

ST. VINCENT AND THE GRENADINES

Report to the Regional Consultation on SIDS Specific Issues

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Executive Summary

In 1994, the first Global Conference on Sustainable Development of Small Island Developing States (SIDS) was convened in Barbados. The Conference adopted the Barbados Plan of Action (BPOA) that set forth specific actions and measures to be taken at the national, regional and international levels in support of the sustainable development of SIDS.

Resolution A/57/262 of the World Summit on Sustainable Development held in Johannesburg in 2002 called for a comprehensive review of the BPOA at an international meeting to be held in Mauritius in 2004. This national report is provided by St. Vincent and the Grenadines (SVG) in response to this call. The report evaluates:

1. Socio-economic context of SVG; key characteristics, challenges and response
2. National framework for Sustainable Development
3. Progress made and challenges encountered in implementing the BPOA
4. Policy responses to climate change and sea-level rise
5. Policy responses to natural and environmental disasters
6. Policy responses to coastal and marine resources, including biodiversity
7. Issues of energy
8. Management of waste and provision of water and sanitation services
9. Tourism
10. Financing and investment for Sustainable Development
11. Trade, investment, capacity building and cooperation
12. Millennium development goals
13. New and emerging concerns

While there are clear evidences that work was done as required by the BPOA, there is also clear evidence that the BPOA was not the driving force for these initiatives. The corollary of this is that SVG has not addressed Sustainable Development in a holistic manner; rather it is a piece-wise project driven affair.

There appears to be an absence of clear policy directives for some sectors and hence some difficulty in identifying emerging concerns. Clearly, there is a need for a sustainable development initiative in SVG that will take on board all development concerns. Such an initiative would of necessity address partnerships, an issue not clearly visible in this report.

List of Acronyms

ARCB	Amateur Radio and Citizen's Band Operators
BNTF	Basic Needs Trust Fund
BPOA	Barbados Plan of Action
CARICOM	Caribbean Community
CAP	Children Against Poverty
CAPAM	Commonwealth Association for Public Administration and Management
CBD	Convention on Biological Diversity
CBO	Community-based Organization
CBT	Community-based Tourism
CEE	Common Entrance Examinations
CEHI	Caribbean Environmental Health Institute
CDERA	Caribbean Disaster Response Agency
CMD	Centre for Management Development
CPAGCC	Caribbean Planning for Adaptation to Global Climate Change
CPEC	Caribbean Regional Human Resource Development Programme for Economic Competitiveness
CREDP	Caribbean Renewable Energy Development Project
CRFM	Caribbean Regional Fisheries Mechanism
CWSA	Central Water and Sewage Authority
ECE	Early Childhood Learning
EDSP	Education Sector Development Plan
ERDM	Emergency Recovery and Disaster Management
ESDU	Environment and Sustainable Development Unit
IICA	Inter-American Institute for Cooperation and Agriculture
IOB	Institute of Business
MEYS	Ministry of Education, Youth and Sports
NCCP	National Commission on Crime Prevention
NGO	Non-governmental Organization
NDP	National Disaster Plan
NEMO	National Emergency Management Organization
NRMU	National Resource Management Unit

OECS	Organization of Eastern Caribbean States
OLADE	Organización Latinoamericana Energía
PAHO	Pan-American Health Organization
SD	Sustainable Development
SGD	St. Georges Declaration of Principles for Environmental Sustainability
SIDS	Small Island Developing States
SLE	School Leaving Examinations
SSGWMP	Solid and Ship Generated Waste Management Project
SVG	St. Vincent and the Grenadines
SWMU	Solid Waste Management Unit
UNDP	United Nations Development Programme
UNEP	United Nations Environmental Programme
UNFCCC	United Nations Framework on Global Climate Change
US	United States
USAID	United States Agency for International Development
UWI	Universities of the West Indies
VCU	Vector Control Unit
VINLEC	St. Vincent Electricity Services
VINSAVE	St. Vincent's Save the Children Fund
VLCC	Very Large Crude Carriers
WECAFC	Western Central Atlantic Fisheries Committee

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St. Vincent and the Grenadines

1. SOCIO-ECONOMIC CONTEXT

1.1 Key Characteristics

Location

St Vincent and the Grenadines (SVG) is an archipelago of 34 islands and islets located in the Eastern Caribbean at 13° 15 N, 61° 12 W. St. Vincent, the mainland, is 133 sq. miles, while the Grenadine islands which run for forty miles to its southwest are in total 17 sq. miles. The Grenadines consist of a number of privately and state-owned islands with Bequia, Mustique, Canouan, Mayreau, Union and Palm Islands and Petit St. Vincent being inhabited. Four other islands make up the Tobago Cays Marine Park (see Appendix 1).

SVG is flanked by Barbados to its east at 100 miles, St. Lucia to its north at 24 miles and Grenada to its south at 75 miles.

Climate and geography

St. Vincent is very mountainous in nature with one of the world's largest active volcanoes, its highest point, rising to over 4000 ft. The Grenadines, on the other hand, consist of low-lying dry islands surrounded by extensive coral reefs. Approximate annual rainfall on the mainland island ranges from 1700 mm on the dry coast to 7000 mm in the wet central mountains. In contrast, the Grenadines may experience as little as 460mm per annum (Simmons and Associates, *Inc.*, 2000).

Population

The population of SVG was estimated at around 111, 000 in 2001, with most of the inhabitants found on the mainland. Approximately 90% of the population is of African descent, while the other 10% is made up of East Indian, European and indigenous descent.

The majority of the population (approx. 67%) is under the age of 30 years. The average life expectancy for males and females is 69 and 72 years respectively. The sex ratio is 1 and dependency ratio is approximately 77%; while crude birth and death rates are 7.3/1000 and 0.7/1000 respectively. Infant mortality rates in SVG have significantly reduced over the past 20 years from 60 per 1000 live births in the 1980s to 19.2 per 1000 live births in 2001. The population growth rate is estimated at 0.8% per annum with a fertility rate of 2.8. SVG is reported to have the highest population density in the OECS at 293 per km.¹

Economy

SVG is highly dependent on agriculture (mainly bananas) as a main source of income. However, growth in tourism has made that industry the current highest income generator in the country. In 2002, revenue from visitor expenditure amounted to approximately E.C. \$219.46 million², while that from banana export amount to EC \$38, 918,908.57.

Agro-processing and manufacturing have also contributed significantly to the growth of the economy. Manufacturing, which consists of packaging, and metal and plastic products, accounts for about 10% of the Gross Domestic Product (GDP). St. Vincent and the Grenadine's GDP is growing annually at a rate of approximately 10%

Education

SVGs education system is modelled off that of the British. Government schools are free at the primary and secondary levels and schooling is compulsory up to the age of 15 years. There are sixty-five (65) primary and twenty-one (21) secondary schools. Tertiary technical/vocational education is obtained via the St. Vincent Technical College and Technical Education Centre. Five multi-purpose centres cater for persons unable to enter secondary school. While the Government, in the past, would have focussed primarily on primary school education, there is now an extended effort towards making secondary education compulsory.

Government

After gaining political independence from Great Britain on 27th October, 1979, SVG is currently a parliamentary democracy within the Commonwealth of Nations. The Governor General is nominated by the Prime Minister and represents Queen Elizabeth who is the Head of State. *The unicameral parliament, the House of Assembly, has fifteen (15) elected representatives and six*

(6) senators who are appointed by the Governor General on advice from the Prime Minister. The parliamentary term of office is five years, although the Prime Minister may call elections at any time³.

Health

There are six public and three privately-owned hospitals in SVG. Some thirty-eight outpatient clinics throughout the country provide community care; each clinic serving about 3, 000 persons. Health centres are staffed to provide a variety of services including midwifery, family planning, immunization and emergency care. There is a mental health centre and homes for the elderly.

1.2 Key Socio- Economic Challenges

According to the Governments Medium Term Strategy Paper 2002 – 2004, although the economy of SVG experienced modest but positive real growth over the period 2000 - 2001, there was a downturn in the economy over the last year due mainly to a decline in the agriculture and tourism sectors and a slow down in the combined services sectors (Communications, Transport, Wholesale and Retail Trade, Banks and Insurance, Real Estate and Housing). Agriculture (the traditional mainstay of the economy) and tourism also experienced declines between 2000 and 2001, by 7.2% and 3% respectively. Overall, there is *a slowing of productivity and economic growth⁴* with some resultant negative effects.

The issues of poverty, education and unemployment are identified as the main socio-economic factors affecting SVG. There are, however, other social issues which have stemmed from these major factors, some of them so great that they appear to be causes rather than by-products of a troubled socio-economic environment. These too are examined below.

Socio-economic Challenge 1: Poverty

SVG has been identified by Thomas (2001) as having the highest levels of poverty in the OECS at 37.5%. The country also has a high level of income inequality, with the *Gini coefficient*⁵ the worst in the region at 0.56. Kairi (1996) reported that 30.6% of households and 37.5% of the population were poor, and 20.4% of households and 25.7% of the population were indigent⁶. Other studies focussing on the social sector and, by extension, poverty have since been carried out and suggest a worsening of the poverty levels⁷. Free market access and SVGs ability to compete adequately on the global market, loss of preferential treatment in the banana industry and the inability of some segments of the population to adjust to these changes are placing more and more person at risk of being driven into the poverty bracket.

Key response: The Poverty Reduction Strategy Paper

The Government, in recognition that efforts to reduce poverty *”in a developing country context yield disappointing results unless they are located within a coherent social policy framework and are driven by national commitment to promote sustainable human development⁸”*, has placed greater emphasis on poverty reduction and has drawn up an InterimPoverty Reduction Strategy Paper (I-PRSP). This paper is intended to develop policies programmes aimed at addressing key elements of poverty reduction in the short, medium and long term. Its components include developing policies to stimulate growth, trade and investment, increasing/generating employment opportunities and greater investments in human capital, thus increasing the livelihood of all Vincentians.

Socio-economic Challenge 2: Education

According to the Interim Poverty Reduction Strategy Paper (2002), *“SVG has a resource base that is generally low-skilled. The majority of the young population have only been educated to primary school level and the present adult population which comprises the existing workforce also suffers from this defect. There are also serious deficiencies in literacy and numeracy skills which impact on the ability of many persons to take advantage of economic opportunities”*.

Education has been identified by the Government of SVG as a main indicator of poverty. People are perhaps the greatest natural resources on which development can occur in St Vincent and the Grenadines. With the demands for increased productivity and a need for diversification of the economy, an educated populace is therefore a necessity. Until recently, drives towards compulsory primary education was very limited. Person did not feel compelled or was unable to complete primary education due to poverty and/or the lack of significance paid to education. Thus, for example many young persons were kept away from school to assist parents and other family members with maintenance of banana farms. The current Government of SVG has identified education as central to socio-economic development and the reduction of poverty.

Key response: The Education Sector Development Plan

The Government of St Vincent and the Grenadines regards education, first and foremost, as a social institution indispensable for quality production, order, progress, poverty reduction, and the development of individuals and society. It has thus, through the Ministry of Education, Youth and Sports, developed the Education Sector Development Plan (ESDP). This plan is the outcome of extensive discussions and consultations with a wide range of stakeholders in the sector throughout SVG and is geared towards providing overall direction for the development of education in SVG over the next five years⁹.

Socio-economic Challenge 3: Unemployment

Agriculture, particularly for bananas, is one of the main employers in SVG. The 2000 Agriculture census showed that this industry employed over 40% of the workforce. However the impact of the banana fall out has had a great effect on rural communities, leading to loss of employment. Campbell *et al.* (2001)¹⁰ have concluded that rural communities have deteriorated drastically over the past few years as a result of this fallout and thus the incidence of poverty has increased significantly. They have also identified that the number of active banana growers is estimated to have fallen from approximately 8000 in 1992 to 3,800 in 2001, a decline of over 50%. In conclusion, Campbell *et al.* state that as a result of the Windward Island Banana Development Corporation's (WIBDECOs) restructuring process, over 1,300 farmers and 1,950 farm workers will be displaced and of that number, the majority will be female.

The increased focus on tourism will provide some employment opportunities. However, poor education and lack of skills may result in limited ability of a large segment of the population to adapt. Approximately 20% of the population is unemployed and this number is expected to increase.

Key response: **The Education Sector Development Plan** - Quality education leads to greater employability

The Poverty Reduction Strategy Paper (I-PRSP) - This paper is seen as the Government of St. Vincent and the Grenadines' blue print for poverty reduction strategies. It therefore highlights creation of employment opportunities as a means of alleviating poverty.

SVG Medium Term Economic Strategy Paper 2002 – 2004 - The overall objective of the Government of SVG is to *“attain high levels of sustainable growth and development, while at the same time reducing the levels of poverty and raising consciousness and increasing the levels of employment. To achieve this objective, the Government will in the medium term, implement a more focused economic diversification programme, put measures in place to increase the level of exports and place new emphasis on social development which will enable the population to maximize the opportunities for improved education and health”*.

Note: the above challenges and key responses are expanded upon under Sections 5.1 and 5.2.

1.3 Negative Spin-offs from poverty, education and unemployment

Several social ills are being observed in SVG as a consequence of the above-mentioned challenges. These in turn have associated trials which further affect the socio-economic situation. There is thus a cycling of causes and effects of these challenges.

Illegal drugs

Marijuana cultivation and drug (cocaine) trafficking are increasingly being used as a means of escaping poverty. The rugged terrain and fertile soils of the mainland provides an environment conducive to the cultivation of *Cannabis sp.*, while the numerous coastlines and uninhabited islets create additional opportunities for drug smuggling. The Caribbean is a transit zone for drug and ammunition smuggling between South and Central America and destinations in North America and Europe. Latest US estimates (2002) are that 5% of cocaine (44 metric tonnes) from these source countries passes through the Lesser Antilles. The drug culture and associated violence and criminal activities further cause deterioration of societal norms and structures.

Crime

A crime wave of a new kind is sweeping through the nation. No longer are crimes associated with squabbles between family members and neighbours or petty thefts. Many of the crimes being observed today are felonious crimes such as murders, gun-play and large-scale robberies that seem out of place in such a small society. On the one hand, one may consider these crimes to be a response of a poor frustrated populace, while on the other, such crimes appear often to be influenced by and associated with the growing drug culture, the deportation of convicts from the US and Canada and cultural intrusion through foreign music and television. SVG is relatively ill-prepared to deal with and accept these 'high-class' crimes

Cultural infiltration

As stated above, SVG is now facing intrusion from foreign cultures via their music (particularly rap and dub) and television. Access to cable and the internet is now exposing many Vincentians, particularly the younger, more inquisitive and vulnerable sectors of the populations, to violence

and illicit sex. These cause changes in attitudes and behaviour, much of which is unacceptable in the society. Teenage sex, use of foul language and gang-related activities are almost becoming the norms of the day. This is leading to social disintegration to a proportion that has not been seen in the country's recent history.

Social disintegration

Family life and by extension society continue to be troubled by absentee fathers, domestic violence, teenage motherhood, child abuse and child truancy. These may be directly or indirectly associated with poverty-induced stresses.

Key responses

- As a direct result of criminal activity, the Government of SVG has embarked on an anti-crime campaign to deal with the problem of criminality in the state. In February 2003, the House of Assembly passed a motion on crime prevention and subsequently appointed a National Commission on Crime Prevention (NCCP). The NCCP is comprised of representatives from the Ministry of National Security, Churches, the Bar Association, and other Ministries within the public service.
- The Ministry of National Security and the Police have mobilized several communities into Neighbourhood Watch Schemes and Police Youth Clubs. These efforts have already shown improvement in the community life of those involved in the programmes.
- Proposals are in place for the development of a drug demand reduction and drug detoxification programme to address issues of drug abuse.
- A Youth Socialization Programme will be established that will target young persons through strengthening and coordinating existing programmes in family planning, life skills and other similar programmes.

- Development of a programme to prevent and address domestic violence through education programmes, improvements of foster care and provision of shelters for those affected with domestic violence.

2. NATIONAL FRAMEWORK FOR SUSTAINABLE DEVELOPMENT (SD)

For centuries, the environment has undergone drastic changes due to the destructive, yet renewing forces of major catastrophes as the Ice Age. The earth resilience is continuously being proven. Even within SIDS like SVG, volcanic, hurricane and other natural activities have constantly sculpted the face of the land. The earth has a natural ability for self renewal and to maintain systems of survival.

In SVG, as worldwide, there is increasing pressure on the natural environment's ability for renewal. As a poor, unemployed and growing populace attempts to satisfy its basic need and wants, and as a government looks towards improving the socio-economic atmosphere, the natural resources are being depleted at an accelerated rate. Global phenomena (such as large-scale pollution, global warming and climate change) caused by the activities of large multinational further amplify potential for resource loss. In light of the country's vulnerability, it is imperative that measure be adopted to reduce such impacts and protect the natural resource base.

2.1 Policies and Mechanisms/Frameworks

SVG has no comprehensive policies or mechanisms addressing sustainable development (SD) on a national level and thus SD is given no specific focus. The country is however signatory to several Conventions which promote sustainability and address causal and resultant factors associated with intensified use of resources. These include the Convention on Biological Diversity (CBD), the United Nations Framework on Global Climate Change (UNFCCC) and the United Nations Convention to Combat Desertification (UNCCD).

In 2000, under a project conducted by international consultants Simmons and Associates, a National Biodiversity Strategy and Action Plan was developed for SVG in accordance with *Article 6* of the CBD. This document identified several strategic areas to support biodiversity conservation. These areas included among others (i) the conservation and sustainable use of biodiversity, (ii) review and update of environmental legislation and (iii) institutional

strengthening for SVG¹¹. Other work has also been done to assess and address the state's vulnerability to global climate change and land degradation.

SVGs natural resources are under threat from a range of issues. These include habitat loss and fragmentation through deforestation for agriculture and marijuana cultivation, hunting, use of agrochemicals, invasive species and natural disasters. These therefore are perhaps also the greatest factors affecting sustainability.

Currently, there is no legislation which thoroughly implements or supports the CBD, UNFCCC or UNCCD. Thus, various degrees of resource protection is obtained through a number of existing legislation; including the Town and Country Planning Act, Forest Resource Conservation Act, Wildlife Protection Act, Fisheries Act, Marine Parks Act, St. Vincent National Trust Act and Maritime Areas Act (*see* Simmons and Associates, inc, 2000).

There is also no national policy for institution of a responsible agency for sustainable development in SVG. Supportive legislation and policies are necessary for the implementation of the above Conventions and for successful SD. Since their ratification, however, institutions were never put in place. It means therefore that although there are legislations governing some areas of biodiversity and natural resource conservation (namely the Fisheries Act, Wildlife Protection Act, Forest Resource Conservation Act), absence of defined legislations and responsible agencies, leaves many gaps still to be addressed. Many of these Acts to are outdated and some are without necessary Regulations.

There is one positive however, and that is that consistent with global trends, SD is increasingly arising on agendas and seen as an integral component of national development. It is being included more and more in project documents and sub-sector policies. However, because SD is not yet a national focus, there is lack of cohesion and inconsistencies among these sub-sectors. In many cases too, SD appears only to be included in documents as a means of satisfying donor agency requirements, with the result that in actuality SD is never really implemented.

There are several factors which may determine why SD has not been made a priority in SVG. These include:

- (1) Lack of or limited awareness of SD issues, including what it is, what it is meant to achieve and how SD can be achieved. Due to this lack of interpretation, many persons are currently of the opinion that SD is already being implemented in SVG. SD is interpreted as physical development that is sustainable and thus minimizing negative impacts on biodiversity is often ignored. For example, for some SD is the construction of a hotel that generates enough revenue to maintain it at a particular standard and at the same time provide owners with a profit. Protecting biodiversity is a key component of SD but biodiversity is often the element sacrificed in current SD ventures.
- (2) For many, SD is an unachievable concept or one that requires major financial inputs. Thus it can only be achieved by larger countries with greater resources.
- (3) The belief that SD impedes national development by making inaccessible and unusable, areas of the natural environment on which developing countries are so dependent. In other words, (for example) if one were to focus on sustainable development and/or biodiversity conservation in SVG, one might not be able to utilize or interfere with areas of natural beauty that are prime areas for tourism, housing and other forms of development.

Except for people, the resources of the Caribbean are dwindling. SD is therefore an important consideration for the continued development of SIDS. However, because SVG has not yet taken it on as a national issue, the natural environment continues to suffer at the expense of a developing economy.

3. NATIONAL PROGRESS MADE AND PROBLEMS ENCOUNTERED IN THE IMPLEMENTATION OF THE BPOA: Sectoral and Cross-Sectoral Areas

3.1 SECTORAL AREAS: Progress Made and Problems Encountered

3.1.1 Climate Change and Sea Level Rise

The subject of climate change is a global one because carbon emitted from any source throughout the world can potentially cause the same negative global impacts. For Small Island Developing States like SVG, the issue is however critical because of the disastrous impacts climate change and sea level rise can have on them. Much of SVGs inhabitants live on coastal areas and their livelihood and that of the tourism industry is highly dependent on it.

Though SIDS are among the least contributors of carbon to the atmosphere, they are most likely to suffer the consequences of global warming due to their small land mass and impoverished economies; while the larger, more developed countries and their economies are better able to withstand these shocks.

SVG acceded to the United Nations Framework on Global Climate Change (UNFCCC) on September 5, 1996. Since then, a number of national and regional initiatives have been taken to address the matter. Overall, however global climate change and sea-level rise are not issues of major concern in the everyday life of the average Vincentian. Much more needs to be done to increase the awareness of the local population, and this must be executed in a consistent manner.

Local initiatives

- Several workshops, presentations and training sessions have been conducted with schools and community members since 1996. In 1998, training was also done with consultants gathering information on the greenhouse gases (GHC) inventory.
- In 1999, there were a series of secondary schools' public speaking competitions covering such topics as '*The Consequences of Sea Level Rise on SIDS*'.

- In 2000, there was a secondary schools' summer workshop on climate change in SVG, resulting in the production of a magazine on '*Climate Change and its Effects on SVG*'.
- SVG submitted its First National Communication on Climate Change to the UNFCCC at The Hague in 2000. The communication highlighted the results of the greenhouse gas inventory, the country's vulnerability to climate change (with special attention on coastal vulnerability), agricultural vulnerability and water resources vulnerability. It also contained a climate change response strategy which included adaptation and mitigation measures to address climate change in SVG.
- SVG has also phased out the use of leaded gasoline within the country.
- In 2001, a workshop on '*Risk Assessment*' was held for financial institutions and business houses.
- In 2002, the Ministry of Health and the Environment submitted a draft policy on Climate Change to Cabinet.

Regional initiatives

The Caribbean Planning for Adaptation to Global Climate Change Project

The overall purpose of this project was to provide support to member countries to develop and implement strategies to cope with the harmful effects of global climate change, particularly sea-level rise. Assistance was provided for vulnerability assessments, adaptation planning, and capacity building relative to adaptation planning. Support for the project was obtained from the Global Environmental Facility, via the World Bank, and it is executed by the Organization of American States in conjunction with the University of the West Indies Centre for Environment and Development. Regionally, the project was implemented by the Regional Project Implementation Unit in Barbados, with a Project Advisory Committee chaired by the CARICOM Secretariat.

Key Constraints to Implementation of the UNFCCC Objectives

- Lack of national public education strategies to address issues of climate change and the general environment.

- Limited understanding of the magnitude of possible impacts.
- Absence of suitable predictive models for Small Islands.
- Lack of appropriate technology and financing for Small Islands.

3.1.2 Natural and Environmental Disasters

SVG is in no way unfamiliar with natural disasters. Its history is riddled with periods of drought, floods, storms and coastal surges due to hurricane activities and eruptions of the ever-present volcano.

Additionally, it is estimated that over 25% of the world's crude oil passes through the Caribbean Sea. Much of this oil is transported in very large crude carriers (VLCCs) to the Caribbean states where it is off-loaded for refinement and trans-shipment. The trans-shipment of hazardous and noxious substances, in particular nuclear waste, through the Caribbean Sea (to access the Panama Canal) has been and remain a concern of considerable gravity for SVG.

Disasters such as these have caused and have the potential of causing incomprehensive damage to life and property, and their continued occurrence and threat is a major concern. The two main income-generating activities, tourism and agriculture, are highly dependent on environmental security and resiliency. It is thus imperative that there be a effective and working disaster management infrastructure.

Disaster management has long been the concern and responsibility of the Government of SVG, and an area that was critically understaffed for years. Mobilization of necessary resource in the aftermath of a disaster is still a concern. The present Government is committed to strengthening the national capacity to respond to, as well as mitigate against disasters, with the implementation of the Emergency Recovery and Disaster Management Project.

The Disaster Management Plan

SVG has established a National Disaster Plan to deal with both natural and man-made disasters. The plan, which is currently under review, involves the mobilization of human and material resources of the country in planning, training and managing the various aspects of a disaster or major emergency in order to return the country to a state of normalcy as quickly as possible. It includes:

- The establishment of the National Emergency Organization, determining the structure of various emergency committees, the roles and functions of Government ministries and key departments, public utilities, statutory bodies, non-governmental and other organizations.
- Classification and cataloguing of resources at all levels.
- Defining the roles and functions of all agencies before, during and after a disaster.
- The emergency telecommunications network.
- The assessment of losses.
- The coordination between the various committees with the organization.
- The post-disaster relief, and rehabilitation mechanism.

Successful implementation of the National Disaster Plan (NDP) is dependent upon public awareness of disasters likely to affect the state. Knowledge of the roles which each individual is expected to perform in the event of a disaster.

The Emergency Recovery and Disaster Management Project

In 2001, funds for the Emergency Recovery and Disaster Management Project was obtained from the World Bank through an OECS initiative. The entire programme targets five OECS countries (Dominica, St. Lucia, St. Kitts/Nevis, Grenada and SVG) and consists of individual loans to these states. The programme is initially expected to be implemented over a six-year period and supports the following comprehensive set of activities.

- *Physical prevention and mitigation investments:*

Key social and economic infrastructure will be protected and strengthened before disasters strike so as to reduce likelihood of loss of life and assets – alternatively, they will be rehabilitated or reconstructed in the aftermath of a disaster.

- *Capacity building and strengthening of disaster management capacity:*

The capacity of national emergency management and disaster preparedness agencies will be strengthened to enable them to perform more effectively.

- *Community preparedness:*

Community-level disaster committees will be organized, trained and equipped to enhance their role in disaster preparedness, mitigation and recovery¹².

Generally, the programme aims at “*strengthening the OECS countries’ ability to efficiently and effectively manage emergency situations, in an effort to reduce the likelihood of loss of life and assets*”. It further aims to enhance the capacity of disaster management agencies and mitigating the adverse outcomes of disasters that regularly strike the island.

In SVG, the project which began in 2002 is expected to last for three (3) years after which a fully integrated and functional national system for disaster management is expected to be in place. A Project Coordinating Unit was also established to oversee execution and financial disbursement of the project.

A fuller understanding of the Project can be had by examining the three major components, (and their sub-components) as follows:

Components of the Emergency Recovery and Disaster Management Project

Component 1: Strengthening disaster management capacity

This is the major component of the project which includes (a) institutional strengthening of the office of disaster preparedness, (b) developing emergency communications and improving meteorological systems on a country-wide basis to facilitate early warning, (c) implementing a shelter programme including technical assistance, training and retrofitting of selected public buildings and (d) building capacity within the Ministry of Transport, Works and Housing to manage emergency situations, including the procurement of stocks of prefabricated metallic bridges and gabions.

Component 2: Preventative physical mitigation

This includes river flooding protection, coastal erosion protection, preparation of a comprehensive drainage improvement, flood control and watershed management programme for Kingstown and, a programme of retrofitting works for priority health centres and clinics.

Component 3: Programme management

This is aimed at providing assistance for Government to meet its project management obligations through financing the Project Coordinating Unit staff not seconded by the Government. Finance will also be provided for the conduct of financial and technical audits.

Other projects

There are other national and regional projects being conducted to support SVGs preparedness for risk reduction. These include:

- Community Hazard Mapping and Profiling (ongoing)
- Public Education Programming (ongoing)
- Preparation of a Disaster Management Plan for each Household (ongoing)
- Restoration of the Am Radio Service
- Adoption of the Caribbean Building Codes (Before Parliament)
- Caribbean Disaster Management Project: A regional programme looking at flood hazard mitigation and administered by the Caribbean Disaster Response Agency (CDERA))
- Project for Comprehensive Hazard Mapping of the Region (funded by the OECS)

Vulnerability Assessment in SVG

The Government of SVG, through its National Emergency Management Office has established a National Hazard Mitigation Council to:

1. Support the development of a comprehensive hazard and vulnerability map for SVG, and
2. Ensure the identification of hazards and vulnerability to protect current and future public and private sector needs.

A national vulnerability assessment of all possible hazards has never been completed. However, a vulnerability assessment has been completed with regards to volcanic activity and risk maps exist in this area. The process of vulnerability assessment by communities is being carried out through a pilot projects in the Marriaqua community, under the regional project *The Caribbean Disaster Management Project*, being funded by the Government of Japan and administered by the CDERA.

A national vulnerability assessment is under consideration by National Emergency Management Office (NEMO) and the National Hazard Mitigation Council under the current Emergency Recovery and Disaster Management Project (ERDM).

Sustainable Development Indicators

The NEMO has not yet undertaken any initiatives to address SD indicators.

Early Warning System

The early warning system in SVG are primarily composed of telecommunications and Amateur and Citizen's Band radios.

Telecommunications

The Emergency Telecommunications Centre is currently located in the Control Room of the Police Headquarters. A direct link will be established between the headquarters and the emergency office at NEMO. Points will be established in the Telecommunications Centre for the installation of equipment of Amateur Radio, Citizen's Band and other radio operators likely to be used during a disaster. In the event of a disaster or major emergency, the Chairperson of the Emergency Telecommunications sub-committee¹³ will contact the Amateur Radio Club and other operators with regard to assistance in telecommunications.

Amateur Radio and Citizen's Band Operators (ARCB)

In the event of an emergency and when so requested, the ARCB will make available to the NEMO such equipment and operators as may be necessary for providing communications

between the Emergency Telecommunications Centre and the respective areas to which they may be assigned.

Currently, NEMO also makes significant use of the network of Fm Radio stations in the country; altogether, these do not offer national coverage. National radio coverage was lost when the Am transmitter of the government-owned radio station was destroyed. The process of restoration of Am services to the country is now at an advanced stage. Funding was made possible by the European Union. Additionally, the ERDM project makes provisions for establishing an emergency communication system, which will be used for early warning.

Key Constraints to Disaster Planning and Management, and Risk Assessment

1. Lack of clear policies on disaster management.
2. Separation of Disaster Management from Development Planning.
3. Ineffective public education programmes.
4. Absence of capacity building for comprehensive disaster management.
5. Absence of a reliable database for assessment (Risk maps, hazard maps etc).

3.1.3 Coastal and Marine Resources, including coastal and marine biodiversity resources

The fisheries sector is dominated by small fishing enterprises of relatively low efficiency. It is estimated that approximately 600 vessels, primarily below 32ft in length, operate in the fishery waters of SVG. The main form of propulsion is the two-stroke outboard engine, ranging from 25 to 100 horsepower(HP), with increasingly higher HP ratings being favoured. There is a small but growing number of diesel-powered, decked vessels with insulated fish hold, facilitating longer periods of operation. On average, the annual landings generated EC \$7 million, while exports account for foreign exchange of EC \$2 million, mainly from Spiny lobsters, large tuna and demersal species. National statistics indicate that import of fish and fish products are estimated to be approximately EC \$2.7 million. GDP averages approximately 2% per annum. The Sector employs about 5% of the labour force including some 2500 full and part-time fishermen and 500 vendors, processor and handlers.

SVG signed the UN Convention on the Law of the Sea on 10th December, 1982 and ratified it on the 1st October, 1993. The Convention on Biological Diversity was acceded on 3rd June, 1996. The Cartagena Convention on Bio-safety not signed.

No charts have been deposited for the EEZ of SVG. The maritime boundaries were declared in 1982 under the Maritime Areas Act of 1982. *‘The EEZ extends seaward for 200 nautical miles and encompasses a total area of about 11,000 square miles’* (Matthes, 1984)¹⁴.

National framework for sustainable development of marine resources

There are several pieces of legislation that are used to manage and conserve marine resources in SVG. These are:

- (1) The Maritime Areas Act of 1983 legislated to declare the maritime areas of SVG. This Act establishes SVG as an archipelago. It also establishes the territorial sea, the contiguous Zone and Exclusive Economic Zone, and defines internal water and archipelagic waters.

- (2) The Fisheries Act No. 1 of 1986 gives the mandate to the Fisheries Division for the Management and Development of the fisheries sector within the waters of SVG. The Fisheries Act of 1986 makes provisions for the registration and licensing of fishing vessels, the establishment of a fisheries advisory committee, the management and conservation of fisheries resources, the establishment of marine Protected Areas, distribution of fish and fish products, management of aquaculture and enforcement.
- (3) The Fisheries Regulations No. 8 of 1987 established under Section 45 of the Fisheries Act of 1986, make regulations for the registration and licensing of fishing vessels, the establishment of a fisheries advisory committee, the management and conservation of fisheries resources, the establishment of Marine Protected Areas, distribution of fish and fish products, management of aquaculture and enforcement.
- (4) Fish Processing Regulations of 2001 make provision for the control of fish processing and handling destined for export, and gives the mandate to a named competent authority to ensure that fish and fish products meet appropriate export standards through inspections and other mechanisms.
- (5) The High Seas Fishing Act of 2001 makes provisions for the regulations of Vincentian vessels fishing on the high seas. It specifically provides for the licensing of high seas fishing vessels, international cooperation, conservation and management of marine resources and enforcement.

National Coordination Mechanism/Committees

Inter-ministerial committees on International Commission for the Conservation of Atlantic Tunas (ICCAT) and Convention for the International Trade in Endangered Species of Flora and Fauna (CITES) have been established to review, develop and implement plans and activities/actions for meeting obligations, including legislative obligations, under ICCAT and CITES, respectively.

National, sub-regional and regional projects related to the sustainable use, management and conservation of coastal marine resources

National projects

1. The Fisheries Development Programme includes projects with the following objectives:
 - To develop and enhance on a sustainable basis the potential of our living marine resources to meet human nutritional needs, as well as social, cultural and economic development goals through the management of traditionally utilized, and the introduction of under-utilized, species.
 - To promote the involvement of local communities, fishers and other stakeholders in the management and development process through consultations.
 - To restore and maintain fish population levels that can produce the MSY (Maximum Sustained Yield) as qualified by relevant environmental and economic factors taking into consideration the relationship among species.
 - To preserve fragile ecosystems, including habitats and other ecologically sensitive areas such as coral reef systems, estuaries, mangroves and sea grass beds.
 - To promote scientific research and enhance institutional capacity in order to provide the necessary information for fisheries management and development and biodiversity management.
 - To ensure that the fishing industry is integrated in the policy decision-making process concerning fisheries and coastal zone management.
 - To promote the development and use of selective fishing gear and practices that minimize waste in the catch of target species and by-catch as well as habitat destruction.
 - To promote cooperation with other nations in the assessment and management of shared and migratory species.
 - To collaborate with other agencies such as the Central Planning Division, the Tobago Cays Park Management Team, the Environmental Unit, the Forestry Department, the Department of Tourism and other stakeholders.

Sub-regional projects

1. Sustainable Integrated Development and Biodiversity Conservation in the Grenadines Islands (SVG and Grenada)

The purpose of this project is to develop a participatory co-management framework for integrated SD and to implement those parts of the plan associated with the environment and the use of marine resources.

Regional projects

1. The establishment of the Caribbean Regional Fisheries Mechanism (CRFM) for the strengthening regional management of marine resources. Projects under the CRFM will focus on research and data analysis to support policy formulation and decision making; enablement for global competitiveness; resource assessment and management; development of skills and expertise; institutional strengthening; improving the quality of community participation for effective co-management; promoting the diversification and expansion of aquatic resources.
2. Preparation for expansion of domestic fisheries for large pelagic species by CARICOM countries. This project is designed to build on CARICOM Fisheries Research and Management Programme (CFRAMP) efforts and will give the CRFM a head start in this priority area. Activities will include:
 - The acquisition and synthesis in information on large pelagics.
 - The development of a strategy for the management of large pelagics.
 - The formulation of a regional fishery management arrangement which reflect the above strategy.

Constraints in the areas of coastal and marine resource management

- Inadequate financial and human resources.
- Inadequate enforcement capability. For example, police presence in some geographical areas is weak or non-existent, particularly so in the Tobago Cays area.
- Limited scope for alternative livelihood for dislocated stakeholders to implement management measures, which target the high exploitation pressure on coastal marine resources.
- Inadequate information on the ecosystems being managed.

- Uncontrolled pollution of coastal marine habitats, via for example, poor farming practices leading to sedimentation; dumping of garbage in rivers; and sewage discharge along coast.
- Unplanned coastal development close to beaches.
- Limited capability for controlling poaching including illegal exploitation of marine resources in conservation areas and the Tobago Cays Marine Park.

Additional challenges

- Strong individualism among fisher folk and lack of a common focus.
- A measure of distrust for government-sponsored activities (fear of taxation, etc.).
- Weak management capabilities among fisher folk, individually and collectively.
- Low awareness and sensitivity on the part of the general public and others, to fisheries issues.
- Relatively low *per capita* consumption of fish and fish products as well as inadequate distribution of such products, in relation to other meats, which are usually imported.
- Conflict among resource users e.g. Tourism, Fisheries, Industry and Agriculture.
- Apparent low contribution of the fisheries sector to the national economy – where the economic evaluation is based primarily on the GDP calculations, excluding other socio-economic considerations, namely employment and income-generation, value-added activities.
- Management of fisheries centres in relation to their self-sufficiency – the need to access operational funds through a more flexible and responsive system is a critical factor.

Areas/programmes to address above challenges

- On-going liaison with various regional and international organizations regarding stock management, research, conservation, training and resource development to promote national objectives.
- Strengthening linkages with fisher folk organizations, promoting their development and strengthening linkages with all stakeholders.
- Research, assessment and conservation activities on important aquatic resources, including coral reefs and coastal zones.

- Public awareness and education programmes for schools, fisher folk, agencies, communities and the general public.
- Training for staff and those within the industry.
- Promoting increased utilization of aquatic resources, for example through product development and technology transfer.
- Enhancement of data gathering and analysis capabilities.
- Exploratory fishing for resource mapping as well as gear and fishing methods development.
- Continued strengthening of the Fisheries Division to deal with present, as well as new and emerging issues – high seas fishery management issues (International Commission for the Conservation of Atlantic Tunas - ICCAT, IOT, etc) export certification.

Approaches and tools aimed at reducing destructive fishing practices

There are two approaches used for combating destructive fishing practices in SVG. These are as follows:

1. *Regulation of fisheries utilizing a suite of management tools.*

This approach has proceeded along two major avenues.

- The first is the limitation of the amount or size of fish caught either directly or indirectly, in order to protect the resource or maintain it at some level of abundance best suited to the management objectives.
- The second is to regulate the way in which the resource is taken in order to promote economic efficiency (e.g. preventing over-capitalization) or to direct the development of the fishery to achieve the stated objectives.

Examples of the management tools commonly utilized by the Department include (1) limited entry through licensing, (2) size limits, (3) closed seasons and (4) area and gear limits and restrictions. These tools are stipulated in the Fisheries Act of 1986 and Regulations of 1987 for species such as conch, lobster, turtles and corals. There are also specific provisions relating to marine Protected Areas and destructive fishing practices.

However, there has been varying success at enforcement and limited poaching still occurs.

2. Another approach utilized is the community involvement in the management process. Collaboration with communities significantly reduces the need and cost for enforcement of management measures. It demands continuous consultation with stakeholders, and public education programmes.

The ecosystem approach has not been significantly utilized as a result of the need for vast quantities of data. This approach requires large quantities of data and consequently, significant human and financial resources. Small developing states such as SVG, with limited human and financial resources, experience difficulties in implementing this approach.

Capacity building and coordination

- SVG is a member of the Caribbean Regional Fisheries Mechanism (CRFM) and the Western Central Atlantic Fisheries Committee (WECAFC). SVG participates in all activities coordinated by CRFM, in particular, collaborating on data management, resource assessment and fisheries management. SVG also collaborates with other countries of the Western Central Atlantic region to facilitate proper assessment and management of fisheries resources through WECAFC.
- Formation and strengthening of fishers' organizations are vigorously promoted in the Fisheries Division's work programme to ensure that benefits are delivered to a wide cross-section of fishers. These organizations are designed to facilitate technology transfer, the delivery of training and financial assistances from government and other donor agencies. These can realize benefits to fishers through the establishment of pension funds, medical insurance, death benefits and rebate schemes.
- Public awareness and education programmes for schools, fisher folk, agencies, communities and the general public are being developed and implemented.

Constraints to capacity-building and coordination

- There is still a limited number of trained personnel at the diploma, graduate and post graduate levels in SVG in fisheries-related fields.
- Appropriate training programmes and funding to access training are limited particularly so, for diploma level training in marine biology and ecology.
- Although there has been some technical cooperation in the region, formalized mechanism are required to facilitate easy access to technical expertise.
- There is very poor attendance at training workshops.
- The individualistic nature has made it difficult to establish fisher groups. In addition, misappropriation of funds in the past has led to fishers having little confidence in the management and executives of cooperatives.

3.1.4 Land Resources, including terrestrial biodiversity

Ever since its discovery by Europeans in the 17th Century, the fertile volcanic soils of St. Vincent has been exposed to agriculture, particularly through intensive mono-cropping for external markets. From the first large-scale removal of natural vegetation for sugarcane cultivation in the 1700s to current banana cultivation, St. Vincent's land area has been under constant pressure. Cultivation on steep sloping lands has also been exacerbated by heavy rains in the Rainy season, droughts during the Dry season and periodic volcanic eruptions; leading to landslides, gullying and other forms of erosion.

With very little primary forests remaining on only the very steep, inaccessible slopes, and the negative associated environmental impacts, there has been efforts in the past 50 years to combat these problems. The work of the Forestry Department, through its reforestation and forest management programmes is commendable but the needs of a growing population continue to take their toll. There is now a growing demand for housing and agriculture leading to further vegetative destruction, erosion and soil and water pollution. This pollution is also evident along the coast and sedimentation has destroyed many coral reefs around the islands.

The Grenadines on the other hand is faced with a different type of challenge. Because the islands are so small, they attract very little rainfall, have no permanent rivers or streams and due to their calciferous nature, do not support water retention. Hence, there is very little surface water¹⁵. Agriculture and animal husbandry are practiced on these islands during the Rainy season but during the Dry season, animals are left to graze freely exposing and eroding the soil.

The UN Convention to Combat Desertification (UNCCD) was signed/ratified by SVG in July 1998. However, the Convention on Persistent Organic Pollutants has not been ratified.

Conservation of land resources

There are several projects and initiatives related to sustainable use and conservation of land resources in SVG. These include:

National projects and initiatives:

1. *Integrated Forest Management and Development Programme*

This programme is aimed at ensuring ‘*effective and sustainable management of forests and their resources through community involvement in sustainability and the development and sustainable alternative rural livelihoods while maintaining a designated protected forest area of not less than 30% of the total land area*’.

Other local initiatives include:

- The establishment of a national steering committee on UNCCD in 2001.
- Public education programmes creating awareness on issues pertaining to desertification.
- “Market to production” Skills Training Programme by the Ministry of Social Development. This programme teaches community persons how to identify their natural resources and use them sustainably.
- Ongoing reforestation activities by the Forestry Department and watershed management programmes with support from the Soil Conservation Unit in the Ministry of Agriculture, through their soil conservation and stabilization efforts.
- Riverbank Stabilization Programme using gabion baskets and vegetative wattles (fasines).
- Sand mining regulations and the planting of *Pandanus sp.* and Coconut *Cocos nucifera* to address coastal erosion.
- Integrated Watershed Management Project – A joint effort between farmers in the Montreal and Majorca catchment area, the Forestry Department and the OECS/NRMU to maintain farming below the 1400 ft contour and to reforest and protect denuded areas.

Regional projects and initiatives

1. *Preserving/Protecting Biodiversity and Reducing Land Degradation in the Caribbean*

This United Nations Environmental Programme (UNEP) initiative is aimed at identifying and protecting specific critical habitats within the Caribbean islands.

2. *Integrated Watershed and Coastal Area Management*

This is a Caribbean Environmental Health Institute (CEHI) initiative intended to address water resources and quality throughout the region. In SVG, activities of this project will include research into such issues as salt water intrusion and the impact of sea levels on fresh water resources, especially in coastal areas. It will also focus on issues of watershed management through reduction of deforestation and maintaining land stability.

3. In 2001, OECS members signed the St. Georges Declaration of Principles for Environmental Sustainability which commits member states of the region (such as SVG) to work collectively towards improving the quality of life of the people of the region to work towards sustainable management of their resources, including land and water. SVG, acting on its commitment to this declaration, developed a National Environmental Strategy to outline short and long term measures for soil conservation, watershed management and land use planning.

4. Water quality monitoring – CEHI and PAHO continue to assist technically with the monitoring of water quality.

International initiatives

1. The Fair Trade System established within the Banana Industry is intended to have positive effects on the environment. Important elements of this system are:

- *Integrated crop management* – Producers are expected to practice a balance between business results and high-level environmental protection.
- *Protection and respect of ecosystems of high ecological value* – Ecosystems included are virgin forests, Protected Areas, lagoons, swamps, surface water bodies and springs.
- *Provision of adequate protection of water resources from chemical pollution.*
- *Minimization of agro-chemical use to reduce risk to human and environmental health.*

2. Good Practice in Agriculture – this project is aimed at increasing the economic competitiveness of the OECS ‘through trade in consistently healthy, hazard-free, safe and wholesome crops selected for export development’¹⁶. This project is supported by the Caribbean Regional Human Resource Development Programme for Economic Competitiveness (CPEC), the governments of the OECS and the Inter-American Institute for Cooperation and Agriculture (IICA)
3. Initiatives related to commitments to Multi-lateral Environmental Agreements such as United Nations Framework Convention on Global Climate Change (UNFCCC) and Convention on Biological Diversity (CBD).

Under the UNFCCC, SVG has submitted its first National Communication to the Conference of Parties. The report highlights SVGs vulnerabilities and the threats to water resources particularly in the Grenadines. Surface water loss along with increased global temperatures are having negative impacts on agriculture and forest resources. This will also affect biodiversity as outlined in the CBD.

Key constraints

1. Lack of financial and human resource to execute land resource conservation strategies.
2. Need for institutional framework to address desertification and other factors affecting natural resources.
3. Fragmentation of approach to resource management between the different responsible agencies.
4. Exclusion of stakeholders from some initiatives. Stakeholder involvement is a key requirement of many Conventions and activities geared towards conservation.

3.1.5 Energy

The depletion of non-renewable sources of energy such as fossil fuel, environmental pollution, global warming and the resultant costs associated with these have led to increased focus on renewable sources of energy.

Developed countries have also been forced to become more accountable for the destructive effects of their carbon emissions on the global environment and on the environment of SIDS whose emissions are comparably insignificant, and whose environments much more susceptible to environmental changes such as sea level rise.

In St. Vincent, there is generally a lack of initiative towards renewable sources of energy on a national level but there is some involvement with regional initiatives. Renewable sources of energy include solar, photovoltaic, wind, wave, geothermal, biogas and biomass, and hydroelectricity. SVG focuses mainly on the latter.

Several initiatives are being undertaken by SVG on a regional level but there exists a lack of will to pursue renewable sources of energy.

National initiatives

There are initiatives in place to try to facilitate Independent Power Producers (IPP) i.e. private persons/individuals who are interested in investing locally in renewable sources of energy. Several individuals have expressed interest in investing in such ventures in St. Vincent, particularly in the harvest of geothermal energy from La Soufrière Volcano. However, none have so far been realised.

Regional initiatives

The following regional initiatives of which SVG is a part are related to the development and provision of sustainable energy.

1. Caribbean Renewable Energy Development Project (CREDP)

This project examines critical needs within Caribbean countries relative to energy development and how to address them. It particularly encourages the use of sustainable energy resources as listed above.

2. Clean Development Mechanism

This GEF initiative was introduced to the Caribbean and SIDS countries out of concern for their susceptibility to the effects of large-scale development and the economic activities of developed countries. This mechanism encourages the trade in carbon on a global level, between developed and developing countries whereby developed countries benefit from and are awarded for assisting developing countries to reduce their carbon emission. Since any molecule of CO₂ has the same global warming potential wherever it is emitted, and by whatever means, it may be cheaper for one nation or firm to ‘buy’ CO₂ reduction from elsewhere as a means of meeting the requirements of membership to the UNFCCC. Some recent agreements have already taken place internationally following the Berlin Mandate. These include investments by the US in Russia and Costa Rica in reforestation and by Norway in areas of energy-efficient lighting.¹⁷

3. Energy Efficiency and Awareness and Information Management in the Caribbean

This project is funded by the Organización Latinoamericana Energía (OLADE) in Chile and focuses on energy efficiency and awareness in the Caribbean and Latin America.

Constraints for Energy Efficiency Awareness and Information

Although energy efficient systems are proven to be effective at reducing long-term cost of energy and are sources of less pollution than fossil fuel energy, their use is still very limited in SVG. Some of the main reasons are as follows:

1. Limited involvement by the national utility (VINLEC) in the promotion of energy efficiency programmes and equipment.
2. Lack of awareness of sustainable energy sources on a national level.
3. High cost of energy-efficient products.
4. Failure of local commercial agencies to promote energy-efficient products.

3.1.6 Management of Wastes and Provision of Water and Sanitation and Services

Water is the world's most abundant natural resource. But the quality of this resource is increasingly at threat from contamination by excreta, fertilizers and other pollutants. Household, industrial and commercial waste also threaten water resources and the general environment.

Management of St. Vincent's freshwater resource is a shared responsibility between the Central Water and Sewage Authority (CWSA) and the Forestry Departments. The CWSA was given broad powers to provide for the conservation, control, apportionment, and use of water resources, while the latter manages the watershed from which the resources is harvested.

Waste Management

Management of waste, both solid and liquid, is the responsibility of the Solid Waste Management Unit (SWMU) within the Central Water and Sewerage Authority. Prior to this it was the responsibility of the Public Health Department.

The SWMU was established in 1999 through the OECS Solid and Ship Generated Waste Management Project (SSGWMP) – a regional project geared at improving management of solid waste in SVG, St. Lucia, Dominica, Grenada, St. Kitts/Nevis and Antigua and Barbuda. The SWMP was jointly funded by the Caribbean Development Bank and the World Bank. While the local component of the project lasted from 1997 to 2002, the regional component was completed in 2003.

The SWMP had several components and mainly focussed on increasing institutional capacity of Caribbean countries to manage waste and was exemplified through the following goals:

1. Institutional strengthening

Through establishment of institutions to manage solid waste in the island. This required the establishment of a management authority in each country, and hence the establishment of the SWMU at the CWSA.

2. Construction of Land fills (Mainland SVG)

One land fill was constructed and a second is underway. This also saw the closure of 1 several smaller landfills on the mainland and the restructuring of the main one at Arnos Vale.

3. Financial Assistance

Provision of capital injection to purchase required equipment including vehicles, storage equipment and heavy equipment for use at landfills. The project also provided a budget for a public education component which focussed on specific communities throughout SVG. Several groups were targeted including schools, churches, community and youth groups through a series of presentations, community programmes and tea meetings. Additional modes of education included school visits to landfills and production of a colouring book and teachers' manual.

Waste water

Waste water is viewed in two categories. These are *grey water* (e.g. kitchen and bath wastewater) and *sewage*.

When the waste water management system was set up in SVG it was only set up to manage sewage waste in the country's capital – Kingstown. The majority of households in rural and suburban areas dispose of black water through pit latrines or septic tanks with soak-away. Septage monitoring, mainly in the capital, is the responsibility of the Public Health Department but collections and disposal are done by several privately owned companies operating within the island.

Most grey water is released directly into drains. In the capital, there is an increasing problem with *grey water* from restaurants, bakeries and supermarkets. Residue such as grease and other food particles become trapped in drains creating a stench and encouraging rodents and other pests.

Sewage collection and treatment in the Capital

The majority of the capital is connected to an underground sewer system. This waste is collected at a central point and pumped out to sea. Studies have indicated that biological communities within oceans are capable of breaking down and immobilizing toxic pollutants from sewage and in SVG this system has proven to be effective. However, at the moment the existing outflow line has been damaged and sometimes seeps and washes inward towards land. Feasibility studies for improving the sewage system in Kingstown have been carried out. There are no immediate plans to repair the line due to costs.

Solid Waste Management in the Grenadines

Solid waste management is also provided in the Grenadine islands of Bequia, Union Island and Canouan. These island all have landfills and island wide collections systems. The other inhabited islands, except Mayreau, are privately owned with their own systems of waste disposal. SWM on Mayreau is expected to be linked soon with that of Union Island.

European Union Solid Waste Project

A project funded by the European Union is currently underway to develop the solid waste management facilities in the Grenadines.

Waste collection

The SWMU now conducts an island-wide collection system on the mainland and on the Grenadine islands of Bequia, Canouan and Union Islands. In the capital, solid waste is collected daily and transported to the landfill. In the Grenadines, waste is collected thrice weekly and the remainder of St. Vincent once weekly.

National constraints to planning, development and implementation of waste management and sanitation services

1. Lack of institutional capacity within the Public Health Department to work collaboratively with the CWSA/SWMU to regulate waste in SVG. The SWMU is responsible for implementing solid waste management while the PHD is responsible for policing SWMU and CWSA. However, due to the lack of resources within the PHD, SWMU is left to do its own policing.
2. Public attitude towards waste management. Persons are resistant to changing traditional waste disposal practices which are often detrimental to the environment. These include dumping in rivers and along coastal areas.
3. There are no national water resources plans or policies governing use of water. There are three main entities depending on the freshwater generated in St. Vincent. These are the CWSA for provision of domestic and potable water supply; St. Vincent Electricity Services for hydroelectricity and Agriculture mainly for irrigation. However there is limited coordinated effort as they work as independent corporations with no control over each other's affairs.
4. Lack of research and absence of hydrological data i.e. lack of data on what is actually occurring in the watersheds and the linkage between that and rainfall.

Other initiatives

In the latter part of 2003, a European Union Development Fund project will be set up to examine freshwater availability in St. Vincent and the Grenadines. This will include studies on rainfall and aquifer sources with attention also being placed on Grenadines which have no permanent rivers or streams.

3.1.7 Tourism

The erosion of many small island economies and their resultant economic marginalization has caused an undermining of these states' development policies and macroeconomic stability; leading to such issues as social disintegration, unemployment and poverty.

Tourism has provided an opportunity for many developing countries to employ some level of economic stability and social improvement. Other states such as SVG are now looking towards tourism as a solution to troubled economies. The agriculture industry, the traditional mainstay of SVG is currently experiencing a fall-out and tourism is now the main economic income earner.

The Government of SVG is committed to further development of the tourism industry and thus, the country's eyes are now set on the environment and how it can provide the necessary infrastructure to support the tourism product. Tourism was mainly concentrated on the sun, sea and sand of the Grenadines, but with the growth of ecotourism on a global scale, the mainland of St. Vincent and its rugged lush landscape is beginning to attract increased attention. The natural environment must now provide the food, lodging, attractions and other facilities to hosts our visitors.

The Mission of the Department of Tourism is *“to position SVG as a diverse, globally competitive tourism destination through effective planning, management and sustainable use of the natural and cultural resources of the country; while facilitating the preservation of cultural heritage as a vehicle for instilling national pride and forging national identity”*.

Though there is mention of sustainable use of resources, the absence of a national SD infrastructure place us at risk of destroying our 'Goose with the golden egg'. The *National Tourism Sector Strategic Plan 2002 – 2006* also highlight SD as a major goal. However, very little progress has been made in realising these efforts and very little attention is paid to SD. Tourism is presented as an economic alternative for development but no attention is paid to sustainable use or management of the natural resource upon which it depends.

Community-based Tourism

The mantle of SD seems to have been taken on board more by community organizations than by the government, as community person look towards becoming self-sufficient and towards receiving benefits from their natural surroundings. They too are observing the shifts in focus on a global and national level towards tourism and are looking to receive some of these direct and indirect benefits. However, community-based organizations (CBOs) too are riddled with lack of technical expertise and financial resources, thus many of the CBT projects are only partly realising their full potential.

The Ministry of Tourism and Culture has decided to focus on the promotion of CBT as a means of addressing several critical issues such as conservation and preservation of tourism site resources, and increasing education and awareness in communities. To a great extent, the establishment of the National Parks, Rivers and Beaches Authority will play a significant role in this area when it is set up.

To date, the Ministry has worked with several CBOs that are engaged in developing and co-managing natural tourism site. These groups benefit from the Ministry's input in various ways that include annual subventions, training, provision of equipment and supplies, technical assistance and funding for projects through the Ministry's capital projects programme. A notable example has been the North Leeward Tourism Association, where a heritage village is being developed at Fitz-Hughes and funding has been provided by the Ministry of Tourism for washrooms, a restaurant and interpretive building at Richmond.

The North Leeward Tourism Association

The North Leeward Tourism Association (NLTA) believes that North Leeward should be established as an Eco-tourism Zone and be promoted as part of the National Tourism Product with active participation of the community. Their plans for the area are:

- To develop Chateaubelair as a Port of Entry.
- To develop the major waterfalls (Baleine, Trinity, Dark View and Petit Bordel), the hot springs, the dam at Troumaca and other sites of interest.

- To train and employ lifeguards, tour guides, forest rangers and recreational site rangers; and to construct restroom facilities at Richmond Beach.
- To develop Cumberland Bay as a yachting centre providing adequate amenities such as lighting, reef warning lights, a jetty. They will also provide training for potential tour operators in the area.
- To provide incentives to attract investors for the development of guest houses, hotels and mountain lodges or retreats in the North Leeward area by declaring it an enterprise zone.
- To develop a one-week Christmas and two-day Easter food festival featuring seafood and Caribbean cuisine, while showcasing the culinary talents in North Leeward, SVG and other islands.
- To promote special events such as the reintroduction of a North Leeward Agricultural Exhibition, North Leeward Carnival and Nine Mornings Community Lighting. They also intend to revive pan music, drumming, the Quadrille and Maypole dances and promote popular North Leeward artistes.
- To attempt to create changes in community attitudes towards visitors and the environments through education and sensitization. Tourism education will be introduced to schools.

The NLTA, with assistance from the Ministry of Tourism and Culture and the OECS-ESDU has completed work at Dark View Falls and the Troumaca Dam. The Richmond recreation site will soon be completed.

The NLTA has received a grant from UNESCO and has established the UNESCO Youth Path Project. This is a poverty reduction initiative intended to provide alternative livelihood opportunities for young persons in the area through training and empowerment.

The Association has also developed a Heritage Village at Fitz-Hughes which is presently in its second year of operation. The Village features local handicraft that include jewellery, straw and fibre work, silk screening and clay pottery. The Association has been able to achieve many of its goals set thus far due to the strengths of the organization and the support received from the government, community members and other local, regional and international organizations. It is

hoped that this project will be a model and incentive for other communities wishing to be proactive and to benefit from their natural resources.

Other CBT and sustainability initiatives

- Union Island Eco-tourism Committee

This committee was set up to assist the Ministry of Tourism with the development of Union Island. The Government provides the committee with a subvention for site management.

- Biabou Community Group

This group manages the Biabou beachfront. Though the Ministry provides assistance to the group, it is mainly technical assistance. The group does much of its own fundraising and obtains monies through grants and sponsorship.

- The Ministry of Tourism conducts ongoing tour guide training. However, this programme is more geared towards creating independence and self-sufficiency (i.e. empowerment for employment) than providing protection for sites. Thus, it is the responsibility of these guides thereafter to seek employment

- The STEP Resource Centre

This centre was developed to provide assistance to small hoteliers through provision of training and information dissemination on the global tourism trends and markets, and how they can be affected by these. Training is also provided on the Green Programme, Best Practice and sustainable hoteling. Hoteliers are provided with manuals, and internet and library services. The Department of Tourism has provided the office and trained office personnel.

- The Standards legislation currently being developed for person working in the service industry is also expected to provide guidelines to assist persons in the area of conducting positive environmental practices.

One of the more evident factors emphasizing the lack of focus on SD is the fact that nature sites are developed but no management structure or cost recovery system are put in place although visitors to the sites are willing to pay and often do volunteer to contribute financially to site maintenance. Additionally, limited monitoring of National Parks and Protected Areas in SVG means that persons are free to access and use these sites unguided, and to a large extent uncontrolled. Finally, although the National Parks (NP) unit has been established via the NP Act, Regulations, operational plans and other institutional arrangements are absent.

3.2 CROSS-SECTORAL AREAS

3.2.1 Financing and investment for Sustainable Development (SD)

As stated before, SD has not yet been identified as a national priority. Therefore, there are no national, sub-regional or regional investments for SD in SVG.

3.2.2 Capacity-building and Coordination

The Ministry of the Public Service is responsible for human resource development in the public service. Its mission includes developing capacity-building mechanisms to improve and maintain a cadre of professionals that has the ability to deliver quality service to all stakeholders and thus ensuring sustainable national development.

In order to achieve the national development goals of increasing efficiency and effectiveness set for SVG by its Government, human resource development must be a priority. There are several initiatives aimed at improving the capacity of human resources both at a national and sub-sector level.

1. The Caribbean Centre for Administration and Development (CARICAD) Initiative

The CARICAD Centre in Barbados is a CARICOM initiative which is responsible for public administration throughout the Caribbean. It speaks to public sector reform and specifically to strengthening the capacity of the Public Service throughout the region.

The Performance Management and Development System (PMDS) currently being instituted in SVG is part of the broader Public Sector Reform. This system, which is expected to commence later in 2003, seeks to *'improve and manage the performance of employees' output and efforts related to performance targets'*¹⁸. Linked with this is a recently-completed reclassification exercise. It is hoped that at the end of this exercise that the civil service will be able to deliver the necessary skills for the labour market, thus improving competitiveness and productivity.

2. *Human Resource Development*

- The Department also conducts several training needs assessments both for the short and long term and continues to establish a network with local, regional and international organizations in the development of training programmes for the private and public sectors. Several partnerships have been established with the agencies listed below that facilitate funding and delivery of training programmes.

Commonwealth Fund for Technical Cooperation

Universities of the West Indies (UWI)

Centre for Management Development (CMD)

Commonwealth Association for Public Administration and Management (CAPAM)

Chamber of Commerce

Institute of Business (IOB)

United Nations Development Programme (UNDP)

United States Agency for International Development (USAID)

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- Scholarships are also provided by the local Government and through assistance from countries such as Cuba, the Republic of China and Mexico.
- Several training programmes are also conducted locally with the aid of foreign consultants and the private sector.

Other sub-sector initiatives are being carried out in different Ministries and Units of the Government such as the Department of Agriculture, Fisheries Department, Ministry of Health and the Environment, and the Ministry of Education, Youth and Sports. These include the PAHO-assisted capacity-building within the health services (especially in Primary Health Care) and the assistance rendered to the Ministry of Education by the OECS. Additionally, within the Ministry of Transport, Works and Housing, a jointly funded project between the Government of SVG, the private sector through the Construction Association and the Caribbean Programme for Economic Competitiveness is looking at *Capacity building for improved competitiveness in the SVG Construction Sector and an Integrated Strategy for Competitive Construction in the OECS*.

Key Constraints

1. There exists a resistance to change and training among some personnel within the public service. Therefore there is some difficulty in the effective execution of new techniques aimed at improving the Civil Service productivity and efficiency.
2. There exist too a cultural traditional of treating co-workers and the general public as adversaries and subordinates and some workers exhibit an attitude of elitism towards co-workers and members of the general public. This gives the Service a negative public image.
3. Resistance to teamwork within the service.
4. Financial limitations for delivery of local training and provision of scholarships

The Ministry of the Public Service recognises that over the years, training (particularly in areas of competency and attitudinal change) was not given priority. In recognition of the fact that increased productivity and competitiveness are dependent upon a competent, well-trained staff, with good/positive attitudes towards the public, greater focus is now being placed on the public service reform. There is much support being given to this venture by the present Government and hence, within the last year, the budget for capacity building within the Ministry has increased by almost two million dollars. This will impact overall on the competitiveness of SVG in the regional and international market.

Information Exchange

The exchange of information with other countries is mainly done through a number of case studies. Case studies on the issue of public reform have been presented at meetings regionally and internationally as means of sharing experiences with colleagues within a learning environment.

Other recent initiatives of the Ministry of the Public Service include:

- Continued strengthening of the Human Resource Management Process through development of an action plan to deliver training for Human Resource Managers.

- Implementation of the Revised Civil Services Orders and Public Service Commissions Regulations. Review of these regulations are ongoing via coordination by the Public Sector Reform Unit in the Ministry of the Public Service.
- Continuation of the reorganization and training processes for staff of the Services Commissions Department. Training is ongoing, especially at the tertiary level. Additionally, a draft plan for the re-organization of the Service Commissions Department has been developed.
- Implementation of a revised Human Resource Information System (HRIS) in collaboration with the Ministry of Finance.

In 2004, the Public Services Commissions intends to focus on *Service Delivery* as a strategy to continue improvement of the image of public service, through changes in attitudes.

4. TRADE, INVESTMENT, CAPACITY BUILDING AND COOPERATION AND THE STATUS OF SIDS VULNERABILITY

The issue of trade in SVG is plagued with two basic realities (i) the vulnerability of the economy due mainly to the islands small size, and (ii) the fact that the island has very few competitively exportable products. The liberalization of global trade under the General Agreement on Tariffs and Trade (GATT) and the World Trade Organization (WTO) has further increased the vulnerability of the island's economy. SVG is also quite vulnerable to external shocks such as stock market fluctuations. The relevance of these are further expounded upon below.

Key trade-related concerns and needs faced by SVG

Trade

1. High productivity index – SVG is not a very efficient producing state. Overall, input (e.g. fuel and labour) costs are very high
2. Transportation – Very little trade occurs intra-regionally because of the costs associated with it. Currently, it is cheaper to ship goods to Miami than to Trinidad and some other island of the Caribbean. This is due to absence of a regular transport system going to these islands.

Capacity-building

1. Limitations exist in terms of human and technical resources, both in the public and private sectors. These sector lack highly skilled and trained individuals.
2. There is a lack of capacity to monitor and implement standards and regulations. The Standards Bureau laboratory is in its infancy and not adequately equipped to test local and foreign products. Additionally, most firms do not meet the requirements of HASAP. Even where there are quality products labelling may be inadequate.
3. On a national level, SVG has a capacity constraint in that it is unable to meet its obligations and commitments in the various trade and negotiating theatres. The main

reason for this is that the country does not have the requisite Financial and technical resources to meet its obligations in the various Multi-lateral agreements.

4. Lack of capacity to monitor trading partners for compliance to local and international regulations.
5. Diseconomies – Limitations in the size of the local market means that because of the small population, local sales will always be a constraint to expansion and cost of development necessary to maintain a cutting edge and competitiveness.
6. Technology – The technology necessary to make SVG cutting-edge competitive is too costly to obtain and maintain relative to the size of the local market and the financial capacity of local businesses and investors.
7. Vulnerability – The state is vulnerable to natural and other hazards and these affect trade
 - SVG is a Net Food Import Developing Country (NFIDC) and is therefore open to inflationary surges.
 - The state is also very vulnerable to trends in the export market
 - Being a mono-crop exporting state, SVGs economy correlates positively with trends in the export item. For example, because the islands depend so much on bananas, a fall in banana export or prices results in a fall in the economy.
 - Due to the size of the island and the close proximity to the US, SVG is vulnerable to socio-political issues in that country. For example tourism in SVG was seriously affected by the activities on September 11, 2001.

National level and community-based initiatives related to trade practices and services

National level

1. The Government of SVG is currently facilitating the reconstruction of the Banana Growers' Association to meet international market standards and increase efficiency of the organization.

2. There are consultative mechanisms in place for consensus building between the private and public sectors on trade-related issues. Private sector involvement occurs in all trade negotiation done on behalf of SVG.
3. A Standards Bureau and a National Telecommunications Regulatory Commission (NTRC) has been set up. The NTRC was established to regulate telecommunications services in SVG in keeping with local obligations and international standards. The Standards Bureau is part of local obligations to meet international standards and to ensure that imported goods meet standards that protect local consumers.

Community-based/NGO

4. The Ministry of Trade collaborates with the National Consumer Association to promote and advocate consumer protection. The Ministry provides financial assistance to the association to help with their operations. The NCA is especially involved in consumer advocacy.

Key investment-related concerns and needs

1. SIDS (small economies) such as SVG, are not an attractive destination for foreign direct investments due to their small economies. The high cost of production creates inefficiencies, while the absence of a critical mass cannot effectively maintain economies of scale.
2. Increased economic risks leading to the ripple effect. Small changes in the market (such as reduction in salaries, loss of jobs or change in government) can spell economic disaster. Absence of a critical mass means inability to withstand such shocks.

Key concerns and needs related to capacity-building for SD

1. There is a need for proper management systems to assess and monitor the country's natural resources.
2. There is a need to link agricultural production to rural development to ensure that benefits go back to the rural community. Farmers tend to benefit the least from the sale of their produce.

3. Need for greater linkages between agriculture and tourism. SD programmes will assist farmers in realising direct returns from the tourism sector.
4. Need to have support systems for farmers to enable them to maintain viable agriculturally-productive programmes particularly during the low periods. Government assistance is required to ensure that produce are marketed and that farming itself is a viable entity. If not, this may lead to disincentives.

The effects of capacity development issues on national socio-economic and environmental vulnerability concerns

1. Limitations in human and technical resources affect the quality of production and thus the exportability of some products. For example, products may experience problems in entering export markets because of quality and technical capacity constraints. A Lack of technical expertise in some areas also means that some high paying jobs are filled by non nationals.
2. Due to the inability of SVG to monitor the quality of goods entering the country, sub-standard goods may be ‘dumped’ unto the local market. Under the World Trade Organization’s (WTOs) there are anti-dumping and counter-availing Agreement under which member states can adopt protective measures. However, the absence of monitoring capability means that SVG cannot take advantage of these measures available to it in order to protect the local market.
3. The low levels of production experienced in SVG results in inefficiencies and uncompetitive standards.

Sub-regional and regional cooperative mechanisms and programmes related to SD

Sub-regional

1. The OECS Export Development Unit (Dominica)
This is a Sub-regional programme that assists enterprises within the OECS with capacity building and development of institutional standards. It focuses mainly on the

manufacturing sector, providing assistance in areas of product quality development, marketing strategies and all other areas of capacity building.

2. Eastern Caribbean Telecommunications (ECTEL) – This is a sub-regional regulatory mechanism that assists member states of the OECS in harmonizing their regulatory regime. This body acts as the sub-regional regulatory body for all telecommunications services in the OECS. The National Telecommunications Regulatory Commission is the executing and enforcement body that operates nationally in SVG.

Regional

1. *Regional Transformation Programme* – This programme focuses on developing and modernizing agriculture sectors in the region and addresses issues of SD. It also encompasses such issues as fisheries and watershed management.
2. The Caribbean Regional Fisheries Mechanism (CRFM) – A management programme to assist in the strengthening of management of marine resources in the Caribbean. It includes provision of data on fish stocks in the area and how and when these can be efficiently utilized.
3. Council for Trade and Economic Development (COTED) – This CARICOM regional committee sets regional policies for the promotion of trade and economic activities in the region.
4. Council for Human and Social Development (COHSOD) – A CARICOM body made up of Ministers of Health, Education and Social Development. The council invests in human resource development through the establishment of human and social policies for the Caribbean Region. It also advises regional states on laws which are harmonized throughout the region.

A major concern for SVG and other Small island states is the lack of recognition of Small Island Developing States (SIDS) by multilateral Trading institutions. Thus, there are no provisions for SIDS in these institutions' policies, rules and regulations; and their disciplines and rules are not therefore favourable to the unique interests of these small states. These Multilateral Institutions only recognize Small and Vulnerable Economies. However SIDS requires different levels of treatment and exemptions since, although they too are developing countries, they are at different levels of development and cannot be compared with other developing countries such as Brazil and China. Currently SIDS is lobbying for recognition within the WTO.

Constraints to trade, investment, capacity-building and cooperation in SVG

1. *High cost of energy* – Fuel cost being a basic input cost, has a chain effect on all levels of production. This increases the cost of living for Vincentians.
2. *High cost of banking and insurance* – These high costs to businesses are passed on to consumers and thus affects the economy.
3. *Economic shocks in the economies of the OECS that jeopardize the stability of the East Caribbean Dollar.*
4. *Erosion of SVG preferential market* – SVG's exportability is based on the maintenance of a preferential market. Loss of this preferential treatment means that SVG has then to compete on the global market. Erosion of the banana industry and the economy will therefore continue because of high costs of production experienced locally.
5. *High levels of external debt with the ensuing financing of these debts.* A high proportion of SVGs annual budget goes into financing these external debts.
6. *Limited capacity for production.*
7. *High cost of production.*
8. Difficulties in meeting export markets standards.
9. Insufficient high quality product to meet export market demands.
10. Even when SVG has a high quality product, there are high levels of competition from other countries that can produce at a cheaper price. For example, in the pasta industry, SVG receives competition from Trinidad due to cheaper product costs.

5. MILLENNIUM DEVELOPMENT GOALS (MDGs) AND SD IN SIDS

SVG, along with 188 other member states of the United Nations have pledged to meet eight (8) Millennium Development Goals by the year 2015. These goals and objectives are as follows:

1. Eradication of extreme poverty and hunger
 - To reduce by half, the proportion of people living on less than one dollar per day.
 - To reduce by half the proportion of people who suffer from hunger.
2. Achievement of universal primary education
 - To ensure that all boys and girls complete a full course of primary education.
3. Promotion of gender equality and empowerment of women
 - To eliminate gender disparity in primary and secondary education, preferably by 2005, and at all levels by 2015.
4. Reduction of child mortality
 - To reduce by two-thirds, the mortality rate among children under 5 years.
5. Improvement of maternal health
 - To reduce by three-quarters the maternal mortality ratio
6. Combat of HIV/AIDS, malaria and other diseases
 - To halt and begin reversal of the spread of HIV/AIDS.
 - To halt and begin reversal of the incidence of malaria and other major diseases.
7. Ensuring environmental sustainability
 - To integrate the principles of sustainable development into country policies and programmes; to reverse loss of environmental resources.
 - To reduce by half the proportion of people without sustainable access to safe drinking water.

- To achieve significant improvement in lives of at least 100 million slum dwellers by 2020.

8. Development of global partnership for development

- To develop further an open trading and financial system that is rule-based, predictable and non-discriminatory, this includes a commitment to good governance, development and poverty reduction – nationally and internationally.
- To address the least developed countries’ special needs which include tariffs and quota-free access for their exports; enhanced debt relief for heavily indebted poor countries; cancellation of official bi-lateral debt; and more generous official development assistance for countries committed to poverty reduction.
- To address the special needs of landlocked and small island developing states.
- To deal comprehensively with developing countries’ debt problems through national and international measures to make debt sustainable in the in the long term.
- To develop decent and productive work for youth in cooperation with the developing countries.
- To provide access to affordable essential drugs in developing countries in cooperation with pharmaceutical companies.
- To make available the benefits of new technologies in cooperation with the private sector – especially information and communications technologies.

SVG has made several strides in attempting to meet these goals. However, lack of technical and financial resources and institutional limitations continue to hinder the countries progress. Issues related to Poverty Eradication (Section 5.1), Education and Reduction of Child Mortality (Section 5.2), Gender Equality and Empowerment of Women (Section 5.3), HIV/AIDS, Malaria and other disease (Section 5.4), Environmental Sustainability (Section 5.5), Global Partnership for Development (Section 5.6) and Global Partnerships (Section 5.7) are expanded upon below.

5.1 Poverty Eradication

Unemployment in SVG stands currently at between 20% and 22%, while Kairi (1996) reports that some 37.5% of the population were poor, and of this 25.7% can be classified as indigent. 30.6% of households was found to be poor and of this 20.4% was below the indigent line. This means the almost 26% of the population and 21% of households are unable to satisfy basic nutritional requirements and are at risk of chronic ill health.¹⁹ Since then, other studies carried out have suggested a worsening of poverty levels.²⁰

In recognition of a need for a social policy framework to develop clear and cohesive policies and strategies focused on poverty reduction, the Government of SVG assigned responsibility for the development of a Poverty Reduction Framework to the National Economic Social Development Council (NESDC) which consists of representatives from a wide range of civil society organizations and senior public servants. A Poverty Reduction Task Force (PRTF) was established by NESDC to develop a Poverty Reduction Strategy for SVG.²¹

Components of National strategies and initiative for poverty reduction

- a. *Developing effective policies to Stimulate Growth, Trade and Investment through:*
 - Improvement of the macro-economic environment
 - Expansion and diversification of the sources of economic growth including the agriculture, fisheries and tourism sectors
 - Investment promotion and poverty reduction
 - Facilitating credit and support to small business and micro-enterprise, in recognition that these play an importance in promoting sustainable economic development and by extension opportunities for poverty reduction
 - Accessing dead capital; rationalizing the squatter situation (dead capital is defined as land, property and other assets that are not properly titled)

and therefore cannot be utilized efficiently and effectively for capitalist development).

- Improved income distribution (poor distribution of wealth creates disparities in the society).
- Strengthening natural resource management (as environmental sustainability is viewed as a critical component of the poverty reduction strategies)
- Strengthening rural development (most poor are found in rural areas and where most natural resources and opportunities for agriculture exist)
- Strengthening capacity for improved data generation, and analysis; and policy development and execution

b. Increasing/generating employment opportunities

- Supporting job creation in tourism, agriculture and the micro-enterprise, and informal sector.

c. Greater and better investment in human capital, particularly in the following areas

- **Education** – Education has been identified as a basic indicator of poverty. Thus programmes are geared towards strengthening the pre-school system, providing adult education programmes, providing support to compulsory education strategies, exploring possibilities of a phased in approach to Compulsory education, provision of technical and vocational training for youth, and reintroduction of agricultural science programmes in schools.
- **Health** – Most programmes are geared towards the poor because they are at greater risk of illness and disease, less likely to report illness and a greater percentage is subjected to hospitalization and longer hospital stays.²² There is a thrust to upgrade and increase health care facilities throughout the country.
- **Social Service delivery – capacity building** : This component of the strategy seeks to develop the capacity of various agencies involved in

social service delivery, enabling them to identify strategic programmes in the development of human/social capital. Additionally, the institutional strengthening of the Ministry of Social Development is seen as a vital element; another is the strengthening of NGOs and CBOs to function at a community level.

- **Social protection and coping strategies** – These include the development of an expanded Basic Needs Programme which provides emergency support to the needy and development of labour intensive public works projects which provide employment for the poor. In addition, there is a programme to prevent and address domestic violence and another to developing non-contributory Pension programmes for the elderly.
- **Agriculture** – Poverty appears to be greater in rural areas, those most dependent on agriculture for their livelihood. Elements of this a towards agriculture improvement will include programmes to combat praedial larceny, restructuring land tenure practices to enable greater access to land, developing public education programmes for economic trade literacy, enabling farmers to access business opportunities on the global market, and restructuring agricultural extension services to service the demands of agriculture in the context of free trade²³.
- **Children** – It is recognized that working with children is critical to addressing issues of education and other causes of poverty. The Children Against Poverty Programme (CAP) targets low achievers within primary schools (ages 5 to 16) using a creative and integrated approach to learning. It seeks to provide educational opportunities for children while developing socialized skills and attitudes. Additionally, community adults act as mentors, helping with school work and job shadowing. There is also a parenting component to CAP where (through a Micro-enterprise Programme) parents of participants are exposed to skills training in areas of effective parenting, leadership, communication and conflict resolution skills and training in fishing, tourism and

handicraft. This provided a support mechanism for the children. In 2003, 8 schools and 600 students participated in the programme.

- **Other related issues** are gender, sports, cultural development, worker values and attitudes and drug abuse.
- d. *Improving social and physical infrastructure* through
- Re-focussing public expenditure through the Public Sector Investment Programme to provide adequate socio-economic infrastructure and eradicate poverty.
 - Increased access to water, sanitation and electricity to segments of the population. Priorities will include providing an efficient energy sector; rural electrification; repair and maintenance of the national road system; improving water supply and sanitation; improving telecommunication, irrigation and drainage facilities; and improving the transportation system.
- e. *Strengthening Civil Society Participation* in an attempt to empower communities to participate in planning, monitoring and coordinating poverty reduction policies and programmes. This will be achieved through the proper development of the national information systems and also through the re-introduction of local government.
- f. *Good governance and the Business Environment* in accordance with and guided by the UNDPs “Governance for sustainable development” policy document. It encompasses such issues as the (i) maintenance and enhancement of constitutionally fundamental rights and freedom; (ii) making government more accountable and efficient; (iii) maintenance and strengthening of the independence and quality of the judiciary and initiating an on-going war against official corruption and (iv) the promotion of a politically-hygienic system of government²⁴.

Special Intervention Projects and Programmes²⁵

The government of SVG has also established special initiatives to cope with poverty.

These include:

- A *Poverty Relief Fund* established within the Ministry of Agriculture, Lands and Fisheries. This enables farmers to cope with the fall out from Bananas.
- A Social Recovery Programme within the Ministry of Social Development – Funds are set aside to identify and support social and community development initiatives.
- A *Low-income Housing Programme* being implemented through the Ministry of Transport, Works and Housing. This is intended to increase access to the poor and middle-income earners.
- The *Basic Needs Trust Fund (BNTF) Project* – a regional programme sponsored and managed by the Caribbean Development Bank. It has been in operation now for the past two decades. This programme assists low-income communities with improving access to public services through the provision of social and economic infrastructure and the development of skills to enhance employability.
- *Home Help for the Elderly* - This project is designed not only to help the destitute elderly and reduce the effects of poverty on this segment of the population, but also as a means of employment creation for person providing home assistance. Assistance ranges from cleaning and making meals to bathing and running errands. Currently some 18 persons have been trained providing assistance to 60 elderly individuals. By the end of September 2003 some 53 persons will be providing this service to communities around St. Vincent.
- *Public Assistance Programme* – The Family Services Division provides monthly monetary assistance of \$110.00 to over 6000 person who are 65 years and over. Assistance is also provided to the elderly in the form of transportation allowance and rebates for water and electricity. This rebate is made possible with collaboration between the Central Water and Sewage Authority (CWSA) and the St. Vincent Electricity Services (VINLEC).
- *Skills Training Programme* - A government-sponsored initiative in which young persons are trained in non-formal skill areas in preparation for employment. Areas of training include carpentry, pottery, craft, welding and plumbing. Work is also done on preparing persons to employ positive attitudes towards work. Over 350

persons are trained annually and over 80% are provided with employment. Many persons are also self-employed.

- *Detached bathrooms* – A three year programme aimed at providing over 800 persons with outdoor toilets. It has been identified that hundreds of households and, by extension, the environment are at high health risks due to poor sanitation and toilet facilities.
- Provision is made in the form of assistance for uniforms, transportation, examination fees and meals for destitute students.
- Assistance provided to soup kitchens for the homeless and vagrants. These are often maintained by churches.
- Provision of building materials for the aged and destitute.
- Provision of assistance to groups wishing to do environmental work. Provide financial, equipment, advisory and technical assistance to such groups. Also provide assistance to groups such as Neighbourhood Watch Groups. However, this type of support is not deliberately offered by the Ministry of Social Development because of lack of funds.
- A UNDP-sponsored Programme targeting the poverty within urban and rural communities. This is designed to be sustainable, and is aimed at capacity-building to empower unemployed communities. Community persons also identify project that are sustainable for their communities and training and monetary assistance are provided. Exchange visits to other islands receiving similar sponsorship is also facilitated.
- The National Commercial Bank's Micro-enterprise Loan Programme was developed to provide micro credit to individuals in areas of manufacturing, agriculture, tourism services and retailing. The purpose of this programme include (1) to enable micro entrepreneurs to access credit on a low or no collateral basis for expansion or to develop a micro enterprise, (2) to assist micro entrepreneurs in the development and improvement of managerial skills and abilities by adoption of sound management practices, and (3) enabling micro entrepreneurs in acquisition of skills that will enable the utilization of financial services available within the financial services sector.

Constraints

- Attitudinal: this constraint is evident in the way people prioritize their wants as opposed to needs. Often persons who come looking for assistance would prefer to spend limited finance on luxuries such as mobile phones etc and then come to the government for assistance to take care of their needs.
- Limited financial and human resources to execute programmes
- Reduction in voluntarism: There is growing resistance in persons to render their assistance without some form of remuneration.
- A breakdown in family structure, leading to issues of child abuse, juvenile delinquency and general depletion in social order.

5.2 Education and Reduction of Child Mortality

EDUCATION

The Government of St Vincent and the Grenadines has identified education as being central to the success of its development programmes and thus high priority is being given to ensuring that every citizen is provided with a quality education²⁶

In February of 2003, the Ministry of Education, Youth and Sports (MEYS) began a series of public consultations on education to inform its Education Sector Development Plan (ESDP). The purpose of the ESDP is to provide overall direction for the development of education in St Vincent and the Grenadines from 2002 to 2007; providing strategies and timeframes for delivering quality education that raises levels of achievement of all learners and enables them to benefit as individuals, and to contribute to national and regional development.

Under the ESDP efforts will be made to improve access to both pre-primary and primary education. Components of the plan include:

Pre-primary education has been identified as being an important precursor to primary education and thus more emphasis is being placed in this area. Pre-primary education is primarily a private sector led activity with some government assistance in the form of teacher training and provision and a subvention. Over the years, less than 25% of the age group 2.5 – 3.5 years has accessed education at this level. The Ministry of Education confirms that there is a strong level of correlation between access to pre-primary education and performance at the primary level²⁷.

Pre-primary education (Early Childhood Learning)

The following are policy objectives associated with increasing access to pre-primary education:

- Making Early Childhood Education (ECE) available and accessible to all children from age 3 by the year 2007

- Facilitating a smooth transition from the nursery to the primary school.
- Improving the quality of ECE through an integrated health and social development programme
- Providing pre-primary care for the physically and mentally challenged
- Revising and upgrading an integrated core curriculum for ECE
- Involving the community and community organisations in shaping the curriculum, school management and the provision of resources
- Strengthening mechanisms for monitoring nursery schools to ensure that they meet minimum national standards
- Strengthening partnerships between the Health and Social sectors, NGOs and civil society
- Heightening awareness-programmes designed to give parents, guardians, and other care-givers an understanding of ECE and of the development of the young child
- Sensitising parents and guardians to the nature and importance of ECE
- Proposing designs for the construction of purpose-built nursery schools
- Create an Education Access Fund for needy parents

Primary education

Through its goal to improve standards of achievement by providing effective primary education for all, the policy of government of SVG is to establish primary schools where necessary, and support external agencies engaged in similar operations. Broad based bodies for the management of educational facilities will be established to ensure best use of facilities.

In support of this, a number of policy objectives were outlined in 2002 as follows:

- a) Increasing substantially literacy and numeracy above the current baseline
- b) Reviewing and revising the primary curriculum to make it more relevant to pupils
- c) Increasing the provision of books and learning materials
- d) Expanding the current text book scheme
- e) Reducing the number of open classrooms, and upgrading others in schools
- f) Ensuring that all primary teachers are trained and qualified
- g) Increasing management efficiency by encouraging home-school partnerships to improve student performance and participation

- h) Restructuring the transition to secondary education
- i) Reducing and eventually eliminating inequity of provision (whether on the basis of gender, location, special needs, poverty)
- j) Revising policy regarding registration of private schools.

Strategies for obtaining the above goals would include:

- a) Developing a scheme whereby low-income parents will be facilitated in sending their children to obtain a basic education
- b) Re-examining the focus of primary education and reflect on the learning activities that would enable children to develop higher-level cognitive skills such as analysis, synthesis, and evaluation
- c) Reviewing the provisions in place for the expansion of continuing adult education for youth (i.e. failing primary leavers). The Government is prepared to dedicate more resources to this aspect of the education system.
- d) Exploring improvement in linkages between the public and private sector to address critical issues related to the above.
- e) Designing strategies to bridge the gap created by limited secondary school places and a declining primary school enrolment
- f) Exploring alternative models of special education in order to maximise on scarce resources
- g) Repair and build school plants in order to make available modern technologies, improved library facilities, adequate classroom space, playing facilities, improved sanitation and other facilities for student and staff
- h) Develop a balanced curriculum in which space is given to culture and the art, morality, health awareness, sports and games, music and the development of higher level of thinking skills
- i) Develop performance norms according to grade level and subjects, and in keeping with the inculcation of the life skills relevant to age and level
- j) Review and revise current assessment practices, giving special consideration to continuous assessment supported by a system of improved record-keeping in schools
- k) Restructure the CEE to test students in their ability to write continuous prose, read and comprehend, compute and solve problems and think critically
- l) Rationalise the mechanism for the transfer of students from primary to secondary schools

- m) Conduct pilot projects for the testing of strategies for easing the transition from primary to secondary schools, with emphases on post primary special education
- n) Develop textbooks and teaching-learning aids
- o) Upgrade the competence of practising primary school teachers in the teaching of literacy, numeracy and learning support using appropriate technology
- p) Improve the training of primary school principals so that they acquire increased competence in instructional supervision and curriculum management
- q) Encourage partnerships between the school, the home and the community, national and overseas-based alumni, etc., in creating effective learning environments in schools

Issues and Challenges to Pre-primary and Primary Education

Pre-primary education

- a) Absence of an appropriate policy and regulatory framework to govern the provision and enhance the delivery of Early Childhood Education (ECE)
- b) There is limited involvement by government in creating an enabling environment for the delivery of quality ECE services, including registration and monitoring
- c) There is no Education Officer or ECE Unit within the Ministry of Education Youth and Sports
- d) The absence of any formal links between St. Vincent's Save the Children Fund (VINSAVE), the main training centre and provider, and the Teacher Training College
- e) High staff turnover rates due to poor wage structures and teacher incentives
- f) The geographical spread of pre schools clusters round urban centres. They are not sufficiently dispersed to be within easy reach of all pre- school aged children. Areas where no schools exist are often those where poorer families live, and where children may suffer other disadvantages
- g) There are many reported incidents of families being unable to pay the fees, and so their children are denied regular access to pre-schooling
- h) Fees differentiate children from poor families
- i) Currently there is no national fund to provide support in the way of ECE materials and facilities

Primary education

- a) A major concern is the performance of students at the Common Entrance Examination (CEE) and School Leaving Examinations (SLE), and the criteria on which these examinations are based; overall pass rates are about 33% and less than 10% respectively
- b) Low levels of attendance and achievement among certain vulnerable groups, particularly, males, children of single parents, child guardians (often females), and rural students
- c) Lack of appropriate policy framework regulations and quality standards to ensure that the private sector is in line with Government in the provision of adequate space and related facilities to deliver an effective primary programme and services
- d) Inadequate funds for the maintenance of school buildings and furniture
- e) The need for additional curriculum officers at MEYS to monitor teachers in all primary schools, and to address issues relating to special needs education. At present, there are only two Senior Education Officers with responsibility for primary education; they also share responsibilities for special needs
- f) Insufficient staff at SGVTTC to supervise teaching practice in schools

Social challenges to education (identified by CY Thomas)

- Staffing shortages and related issues of pay and conditions of service.
- Curricula reform as a priority, due to the impact of globalization.
- Low school achievement as reflected in high non-completion/drop-out and repetition rates, and poor examination performance.
- Pressures to maintain and improve school quality.
- Issues related to “special needs” education.
- There are marked gender disparities in performance in school. Girls are outperforming boys by a very wide margin.
- There also appears to be unequal access to educational opportunities.
- Pressure exists to improve linkages between education and education related services, such as transportation, nutrition and health.
- Lack of sustained linkages between education, research and the active pursuit of a “culture of excellence”.
- There is an outflow of skilled/trained educators

- There is an urgency to modernize and streamline the Ministry of Education in light of the central role it has to play of the country adopts a more holistic vision of human resource development to replace traditional views of education.

These five issues are of particular concern as relates to education.

- a) Inadequate provision of early childhood education
- b) Child labour and truancy during school hours
- c) Insufficient access to secondary education
- d) Quality improvement through improved teacher training and a relevant curriculum
- e) Restructuring of Technical and Vocational Education and Training (TVET)

Current initiatives to universal education include:

- A drive towards compulsory education programmes (to counteract truancy).
- Social support programmes such as book loan schemes, provision of free basic texts and school uniforms, subsidised transport, school-feeding programmes, a *Poverty Access Fund*, counselling in schools and community education programmes.
- Radio programmes to support the curriculum

These initiatives are however constrained by (1) inadequate monitoring of the School Feeding Programme due to limited human resources, (2) abuse of school feeding supplies by teachers, (3) inadequate financial resources to take care of all children and (4) other financial constraints.

CHILD MORTALITY

Infant mortality rates in SVG have significantly reduced over the past 20 years from 60 per 1000 live births in the 1980s to 19.2 per 1000 live births in 2001. The under 5 years Mortality Rate was 22.9 per 1,000 live births in 2001. Within recent years, the majority of infant (under 5 years) mortality has occurred in children under the age of 1. These were mainly due to

haemorrhage of foetus, sepsis and respiratory distress. In the 1980s and prior, infant deaths were mainly due to malnutrition and gastroenteritis.

In 1993, the Government of SVG, through the Ministry of Social Development, signed and ratified the Convention on the Rights of a Child and established a national committee on the rights of a child. Additionally, in April 2002 this country launched the Global Movement for Children (GMC).

The Ministry of Health and the Environment recognises that education is a key factor in reducing infant mortality rates and much of its effort have been geared towards this. Additionally, because the very poor are identified as being unable to satisfy basic nutritional requirements, other institutions are being developed to reduce the impact of poverty on infant survival. These include:

1. *Capacity building and educational awareness* – There is a concerted drive towards training of all levels of staff and improving linkages between doctors and nurses. There is close communication between nurses, doctors and hospitals. For example, nurses can now make immediate referrals to hospitals for pregnant mothers with elevated blood pressure, swollen feet or spotting. Such referrals and quick intervention reduces the incidence of still births and birth trauma. Additionally, the hospital's midwifery programme is of a very high standard. 95% of trained nurses are trained mid-wives. In the 1970s, a policy change was adopted that disallowed midwifery training to persons who were not first trained in nursing.
2. *The Primary Health Care Approach* – This is a policy framework developed by the Ministry of Health that ensures that health care is available in all districts and that each person is within 2 miles access of primary health care. There has been therefore an increase in the numbers of clinics, improvements in clinic structures and improved staffing of facilities. Clinics are more equipped to deal with acute diseases such as gastroenteritis that was in the past responsible for larger numbers of infant deaths.
3. *Nutrition Support Programme for Pregnant Mothers* – this programme provides food packages for pregnant mothers who are identified as suffering from poor nutrition.
4. *Nutrition Support Programmes in Pre- and Primary Schools and at Health Centres* - Food packages are distributed to schools and health facilities on a regular basis.

5. *Breast Feeding Campaign* – A campaign instituted by the General Hospital which educates and encourages mothers to breast feed as a main means of defending their babies against illness.
6. *Expanded Programme on Immunization* – During the 1960s, an immunization programme was started to treat preventable forms of mortality. Infants were immunized against Diphtheria, Pertussis (Whooping cough), Tetanus, Mumps, Measles, Rubella, Polio and Tuberculosis. In 2003, two additional vaccines were added to immunize infants against Hepatitis B and *Haemophylus influenzae* type B (causes Meningitis). To ensure compliance, no pupil is allowed to enter primary school without a vaccine certificate confirming that the necessary vaccines were obtained. This has stimulated a greater sense of reliability and accountability in parents. The Pan-American Health Organization (PAHO) has recommended that the immunization rate within a country should be 95% and in SVG it is currently close to 100%.
7. *School Health Programme* – Family nurse practitioners are allocated to schools to observe, treat and refer to doctors any student identified with communicable and non-communicable diseases.
8. Improvement of primary health care facilities

Constraints

These constraints are not so much linked with child mortality as they are with an inability to research and document information.

1. Manpower issues – lack of expertise/staff in areas such as health financing, data analysis, research, systems analysis, data entry. The Epidemiology unit is unable to collect the types of data, from a number of different areas due to lack of personnel.
2. Lack of networking: the absence of computer networking and efficient links between clinics and the central office (epidemiology) means that often the reports from out-districts are obtained late because they must either be hand-delivered or mailed to the main office. This further affects the timeliness in which national reports are prepared.

5.3 Gender Equality and Empowerment of Women

Prior to 2001, issues of gender focussed mainly around women's rights issues, this particularly so with the establishment of the Women's Desk in 1985. The Desk sought to '*inform the government of policy relating to women and to be the co-ordinating link between government ministries and agencies and women's organizations*'.²⁸ In 1987, the Desk, which was upgraded to the Division of Women's Affairs, saw its main thrust as helping women to recognize and realize their full potential as individuals and creating awareness for the full integration in national development.

In 2001, in keeping with the focus on a global level, the Women's Affairs Division was renamed the Gender Affairs Division and relocated to the Ministry of Social Development. Such a change has increased attention on gender equity.

Due to the fact that the Gender Affairs Unit is relatively new, much of its work on gender equity is currently at the policy phase. The Unit however continues some of the initiative relating to women that begun prior to 2001.

The Current national efforts and initiatives of the Gender Affairs Department are:

- The establishment of a Gender Equity Commission to examine issues relating to gender equity in SVG.
- Creation of a national policy on gender equity. Several consultations have been conducted and a draft policy completed and currently under review.
- Work continues to meet the countries obligations under a number of Conventions to which SVG are signatories. These Conventions include:
 - The Convention on the Elimination of Discrimination Against Women – CEDAW
 - The Belem-do-Para (BDP) Convention – This Convention deals with issues surrounding domestic violence. The Department is currently focussing on simplifying the language of the BDP into layman terms. Information will be presented in booklets available to the public to educate them on their rights. This effort is being supported by the Family Court and by the Ministry of Social Development, of which the Gender Affairs Unit is a part.

SVG also continues the celebration of International Women's Day.

The Gender Affairs Department is currently carrying out several programmes and projects as part of its initiatives. These are strategically designed to focus on empowerment, education and training and advocacy and are as follows:

a. Poverty Reduction and Capacity-building among Rural Women in SVG

Priority areas in this project include social development and creation of productive employment. This project is intended to be sustainable by creating training opportunities for women, thus increasing their independence. Some major components of this project are developing project goals, targets and guidelines; capacity-building and strengthening of women's organizations; and Training in small-business management and specific livelihood activities.

b. Situational Analysis of Gender Relations in SVG

Gender equity is a priority area in this project. It is intended to inform the national policy on gender equity and data provided will outline how people view situations of men and women in SVG.

Main constraints:

- Lack of funding to support consultations, and foreign facilitators/consultants necessary to execute programmes and projects.
- People have not yet come to grips with the understanding of gender and what it means.
- Staff limitations – Lack of manpower to execute the Department's work.
- Lack of office equipment including computers and software packages.

5.4 HIV/AIDS, malaria and other diseases

The Ministry of Health and the Environment, through its Public Health Department, Vector Control and HIV/AIDS/STI Units, is the main agent spearheading the fight against vector-borne diseases and HIV/AIDS. Mosquitoes and rats are the main vectors targeted by the Department.

Malaria and other mosquito-borne diseases

The Vector Control Unit (VCU) in the Ministry of Health and the Environment *'seeks to reduce transmission and morbidity of vector-borne diseases as well as economic and other losses resulting from the presence of vectors by using available resources and physical, chemical and biological measures with the cooperation and participation of the general public'*²⁹.

Its goals are:

- To make continuous assessments of the health and other risks of the general population resulting from the presence of disease vectors.
- To reduce wastage of government supplies, or damage to equipment or structures arising from rodent activity.
- To enlist public support and participation in vector control activities.
- To progressively reduce the *Aedes aegypti* mosquito index, and any other indicators of mosquito activity island-wide.

The main strategies for mosquito control are against the *Aedes aegypti* mosquito because it is the vector for Dengue and Yellow fevers; and Dengue is currently a major threat to SVG, particularly because there are four strains of Dengue and no vaccine has yet been created to treat it.

Yellow Fever is no longer of great concern in SVG since the development of the Yellow Fever vaccine and it is now confined to only small areas of the globe. There is also a focus on other mosquitoes such as other *Aedes sp.* which are not necessarily vectors but are considered nuisance mosquitoes. There is however a concern for *Culex sp.* which in recent times has been identified as a vector of West Nile disease.

There are 12 species of mosquitoes in SVG but based on regular entomological surveys, no Malaria vectors are present. Mosquito surveillance is conducted periodically and samples of *Anopheles sp.* found are sent to the Caribbean Epidemiology Centre (CAREC) for identification.

Strategies for combating mosquito-borne diseases include:

1. *Regular inspections:* Property (particularly private property) are inspected daily by field inspectors for the presence of mosquitoes.
2. *Education:* Pamphlets are produced to educate persons on how to identify and eliminate these mosquitoes. Additionally, house inspectors will advise and seek to get the assistance of house owners in the control of these pests.
3. *Periodic fogging:* Fogging is usually kept to a minimum because of concern for the environment, to prevent misuse of and mosquito resistance to insecticides. Therefore, fogging is not used to control mosquitoes in general. A policy has been established by the Department to fog an area only if there is a cluster of Dengue cases reported there and is thus geared towards infected mosquitoes.
4. *Fish as biological control:* The use of fish to control mosquitoes via their feeding on mosquito larvae.

The VCU is striving to reduce the mosquito *House Index*³⁰ to 1% or less based on the UN recommended that Dengue fever will not spread if the *House Index* is lower than this figure. In 2001, there were 200 reported cases of Dengue fever but only 100 of these cases were confirmed by laboratory analysis. In 2002, there were 29 cases in the first half of the year but none in the second.

Based on PAHO recommendations, the Unit is also attempting to keep the *Breteau Index*³¹ to less than 5%. This is another recommended figure to prevent the spread of Dengue.

Regional initiative

Programme on Climate Change and Disease Transmission in the Region - SVG is part of this regional programme conducted by CAREC to monitor whether there is a correlation between weather patterns and disease transmission rates. There are presently 132 local houses used in the

study. These houses are inspected monthly and the data collected on mosquito presence is submitted to CAREC.

Constraints to mosquito control

- Compliance – Although there is a constant awareness programme, the Unit continues to have problems with conformity to healthy household practices that would prevent mosquito breeding.
- Inability to use legislation to ensure conformity. Although some legislations exist, there is a problem with enforcement. This is especially due to the fact that traditionally, the Public Health Department did not adequately enforce its legislations and presently persons do not feel forced to comply. Additionally, current penalties (fines) are very low.
- The Government of SVG still permits importation of used tyres into the country, some of which can be considered waste themselves. According to the definition for solid waste, tyres are solid waste and should be handled by the Solid Waste Management Unit (SWMU) at a cost to prevent indiscriminate dumping by persons and tyre dealers. However, the Solid Waste Management Unit does not presently manage the tyre disposal and there are no known plans to do so. There is, though, a loose arrangement between tyre dealers and the Government Equipment Services Corporation (GESCO) whereby dealers are expected to deliver their tyres to be burnt by the Corporation at a cost of E.C. \$1.00 per tyre. Hence, many tyres are dumped over bank sides and on vacant lots, collecting water and creating a haven for mosquitoes.
- Lack of financial and technical resources to execute programmes effectively.
- Poor physical infrastructure and improper maintenance plans – e.g. poor drainage and blocked river mouths encourage mosquito breeding.
- Difficulties in detecting cracks in septic tanks.

Rodents

In 2002, the Public Health Department in the Ministry of Health and the Environment launched a Rodent Control Programme as a result of a survey which revealed that SVG had a serious level of rat infestation. This programme included development of plans of action for individual district in the combat of rodents. These plans were mainly geared at creating awareness and

obtaining community support for rodent control. However, due to several constraints within the Department, including the resignation of several key members of staff responsible for the execution of the programme, it was not effectively implemented.

In 2003, the VCU whose mandate is to inspect and treat rodents in government buildings is expanding its focus to include selected communities throughout the island. Under this pilot project staff members have been trained in areas of recognition of rodent signs and in means of involving community personnel in the baiting of infested areas. The VCU also, through education, encourages community persons to improve solid waste management and sanitation within their surroundings.

Constraints to rodent control

- Business operators in the capital (restaurants, supermarkets, bakeries) release their waste water directly into drains. Many have no grease traps and others are not regularly maintained. There has however been some compliance by proprietors and the Central Water and Sewage Authority is assisting with the construction of traps. Still, the numbers complying are very limited.
- Limited financial and material resources.
- Limited adherence of public to the rules and measures set out by the Public Health Department.
- Some farmers conduct the unhealthy practice of leaving spoils to rot in fields, thereby harbouring rodents. Farms are causing some of the greatest infestation problems.

HIV/AIDS

In 1984, SVG recorded its first case of HIV. From 1984 to 2000, some 478 cases were reported. *‘Two hundred and sixty-nine (269) cases or 56% progressed to full-blown AIDS and two hundred and sixty-six (266) or 99% of the AIDS cases have died. Of the 266 AIDS-related deaths, 179 or 67.3% were men and 87 or 32.7% were women. Interestingly, 192 or 72% of all AIDS-related deaths occurred between 1996 and 2000. The estimated prevalence rate of HIV*

infection at the end of year 2000 was computed at 0.2%³² and the incidence rate for that year was recorded as 62.5 per 100,000 population³³.

Of the cumulative number of HIV/AIDS cases, 301 were male, 163 were female and 14 were registered without sex being reported. In recent years the male/female ratio has decreased significantly and is now recorded at 1.8:1 from a ratio of 8:1 in the earlier period³⁴.

Statistics show that the majority of HIV/AIDS cases (60% of HIV and 65% of AIDS) fall within the 25 - 44 years age group. The 15 – 24 year age group accounts for the second largest (19.7%), while the group 5 – 14 years reflects the lowest rate of infection (0.7%).

According to the Pan-American Partnership on HIV/AIDS (2002)³⁵, AIDS is the leading cause of death in the 15 – 44 year age group, and the Caribbean is the hardest-hit region in the world outside sub-Saharan Africa. Estimates are that there are between 360, 000 and 500,000 persons living with the virus in the Caribbean.

SVG has developed several major response initiatives³⁶ to HIV/AIDS. These include:

- Implementation of a surveillance system, including training of personnel, to monitor the spread of the diseases since initial diagnosis in 1984. A Cabinet-appointed Advisory Committee with several working groups in the areas of information, education and counselling, surveillance and patient care was established with efforts aimed at reducing the incidence of HIV/STIs. Information, education and communication (IEC) programmes were launched and transmitted through the use of film, drama, calypso, print media etc.
- Health and Family Life Education is ongoing in primary and secondary schools with support for training and development of out-of-school youth. This training is provided for by the Health Promotion and Education Unit and the Reproductive/Family Planning Programme.
- Condoms are made available at supermarkets, drug stores and gas stations as well as all 38 health centres.
- Based on a study conducted in Her Majesty's Prison in 1992 which showed that inmates were at risk, a programme has been developed and implemented.

- In 1985, the Elisa tests were introduced to SVG, while confirmatory tests previously conducted at CAREC began in 1999. A working group was also set up to develop policies to ensure satisfactory services for all HIV positive patients. In 1999 and 2000, anti-retroviral treatment trials were undertaken for positive mothers, which necessitated an expansion of the clinical laboratory to offer CD4 counts as well.

In response to the disease, NGOs also developed programmes and activities targeting prevention and control of HIV/AIDS. These include work by the *National Youth Council*, *St. Vincent Planned Parenthood Association* and *Faith Based Organizations*. These activities are as follows:

National Youth Council

This organization was set up to protect and serve the interest of youth, with attention being given to unemployment, anti-drug and alcohol campaigns and HIV/AIDS awareness. The Council's objectives include reduction of the rate of HIV/AIDS infection by 2.5% by 2006, as well as developing youth-friendly educational material.

St. Vincent Planned Parenthood Association

This NGO provides Family Planning, Family Life and Health Education, Counselling, HIV/AIDS/STI Prevention and Control services. The primary goal of the '*Heal St. Vincent*' Project implemented in 1997 was AIDS education. Additionally, the project also involved training of community workers, health care providers and leaders in issues relating to HIV/AIDS/STIs, Counselling and Family Life.

Faith Based Organizations

- Marion House – Established in 1987 as a joint effort between the Roman Catholic Church and the National Children's Home Fund. They offer counselling services to HIV positive individuals, as well as general counselling.
- House of Hope – Objectives include provision of a home for HIV/AIDS positive persons, relieving care-givers who are unable to cope with terminally ill relatives and to provide assistance to local health agencies.

The HIV/AIDS/STI Strategic Plan

SVG, through the HIV/AIDS/STI Unit in collaboration with Caribbean Epidemiology Centre (CAREC), PAHO and the United Nations Joint Programme on AIDS (UNAIDS), has developed the SVG HIV/AIDS/STI Strategic Plan as a means of combating this dreaded disease. The following is a list of those strategies, aimed at reducing the incidence of HIV/AIDS and improving the quality of life of people and families affected by HIV/AIDS and mitigating the impact of HIV on communities. Strategic objectives are also outlined.

Strategy 1: *Strengthen Intersectoral Management, Organizational Structures and Institutional Capacity*

Strategy Objectives:

- Re-organize the National HIV/AIDS Task Force and the HIV/AIDS Unit
- Improve institutional capacity to deliver relevant quality health and social services

Strategy 2: *Design and Implement Care, Support and Treatment Programmes for Persons Living with AIDS and their Families*

Strategy Objectives:

- Establish a care treatment and support network system for persons living with AIDS and their families

Strategy 3: *Develop and Implement HIV/AIDS/STI Prevention and Control Programmes with Priority given to Youth and High Risk/Vulnerable Groups*

Strategy Objectives:

- Utilize the holistic approach to provide targeted prevention and control programmes for adolescents, young adults and high risk/vulnerable groups.
- Upgrade knowledge and skills of Medical and Nursing Practitioners in the Management of Sexually Transmitted Infections (STIs).
- Mount public information programme on common signs, symptoms, treatment issues for selected STIs.

- Conduct pre and post surveys.

Strategy 4: *Conduct Research and Training Programme*

Strategy Objectives:

- Improve the capacity of selected personnel in the development and conduct of small scale applied research studies, data analysis and recording findings.
- Conduct specific HIV/AIDS/STI Research

Strategy 5: *Upgrade Surveillance Systems*

Strategy Objectives:

- Strengthen HIV/AIDS/STI Surveillance Systems

Strategy 6: *Implement Advocacy Programmes*

Strategy Objectives:

- Promote a supportive environment for persons living with AIDS.

The Government of SVG will also facilitate the following³⁷ in support of the above strategies.

- Institute an organized national counselling programme for people living with HIV/AIDS and their contacts.
- Offer grants to non-governmental organizations and community-based programmes, whose emphasis is on AIDS prevention and support for people living with AIDS.
- Formulate policies to address stigma and discrimination in the workplace.
- Provide welfare assistance for needy people living with HIV/AIDS and their offspring/orphans.
- Strengthen and support systems for the provision of home care.
- Source funding for provision of antiretroviral drugs.
- Conduct intensive educational programmes aimed at prevention.
- Strengthen laboratory services to offer diagnostic and monitoring services.

Current developments since the preparation of the HIV/AIDS/STI Strategic Plan³⁸

1. Strengthening of the HIV/AIDS Unit

The HIV/AIDS Unit of the Ministry of Health and the Environment is currently performing the coordinating function for programmes under the expanded response. Additionally, the National HIV/AIDS Programme Coordinator, a National HIV/AIDS Programme Director, a Social Worker, two Counsellors and a Psychologist have been appointed, along with a clerk/typist and an office attendant. Although there are two vacancies remaining to be filled, that of medical specialist and one additional counsellor, funds have already been made available by the Government for these two positions.

2. Laboratory upgrade

In 2002, the capacity of the new laboratory at the Milton Cato memorial Hospital was expanded. Given the need for consistent monitoring and testing of persons with HIV/AIDS, one of the prerequisites of the implementation of Highly Active Antiretroviral Therapy is that required CD4 and viral load testing be carried out. A CD4 machine has already been ordered through a regional arrangement with CAREC and other countries. Blood and other samples from Bequia and other island in the Grenadines are transported via ferry or aeroplane to the laboratory. Additionally, a MAXM haematology Analyzer has also been acquired. There is however a need for 2-3 technologists within the haematology unit.

3. Persons living with HIV/AIDS

Through the Ministry of Housing and Social Welfare, the social support programme for persons living with HIV/AIDS has been implemented. Twenty thousand dollars (EC \$20,000) was allocated for this purpose in 2002.

4. Training and education

The Ministry of Health and the Environment collaborated with the performing arts group ASHE of Jamaica to hold two International Labour Organization/National Labour Congress to hold two training programmes. Ashe performed in many schools, emphasizing the information and education aspect of HIV/IDS. Workshops were also held for other persons including counsellors, school nurses, and peer counsellors. A

second training programme was also centred around Occupational Safety and Health, as well as HIV/AIDS in the workplace.

5. *NGO involvement*

NGOs have continued to be strongly involved in the fight against HIV/AIDS. The St. Vincent Planned Parenthood Association (SPPA) has been selected as the focal NGO for the expanded response. The SPPA provides home-based palliative care for persons living with HIV/AIDS and also distributes condoms.

The National Youth Council targets youth through its HIV/AIDS education programmes. The council also has a small secretariat and receives financial support from donor agencies which focus on community-based projects.

5.5 Environmental Sustainability

There are pockets of responsibility for environmental sustainability within most Ministries. The Ministry of Agriculture, Industry and Fisheries (through its Forestry, Fisheries and Agriculture Departments), and the Environmental Health Services within the Ministry of Health and the Environment are the key players in the arena of environmental protection. However, once more matters regarding the implementation of environmental sustainability are hindered by the absence of overarching visions and policies towards it. Therefore, there are no strategies towards it. The limited focus being paid to it by some Departments is driven mainly by external trends, responses to regional policies and meeting the requirements of donor organizations. Within the country there is still an urgency for national recognition of the issue.

5.6 Global Partnership for Development

St. Vincent and the Grenadines has several initiatives aimed at developing partnerships for Sustainable Development (SD). Although the individual initiatives may not be significant, the collective impact on the SD of SVG is great.

At the national level there are partnerships with Cuba in the field of education, professional services and technical expertise. There are bilateral arrangements with Venezuela, Taiwan and Mexico.

At the sub-regional level, the St. Georges Declaration (SGD) of Principles for Environmental Sustainability is a major initiative involving all OECS member countries. The Declaration calls for precise action aimed at improved and sustainable livelihoods and commits both individuals and state to accountability in this regard.

At the regional level, the CARICOM initiative for the establishment of a Sustainable Development Centre is a major thrust. This effort builds on the successes of the Caribbean Planning for Adaptation to Global Climate Change (CPAGCC). St. Vincent and the Grenadines participated fully in this initiative and sees it as key to the development of a national platform to address global climate change.

In the area of Trade and the Economy, SVG is participating fully in the negotiations leading to the establishment of a Caribbean Single Market and Economy. The Caribbean Court of Appeal is another area of partnership building for sustainable development.

Development of environmental initiatives is possible the area of greatest cooperation, partnerships and efforts aimed at sustainable development. In addition to the SGD there are several Multilateral Environmental Agreements that operate at the sub-regional, regional and international level. In all of these cases, there are requirements at the national level aimed as Sustainable Development. In some instances, financial support is provided by the Global Environmental Facility thus taking the strain off the state.

The OECS solid waste management project, an element of the Barbados Programme of Action, enabled member states the opportunity to address waste management. Like CPAGCC, this initiative has created partnerships that support sustainable development at the national level.

In the area of Health, there is the Organisation of American States Pharmaceutical Procurement Services. This body affords the OECS member states the benefits of bulk purchase of pharmaceuticals and some degree of credit that ensures a sustained supply of needed drugs. In addition, the PAHO provides technical support in primary health care and allows the member states the privilege of exchange of ideas and information.

The Environment and Sustainable Development Unit of the OECS maintains a register (database) of experts in the various disciplines of environment. Similar databases reside in regional institutions like the CDB covering a much wider area of expertise.

Currently, St. Vincent and the Grenadines is not in a position to maximize possible benefits from global partnerships. From the data collected and reflected in this report, it is clear that there is an absence of a sustainable development entity and thrust coupled with a shortage of experts and a national plan for sustainable development.

6. EMERGING CONCERNS AND SPECIAL NEEDS

HIV/AIDS

With the hardest hit sections of the population being the 15 – 44 year category, there is concern that developing countries like SVG are at risk of having a significantly reduced workforce in the near future. This will further disable the country's ability to make economic progress.

An aging population

SVG's growing aging population is and will continue to provide a challenge to its economic environment. Approximately 10% of the population falls within the *65 years and over* category and this may mean that the population is aging faster than the country's ability to plan for them. Life expectancy has risen from 55 years in the 1960s, to 65 years in the 1980s, and currently to 73 years. As a third world country, SVG has to continuously focus on avenues for economic development. It therefore now faces the challenge of being unable to adequately care for this category of the population. Even with current national efforts to improve provisions to these persons, many may be excluded because of poverty. Because these persons do not obtain the necessary care from families and friends, they remain dependent on the government's resources.

Increases in chronic diseases due to changing lifestyles:

Chronic diseases such as Diabetes, hypertension, heart disease, cancer and risk factors such as obesity are on the rise in SVG. Many persons are of the opinion that health is the responsibility of the Ministry of Health and a large number of the population do not see it as a personal issue. Thus culturally, health care has been left up to the Government. Vincentians are not, in general, oriented to fitness (physical and mental well-being). They are also spending more time in less active forms of recreation such as relaxing, and watching television. Life expectancy is increasing in SVG and there will be greater demands on the country's limited resources in order to cope with and treat these illnesses.

Crime and drugs

Drugs, particularly cocaine transhipped through SVG and marijuana grown on the rugged slopes of the island, are increasingly being seen as a means of alternative livelihood. Activities associated with the growth, harvesting, marketing and/or use of these products have brought with them an associated culture of crimes, and altered behaviour patterns which are unfavourable to societal values and norms.

Marijuana cultivation, in particular, is also having other impacts which are often overlooked. For example, deforestation for marijuana cultivation often causes loss of habitat, threatens biodiversity and impacts on the overall benefits provided by watersheds. Additionally, growth in crimes associated with drugs have brought with them increased concerns among the populace about safety and security.

Loss of trained personnel to the developed world

This area of concerns is already impacting on SVG from a socio-economic standpoint. SVG continues to lose a cadre of personnel considered ‘the cream of the crop’. These persons are usually highly trained and experienced in key areas which contribute significantly to the country’s development. These losses are mainly due to limited local opportunities for upward mobility, the constant search by individuals for more lucrative forms of remuneration and a quest to obtain greater professional development. Also of note is the fact that several western countries conduct vigorous recruitment programmes offering higher paying jobs and other attractive benefits.

Some of the key sectors where this loss of professionals is being experienced are in the fields of medicine (nurses), education (teachers) and among various types of technicians.

Globalization and trade

The economy of small developing countries such as SVG are susceptible to external market forces brought about by new trade liberalization policies. Over the years, the country has enjoyed preferential market treatment for major foreign exchange earners such as bananas.

However, with the inevitable loss of this preferential treatment and with the impending new trading regimes, SVG will now be forced to compete with other countries that are more technologically capable, have cheaper costs of production, can produce in larger quantities and in some cases still enjoy subsidies by their government. This will have severe consequences on the competitiveness and profitability of local products and enterprises.

Bibliography

Campbell, D. *et al.* (2001). Windward Islands' Banana Farmers Livelihood Study. Prepared for Department for International Development Caribbean.

Central Planning Division, Ministry of Finance, Planning and Development (2001). SVG Medium Term Economic Strategy Paper 2002 – 2004. Prepared for the Government of SVG.

Gender Affairs Division (1990). The Gender Affairs Division. *Gender News*, 1 (1), pg. 5.

Kairi Consultants, 1996. Main Report – Poverty Assessment Report, St. Vincent and the Grenadines. Prepared for the Government of SVG.

Matthes, H. (1984). SVG Formulation of a Fisheries Development Programme. United Nations Food and Agriculture Organization, Rome.

Ministry of Education, Youth and Sports (2002). Education Sector Development Plan 2002 – 2007. MEYS, Kingstown.

Ministry of Health and the Environment (2002). National Report to the United Nations Convention to Combat Desertification. Prepared by the Environmental Health Services Unit.

Ministry of Tourism and Culture, 2002. Tourism Statistical Report Jan. – Dec. 2002. Ministry of Tourism and Culture, St. Vincent and the Grenadines.

National Economic and Social Development Council, Poverty Reduction Task Force (2002). SVG Interim Poverty Reduction Strategy Paper. Prepared for the Government of SVG.

O'Riordan, T. (2000). Environmental Science for Environmental Management 2nd ed. Prentice Hall, Norwich.

Pan-Caribbean Partnership on HIV/AIDS (2002). The Caribbean Regional Strategic Framework for HIV/AIDS 2002 2006.

Simmons and Associates, Inc., 2000. Draft National Biodiversity Strategy and Action Plan for St. Vincent and the Grenadines. Report prepared for the Government of St. Vincent and the Grenadines.

The Health Information Unit (2001). SVG HIV/AIDS/STI Strategic Plan 2001 – 2006. Registrar's Office/Statistics Unit, SVG.

The World Bank (2002). Project Appraisal Document on a Proposed Loan and Credit for the Emergency Recovery and Disaster Management Project. Finance, Private Sector and Infrastructure Department, Latin America and the Caribbean Region.

University of the West Indies, 2002. St. Vincent and the Grenadines Cost of the Five-year HIV/AIDS/STI Strategic Plan 2001 – 2006, Draft Report. Health Economics Unit, University of the West Indies, Republic of Trinidad and Tobago.

Appendix 1:

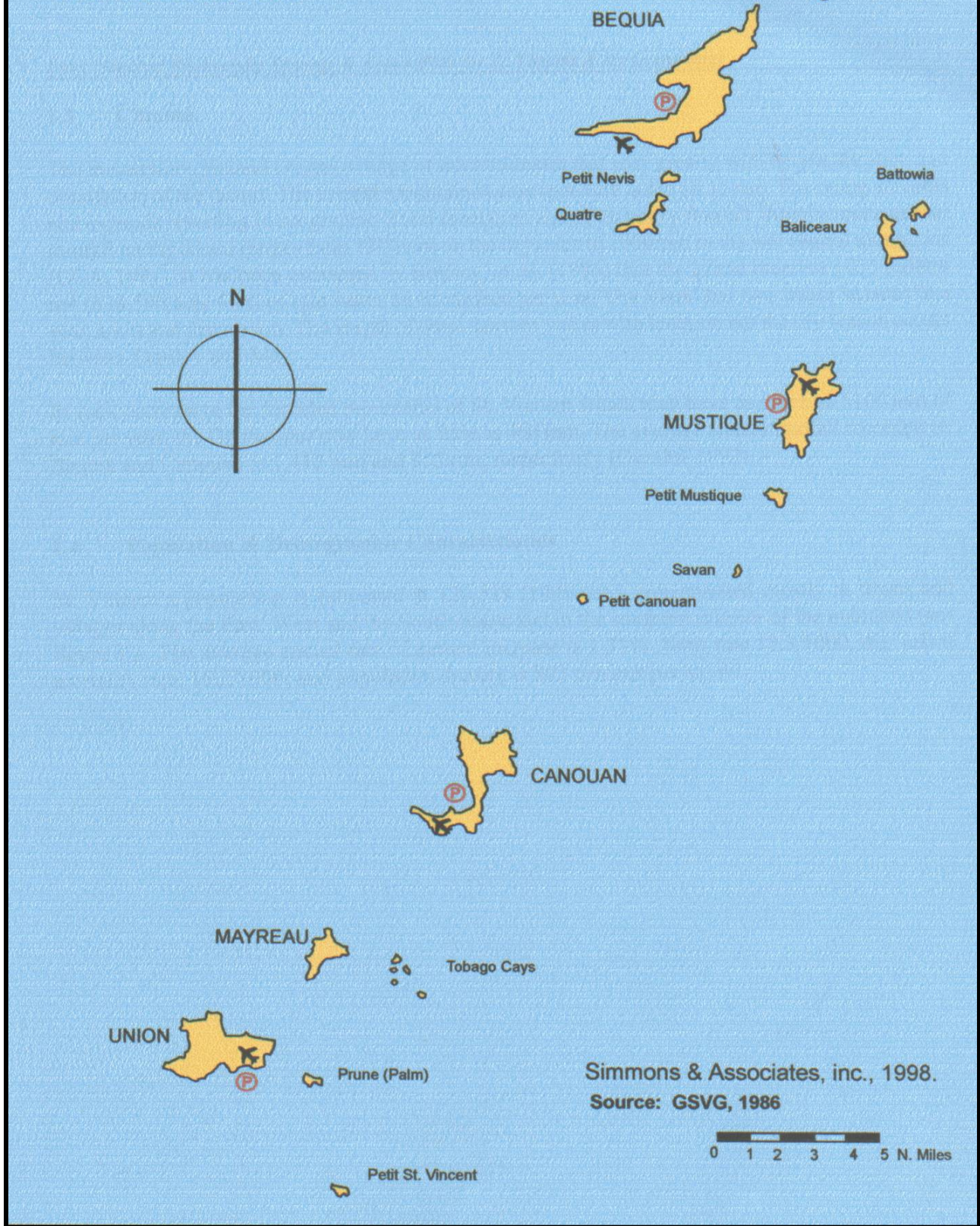
Maps of St. Vincent and the Grenadines



Source: Draft National Biodiversity Strategy and Action Plan for SVG (Simmons and Associates, Inc., 2000)

The Grenadines

Figure 2.



Source: Draft National Biodiversity Strategy and Action Plan for SVG (Simmons and Associates, Inc., 2000)

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- ¹ National Economic and Social Development Council, 2002 - page 15
 - ² Tourism Statistical Report Jan. – Dec. 2002.
 - ³ The Department of Tourism, Kingstown, St. Vincent and the Grenadines.
 - ⁴ National Economic and Social Development Council, 2002 - page 2.
 - ⁵ The *Gini coefficient* is used as a measure of income distribution. 0 indicate full equality and 1 indicates total inequality.
 - ⁶ Kairi Consultants, 1996.
 - ⁷ National Economic and Social Development Council, 2002.
 - ⁸ National Economic and Social Development Council, 2002 - page 2.
 - ⁹ See Ministry of Education, Youth and Sports, 2002.
 - ¹⁰ Campbell, D. *et al.*, 2001.
 - ¹¹ See Simmons and Associates, 2000.
 - ¹² The World Bank, 2002.
 - ¹³ Other sub-committees of the National Emergency Organization include Public Information and Education, damage assessment, transport and road drainage, emergency shelter, health services, emergency telecommunications, emergency supplies, search and rescue, rehabilitation and reconstruction, public utilities, voluntary services, oil spills, volcanic emergency planning.
 - ¹⁴ Matthes, H. FAO, ROME. 147 -149.
 - ¹⁵ National Report to the UNCCD, 2002
 - ¹⁶ See National Report to the UNCCD, 2002
 - ¹⁷ O’Riordan, T. (2000). *Environmental Science for Environmental Management* 2nd ed. Prentice Hall, Norwich.
 - ¹⁸ National Economic and Social Development Council, 2002 - page 13
 - ¹⁹ Kairi Consultants, 1996 - p.xii
 - ²⁰ National Economic and Social Development Council, 2002 - page 10
 - ²¹ National Economic and Social Development Council, 2002.
 - ²² National Economic and Social Development Council, 2002.
 - ²³ Campbell, D. *et al.*, 2001.
 - ²⁴ Summarized from ‘The Government’s Position’ in National Economic and Social Development Council, Poverty Reduction Task Force (2002). SVG Interim Poverty Reduction Strategy Paper. Prepared for the Government of SVG.
 - ²⁵ National Economic and Social Development Council, 2002.
 - ²⁶ Central Planning Division, 2001.
 - ²⁷ National Economic and Social Development Council, 2002.
 - ²⁸ Gender Affairs Division, 2002.
 - ²⁹ Mission of the Vector Control Division in the Public Health Department
 - ³⁰ The *house index* is the percentage of houses inspected that are found positive with breeding mosquitoes.
 - ³¹ The *Breteau index* is the percentage containers found positive with breeding mosquito for the number of houses inspected.
 - ³² The Health Information Unit, 2001.
 - ³³ University of the West Indies, 2002 - page 2.
 - ³⁴ University of the West Indies, 2002 - page 2.
 - ³⁵ Pan-Caribbean Partnership on HIV/AIDS, 2002 - page 2-3.
 - ³⁶ University of the West Indies, 2002 - page 4.
 - ³⁷ Central Planning Division, 2001.
 - ³⁸ Pan-Caribbean Partnership on HIV/AIDS, 2002 - pages 6-7.