation and conservation.
 - Ministry of Finance

- ❖ Develop pollution charges and environmental levies for polluters.
 - Ministry of Finance
- ❖ Impose user fees for resource utilization (eg. recreation areas, national parks)
 - Ministry of Finance
 - Ministry of Tourism
- ❖ Enforce environmental laws and penalties for violation.
 - Ministry of Agriculture
 - Ministry of Legal Affairs
- ❖ Establish a system to monitor the use of biological resources.
 - Ministry of Agriculture

6.0 SCHEDULE

The above series of activities were developed in seven priority project concepts and recommended for implementation with a five-year time frame.

Timetable

| Activity | 2001 | 2002 | 2003 | 2004 | 2005 |
|--|-------------|-------------|-------------|-------------|-------------|
| Building awareness on Biological Diversity in Grenada | xxx | xxx | xxx | xxx | xxx |
| Drafting a National Land Use Policy for Grenada | xxx | xxx | | | |
| Strengthening Management of Key Ecosystems | xxx | xxx | | | |
| Promoting Sustainable Use of Biological Resources | | xxx | xxx | | |
| Capacity Building for Germplasm Conservation | | xxx | xxx | xxx | xxx |
| Strengthening Biological Pest Control | | | xxx | xxx | xxx |
| Incorporating Ecosystem Valuation into National Accounting | | | xxx | xxx | xxx |

7.0 BUDGET

The proposed budget relates to seven (7) priority projects to be implemented within the next five years.

Implementation will be through a broad based consultative and participatory approach.

The profile of the seven (7) projects and the budget are given below:

Project 1:

Title: Building awareness on Biological Diversity in Grenada

Objective: Provide broad-based support for conservation and sustainable use of biodiversity.

Lead Agency: Ministry of Agriculture, Forestry and Fisheries

Time frame: 5 years

Co-operation: Caribbean Conservation Association
United Nations Environmental Programme
United Nations Development Programme

Project 2:

Title: Drafting a National Land Use Policy for Grenada

Objective: Provide broad-based support for conservation and sustainable use of biodiversity.

Lead Agency: Ministry of Finance, Physical Planning Unit

Time frame: 2 years

Co-operation: United Nations Environmental Programme

Project 3:

Title: Strengthening Management of Key Ecosystems

Objective: Protect key ecosystems from negative human induced impacts.

Lead Agency: Ministry of Finance, Physical Planning Unit

Time frame: 2 years

Co-operation: United Nations Environmental Programme
United Nations Development Programme
Caribbean Development Bank

Project 4:

Title: Promoting Sustainable Use of Biological Resources

Objective: Develop and encourage sustainable utilisation of biological resources that are essential to the livelihood of local communities.

Lead Agency: Ministry of Agriculture, Forestry and Fisheries

Time frame: 2 years

Co-operation: United Nations Environmental Programme
Caribbean Development Bank
CTO

Project 5:

Title: Capacity Building for Germplasm Conservation

Objective: Maintain, recover and promote genetic resources necessary for sustainable agriculture.

Lead Agency: Ministry of Agriculture, Forestry and Fisheries

Time frame: 4 years

Co-operation: United Nations Environmental Programme
United Nations Development Programme
Caribbean Agricultural Research and Development Institute

Project 6:

Title: Strengthening Biological Pest Control

Objective: Maintain, recover and promote genetic resources necessary for sustainable agriculture.

Lead Agency: Ministry of Agriculture, Pest Management Unit

Time frame: 3 years

Co-operation: United Nations Environmental Programme
Food and Agricultural Organisation
Caribbean Development Bank
Caribbean Agricultural Research and Development Institute

Project 7:

Title: Incorporating Ecosystem Valuation into National Accounting

Objective: Provide information on key ecosystems for incorporation into national accounts and decisions on national development projects.

Lead Agency: Ministry of Finance

Time frame: 3 years

Co-operation: United Nations Environmental Programme
United Nations Development Programme
Caribbean Development Bank

B u d g e t

| | Project 1 | Project 2 | Project 3 | Project 4 | Project 5 | Project 6 | Project 7 |
|------------------------|---------------|---------------|----------------|----------------|----------------|---------------|----------------|
| Operating Expenses | 20,000 | - | 30,000 | 15,000 | 80,000 | 10,000 | 10,000 |
| Capital Purchases | 10,000 | - | 100,000 | 10,000 | 100,000 | 20,000 | 10,000 |
| Transport | 10,000 | 5,000 | 25,000 | 10,000 | 20,000 | 5,000 | 5,000 |
| Field Costs | 15,000 | 5,000 | 25,000 | 15,000 | 10,000 | 5,000 | 15,000 |
| Consultancies: | 15,000 | 20,000 | 40,000 | 50,000 | 50,000 | 30,000 | 40,000 |
| Advertising Firm | X | | X | | | | |
| Marketing Specialists | X | X | X | | | | |
| Management Consultants | X | X | X | X | X | | |
| Economists | | X | X | X | | | X |
| Agriculturists | | X | X | X | X | X | |
| Biotechnologists | | | | X | X | | |
| Workshop/Training | 10,000 | 10,000 | 30,000 | 20,000 | 40,000 | 10,000 | 20,000 |
| TOTAL | 80,000 | 40,000 | 250,000 | 120,000 | 300,000 | 80,000 | 100,000 |

8.0 MONITORING AND EVALUATION

State agencies have the responsibility for tracking the results of the GBSAP. This will assist in providing information needed to comply with reporting requirements and to justify the timing and usefulness of expenditures on biodiversity activities. The lead agencies such as the Forestry and Fishery Divisions, National Parks Department, and Economic Planning Department will be responsible for implementation of the majority of specific activities in the action plan and will be responsible for monitoring changes in the environment and progress in achieving the objectives of the plan. Key indicators are proposed below for two broad groups, namely; environmental related and objectives related factors.

8.1 Environmental Related Indicators

Land Use Categories

| | |
|--|----|
| Residential: | ha |
| Industrial: | ha |
| Commercial: | ha |
| Tourism | ha |
| Forest: | ha |
| Wetlands: | ha |
| Coral reefs/seagrass beds: | ha |
| Agriculture: | ha |
| Recreation: | ha |
| Rehabilitated area: | ha |
| Transport (road, shipping and airports): | ha |
| Other: | ha |

National Expenditure

| | |
|--|------|
| Annual expenditure for management of wetlands: | EC\$ |
| Annual expenditures for management of coral reefs/seagrass beds: | EC\$ |
| Annual expenditure for management of forests: | EC\$ |
| Annual expenditure on biological pest control: | EC\$ |

Agrochemical

| | |
|---|-----------|
| Annual total of agricultural pesticides sold: | tonnes/yr |
| Annual total of fertilizers sold: | tonnes/yr |

Habitat

| | |
|---|----|
| Total natural area: | ha |
| Total natural area converted by development annually: | ha |
| Total number of native floral species: | |
| Total number of native faunal species: | |
| Number of endemic floral species: | |
| Number of endemic floral species: | |
| Number of threatened or endangered species: | |
| Total terrestrial protected areas: | ha |
| Total marine protected areas: | ha |

8.2 Objectives Related Indicators

Provide broad-based support for conservation and sustainable use of biodiversity.

- ❖ Number of biodiversity media activities held per year.
- ❖ Mechanism for incorporating biodiversity issues in schools developed.
- ❖ Number of consultations on biodiversity held per year.
- ❖ Preparation of land use policy and plan.

Protect key ecosystems from negative human induced impacts.

- ❖ Number of ecological surveys of major ecosystems initiated or completed.
- ❖ Assessment of impacts of major ecosystems initiated or completed.
- ❖ Management plans for major ecosystems initiated or completed.
- ❖ Upgrading of botanical gardens initiated.
- ❖ National Herbarium established.
- ❖ Key legislation revised and regulation developed to give better support to biodiversity protection.

Develop and encourage sustainable utilisation of biological resources that are essential to the livelihood of local communities.

- ❖ Priority habitats and biological resources for utilisation identified.
- ❖ Sustainable use plans or programmes developed for coastal and inland biological resources.
- ❖ Number of training activities on issues relevant to management of biological diversity.

Maintain, recover and promote genetic resources necessary for sustainable agriculture.

- ❖ Policy, legislation and incentives developed to support germplasm management.
- ❖ National Germplasm Programme developed.
- ❖ Increase in budget allocation for germplasm management.
- ❖ Number of training activities held related to germplasm management.
- ❖ Frequency of information exchange with other germplasm management agencies or networks.
- ❖ Number of awareness/education activities per year on biological pest control.
- ❖ Increase in budget allocation for biological pest control.

Provide information on key ecosystems for incorporation into national accounts and decisions on national development projects.

- ❖ Valuation of key ecosystems initiated.
- ❖ Number of local personnel trained in valuation methodologies.
- ❖ Valuation information on local ecosystems presented to senior decision makers.
- ❖ Mechanism for incorporation of the valuation results into the national accounts developed and implemented.

8.3 Evaluation

Evaluation of implementation of the action plan will be a continuous and formal process. The Sustainable Development Council, the designated Biodiversity Steering Committee may convene quarterly meetings to review progress and develop strategies to overcome any obstacles that may impede successful implementation.

The evaluation process will also seek to determine if increased capacity to manage biodiversity is being created or utilised, or whether an increase in importance of biodiversity is reflected in the actions and decisions of the key stakeholders. Further, the impacts of implementing the activities of the action plan will be determined with respect to conservation, sustainable use, and sharing of benefits.

Towards the end of the five-year implementation period, a review of the Strategy and Action Plan would be undertaken and a new plan for further activities would be proposed. This review process will be participatory, involving all key stakeholders.

9.0 SHARING OF NATIONAL EXPERIENCE

Implementation of Article 6 in Grenada provides some important lessons. Indeed it was a rich experience of interaction among the people of the country. Specific outcomes of the process include the following:

- ❖ The need to have a sustained effort and an ongoing public awareness and public information programme.
- ❖ The critical role of the media in the exercise.
- ❖ The extent of information exchange and sharing.
- ❖ The need for enhance co-operation among stakeholders.
- ❖ The provision of a forum for learning and documentation of common concerns, interests and activities.
- ❖ The need to have an inclusive format
- ❖ The identification of sensitivities on the local level.
- ❖ The examination of the poverty dimension.
- ❖ The review of the attendant controversial issues and the use and abuse nexus.
- ❖ The need to have identified responsibilities and the championing of the issues.
- ❖ The need to have firm leadership of the process.
- ❖ The realisation of the knowledge sense of the common folk.
- ❖ The realisation of the level of awareness of the common folk.
- ❖ The realisation that local knowledge and cultural practices are critical to sustainability.
- ❖ The realisation that several mitigation strategies are steep in historical cultural practices.
- ❖ The need to have a well co-ordinated approach and to involve persons of knowledge and respect.
- ❖ The need to have consultations on various levels in the academic and social strata – broad based.
- ❖ The need to locate the consultations in the local community settings.
- ❖ The need to have clear objectives.
- ❖ The need to articulate the next steps and to assure participants of the seriousness of the effort.

10.0 CONCLUSION

The process of elaborating a National Biodiversity Strategy and Action Plan in Grenada elicited some positive responses from the population at large. Many persons including the older folks reminisce of “the good days when things were different and better: and the yearning for a return to those pristine times. There is a general conclusion that the loss of biodiversity must be reversed and future generations’ ability to enjoy our biodiversity must not be compromised by present levels of use and abuse.