



CHAPTER 5 ONGOING BIODIVERSITY RELATED INITIATIVES AND THE MAJOR ACTORS IN BIODIVERSITY

Over the years, before there was international consensus on biodiversity, the Federation passed legislation that addressed the protection of various species within the environment, therefore demonstrating that St. Kitts and Nevis, is no stranger to the awareness of the value of the protection of the constituents of biodiversity.

Acts are passed in the General Assembly for both islands while the Nevis Island Assembly passes laws that are specific to the island of Nevis. The following are Statutes passed to date that impact on local biodiversity:-

Forestry Ordinance 1904

The Forest Ordinance of 1904 declared all lands above the 1000 feet contour line to be forest reserves

Animals(Diseases & Importation) 1955

The Act gave the then Administrator in Council the authority to make regulations prohibiting, restricting, controlling or regulating the importation of animals that were likely to spread disease. The main purpose of the Act was to prevent the introduction, or spread, of any animal disease in the country.

The Agricultural Development Act 1973

The Agricultural Development Act made provision for the more efficient use and economic development of agricultural lands, to promote the development of income and employment opportunities and improve the standards of living for farmers and workers in agriculture. The Act also provided for the establishment and incorporation of an Agricultural Land Development Authority for such purposes and for matters incidental to, or connected with, the foregoing purposes.



Fruit Tree (Destruction Prohibition) Act 1954 was substituted by Act#7 of 1976

The Director of Agriculture, or any person who is authorized by him in writing, has the authority to enter on and inspect any land that is being used for the purpose of growing fruit trees. The Act also declares that no person, except by license given by the Director of Agriculture, should destroy or cause to be destroyed, any fruit trees.

Nevis Land Development Ordinance, 1984

This Ordinance established a Nevis Land Development Corporation to provide for the systematic development and alienation of land by the Corporation in respect of agriculture, industry and tourism. It also provided for the establishment of a fund for development in the island of Nevis.

The Southeast Peninsula Land Development and Conservation Act 1986

The Southeast Peninsula Land Development and Conservation Act provides for the development, conservation and management of the South-East Peninsular. It established a Land Development and Conservation Board with specific powers and functions. The Act provides for the protection of wild animals and wild birds.

The National Conservation and Environment Protection Act 1987

This Act provides for the better management and development of the natural and historic resources for the purpose of conservation. The Act also provides for the establishment of national parks, historic and archaeological sites and other protected areas of natural or cultural importance, including Brimstone Hill Fortress National Park (St. Kitts) and Bath Hotel in Nevis.

Amblyomma Vareigatum, Heartwater and Dermatophilosis (Prevention & Control) Regulations 1996

These Regulations were made by the Minister with responsibility for Agriculture under Section 12 of the Animals (diseases and Importation) Ordinance. These Regulations gives the Minister the authority to declare any area infested or any place



The Pesticides and Toxic Chemicals Control Act 1999

This Act provides for the regulation and control of the importation, storage, manufacture, sale, transportation, disposal and use of pesticides and toxic chemicals; and provides for the establishment of a Pesticides and Toxic Chemicals Control Board.

Other Acts:

- Fumigation of Plants Ordinance, 1907
- Wild Bird Protection Ordinance, 1913
- Plant Protection Ordinance, 1913
- Forestry (St. Christopher) Regulations, 1923
- Forestry (Fuel Supply) (St. Christopher) Regulations, 1929
- Protection of Animals Act, 1935
- Forestry Regulations (Nevis), 1944
- Public Parks Regulation Ordinance, 1944
- Turtle Ordinance, 1947
- Watercourses and Waterworks Ordinance, 1949
- Watercourses and Waterworks Act, 1961
- Public Health Act, 1969
- Frigate Bay Development Corporation Act, 1972
- Pesticides Act, 1973
- Watercourses and Waterworks Regulations, 1973
- Biological Weapons Act, 1976
- Litter Act, 1983
- Fisheries Act, 1984
- Carriage By Air Act, 1987
- Nevis Housing and Land Development Act, 1988
- Development Control and Planning Act, 2000
- Solid Waste Management Act, 2000

Natural Hazard Management and Mitigation Policy

In 2001, a Natural Hazard and Mitigation Policy and Plan for the Federation of St. Kitts and Nevis was produced. It was aimed at providing proactive approaches for reducing the vulnerability of the territory to natural hazards through enhancing the capacity for mitigation and influencing the practice of mitigation activities. This policy seeks to:

- Foster an environment supportive of building and land use practices for sustainable development;



- Foster effective coordination among agencies and institutions involved in guiding and directing development; and
- Increase community consciousness and commitment to carrying out disaster mitigation practices.

National Physical Development Plan (NPDP) 2003

The NPDP was prepared for the orderly and progressive development of land and for the preservation and improvement of related amenities. Critical planning goals are as follows:

- To provide a guide for the physical development and the rational allocation of the limited land resource of the country;
- To devise appropriate measures which increase accessibility to essential services, adequate shelter for all, and to ensure sustainable livelihoods;
- To provide guidance for future development control;
- To design policies that relate to land development and management for the long-term objective of improving livelihoods for all;
- To provide a basis for coordinating physical development including plans, programmes, and investment activities of individual, public, and private sector agencies involved in development; and
- To link socio-economic planning with physical planning.

The plan will be used to direct growth by serving as a reference guide when considering future land uses, rezoning, annexation, natural and heritage conservation, subdivisions, and site plans. It will also be used to direct provision of public infrastructure and aid decisions for private sector development.



OTHER AREAS:-

Establishment of the Mount Palmatum (1956)

A non-profit entity which houses 436 varieties of palm trees.

Establishment of the Nevis Historical and Conservation Society (NHCS) 1980

The NHCS was established in 1980 to conserve the natural, cultural and historic fabric of the Island of Nevis and her surrounding sea for the island's people. The Society is a nonprofit organization.

St. Christopher Heritage Society (SCHS) 1989

A non-governmental organisation established in 1989 for the main purpose of promoting the natural, historical and cultural heritage of the island of St. Christopher (St. Kitts).

The Botanical Gardens of Nevis 1998

A private initiative, forming a part of the tourist product on the island which houses a variety of cacti, bamboo, water-lily pools, vines, roses, orchids and tropical fruit gardens, to name a few.

Great Houses

In addition there are a number of historic Great houses on the islands of St. Kitts and Nevis that are nested amongst impressive array of flora. These are: the Great House, Rawlins Plantation, Ottleys Plantation, Golden Lemmon, Golden Rock, Hermitage Plantation, Old Manor, Montpelier and Nisbett Plantation.

Ex-Situ Collections

Three germplasm collections of agricultural plants and one containing medicinal plants are maintained in St. Kitts by:-



- CARDI;
- The Republic of China Agricultural Technical Mission and an;
- NGO project.

A germplasm collection of agricultural plants is maintained on Nevis by the Department of Agriculture. Various breeds of livestock animals are maintained at two stations in St. Kitts and two stations in Nevis. The ex-situ collections are maintained as field gene-banks, or livestock stations.

LOCAL POLICIES AND STRATEGIES ON NEVIS

INTEGRATED PLANNING, LAND USE AND DEVELOPMENT CONTROL POLICY (2001-2005)

The Integrated Strategic Development Plan for Nevis recognizes several biodiversity related strengths and weaknesses of the island. Strengths include diverse and unique natural environment with high potential for growth of such resource-oriented economic activities as agriculture, selective recreation, and tourism activities. Weaknesses include environmental management, development planning, land administration, vulnerability to climatic and seismic hazards.

Given these strengths and weaknesses as it relates to the environment and development, the relevant programmatic goals identified are:

- **Effective Governance and Integrated Development Planning.**
To secure a process of effective governance, integrated development planning, and meaningful community participation in the overall development process.
- **Environment and Development**
To enhance and maintain the ecological integrity of the islands through the provision of sustainable management and the rational use of natural resources.
- **Disaster Mitigation and Preparedness**
To protect indigenous resources, people, housing, economic activities, and infrastructure systems from natural and technological hazards.



LAND DEVELOPMENT POLICY AND DEVELOPMENT GUIDELINES

The existing Land Development Policy in Nevis is the Nevis Resource Assessment and Zoning Plan of 1990. The Zoning Plan restricts development in certain areas that have special environmental, ecological, historic or scenic qualities. Despite this plan, there has been no official designation of conservation areas.

Development control guidelines for Nevis comprise of setbacks for coastal infrastructure that provide safe distances between the upper limit of wave action and new construction providing for beach preservation, reduction of beach erosion, improved access, vistas, and privacy for beach users and property owners.

REGIONAL INITIATIVES

The GOSKN has involved itself in a number of sub-regional projects such as the Eastern Caribbean Coastal Resources Management Initiative and the OECS Solid and Ship Generated Waste Management Project. In addition, the GOSKN cooperates with various sub-regional organizations which include the Organization of Eastern Caribbean States (OECS), in the field of protection of natural resources. It also, offers support to the OECS Environment Sustainable Development Unit (ESDU).

St. Kitts and Nevis is furthermore a member of the Caribbean Conservation Association (CCA), a regional non-profit organization dedicated to promoting policies and practices which contribute to conservation, protection and wise use of natural resources. Finally the Caribbean Natural Resources Institute (CANARI), also supports SKN in its goals to strengthen local capacity to manage the living resources critical to development in the Caribbean region.

MAJOR ACTORS

In tandem with the above initiatives are the organizations (Table 7) that play a key role in safeguarding biodiversity.



Table 6 Major actors with key roles in the preservation of Biodiversity

Institution	Division	Responsibility
Ministry of Agriculture, Lands, and Housing	Forestry	Protection and Management of Forest and Wildlife and Watershed Management
	Fisheries Division	Management and Development of Fisheries; Protection and Management of Marine Reserves.
	Pesticide Board	Enforcement of Pesticides Act and Regulation
	SSMC	Management of Sugar Cane Lands.
	National Housing Corporation (NHC)	Housing Supply
Ministry of Finance, Development and Planning	Physical Planning Unit	Implementation of Planning Legislation
	Technical Committee	Technical Advisory Board to Cabinet. Evaluates Development Applications.
Ministry of Health and Environment	Public Health Department	Maintenance of Environmental Health, Pollution Control, Waste Management
	Solid Waste Management Corporation	Management of Solid Waste
	Department of Environment	Implementation of National Conservation Environmental Protection Act (NCEPA)
Department of Physical Planning, Natural Resources and Environment		
Ministry of Communication, Works, and Public Utilities	Water Department	Supply of Piped Water, Watershed Management
Ministry of Tourism	Urban Development Corporation	Management of Port Zante
	Frigate Bay Development Corporation	Regulating Development in the Frigate Bay Area



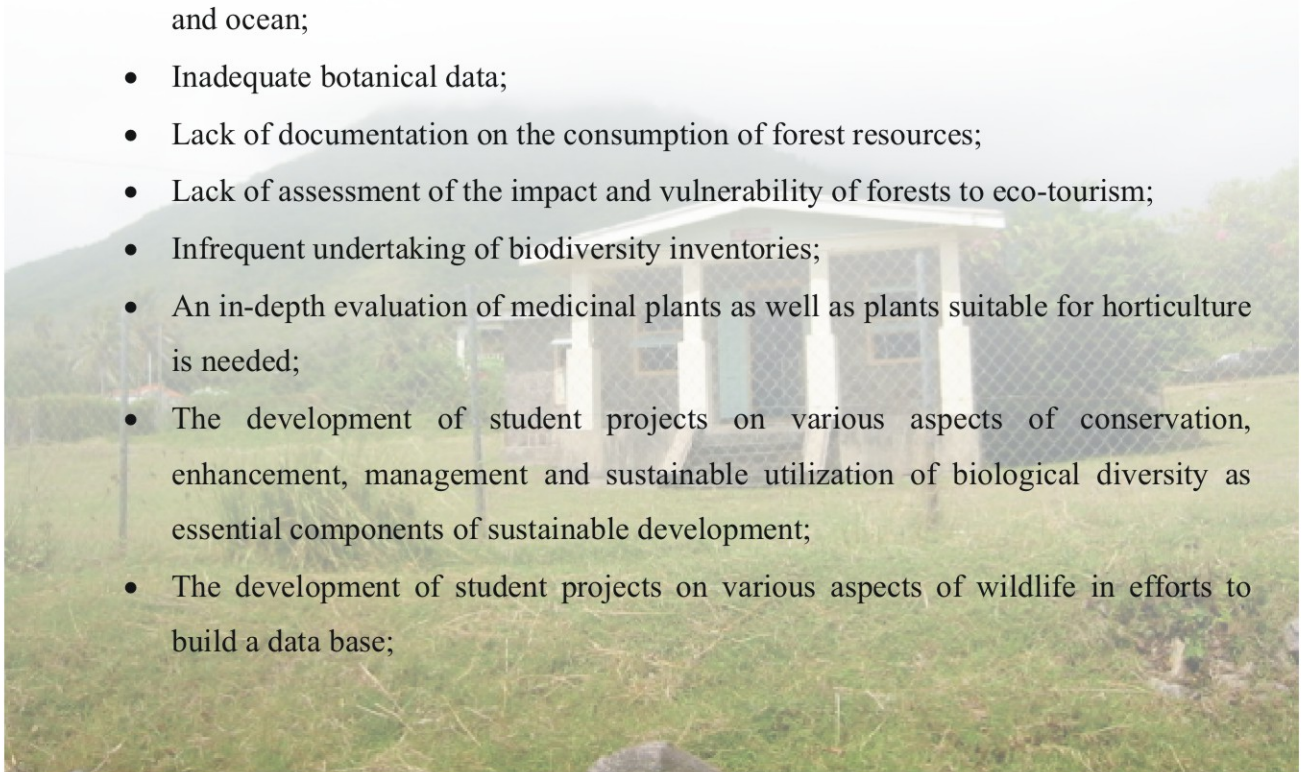
CHAPTER 6 GAP ANALYSIS

A Gap Analysis is a method of identifying inconsistencies within a system. The gap analysis approach provides a logical basis for identifying, evaluating and ultimately protecting biological diversity at the national, regional and international levels. This chapter identifies a number of gaps within the Federation in relation to biodiversity preservation.

GAPS IN INFORMATION

An information-gap divides the scientific knowledge that exists and the local knowledge-systems of most people in the communities. Limited public awareness therefore encourages the debilitating actions of individuals in the country. The following are examples of additional current gaps in information and the areas that need attention in this regard:-

- Data on most diverse groups of organisms and ecosystems eg. Invertebrates, the sea and ocean;
- Inadequate botanical data;
- Lack of documentation on the consumption of forest resources;
- Lack of assessment of the impact and vulnerability of forests to eco-tourism;
- Infrequent undertaking of biodiversity inventories;
- An in-depth evaluation of medicinal plants as well as plants suitable for horticulture is needed;
- The development of student projects on various aspects of conservation, enhancement, management and sustainable utilization of biological diversity as essential components of sustainable development;
- The development of student projects on various aspects of wildlife in efforts to build a data base;





- There is a need for effective information systems to assess and monitor changes in biological diversity so as to subsequently identify rational aims and actions;
- To enhance appreciation at all levels for the role of forests, wildlife and national parks;
- There is a need for proper scientific evaluations/surveys/census of the habitats/species occurring within the marine ecosystems;
- There is no ongoing monitoring of the effects of development on the Marine environment

GAPS IN ACTIONS

Gaps here, speak to actions (nation-wide or individual) aimed at development on the one hand but which result in harmful effects on biodiversity on the other. The gaps therefore arise due to the ‘ill-attempts’ to circumvent the losses.

St.Kitts and Nevis is a rapidly developing country with increasing focus being placed on tourism development, in the face of a declining sugar industry. The development of the country overall has resulted in major construction projects and strengthened the need for improved transportation routes. Generally, the use of land for construction projects reduces the areas available for agricultural biodiversity and indiscriminate land use can result in the loss of genetic biodiversity. The construction of access roads to new areas would have negative impacts as there is considerable clearing of vegetation and destruction of wild life habitat. If not properly planned, the clearing of lands to construct roads could result in severe soil erosions and possible siltation of surface water (Stanley *et al* 2001).

There has been an agricultural diversification thrust that has increased the demands for agricultural land. As a consequence many small farmers have cleared forested land in the upper slopes of the mountain-sides for farming. Such encroachment results in deforestation, soil erosion and the pollution of streams, rivers and coastal water.



GAPS IN POLICY AND LEGAL STRUCTURE

Where there may be strong Federal policies and legislation, local practice and supporting regulations may be weak, absent or even conflicting. There is a:-

- Lack of appropriately implemented policies aimed at conservation, wild and marine life preservation; *see appendix 8* for a list of proposed protected areas.
- Lack of Enforcement Legislation;
- Need for the identification, surveying and legal demarcation of forest reserves;
- Lack of relevance of some international regulations to local situations;
- Failure to incorporate environmental costs into action plans of the national budget;
- Case of minimal authority to enforce decisions held by the DOE, a department which currently has the lead role on environmental matters;
- Need for actual policy on biodiversity management which would focus on protection and utilization of the country's biological resources;
- Case of Unregulated land tenure. A traditional practice that has been passed down from the estate system, is one which a worker was given a piece of land to cultivate. Some people are still in the habit of cultivating land without permission from the relevant authorities.

GAPS IN INSTITUTIONAL AND HUMAN CAPACITY

A number of institutions are responsible for the conservation and sustainable use of biological resources. They however do not fall under the same umbrella, thus resulting in ad hoc coordinated approaches to issues involving the environment. This only seeks to prevent wholistic and/or integrated approaches to management and control. Within the Federation there is a need for:-

- The clarification of roles between the various departments responsible for environmental matters so as to reduce duplication and at the same time optimize the use of limited human and financial resources;