

National Environmental Summary Saint Vincent and the Grenadines

2010



United Nations Environment Programme

The National Environmental Summary (NES) for St. Vincent and the Grenadines (SVG) has been developed by UNEP, with financing from the European Community (EC). It serves as an information tool to support the incorporation of environment as a thematic component into the United Nations Common Country Assessment (CCA) and the United Nations Development Assistance Framework (UNDAF) initiatives. Within the context of poverty reduction and development, this environment summary is intended to provide a critical analysis of gaps and opportunities that exist within the national legislative framework, the policies and the programmes, which are used to address the major environmental issues.

The contributions and support provided through the consultation process by the various Government agencies, regional organizations and international agencies working in and for SVG are well acknowledged. In particular, many thanks to Mr. Edmund Jackson and Ms. Nyasha Hamilton for scheduling the interviews with the various technical persons and experts and facilitate the consultant whilst in SVG.

UNEP/ROLAC (Regional Office for Latin America and the Caribbean)

Coordination and Technical Supervision:

Mark Griffith, PhD, Senior Programme Officer, UNEP-ROLAC

Technical Review:

Graciela Metternicht, PhD, Regional Coordinator, Division of Early Warning and Assessment
UNEP-ROLAC

Author :

Asha Singh, PhD, Independent Consultant

Prepared for

John Wilson  ecoNaturalResourcesManagmentConsulting

Photo Credit on Cover Page:

Asha Singh, 2010

Acronyms

ALBA	Bolivarian Alliance for the Peoples of Our America
CARICOM	Caribbean Community Secretariat
CBD	Convention on Biological Diversity
CIDA	Canadian International Development Assistance
CPACC	Caribbean Planning for Adaptation to Climate Change
CRFM	Caribbean Regional Fisheries Mechanism
DFID	Department for International Development
EC	European Community
FAO	Food and Agricultural Organisation
GEF	Global Environment Facility
GoSVG	Government of Saint Vincent and the Grenadines
IWCAM	Integrated Watershed and Coastal Area Management
JICA	Japan International Cooperation Agency
MTESP	Medium-term Economic Strategy Papers
NCSA	National Capacity Self Assessment
OAS	Organisation of American States
OECS	Organisation of Eastern Caribbean States
SFA	Special Financing Agreement
SLM	Sustainable Land Management
SPACC	Special Programme on Adaptation to Climate Change
SVG	St. Vincent and the Grenadines
SWMA	Solid Waste Management Authority
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCD	United Nations Framework Convention to Combat Desertification
USAID	United States of America International Development

Table of Contents

Executive Summary	-	-	-	-	-	-	-	-	-	1
1. Introduction and Background	-	-	-	-	-	-	-	-	-	3
2. State of the Environment and Environmental Priorities	-	-	-	-	-	-	-	-	-	3
3. National Policy Responses	-	-	-	-	-	-	-	-	-	6
4. International Assistance Programmes	-	-	-	-	-	-	-	-	-	11
5. Critical Gaps and Opportunities to support country environmental Priorities	.									15
List of References	-	-	-	-	-	-	-	-	-	18
Annexes	-	-	-	-	-	-	-	-	-	20

Executive Summary

The National Environmental Summary (NES) for Saint Vincent and the Grenadines (hereon SVG) was prepared using information gathered from a desktop review of scientific studies, national reports and assessments and documents and from personal interviews with key environmental and technical experts working in the various agencies and organisations in and for SVG.

The conclusions drawn from the study identified the environmental priorities as effects of climate change in the form of droughts and increased rainfall, pollution, land degradation, deforestation, loss of agricultural land and solid waste management. SVG has made considerable strides in responding to the environmental issues especially in framework policies and plans. The linkage between development and the environment seems to be well established in the framework agenda for SVG, *The National Economic and Social Development Plan (2010-2025)*. However, this framework needs to be accompanied by the relevant integrated sector policies which are slowly developing. Implementation and enforcement are still lacking to a large extent caused mainly by lack of resources (financial and human) and poor coordination at the agency level. The gaps and opportunities identified during the consultation and research are tabulated under six broad headings and presented below.

Summary of Identified Gaps and Opportunities
1. Resource Management
Gaps: <ul style="list-style-type: none">– Inadequate scientific data– Lack of an integrated Solid Waste system which can respond to the various forms of waste– Absence of an integrated coastal management regime– Absence of an integrated management regime for fresh water resources– Absence of holistic Sustainable Land Management
Opportunities for: <ul style="list-style-type: none">▪ A better regime of data collection which will serve of indicators for gauging environmental quality and ecosystem health▪ An integrated waste management regime which considers reuse, and recycle▪ A regime which considers integrated management of the Coastal Zone and its assets▪ The development and promotion of conservation measures and best water use practices to ensure optimal utilisation of the water resources▪ A comprehensive system for management of the land resources which include emphasis on a national land use and land-use zoning, a national land bank system to reduce the amount of under-utilized arable land and encourage and support security of tenure for lands under the Possessory Title Act, 1967
2. Environmental Governance: Policy
Gaps: <ul style="list-style-type: none">– Integrated Forest Policy is lacking– Lack of land use policy/plan
Opportunities for: <ul style="list-style-type: none">▪ A formal national policy statement and subsequent plan which reflects integrated forest management▪ Updating and implementing the archaic land use policy

Summary of Identified Gaps and Opportunities	
3. Environmental Governance: Implementation and Enforcement	
Gaps:	<ul style="list-style-type: none"> – Poor enforcement of environmental laws – Issue of clear institutional mandate among the various agencies which have jurisdiction on aspects environmental management – Land Use enforcement
Opportunities for:	<ul style="list-style-type: none"> ▪ Greater institutional cooperation and coordination for greater synergies ▪ Need to reform the institutions' mandates in an integrated manner for better environmental stewardship ▪ Need to restrict settlement in critical agricultural lands and update and enforce land use zoning regulation
4. Environmental Governance: Legislative Framework	
Gaps:	<ul style="list-style-type: none"> – Weak and or inadequate environmental related laws – Weak legislation in a number of areas –forestry, coastal zone among others – Land Use Planning guidelines are severely weak – Lack of Pollution prevention regulations especially in the coastal and maritime zones
Opportunities for:	<ul style="list-style-type: none"> ▪ Strengthening of Legislation; adopt the ones in draft and provide accompanying regulations where lacking to these legislation to make them effective for enforcement ▪ Greater involvement of the judiciary in environmental crimes and less reliance on voluntary compliance ▪ A proposed revision of the Planning Act 1967 to strengthen the EIA process in general ▪ The development of water quality standards for recreational water which should be reflected in the CZM efforts
5. Capacity Needs	
Gaps:	<ul style="list-style-type: none"> – Severe shortfall in capacity to pursue needed programmes and plans and enforcement
Opportunities for:	<ul style="list-style-type: none"> ▪ Finding appropriate and innovative financing mechanisms to assist in implementation ▪ Greater human resource capacity especially in the key agencies in relevant portfolios
6. Awareness	
Gaps:	<ul style="list-style-type: none"> – Civil society partnership and participation are severely weak and absent in certain areas
Opportunities for:	<ul style="list-style-type: none"> ▪ Awareness at all levels and sectors including the political level ▪ Building awareness to ensure greater ownership of the environmental assets of SVG by the population

1. Introduction and Background

The National Environmental Summary (NES) for SVG was prepared as an information and decision making tool to support the mainstreaming of the environment as a thematic area (issues, management, responses and opportunities) into the United Nations Common Country Assessments (CCA) and the United Nations Development Assistance Framework (UNDAF). Summarily, this NES aims to provide a succinct but critical analysis of the environmental issues, their linkages with development, poverty reduction and improved human well being whilst identifying gaps within the national legislation and the policies and programmes responses.

This NES was prepared using information¹ analysed from a desktop review of relevant documents (scientific reports, policy documents and reports and national assessments among others) along with 'face to face' interviews with key experts (20-21st July, 2010) using a semi-structured format² with key stakeholders and experts³. This includes persons from key government agencies, regional and international organisations. The DPSIR (driver-pressure-impact-state-response) approach⁴ was used as the framework model and approach in this report.

2. State of the Environment and Environmental

SVG is an archipelagic State in the southern Lesser Antilles of the Caribbean region. It comprises of more than thirty islands, islets and cays and occupying a land area of approximately 390 sq. km⁵. The main island is St Vincent with a size of approximately 345 sq. km and agricultural activities are the main economic and employment activity. On the other hand, the Grenadines consist of seven inhabited islands (Bequia, Mustique Union, Canouan, Mayreau, Palm Island and Petit St. Vincent) of which tourism is the main economic earner and employment provider. St. Vincent is especially rugged, with limited but immensely fertile flat lands, consequently, the vast majority of the settlements and agricultural lands are on the coastal areas below the 1000 ft contour. The population census done in 2002 indicated that 91.9 percent of the total population live on mainland St. Vincent⁶ with the remainder in the different Grenadines islands. This concentrated population system makes SVG, one of the most densely populated islands in the Caribbean. Energy consumption and use in SVG is a policy priority because of the high import cost of fossil fuel to the national budget. In 2010, an energy action plan⁷ was developed for the country in an effort to diversify the energy grid to more renewable sources and ease the reliance on imported products. Fossil fuels in the form of diesel and gasoline add-up >90% of the energy matrix of SVG⁸

¹ Refer to List of reference

² Refer to Annex 1 for the areas covered in the interviews with the experts

³ Refer to Annex 2 for the list of interviewees

⁴ DPSIR is a general framework for organising information and reporting about state of the environment covering Driving forces, Pressures, State of the environment, Impacts and Responses. The idea of the framework is often used for organising systems of indicators in the context of environment and sustainable development: http://maps.grida.no/go/graphic/the_dpsir_framework.

⁵ Ministry of Health and the Environment (2009) National Action Programme: A Framework for Combating Land Degradation and drought in St. Vincent and the Grenadines, Ministry of Health and the Environment: 86

⁶ ibid

⁷ Government of St. Vincent and the Grenadines (2010) 'Energy Action Plan for St. Vincent and the Grenadines 1st Edition, 54pp.

⁸ ibid

Based on the analysis of the interviews, national consultation and documents, six major environmental issues were identified which are described below:

1. The Effects of Climate Change: The effects of global climate change are being felt in SVG in which the climate patterns are noticeably changing into extreme weather events. A period of drought in 2009 has an effect on the agricultural sector and in addition, has fuelled further land degradation and loss of critical coverage in the forest sector due to the increased incidence of fires⁹. In addition, the intensity in rainfall is increasing which are also contributing to increased erosion and land slippages in many areas. The drought has also triggered a rethinking of SVGs policy of freshwater management.

2. Deforestation: By law, any land above the 1000 ft contour is classified as state land and as such majority of forested lands are under government control¹⁰. Illegal marijuana cultivation is done on squatted forest lands often in the higher elevations (in watershed areas) and in areas that are unstable (e.g. on slopes on the La Soufriere area)¹¹. This has led to a significant level of deforestation and concomitant problems include uncontrolled erosion, loss of biodiversity, degradation of critical habitats and watershed area and contamination of the drinking water sources. As in the case of water, it is noted that it is not unusual for water to arrive in homes heavily laden with sediments despite having passed through the treatment process (sedimentation, filtration and chlorination)¹². Although a significant amount of programme intervention was done by the Government to curb deforestation, the problems are short of being abated. Of the 29% of forest area in St Vincent, 27% of this total is classified as planted forests¹³, thus demonstrating the magnitude of the problem but also the response effort.

3. Land Degradation: Constrained by the small size of the island, topography and increasing population, St. Vincent has limited land available (36,423 ha) for commercial development, housing, recreation, agriculture and other uses. Currently, there is no National Physical Development Plan to direct growth and development and to facilitate more comprehensive planning which embraces land zoning. This has resulted in incompatible land use in many areas which has resulted in soil erosion, land slippage and pollution of waterways.

4. Lost of Agricultural Lands to Development: Previously the agricultural sector in St Vincent was characterised by a vibrant banana production. However, the loss of preferential access to the European Union has significantly reduced the agricultural output and many farms were abandoned. The agricultural lands (especially those privately owned, which is in the majority, if not all) are being converted to housing and other forms of development. Given the private leasehold issue, little control is being exerted by the Government in addition, the weak land use planning mechanism currently in place, brings little or no solution to the issue. Within the context of sustainable land management, the loss of agricultural lands to these somewhat irreversible land uses have long term implications for food security in SVG.

⁹ Although accidental fires are normal, the frequency in 2010 and subsequent damage warrant the concern raised regarding climate change effects in SVG

¹⁰ *Pers Comm* Anthony Bowman- Town Planner, SVG

¹¹ National Action Programme: A Framework for Combating Land Degradation and drought in St. Vincent and the Grenadines, 2009 and *pers comm*. With Edmund Jackson and Anthony Bowman

¹² Ministry of Health and the Environment (2009) National Action Programme: A Framework for Combating Land Degradation and drought in St. Vincent and the Grenadines, Ministry of Health and the Environment: 86

¹³ Report on the Implementation of the Mauritius Strategy (2009)

5. Pollution of Coastal Water and River system: Land-based sources of pollution are mainly from sediments, agrochemical leaching, direct agrochemical influx, industrial and commercial discharge, liquid waste, and storm water runoff from city streets and construction sites. The issue of pollution are affecting the river and coastal water quality, but are also impacting on the habitats. Ship generated waste is major issue in SVG, as it is known that some small ships and pleasure crafts traversing the waters of S VG dump their waste into the sea within the EEZ of the country¹⁴ and the poor surveillance system serves little as a deterrent.

6. Solid Waste: SVG has a good waste collection system but indiscriminate and improper dumping of waste is an issue. In particular, plastics bottles and containers (the changing consumption patterns from local to more imported foods are driving this increase) and derelict vehicles are the forms of waste which are not adequately captured by the current waste management collection. In particular, enforcing the waste management laws seem to be the challenges specifically with regard to illegal dumping and enforcement are largely based of voluntary compliance of the citizens. Despite a collection system, integrated waste management is lacking.

The Key Drivers identified are

1. Poverty: This is considered to be one of the main driving forces that contribute to the degradation of the environment in general, and it is applicable to many of the issues highlighted above. In 1996, a poverty assessment was conducted for SVG¹⁵ of which 37. 5% of the population were classified as poor, accounting for some 43,875 persons.
2. Implementation of policies, plans and programmes are hindered by inadequate resources and capacity –financial and human
3. Lack of appreciation of the environment and low level of resource ownership by citizens. This stems from a relatively low level of effective public awareness programmes in all areas of resource management
4. Weak laws and outdated legislation, low level of adoption of some major legislation and low level of enforcement of legislation where present

¹⁴ *Pers Comm.* with Landsford Weeks, Permanent Secretary Ministry of Health and the Environment, SVG

¹⁵ Kairi Consultants Ltd., (2006).

3. National Policy Responses

SVG in 2009 developed a broad scale sustainable development policy agenda referred to as The *National Economic and Social Development Plan (2010-2025)* which incorporates and builds on the previous Medium-term Economic Strategy Papers (MTESPs)- 2002-2004 and 2005-2009 respectively. The 16 year plan which forms the overarching framework for policy activities in SVG considers the social, cultural, environment and economic aspects in an integrated manner. It proposes a number of policy measures and activities in areas such as climate change, biodiversity and natural disasters. Currently, it is in the initial stages of implementation and should respond to many if not all the issues highlighted below at the broad policy level. Below are the national responses as they relate to the priority environmental issues.

Item #	Priority Environmental Issues	Specific Area	National Responses
			<ul style="list-style-type: none"> ❖ ¹⁶An <i>Environmental Management Act</i> was developed in 2009. This act focuses on many of the current environmental issues such as pollution (marine and land based) and serves to compliment the other legislation which exist in forestry, agriculture and protected areas among others. This is currently awaiting approval from the Attorney General’s Office to give it the legal effect. ❖ The National Environment Strategy and Action Plan details the manner in which SVG will fulfill its obligations under the St George’s Declaration (SGD) of Principles for Environmental Sustainability in the OECS¹⁷, many of the issues identified in this report is recognized, although there are some measures of intervention, the depth and level will need to be examined to determine how effective are these. ❖ There is a National Environmental Advisory Board (NEAB) appointed by Cabinet to assist in the Coordination in multi-sector environmental initiatives. The members are from the various environmental agencies. This body serves as a ‘liaison’ between the government agencies and the parliament and act solely in an advisory capacity.
1.	Climate Change		<ul style="list-style-type: none"> ○ Ratified the UNFCCC¹⁸ in 1994 and submitted the first communication report in 2000 as mandated for the Contracting Parties ○ Conducted a Vulnerability and Capacity Assessment for SVG to determine the impacts of Climate Change on drinking water in the Grenadines, which pointed to acute shortage in some communities e.g. Paget farm ○ Currently, there is a project funded by GEF/World Bank to enhance the portable water supply by installing a Salt Water Reverse Osmosis system (SWRO) which will

¹⁶ This is a national response which is applicable to a number of the environmental issues and to avoid repetition, it is headlined as a general response

¹⁷ SGD is a policy statement and a framework undertaken by members of the OECS to ensure sustainable management of its resources. There are 21 Principles that have been prescribed in the SGD

¹⁸ For an overview of the purpose of this Convention and the others mentioned in this report, refer to Annex 3

Item #	Priority Environmental Issues	Specific Area	National Responses
			<p>be serviced by a 50kw wind turbine. This is done in an effort to enhance the water availability to residents in that community</p> <ul style="list-style-type: none"> ○ Public awareness aimed at the general public and key stakeholders, in an effort to bring awareness of the issues, impacts, vulnerability and adaptation measures ○ A climate resilience strategy (funded by CIDA) is in progress with aims to be finished by 2011. The intention of the strategy is to identify ways and measures of improving SVGs resilience to the effects of CC ○ A climate change strategy was developed in 2010 with assistance from USAID and is scheduled to start implementation in latter part of 2010
<ul style="list-style-type: none"> ❖ Currently undertaking a project (funded by the World Bank/GEF) in Bequia and Union Islands to establish climate change adaptation measures that conserve biodiversity while at the same time addressing issues of land degradation ❖ Developed a preliminary Sustainable Land Management Plan (UNEP/GEF) funded ❖ The Government has also instituted the National Land Information Management Project (NALIMP), funded by UNEP under the SLM initiative. The Planning Department has a functioning GIS Unit which is currently undertaken mapping. This will complement the policy efforts being undertaken to respond to the land management issues below 			
2.	Deforestation		<ul style="list-style-type: none"> ○ A Forestry Policy was developed in 1994, but remains in draft to date. However, this is being used by the Forestry Division in executing its role and functions. An integrated forest policy is to be developed ○ Wildlife Conservation Act 1991 and a Natural Forest Resource Act 1947 which provides the legal mandate for forestry and Wildlife management in SVG ○ Initiated a programme with local partnership (CSWA and VINLEC) called “Integrated Forest Management and Development Programme”. This programme aims to devise an approach of community participation (some identified communities) to protect the forest resources, while enhancing rural livelihoods and ultimately reducing poverty ○ Currently have a project called ‘Environmental Watershed Project to Facilitate Forest Based Livelihood Opportunities’ (EC financed) in which 20 ecotourism sites will be set up by the Government and co-managed by community groups. ○ The Forestry Division has an active programme of reforestation which is ongoing <u>Awareness</u> ○ There are also programmes (funded by CIDA and UNDP) aimed at public education and awareness. e.g. Areas affected by fires in the dry season were targeted and

Item #	Priority Environmental Issues	Specific Area	National Responses
			farmers were sensitized about the ways to help protect and preserve the area
	Land Degradation		<ul style="list-style-type: none"> ○ Acceded to the UNCCD in 1997 and submitted its fourth national report in 2009. ○ The Government amended a number of land related legislation in an effort to streamline and provide synergies between MEAs, policy initiatives and the current situation. These include the Forest Resources Conservation Act (1992), Wildlife Protection Act (1991) and the Regulations for the National Parks Act (2002) ○ In the agricultural sector, the government has an ongoing extension service to educate farmers on soil Conservation measures (contour drains) aimed at minimizing the problem of soil erosion and mismanagement ○ Designated a number of protected areas and approved a protected area policy in 2009
4.	Lost of Agricultural Lands to Development	Incentives to keep agriculture lands	<ul style="list-style-type: none"> ○ Developed an Agricultural Policy Framework (2002-2006) aimed at promoting agricultural diversification activities around bananas and at the same time facilitate modernization and transformation. This is currently being revised with funding from FAO ○ Under the joint ALBA initiative¹⁹, a programme was initiated to encourage farmers into root crops production for export, this is done in an effort to create more farming opportunities as part of the Government's diversification policy
		Controlling land development	<ul style="list-style-type: none"> ○ Town and Country Planning Act, 1992 was initiated to guide planning in SVG and falls under the jurisdiction of Ministry of Housing. Under the Act, an environmental impact assessment (EIA) for environmentally sensitive projects or activities is required. These include quarrying, pig farms and mechanic shops²⁰. However, ensuring compliance is done on a voluntary basis. Project monitoring is not well enforced as it falls under the mandate of Environmental Health –another Ministry, and

¹⁹ This is a new economic partnership for the Americas started by Bolivarian Republic of Venezuela and Cuba. SVG became a member in 2006

²⁰ Pers comm. Town Planner Mr. Anthony Bowman

Item #	Priority Environmental Issues	Specific Area	National Responses
			cooperation and coordination between these two agencies are not well established. This process is further weakened by the absence of mandated guidelines for EIAs proposal ²¹
5.	Pollution	Ship Generated Waste	<ul style="list-style-type: none"> ○ Party to the convention on the prevention of Marine Pollution by Dumping ○ Acceded to the Cartagena Convention in 1987 ○ The pending environmental Bill when implemented will respond to the issue of pollution
		Agricultural pesticides and residues and other land based sources	<ul style="list-style-type: none"> ○ Pesticide Control Act # 23 , 1973 which deals mainly with importation, at present this does not respond to the issue of pesticide contamination ○ Efforts are being made to promote good agricultural practices such as soil conservation and control of pesticide use. This is done mainly through extension ○ SVG is implementing the Global Program of Action (GPA) for the protection of Marine Resources from land-based activities. This programme provides guidelines to minimise LBS of pollution by promoting integrated management ○ Implemented a series of measures via a management plan in the Tobago Cays to avoid pollution which are endangering critical habitats and species
6.	Solid Waste		<ul style="list-style-type: none"> ○ Established the Solid Waste Management Authority which has the mandate for waste collection and disposal and landfill management ○ SVG Waste Management Act # 31, 2000 and the supporting Regulations #11,2006 covers guidelines for waste disposal and penalties for non compliance ○ The establishment of a compost, woodchip and charcoal production operation on St. Vincent which recycles green waste that enters the landfills in an effort to extend the life of the landfills. Although is done on a small scale, the potential for being larger is possible. ○ There is ongoing public awareness initiatives with a special focus on schools, however these are subjected to funds availability and are therefore not continuous ○ The commencement of a sustainable waste management project for the

²¹ Pers comm. Town Planner Mr. Anthony Bowman

Item #	Priority Environmental Issues	Specific Area	National Responses
			<p>Grenadines. This projects is currently in its design stage and aims to have a better collection and disposal of waste on the Grenadines</p> <ul style="list-style-type: none"> ○ Have a collection service island wide once per week

4. International Assistance Programmes

A number of environmental related initiatives and projects were sanctioned by regional and international agencies. These agencies have played a vital role and to a large extent have been driving financially, many of the environmental initiatives in SVG. These initiatives past, present and those in the pipeline phase along with the collaborating partners are described below.

International Institutions	What has been/is currently done	Major Partners	Future Programmes
UNDP	Funded the development of a National Biodiversity Conservation Strategy, and Action Plan and Country Report to the CBD	GEF/GoSVG	
	Assessment of Capacity Building Needs and Country Specific Priorities	GEF/GoSVG	
	Supported the development of NCSA for Global Environmental Management report	GEF/GoSVG	
UNEP	In 2005, IWCAM project was launched aimed at helping 13 Caribbean countries to implement an integrated approach to the management of watersheds and coastal areas	GE F /GoSVG/CEHI	
	Provide funding through Sustainable Land Management Project (SLM) where SVG developed a sustainable land management Plan	GoSVG	
World Bank	Funding to enable SVG to Prepare its First National Communication in Response to its Commitments to UNFCCC	GEF/GoSVG	

International Institutions	What has been/is currently done	Major Partners	Future Programmes
	Protected Area and associated livelihoods Project (OPAAL) was initiated to contribute to the conservation of biodiversity by removing barriers to the effective management of protected areas (PAs), and increasing the involvement of civil society	GEF /OECS ²² / OAS/GoSVG	
	Sustainable Financing for Protected Areas Project is aimed at creating viable option for the protection and management of PA through the <i>Caribbean Biodiversity Trust Fund</i>	TNC/OECS/GoSVG	
	Provide funding for Solid Waste Management Programme in SVG	OECS/GoSVG	
	Funded the MACC, 2003-2008. In this project, assessments were done in Bequia and on St. Vincent to investigate water resource limitations. Adaptation to changes in water supply and to CC impacts on coastal and marine resources were the area targeted	CARICOM/GoSVG	
	Monitoring gauges to monitor sea level rises was installed at the Coastguard base	CPACC on behalf of CARICOM/GoSVG	
	Project aimed at adaptation to the Impacts of Climate Change on fresh water availability in Bequia	GEF/GoSVG	
GEF	Provided funding for updating some forestry and land related legislation	GoSVG	

²² OECS is a facilitating organization for its member states and all projects undertaken are done with agency collaboration in the member states. The member states are Anguilla, Antigua and Barbuda, British Virgin Islands, Dominica, Grenada, Montserrat, St Lucia, St Vincent and the Grenadines and St Kitts and Nevis

International Institutions	What has been/is currently done	Major Partners	Future Programmes
	<p>Provided funds to develop an integrated ecosystem approach to climate change on the Grenadine islands of Bequia and Union Island and Facilitate climate change risk management in Spring Village on mainland St. Vincent.</p>	<p>CCCCC on behalf of CARICOM/GoSVG</p>	
DFID	<p>Funds a number of Caribbean project in the areas of Climate Change and Disaster Risk Reduction. These include:</p> <ul style="list-style-type: none"> -Comprehensive Disaster Management - Harmonised Implementation Programme (CDM-HIP), -Caribbean Review of Economics of Climate Change (RECC)-Phase 2 and 3, -Caribbean Climate Change Risk Atlas (CARIBSAVE CCRA)-Phase 1 for tourism sector, -Development of an Implementation Plan for the Regional Framework for Achieving Development Resilient to Climate Change, -CCCCC/regional task force support, -Copenhagen and beyond-Capacity building for CARICOM policy makers involved in climate change negotiations, -Disaster Risk Reduction Capacity building in the UK Overseas Territories, -Low carbon/renewable energy development; and Sustainable environmental management 	GoSVG	
EC	<p>Funded a project which focuses on developing the Land information and management database as well as regularizing the land titling system</p>	GoSVG	

International Institutions	What has been/is currently done	Major Partners	Future Programmes
	Under SFA 2006 funding a Environmental Watershed Project to Facilitate Forest Based Livelihood Opportunities	FAO/GoSVG	
JICA	In 2009 participated in the development project aimed at formulating a master plan for fulfilling a sustainable fishery resource use and management, targeting local artisanal fishers and their communities in the Caribbean region	Caribbean Regional Fisheries Mechanism/ GoSVG through The Ministry of Fisheries	
USAID		OECS	Currently in the conceptualisation phase : A climate change based project focusing on water resources and coastal zone management
	Provide funding to develop a Climate Change Strategy	Involves 6 OECS countries including GoSVG	
	Additional enabling activity to implement the climate change strategy	GoSVG	
ALBA	Provide funds for crop diversification	GoSVG	
CIDA	OECS Environmental Capacity Development (ENCAPD) coastal and marine environmental management	OECS/GoSVG	
	Funding a climate change resilience strategy which is scheduled to be completed in 2011		Currently being developed
FAO	Provide assistance to update the Agricultural Policy	GoSVG	

5. Critical Gaps and Opportunities to support Saint Vincent and the Grenadines Priorities

The analysis reveals gaps in a number of areas which are hindering effective resource and environmental management. These gaps present a number of opportunities which could improve the current situation. The gaps and opportunities are presented below.

Main Gaps/Needs	Opportunities	Comments
Resource Management		
Inadequate scientific data	Decisions regarding sound sustainable management could be better informed by a better regime of data collection and construction of indicators	
Solid Waste Management	For an integrated solid waste management policy which considers reuse and recycling	The current system of waste management serves well in ensuring proper collection and disposal into the landfill. However, now the issue of reuse and recycling is becoming critical
Absence of an integrated coastal and marine management regime	To place some level of importance on the management of coastal area in SVG. Despite its multi use and importance, there is no integrated management of this area. In particular there is a need to develop maritime plans	
Pollution	To develop water quality standards for recreational water. This is important especially with the current effort to further develop tourism sector	SVG has not signed the LBS Protocol of the Cartagena Convention
Absence of an integrated management of the fresh water resources	To improve the protection and management of water resources and Develop and promote conservation measures and best water use practices to ensure optimal utilisation of the water resources	
Sustainable Management of the land resources	To develop a comprehensive system for sustainable management of the land resources which include the development of a national land use policies which considers the local problems of land titles and land-use zoning plan, develop a national land bank system to reduce the amount	Currently a proposal is under consideration for the development of a national land use plan and policy

Main Gaps/Needs	Opportunities	Comments
	of under-utilized arable land and encourage and support security of tenure for lands under the Possessory Title Act	
Policy		
An integrated Forestry Policy	For a formal national policy to guide and govern forest management, which considers the complexity of forest management issues, especially those that relate to the illegal cultivation of marijuana on public and private lands	FAO is currently being approached for assistance by the Forestry Division ²³
Need for an effective land use policy	The existing land use policy if updated and implemented would assist immensely in responding to the current and emerging issues regarding environmental management	Efforts are currently under way to revamped the land use policy with the hope of getting the required political support to give it the legal authority
Environmental Governance: Implementation and Enforcement		
Fragmented Policies	Policy evaluation to ensure greater synergies between the actual polices and implementation of these policies among the agencies	The draft Environment Bill if fully implemented should address these concerns of a more cohesive planning mechanism and enforcement
Poor Coordination and enforcement of laws	Greater institutional cooperation and coordination should be formally embedded in the present institutional arrangement. As it exist many agencies have various degrees of jurisdictions concerning land and resource management and protection, however the interaction is relatively uncoordinated at best, thus impeding enforcement and monitoring	For example there are a number of agencies holding various degrees of jurisdiction (enforcement, monitoring) concerning critical areas e.g Ministry of Agriculture, Forestry and Fisheries, Ministry of Housing, Ministry of Health & Environment and National Parks, Rivers and Beaches Authority have jurisdiction for land management
Issue of clear institutional mandate	To reform the institutions' mandates to create more integration for more effective environmental stewardship	Many of the agencies are not very clear on their mandates and in some instances these are overlapping, leading to conflict of interest
Land Use enforcement	To restrict settlement in critical agricultural lands and enforce land use zoning legislation	The physical Development Plan when implanted should assist in alleviated this problem

²³ Pers Comm with Fitzgerald Providence, senior Forestry Supervisor

Main Gaps/Needs	Opportunities	Comments
Environmental Governance: Legislative Framework		
Weak and or inadequate existing laws	To update laws to reflect the current issues in resource management and give adequate effect to the law by way of necessary Regulations.	
Weak enforcement of current environment legislation	Most of the enforcement are done by voluntary compliance, there is a need for greater involvement of the judiciary in an effort to change the present status quo	
Legislation adoption is weak and slow and some accompanying regulations are absent	There are many policies and laws which are in draft and need to be given the necessary legal effect	
Land Use Planning	Proposed revision of the Planning Act to strengthen the EIA process and requirements and to make it an integral part of development activities	
Capacity Needs		
Severe shortfall in capacity to pursue needed programme	Need to find appropriate and innovative financing mechanisms to assist in implementation. Viewing the environment as an economic asset and pursuing such policy may yield greater rewards Need for greater human resource capacity especially in the key agencies	Inadequate finance severely curtails effective policy and programme intervention. The Government makes a commendable effort at responding to many of the issues.
Awareness		
Civil society partnership and participation is weak	Awareness at all levels and sectors including the political level Needed awareness to ensure greater ownership of the environmental assets of St Lucia by the population targeting resource use in all the sectors	The NGO movement is weak in SVG

List of References

Government of St Vincent and the Grenadines (2002)

Special Issue of rainfall Totals and averages of St Vincent and the Grenadines, Government of St Vincent and the Grenadines: 50.

CCA (1990).

Country Environmental Profile for St Vincent and the Grenadines. Barbados, Caribbean Conservation Association: 210.

Government of St Vincent and Grenadines (2001)

National Report on Integrating Management of Watersheds and Coastal Areas in the SIDS of the Caribbean: a Vincentian Perspective: 39.

Government of St Vincent and the Grenadines (2002)

Special Issues of Rainfall Totals and Averages of St Vincent and the Grenadines. Kingstown, Research Division, ALF: 52.

Government of St. Vincent and the Grenadines (2007)

National Biodiversity Strategy and Action Plan for St Vincent and the Grenadines Government of St. Vincent and the Grenadines: 125.

Government of St. Vincent and the Grenadines (2009)

Report on the Implementation of the Mauritius Strategy Government of St. Vincent and the Grenadines; 94.

Government of St. Vincent and the Grenadines (2010)

National Economic and Social Development Plan 2010-2025, Government of St. Vincent and the Grenadines: 80.

Griffith, M. and D. Oderson (2009)

Strengthening the Inner Circle for Environment and Sustainable Development: The Case of the Caribbean Community. Mexico City, Caribinvest Publishing.

Murray, R. R. (2003)

The Nexus between Rainfall and Land Degradation: A Vincentian Experience. St Vincent and the Grenadines Conference, University of the West Indies, Jamaica.

NEAB/ Ministry of Environment (2000)

Initial National Communication on Climate Change: St Vincent and the Grenadines, National Environmental Advisory Board and Ministry of Health and Environment: 74.

St Vincent and the Grenadines Statistical Office (2003)

Statistical Data, St Vincent and the Grenadines Statistical Office: 7.

Kairi Consultants Ltd (2009)

St. Vincent and the Grenadines Country Poverty Assessment 2007/08: Living Condition in a Caribbean SID, Central Planning Division 80.

Ministry of Health and the Environment (2009)

National Action Programme: A Framework for Combating Land Degradation and drought in St. Vincent and the Grenadines, Ministry of Health and the Environment: 86

Annex 1: Generalised Interview Format

1. What do you consider as the main environmental issues affecting your Country?
2. Why do you consider as the drivers (root causes) of those issues?
3. Do you think that the current policies are effectively addressing the issues you have cited? What are the gaps?
4. Do you think that current programs (environment and development) are adequately addressing those issues you have cited? Kindly give reasons for your response.
5. Kindly identify and describe any current programs that your institution is executing as a direct response to the issues you have cited. Kindly give reasons for your responses.
6. Kindly identify and describe any future programs that your institution will implement in an effort to address those issues you have mentioned.
7. Do you have other comments? Please provide details

Annex 2: List of Experts Interviewed

Name	Designation	Organisation	Contact Details
Government and In-Country Experts in St. Vincent and the Grenadines (SVG)			
Mr. Allan Alexander	Permanent Secretary	Ministry of Agriculture, Forestry and Fisheries Kingstown, SVG	(784) 456 4140 allanalexander@gv.vc
Mr. Anthony Bowman	Town Planner	Ministry of Housing Sharpe Street Kingstown, S VG	(784) 457 1588 ppuhilp@yahoo.com keithbowman@hotmail.com
Ms. Nyasha Hamilton	Environment Officer	Env. Management Department, Ministry of Health & Environment Ministerial Building Kingstown SVG	(784) 485 6992 nyakkh@googlemail.com mohesvg@vincysurf.com
Mr. Edmund Jackson	Director	Environment Management Department Ministry of Health & Environment Ministerial Building Kingstown SVG	(784) 485 6992 Edmund_jackson2000@yahoo.com mohesvg@vincysurf.com
Mr. Andrew Lockhart	Superintendent of Marine and Terrestrial Parks	National Parks,Rivers and Beaches Authority Jaycees Building Stoney Ground, Kingstown,SVG	(784) 453 1623 nationalparks@vincysurf.com andylockhart65@yahoo.com
Mr. Fitz Gerald Providence	Senior Forestry Supervisor	Ministry of Agriculture, Forestry and Fisheries Kingstown,SVG	(784) 457 8594 fitzpro@yahoo.com
Ms. Joan Ryan	Environmental Educator	Central Water and Sewerage Authority New Montrose Kingstown. SVG	(784) 456 2946 jryan@cwsasvg.com
Dr. Susan Singh-Renton		Caribbean Regional Fisheries Management Unit ,Careres Building Kingstown, SVG	(784) 457 3474 ssinghrenton@vincysurf.com
Mr. Landsford Weeks	Permanent Secretary	Ministry of Health and the Environment Ministerial Building Kingstown, SVG	(784) 450 0511 mohesvg@vincysurf.com

Name	Designation	Organisation	Contact Details
Mr. Andrew Wilson	Director	National Parks National Parks,Rivers and Beaches Authority Jaycees Building,Stoney Ground Kingstown SVG	(784) 453 1623 nationalparks@vincysurf.com arjwilson@hotmail.com
Mr. Winsbert Quow	Solid Waste Manager	Central Water and Sewerage Authority New Montrose Kingstown St Vincent and the Grenadines	(784) 456 2946 wquow@cwsasvg.com
Experts- International and Regional Organisations			
Ms. Simone Banister	Head of Corporate Management/Climate Change Contact/Disaster Risk Reduction Focal Point	DFID CARIBBEAN Chelsea House, Chelsea Road St. Michael P.O.Box 167, Bridgetown Barbados, BB 14022.	Phone: 246 430 7950 Fax: 246 430 7959 S-Banister@dfid.gov.uk
Mr. Cam Bowes	Counsellor (Development)	Canadian International Development Agency High Commission of Canada Bishop's Court Hill PO BOx 404. Bridgetown Barbados	Tel. 429 3550 ext 3459 Fax 246 429 3876 cam.bowes@international.gc.ca
Mr. Daniel Carruthers	Second Secretary	,Barbados and the Eastern Caribbean, British High Commission Lower Collymore Rock P.O. Box 676, Bridgetown,Barbados	Phone: 246 430 7802 Email: daniel.carruthers@fco.gov.uk
Ms. Sasha Gotheilb	Programme Officer	UNEP/IWCAM CEHI, Morne Saint Lucia	sgottlieb@cehi.org.lc
Mr. Keith Nichols	Head	OECS- Environment and Sustainable Development, Morne, Castries St Lucia	(758) 455 6362 kenichols@oecs.org

Annex 3: List of MEAs of which SVG is a Member

Multilateral Environmental Agreements	STATUS
Wildlife /Conservation	
Convention of International Trade in Endangered Species, 1972 (CITES) <i>This is an international agreement between governments. Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten their survival</i>	A-1999
International Convention for the Regulation of Whaling 1948 and 1959 <i>This is an international agreement which seeks to protection a number of whale species over-exploitation., and to identify measures for greater protection of the species and cooperation of the international community</i>	Ad-1993
Biodiversity/Bio-safety, Traditional Knowledge	
International Plant Protection Convention, Rome, 1951 <i>The agreement seeks to securing common and effective action to prevent the introduction and spread of pests and diseases of plants and plant products and to promote measures for their control</i>	Ad-1985
Convention on Biological Diversity, 1992 <i>This agreement aims to conserve biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies</i>	R-1994
Cartagena Protocol on Bio-Safety <i>It is an international agreement which aims to ensure the safe handling, transport and use of living modified organisms (LMOs) resulting from modern biotechnology that may have adverse effects on biological diversity, taking also into account risks to human health</i>	R-2004
Marine Protection and Safety	
Convention on the Protection and Development of the Marine Environment in the Wider Caribbean, 1983 (Cartagena Convention) <i>This is a comprehensive, umbrella agreement for the protection and development of the marine environment. This regional environmental convention provides the legal framework for cooperative regional and national actions in the Wider Caribbean Region</i>	A-1987
Protocol Concerning Cooperation in Combating Oil Spills in the Wider Caribbean,1983 <i>This Protocol applies to oil spill incidents which have resulted in, or which pose a significant threat of, pollution to the marine and coastal environment of the Wider Caribbean Region or which adversely affect the related interests of Contracting Parties</i>	A-1987
Protocol of 1992 to Amend the International Convention on Civil Liability for Oil Pollution Damage, 1969 (CLC PROT, 1992)	A-1998
Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972, as Amended (LC 1972)	DI-1973

MEAs	Status
Marine Resources	
United Nations Convention on the Law of the Sea, 1982 <i>The Law of the Sea Convention defines the rights and responsibilities of nations in their use of the world's oceans, establishing guidelines for businesses, the environment, and the management of marine natural resources</i>	R-1991
Sustainable Land Management	
United Nations Convention to Combat Desertification <i>The UNFCCC convention aims to address the anthropogenic impacts on the global climate patterns</i>	A-1997
Atmospheric/Climate Systems	
Vienna Convention for the Protection of the Ozone Layer, Vienna, 1985 <i>It acts as a framework for the international efforts to protect the ozone layer. However, it does not include legally binding reduction goals for the use of CFCs, the main chemical agents causing ozone depletion. These are laid out in the accompanying Montreal Protocol</i>	A-1993
Montreal Protocol on Substance that Deplete the Ozone, 1989* Ibid	A-1993
United Nations Framework Convention on Climate Change, 1992 <i>The objective of the treaty is to stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system</i>	R-1994
Kyoto Protocol <i>The Kyoto Protocol is an international agreement linked to the United Nations Framework Convention on Climate Change. The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialized countries and the European community for reducing greenhouse gas (GHG) emissions.</i>	R-2002
Culture and Natural Heritage	
Convention for the Protection of World Culture and Natural Heritage, 1972	Ac-1998

A = Accession²⁴; Ac= Acceptance²⁵; Ad=Adherence; R= Ratification²⁶ and S=Signature, DI = Date of deposit of Instrument; EF/Su = Date of Entry into Force or Succession;RE = Regional MEA

Table above Adopted and modified from Griffith and Oderson (2009)

²⁴ "Accession" is the act whereby a state accepts the offer or the opportunity to become a party to a treaty already negotiated and signed by other states. It has the same legal effect as ratification. Accession usually occurs after the treaty has entered into force. See Arts.2 (1) (b) and 15, Vienna Convention on the Law of Treaties between States and International Organizations or between International Organizations 1986]

²⁵ The instruments of "acceptance" or "approval" of a treaty have the same legal effect as ratification and consequently express the consent of a state to be bound by a treaty. Arts.2 (1) (b) and 14 (2), Vienna Convention on the Law of Treaties 1969

²⁶ Ratification defines the international act whereby a state indicates its consent to be bound to a treaty if the parties intended to show their consent by such an act. See Arts.2 (1) (b), 14 (1) and 16, Vienna Convention on the Law of Treaties 1969.

Annex 4: List of International Projects Implemented in 2005-09 and Planned for 2010-15

IMPLEMENTING AGENCY	INTERNATIONAL PROJECT	TOTAL FUNDS (000,000.00)	TIMELINE	NOTES
ST. VINCENT AND THE GRENADINES AS PART OF THE REGION				
CIDA/PAHO	Health Sector Disaster Risk Management	CAN \$3.00	2007-2015	
CIDA	Disaster Risk Management Facility	CAN \$12.86	2007-2015	
CIDA/WB	Caribbean Catastrophe Risk Insurance Facility	CAN \$20.00	2007-2012	
CIDA	Caribbean Disaster Responsive Fund	CAN \$10.00	2003-2008	
CIDA/OAS	Disaster Preparedness	CAN \$3.86	2001-2008	
DFID/CIDA, EC and OECS Secretariat (CDEMA)	Comprehensive Disaster Management - Harmonised Implementation Programme (CDM-HIP)	USD 3.6	April 2009- March 2013	
DFID/UNECLAC; IADB/CDB and AusAID (UNECLAC and CCCCC)	Caribbean Review of Economics of Climate Change (RECC)-Phase 2 and 3	USD1.125	June 2009-January 2011	
DFID/AusAID supporting CCRA for five additional countries (OUCE and CCCCC)	Caribbean Climate Change Risk Atlas (CARIBSAVE CCRA)-Phase 1 for tourism sector	USD1.125	March 2010-June 2011	
DFID/Climate Development Knowledge Network (CDKN) (CCCCC)	Development of an Implementation Plan for the Regional Framework for Achieving Development Resilient to Climate Change	co funded with CDKN USD 0.66	August 2010- March 2011	
DFID (CCCCC)	CCCCC/regional task force support	USD 0.269	Oct 2007-June 2010	
DFID (UNDP with CCCCC)	Copenhagen and beyond-Capacity building for CARICOM policy makers involved in climate change negotiations	USD 0.2245	Sept 2009- June 2010	

DFID <i>(National Disaster Offices)</i>	Disaster Risk Reduction Capacity building in the UK Overseas Territories	USD 0.450	2008-2011	
DFID	Low carbon/renewable energy development	Tbc	2010-	Regional (pipeline)
DFID	Global Environmental Facility – Sustainable environmental management	£11.00	2010-2012:UK	
EC (8th & 9th EDF)	Regional Weather Radar System	€13.20	2003-2006	
EC (9th EDF)	Disaster Management	€3.40		
EC (7th & 8th EDF)	Caribbean Regional Sustainable Tourism Development programme	US\$8.00	2000-2007	
EC (7th EDF)	Caribbean Regional Environmental Programme	US\$9.15	2000-2006	
GTZ/UNDP	Caribbean Renewable Development Energy Programme – Phase II (CRDEP)	???	2008 - ???	
OAS	Caribbean Sustainable Energy Project	???	2008- ??	
WB (IBRD/IDA)	OECS Protected Areas and Associated Livelihoods Projects	US\$2.70	2005-???	
St. Vincent and the Grenadines				
UNDP/GEF	National biodiversity Strategy, Action Plan and Report to the CBD	???		Project Closure
GEF/UNDP	Climate Change Enabling Activity (Additional Financing for Capacity Building in Priority Areas)	???		Project Completion
GEF/UNEP	National Capacity Needs for Self Assessment (NCSA) for Global Environmental Management	???		Under Implementation
World Bank	Enabling St. Vincent and Grenadines to Prepare its First National Communication in Response to its Commitments to UNFCCC	???		Project Completed