THIRD INTERNATIONAL CONFERENCE ON SMALL ISLAND DEVELOPING STATES (SIDS)

National Preparatory Process

ST. KITTS AND NEVIS

BACKGROUND REPORT

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Executive Summary

This Report was prepared as part of the St Kitts and Nevis National Preparatory Process toward the Third International Conference on Small Island Developing States to be held in Apia, Samoa, 2014. The Report provides a synthesis of several national reports and a review of legislative, regulatory, policy and institutional frameworks for sustainable development in the Federation of St. Kitts and Nevis. Additionally, it provides a summary of the key results from the implementation of the BPOA and the Mauritius Strategy for Implementation.

Overall, the Report summarizes the outcomes and experiences that have been gained thus far from the implementation of the country's sustainable development agenda. Importantly, it examines prevailing constraints, remaining gaps and challenges that exist in the context of the Federation's aspirations. It is expected that the contents of the Report will guide further discussion on the country's general sustainable development objectives.

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1.0 St. Kitts and Nevis at a Glance

Table 1 below provides a brief description of St. Kitts and Nevis

PARAMETER	DESCRIPTION
Location & Size	• Total landmass 269 square kilometers, St. Kitts is 176 square kilometers (68 sq. mi) in size • located at Latitude 17 degrees 15 minutes North and Longitude 62 degrees 45 minutes West. • Nevis is 93 square kilometers (36 q. mi) and located at Latitude 17 degrees 10 minutes North, Longitude 62 degrees 35 minutes
Population	• Approximately 46,000 (2010 population census est.)
Climate	• Classified as tropical marine • Steady northeast trade winds and tropical oceanic cyclonic movements • Mean temperature of approximately 27o Celsius • Seasonal and diurnal variations in temperature are small • Rainfall is mainly orographic and increases in amount and frequency with altitude. • Rainfall is unevenly distributed between years and between months with a reliable wet period from August to November and driest months January to April. • Relative humidity level is usually low in the dry season and high in the wet season. The mean value is 76 percent but ranges from 70 percent in March to 78 percent in September, October and November. • Prevailing wind is northeast trade with mean speeds ranging from 15- 30 kilometers per hour (kph).
Topography	• St Kitts is oriented northwest southeast, about 80 km long and 16 km wide. Generally it rises from the coastline towards its mountain cluster in the center • The highest point is Mount Liamuiga, rising with a pronounced crater to 1,156 meters (m). • Nevis lies on the inner volcanic arc of the Lesser Antilles and is comprised of nine distinct volcanic centers strung out southwest to northwest along a parallel of the inner volcanic arc. The central Nevis Peak is the most imposing of these centers, rising to 985 meters in altitude, giving the island a conical appearance
Geology	• St Kitts is composed almost exclusively of volcanic rocks of andesite or dacite mineralogy. Its geology is similar to that of

	other volcanic islands in the Lesser Antillean Archipelago. St Kitts had since undergone numerous and considerable changes in elevation but is now relatively stable. • Nevis is a volcanic island that began its formation in mid-Pliocene times (approximately 3.45 million years ago). However, the island comprises a number of discrete eruptive centers that range in age from mid-Pliocene to Pleistocene.
Vegetation	• Five types: Rainforest, Dry Evergreen Forest, Dry Scrub Land Palm Break, Elfin Woodland. • Disturbed low lands as a result of farming.
Economy	• Tourism dependent, financial services, manufacturing, construction agriculture, etc

Figure 1: Map of the Caribbean Basin showing location of St. Kitts and Nevis.

1.1 Overview

The agenda for sustainable development in the Federation of St. Kitts and Nevis (SKN) is managed mainly by the Ministry of Sustainable Development (MSD). Financial support for sustainable development initiatives have been derived primarily by the Global Environment Facility (GEF) through the implementation of the United Nations Framework Convention on Climate Change (UNFCCC), the United Nations Convention to Combat Desertification (UNCCD) and the United Nations Convention on Biological Diversity (UNCBD). The Report was prepared as part of the National Preparatory Process for the Third International Conference on Small Island Developing States (SIDS) and catalogues the countries efforts to achieve the targets for sustainable development set out under the Barbados Programme of Action (BPOA) and the Mauritius Strategy for Implementation (MSI).

The Report examines the level of political commitment by the Government of St. Kitts and Nevis to address specific risks and vulnerabilities, through the undertaking of practical actions and implementation of effective policies. Also, it summarizes the challenges, opportunities and priorities for advancement of the country's sustainable development agenda. Several key national documents have been reviewed as part of the stocktaking exercise.

1.2 Methodology

The preparation of the Report involved some stakeholder consultations and an in depth analysis of existing instruments, procedures and institutional structures for sustainable development in SKN. In part, the contents of this Report have been based on the outputs of national assessments and projects including but not limited to the following:

- National Adaptation Strategy (NAS),
- National Environmental Management Strategy (NEMS),
- UNCCD National Action Plan (NAP),
- UNFCCC National Communications.
- National Physical Development Plan (NPDP),
- Sustainable Land Management Project (SLMP),
- Integrated Watershed and Coastal Areas Management Project (IWCAM), and
- OECS Parks and Associated Livelihoods Project (OPAAL)

Information on institutional responsibilities and mandates for sustainable development were obtained from related legislations and operational plans.

1.3 Legislative Framework

Several laws are relevant to various aspects of sustainable development in SKN. These included the following:

- National Conservation and Environmental Protection Act, 1987
- Development Control and Planning Act, 2000.

- Nevis Development Control and Planning Ordinance 2005
- Solid Waste Management Corporation Act
- National Housing Corporation Act
- Whitegate Development Corporation Act, No. 15 of 1999
- Forestry Ordinance 1904
- Water Courses Ordinance 41/56
- Public Health Act No. 22 of 1969
- Pesticide and Toxic Chemicals Control Act 1999
- Agricultural Development Act 1973

Despite the existence of legislations, there are gaps and/or conflicts in the legal coverage for sustainable development in SKN. Existing legislations are sector specific and for the most part were not intended to address sustainable development in a holistic and programmatic way. In several instances there are no accompanying regulations and/or guidelines to direct the administration of these laws.

Additionally, the Constitution of SKN which grants a significant level of autonomy to the Nevis Island Administration (NIA), in several instances constrains the effective and uniform implementation of key pieces of legislation across the Federation. Some of these include Development Control and Planning Act, the Solid Waste Management Corporation Act and the National Conservation and Environmental Protection Act.

1.4 Regulatory Framework

There is a general lack of Regulations that accompany legislations in SKN. Apart from the Guidelines for Mainstreaming Sustainable Land Management into National Development, developed as an output of the Sustainable Land Management Project (SLMP), there are no specific guidelines and/or regulations designed to address sustainable development.

Notwithstanding the above, the planning authorities in SKN have been using the St. Kitts-Nevis Building Regulations, Code and Guidelines to manage land development practices. Additionally, the Department of Physical Planning and Environment (DPPE) on St. Kitts and the Department of Physical Planning Natural Resources and the Environment (DPPNRE) on Nevis, supported by the Development Control and Planning Act and the Nevis Development Control and Planning Ordinance respectively, have developed guidelines for the conduct of Environmental Impact Assessments (EIA).

1.5 Institutional Framework

Several institutions provide support to the overall pursuit of the country's sustainable development agenda. These include:

- Department of Physical Planning and Environment (DPPE)
- Department of Department of Physical Planning, National Resources and the Environment (DPPNRE)

- Department Land and Surveys (DOLS)
- Department of Economic Planning and Public Sector Investment Planning (DEPPSIP)
- Department of Agriculture (DOA)
- Water Services Department (WSD)
- Public Works Department (PWD)
- National Housing Corporation (NHC)
- Nevis Land and Housing Development Corporation
- Whitegate Development Corporation (WGDC)
- St. Christopher National Trust (SCNT)
- Nevis Historical and Conservation Society (NHCS)
- Ministry of Justice and Legal Affairs

The DPPE, DPPNRE and DEPPSIP) have primary responsibility for the implementation of sustainable development initiatives and activities in SKN.

1.6 Policy Framework

Generally, the Government of St. Kitts and Nevis (GSKN) and civil society organizations have been engaged in promoting various aspects of sustainable development. Areas of joint collaboration include:

i. Poverty reduction
ii. Agricultural diversification
iii. Environmental management
iv. Water resources management
v. Land use planning
vi. Housing and infrastructure development
vii. HIV/AIDS and other health issues
viii. Climate change
ix. Land degradation
x. Bio-diversity conservation

The key programmes and policy instruments are analyzed in table 2 below. These include:

- National Adaptation Strategy (NAS)
- National Environmental Management Strategy (NEMS)
- Agricultural Strategic Plan (2005-2009)
- National Physical Development Plan (2005)
- UNCCD National Action Plan (NAP)
- National Biodiversity Action Plan (NBSAP)
- National Communications on Climate Change
- St. George's Declaration of Principles on Environmental Sustainability (2006)
- Barbados Programme of Action (BPOA)
- Mauritius Strategy for Implementation (MSI)

Programme/Policy Instrument		Targets	Lead Agency
National Scope			
1	National Adaptation Strategy	• Maintenance of macro-economic stability to reduce vulnerability and facilitate investment; • Improvement competitiveness in the production and export of goods and services; • Adoption of social policies to support economic development and protect the most vulnerable; • Promotion of a sustainable development agenda; • Restructuring and transformation of the economy; • Development of appropriate legal and regulatory frameworks; and, • Efficient provision of public goods (such as education and health).	DEPPSIP
2	National Environmental Management Strategy	• Foster Sustainable Improvement in the Quality of Life • Integrate Social, Economic and Environmental Considerations into National Development Policies, Plans and Programmes. • Improve on Legal and Institutional Frameworks • Ensure Meaningful Participation by Civil Society in Decision Making. • Ensure Meaningful Participation By The Private Sector • Use Economic Instruments for Sustainable Environmental Management • Foster Broad-based Environmental Education, Training and Awareness • Address the Causes and Impacts of Climate Change • Minimize and Manage the Causes and Impacts of Disaster • Prevent and Control Pollution and Manage Waste • Ensure the Sustainable Use of Natural Resources	DPPE & DPPNRE

		• Protect Cultural and Natural Heritage • Protect and Conserve Biological Diversity • Recognize Relationships between Trade and Environment • Promote Cooperation in Science and Technology • Manage and Conserve Energy • Negotiate and Implement Multi-lateral Environmental Agreements	
3	Agricultural Strategic Plan (2005-2009)	• Expand the development of non-sugar agriculture and increase its contribution to the country's Gross Domestic Product (GDP). • Development of a market-led approach toward increasing productivity, with an emphasis on crop and livestock production. • Development of farmer groups, strengthening the programming of services to farmers, and maximizing irrigation applications in production.	DOA
4	National Physical Development Plan (2005)	• Highlights a general framework that targets sustainable development in the context of land use planning. • Identify appropriate physical planning and land use strategies that allow for sustainable exploitation of the natural resource base and to direct the use of public sector and private industry resources for planned and orderly development.	DPPE
5	UNCCD National Action Plan (NAP)	• To identify the factors that contributing to desertification and practical measures necessary to combat desertification and mitigate the effects of drought. • To specify the respective roles of government, local communities and land users and the resources available and needed. • To include specific measures to prepare for and mitigate the effects of drought. • Based on the circumstances and requirements specific to the	DPPE & DPPNRE

		country, the national action programme should include, as appropriate, inter alia, the following priority strategies as they relate to combating desertification and mitigating the effects of drought in affected areas and to their populations: ✓ Promotion of alternative livelihoods and improvement of national economic environments with a view to strengthening programmes aimed at the eradication of poverty and at ensuring food security; ✓ Demographic dynamics; ✓ Sustainable management of natural resources; ✓ Sustainable agricultural practices; ✓ Development and efficient use of various energy sources; ✓ Institutional and legal frameworks; ✓ Strengthening of capabilities for assessment and systematic observation, including hydrological and meteorological services; and ✓ Capacity building, education and public awareness.	
6	National Biodiversity Action Plan (NBSAP)	• Management of natural resources, and the other numerous elements, should be based on scientific grounds in order to ensure continuity of the natural ecological balance and prevent deterioration of ecosystems, and protecting creatures from loss or extinction. • Developing SKN's scientific and technological capacity in areas of biodiversity conservation. • Development, executive and administrative capacities that attain intended goals, and proceeding with research and studies. • Mobilizing national efforts to conserve biodiversity with all its ecological, biological, and genetic elements, in order to ensure	DPPE & DPPNRE

		sustained survival and optimal use. • Setting the plan of action aiming at involving civil society, individuals or NGOs in biodiversity conservation. • Establishing legislative basis and economic and social incentives that support conservation of biodiversity and sustainable development of natural resources. • Integrating national action with regional and international action, and utilizing the bulk of scientific and technical expertise concerned with conserving resources of biodiversity; including gene resources.	
7	National Communications on Climate Change	• To provide an update on national programmes and priorities to reduce green house gases.	DPPE & DPPNRE
8	National Capacity Self Assessment	• To identify and analyze priorities and needs at the country level for capacity development related to the implementation of the UNCBD, UNFCCC, and the UNCCD.	
Regional & International Scope			
9	St. George's Declaration of Principles on Environmental Sustainability	• Foster Improvement in the Quality of Life • Integrate Social, Economic and Environmental Considerations into National Development Policies, Plans and Programmes • Improve on Legal and Institutional Frameworks • Ensure Meaningful Participation by Civil Society in Decision Making • Ensure Meaningful Participation by the Private Sector • Use Economic Instruments for Sustainable Environmental Management • Foster Broad-based Environmental Education, Training and Awareness • Address the Causes and Impacts of Climate Change • Principle 9: Prevent and Manage the Causes and Impacts of Disasters • Prevent and Control Pollution and Manage Waste	DPPE & DPPNRE

		• Ensure the Sustainable Use of Natural Resources • Protect Cultural and Natural Heritage • Protect and Conserve Biological Diversity • Recognize Relationships between Trade and Environment • Promote Cooperation in Science and Technology • Manage and Conserve Energy • Negotiate and Implement Multilateral Environmental Agreements • Coordinate Assistance from the International Donor Community towards the Organization of Eastern Caribbean States Region • Implementation and Monitoring	
10	Barbados Programme of Action (BPOA)	• Presents a basis for action in 14 agreed priority areas and defines a number of actions and policies related to environmental and development planning that should be undertaken by SIDS with the cooperation and assistance of the international community. • Identifies priority areas and indicates the specific actions that are necessary to address the special challenges faced by SIDS. In fulfilling those actions, several cross- sectoral areas are identified, for example, capacity-building, including human resource development; institutional development at the national, regional and international levels; cooperation in the transfer of environmentally sound technologies; trade and economic diversification; and finance.	DPPE, DEPPSIP
11	Mauritius Strategy for Implementation (MSI) & (MSI +5)	• Further the implementation of the BPOA. • Measure progress in implementing the BPOA.	DPPE, DEPPSIP

Table 2: Summary of Key programmes and policy instruments

2.0 Barbados Programme of Action- SKN Summary

The performance of the SKN in relation to the implementation of the BPOA has been evaluated under the following heading:

- Climate change and sea level rise
- Natural and environmental disasters
- Management of wastes
- Coastal and marine resources
- Freshwater resources
- Land resources
- Energy resources
- Tourism resources
- Biodiversity resources
- National institutions and administrative capacity
- Regional institutions and technical cooperation
- Science and technology
- Human resource development

Table 3 below provides a summary of the SKN's general progress with regard to national actions, policies and measures.

	PRIORITY AREAS	NATIONAL ACTIONS, POLICIES & MEASURES	YES	NO
1	**Climate change and sea level rise**	a. Ensure early ratification of or accession to the United Nations Framework Convention on Climate Change, the Montreal Protocol on Substances that Deplete the Ozone Layer 4/ and other related legal instruments.	✓	
		b. Monitor, survey and collect data on climate change and sea level rise.		✓
		c. Formulate comprehensive adjustment and mitigation policies for sea level rise in the context of integrated coastal area management.		
		d. Assess the effects and the socio-economic implications of the impact of climate change, climate variability and sea level rise on SIDS.	✓	
		e. Map areas vulnerable to sea level rise and develop computer-based information systems covering the results of surveys, assessments and observations as part of the development of adequate response strategies, adaptation policies and measures to minimize the impact of climate change, climate variability and sea level rise.		✓
		f. Improve public and political understanding of the potential impacts of climate change.		✓
		g. Formulate comprehensive strategies and measures (including the preparation, facilitation and collection of information) on adaptation to climate change that would contribute to a better understanding of		

			the range of issues associated with the development of methodologies to facilitate adequate adaptation to climate change.	✓	
		(j)	Promote a more efficient use of energy resources in development planning and use appropriate methods to minimize the adverse effects of climate change on the sustainable development of those resources.	✓	
		(k)	Increase participation in the bilateral, regional and global research, assessment, monitoring and mapping of climate impacts, including the adoption of oceanographic and atmospheric measures and policies and the development of response strategies.		✓
2	**Natural and environmental disasters**	i.	Establish and/or strengthen disaster preparedness and management institutions and policies, including building codes and regulatory and enforcement systems, in order to mitigate, prepare for and respond to the increasing range and frequency of natural and environmental disasters and promote early warning systems and facilities for the rapid dissemination of information and warnings.		
		ii.	Strengthen the capacity of local broadcasting to assist remote rural and outer island communities within countries and among neighbouring countries during disaster events.	✓	
		iii.	Establish a national disaster emergency fund with joint private and public sector support for areas where insurance is not available in the commercial market, taking into account the relevant experience to be gained from the operation of similar funds.	✓	
		iv.	Integrate natural and environmental disaster policies into national development planning processes and encourage the development and implementation of public and private sector pre- and post-disaster recovery plans, drawing on the capacity of the United Nations Department of Humanitarian Affairs and bearing in mind the International Decade for Natural Disaster Reduction.		✓
		v.	Strengthen cultural and traditional systems that improve the resilience of local communities to disaster events.	✓	✓

3	**Management of wastes**	(i) Develop fiscal and policy incentives and other measures to encourage environmentally sustainable imports and local products with low waste or degradable waste content. (ii) Develop and implement appropriate regulatory measures, including emission discharge and pollution standards, for the reduction, prevention, control and monitoring of pollution from all sources; for the safe and efficient management of toxic, hazardous and solid wastes, including sewage, herbicides, pesticides and industrial and hospital effluent; and for the proper management of disposal sites. (iii) Ratify and implement relevant conventions, including the Basel Convention on the Control of Trans-boundary Movements of Hazardous Wastes and Their Disposal 5/ and the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Convention of 1972), 6/ as well as relevant regional conventions. (iv) Formulate and implement public awareness and education campaigns designed to gain local recognition of the need to control wastes at the source; of the value of reuse, recycling and appropriate packaging; and of the possibilities for converting wastes to resources in culturally appropriate ways. (v) Introduce clean technologies and treatment of waste at the source and appropriate technology for solid waste treatment. (vi) Develop information systems and baseline data for waste management and pollution control, monitoring the types and quantities of wastes, for both sea- and land-based sources of pollution. (vii) Establish port reception facilities for the collection of waste in accordance with annex V of the International Convention for the Prevention of Pollution from Ships (MARPOL 73/78). 7/ (viii) In conformity with the Basel Convention and relevant decisions taken by the parties to that Convention, formulate and enforce national laws and/or regulations that ban the importation from States that are members of the Organization for Economic Cooperation and Development (OECD) of hazardous wastes and	✓ ✓ ✓ ✓	✓ ✓

		other wastes subject to the Basel Convention, including hazardous wastes and other wastes destined for recycling and recovery operations.	✓	
4	**Coastal and marine resources**	(i) Establish and/or strengthen, where appropriate, institutional, administrative and legislative arrangements for developing and implementing integrated coastal zone management plans and strategies for coastal watersheds and exclusive economic zones, including integrating them within national development plans. (ii) Design comprehensive monitoring programmes for coastal and marine resources, including wetlands, in order to determine shoreline and ecosystem stability, and also document and apply, as a basis for integrated coastal zone planning and decision-making, traditional knowledge and management practices that are ecologically sound and include the participation of local communities. (iii) Develop and/or strengthen national capabilities for the sustainable harvesting and processing of fishery resources and provide training and awareness programmes for the managers (Government and local communities) of coastal and marine resources. (iv) Ratify and/or adhere to regional and international conventions concerning the protection of coastal and marine resources and combat unsustainable fishing and related practices.	✓ ✓	✓ ✓
5	**Freshwater resources**	(i) Develop, maintain and protect watershed areas, irrigation systems, distribution networks and appropriate catchment systems and promote effective programmes for water conservation and prevention of water contamination through, inter alia, the development of integrated national water plans, the use of appropriate incentives and regulatory measures, community involvement in management and conservation, forest management and reforestation and investment strategies.	✓	

		(ii) Adopt appropriate standards for the management of freshwater resources, and develop and strengthen low-cost monitoring and assessment capabilities, linked to water resource databases, for relevant decision-making tools, including forecasting models for water management, planning and utilization. (iii) Strengthen procedures to monitor and respond to the impacts on water resources of natural and environmental hazards, in particular the impacts of climate change and climate variability, including drought and sea level rise. (iv) Encourage the development and acquisition of appropriate technology and training for cost-effective sewage disposal, desalination and rainwater collection to provide sufficiently high quality potable freshwater, including opportunities for technology interchange SIDS. (v) Strengthen national capacities to make decisions among competing demands for the allocation of limited water resources.	✓ ✓	✓ ✓
6	**Land resources**	(i) Develop and improve national databases and the dissemination of information to relevant groups, especially local communities, youth and women, for land-use planning and management, including estimates of the carrying capacity, economic and environmental value of land resources, along with appropriate decision-making tools, such as land/geographic information systems. (ii) Prepare and/or review land-use plans in conjunction with agricultural, forestry, mining, tourism, traditional land-use practices and other land-use policies, with a view to formulating comprehensive land-use plans and zoning so as to protect land resources, ensure sustainable and productive land-use and guard against land degradation, pollution and exceeding island carrying capacity.	✓ ✓	

		(iii) Encourage appropriate forms of land tenure, improved land administration and a greater appreciation of the integrated nature of land development in order to facilitate sustainable land-use. (iv) Formulate and enforce laws, regulations, and economic pricing and incentives in order to encourage the sustainable and integrated use, management and conservation of the land and its natural resources. (v) Support appropriate afforestation and reforestation programmes, with appropriate emphasis on natural regeneration and the participation of land owners, in order to ensure watershed and coastal protection and reduce land degradation. (vi) Improve the availability, affordability and environmental quality of shelter in human settlements, in accordance with chapter 7 of Agenda 21. (vii) Increase attention to national physical planning in both urban and rural environments, focusing on training to strengthen physical planning offices, including the use of environmental impact assessments and other decision-making tools.	✓ ✓ ✓	 ✓ ✓
7	**Energy resources**	(i) Implement appropriate public education and awareness programmes, including consumer incentives to promote energy conservation. (ii) Promote the efficient use of energy and the development of environmentally sound sources of energy and energy-efficient technologies, paying special attention to the possibilities of using, where appropriate, economic instruments and incentive structures and the increasing economic possibilities of renewable sources of energy. (iii) Establish and/or strengthen, where appropriate, research capabilities in the development and promotion of new and renewable sources of energy, including wind, solar, geothermal,	✓ ✓	

		hydroelectric, wave and biomass energy, and ocean thermal energy conversion. (iv) Strengthen research capabilities and develop technologies to encourage the efficient utilization of non-renewable sources of energy.	✓ ✓	
8	**Tourism resources**	(i) Ensure that tourism development and environmental management are mutually supportive. (ii) Adopt integrated planning and policies to ensure sustainable tourism development, with particular attention to land-use planning and coastal zone management, requiring environmental impact assessments for all tourism projects; the continuous monitoring of the environmental impact of all tourism activities; and the development of guidelines and standards for design and construction taking into account energy and water consumption, the generation and disposal of wastes and land degradation, the proper management and protection of eco-tourism attractions, and the carrying capacity of areas for tourism. (iii) Identify and develop facilities to meet specific niche markets, particularly in eco-tourism, nature and cultural tourism, and involve local populations in the identification and management of natural protected areas set aside for eco-tourism. (iv) Adopt measures to protect the cultural integrity of SIDS	✓ ✓ ✓ ✓	
9	**Biodiversity resources**	(i) Formulate and implement integrated strategies for the conservation and sustainable use of terrestrial and marine biodiversity, in particular endemic species, including protection from the introduction of certain non-indigenous species and the identification of sites of high biological significance for the conservation of biological diversity and/or for eco-tourism and other sustainable development		

			opportunities, such as sustainable agriculture, training and research.	✓	
			(ii) Ratify and implement the Convention on Biological Diversity, 10/ the Convention on International Trade in Endangered Species of Wild Fauna and Flora 11/ and other relevant international and regional conventions.		
			(iii) Promote community support for the conservation of biological diversity and the designation of protected areas by concentrating on educational strategies that increase awareness of the significance of biodiversity conservation, in particular the fundamental importance to resource-owning communities of a diverse biological resource base.	✓	
			(iv) Generate and maintain buffer stocks or gene banks of biogenetic resources for reintroduction into their natural habitat, especially in the case of post-disaster restoration and rehabilitation.		✓
			(v) Develop or continue studies and research on biological resources, their management and their intrinsic socio-economic and cultural value, including biotechnology.		✓
			(vi) Conduct detailed inventories of existing flora, fauna and ecosystems to provide basic data needed for the preservation of biodiversity.		✓
			(vii) Ensure that the ownership of intellectual property rights is adequately and effectively protected. Ensure, subject to national legislation and policies, that the technology, knowledge, and customary and traditional practices of local and indigenous people, including resource owners and custodians, are adequately and effectively protected, and that they thereby benefit directly, on an equitable basis and on mutually agreed terms, from any utilization of such technologies, knowledge and practices, or from any technological development directly derived there from.	✓	
			(viii) Support the involvement of non-governmental organizations, women, indigenous people and other major groups, as well as		✓

		fishing communities and farmers, in the conservation and sustainable use of biodiversity and biotechnology.	✓	
10	**National institutions and administrative capacity**	(i) Strengthen institutional arrangements and administrative capacity, including cross-sectoral/inter-ministerial committees and task forces, in order to integrate environment and economic policy into national planning and across sectors and ensure the capacity to implement Agenda 21 and the decisions of the Global Conference. (ii) Develop implementation strategies and schedules, including financing, for both regional and national activities. (iii) Establish or strengthen environmental agencies with adequate financial and staff resources. (iv) Increase the awareness and involvement of non-governmental organizations, local communities and other major groups in public education, national planning and the implementation of sustainable development programmes. (v) Improve public education in order to familiarize local, provincial/State and national bodies with environmental laws already in existence, facilitate discussion of the value of environmental legislation and standards to local communities and open wider discussion on more culturally appropriate penalties for the contravention of laws and regulations. (vi) Develop appropriate national, provincial/State and local environmental regulations that reflect the needs and incorporate the principles of sustainability, create appropriate environmental standards and procedures, and ensure their integration into national planning instruments and development projects at an early stage in the design process, including specific legislation for appropriate environmental impact assessment for both public and private sector development.	✓ ✓ ✓	✓ ✓

		(vii) Give sustainable development task forces or their equivalent the official authority and validity to permit their continued meeting as interdisciplinary and communally representative advisory bodies. (viii) Provide adequate resources for the enforcement of environmental regulations. (ix) Enact the domestic legislation required for the implementation of the wide range of international environmental conventions and agreements directly relevant to SIDS. (x) Establish national information nodes on the sustainable development of SIDS in order to encourage, at the international level, the development of a small islands' sustainable development information network to facilitate the exchange of experience among SIDS. (xi)		✓ ✓ ✓ ✓ ✓
11	**Regional institutions and technical cooperation**	(i) Support regional organizations through membership and budgetary contributions. (ii) Encourage improved coordination and collaboration among regional bodies and between the international community and regional programmes.	✓ ✓	
12	**Transport and communication**	(i) Continue efforts to strengthen transport services and facilities at both the national and local levels, paying particular attention to environmental protection, safety, and innovative energy-efficient and low-cost transport solutions. (ii) Upgrade domestic communication facilities, including radio and telephone coverage, to remote rural and outer island communities, and continue efforts to improve international telecommunications links. (iii) Address quarantine problems and requirements stemming from changing transport situations and longer-term climatic	✓	✓ ✓

		changes.		
13	**Science and technology**	(i) Ensure that science and technology policy is closely linked to national environmental strategies and sustainable development plans and is responsive to local and sectoral sustainable development needs, emphasizing self-sufficiency and the minimization of import dependency.		✓
		(ii) Give greater emphasis to research and development, as well as to training for science and technology and economic development generally, and for environmental and technology assessment in particular; refine analytical tools for natural resource accounting; and encourage the development and use of information and communications technology to overcome size and isolation problems.		✓
		(iii) Promote research and development in areas where endogenous technologies and traditional practices have great relevance, including agriculture, agricultural processing, waste-recycling, ethno-biology and biotechnology, construction and renewable energy, ensuring that mechanisms are in place for the appropriate protection of intellectual property rights in accordance with relevant international conventions.		✓
		(iv) Encourage the use of endogenous, environmentally friendly technologies by establishing regulations, standards and economic incentives.		✓
		(v) Develop or ensure access to databases on environmentally sound technologies of local relevance and collect consistent time-series data for monitoring the performance of sustainable development.		✓
		(vi) Promote and strengthen the role of women in science and technology disciplines.	✓	
13	**Human resource development**	(i) Infuse sustainable development ideas into education curricula at all levels and promote participation by all		

		groups, emphasizing the link between environment and social and economic issues, and continue to improve access to scientific, mathematics and technical training.		✓
		(ii) Incorporate population issues into the mainstream of decision-making and planning mechanisms of government, including developing comprehensive population policies consistent with sustainable development objectives while respecting and promoting the dignity and the fundamental rights of the human person and of the family.		
		(iii) Improve urban/rural settlements, in consultation with local communities, by giving priority to the improvement of basic services, such as access to potable water, environmentally sound sewage treatment and disposal, shelter, education, family planning and health care, as well as to the elimination of poverty; ensuring that development projects are people-centred and have explicit environment and health objectives; ensuring adequate resources for public health and preventive medicine activities; and considering urban development options, including decentralization.	✓	
		(iv) Direct efforts to improve urban/rural settlements through the promotion of projects aimed at the elimination of poverty that give priority to the improvement of basic services such as shelter and comprehensive public health, including potable water, sewage disposal, maternal and child health care, the responsible planning of family size and other specific measures aimed at health promotion and disease prevention.	✓	
		(v) Encourage the use of distance training to meet the expanding educational demand and the large demand for knowledge and training in the area of the environment.	✓	
		(vi) Promote and strengthen the role of major groups, including non-governmental organizations and women, in the creation and implementation of sustainable development initiatives.	✓	
		(vii) Seek to improve the quality of education, training and human		

		resource development by upgrading basic education and technical/vocational skills training and by making improvements, where necessary, to national management and planning capacities and labour market linkages. (viii) Encourage the use of traditional knowledge and skills in environment, resource management and health, and the use of community groups to assist in promoting environmental awareness.	✓ ✓ ✓	

Table 3: Summary of the SKN's BPOA general progress with regard to national actions, policies and measures

3.0 Mauritius Strategy for Implementation – SKN Summary

A checklist describing in brief SKN's performance with regard to the MSI is shown in table 4 below. The results from the table indicate that SKN has began to implement several actions, policies and measures at the national level that are aligned with the objectives of the BPOA and the MSI.

	Priority Areas	NATIONAL ACTIONS, POLICIES & MEASURES	YES	NO
1	**Climate change and sea-level rise**	i. Fully implement the United Nations Framework Convention on Climate Change and further promote international cooperation on climate change; ii. Continue to take, in accordance with the Convention and the Kyoto Protocol, as applicable, steps to address climate change, including through: adaptation and mitigation in accordance with the principle of common but differentiated responsibilities and respective capabilities; and the effective implementation of the Kyoto Protocol by those countries that have ratified it; iii. Promote increased energy efficiency and development and the	✓ ✓	

		use of renewable energy as a matter of priority, as well as advanced and cleaner fossil fuel technologies, inter alia, through public and/or private partnerships, market-oriented approaches, as well as supportive public policies and international cooperation, and support their use in small island developing States, where appropriate and in accordance with their national policies;	✓	
		iv. Implement the Buenos Aires programme of work on adaptation and response measures, in particular those elements that are relevant to SIDS;		✓
		v. Work to facilitate and promote the development, transfer and dissemination to SIDS of appropriate technologies and practices to address climate change;		✓
		vi. Build and enhance scientific and technological capabilities, including in SIDS, inter alia, through continuing support to the Intergovernmental Panel on Climate Change for the exchange of scientific information and data, including where relevant to SIDS;		✓
		vii. Enhance the implementation of national, regional and international strategies to monitor the Earth's atmosphere, including as appropriate, strategies for integrated observations, inter alia, with the cooperation of relevant international organizations; and work with SIDS to strengthen their involvement in monitoring and observing systems and enhance their access to and use of information.		✓
2	**Natural and environmental disasters**	i. Strengthening the International Strategy for Disaster Reduction and related small island developing States regional mechanisms as facilities to improve national disaster mitigation, preparedness and early warning capacity, increase public awareness about disaster reduction, stimulate interdisciplinary and intersectoral partnerships, and support the mainstreaming of risk		

		management into the national planning process; ii. Augmenting the capacity of SIDS to predict and respond to emergency situations, including those affecting human settlements, stemming from natural and environmental disasters.	✓ ✓	
3	**Management of wastes**	i. Form regional partnerships to draw on best practices and develop innovative solutions to waste management, seeking international assistance in this effort; ii. Work to strengthen the control of the trans-boundary movement of hazardous wastes, especially through the enhancement of activities under the Basel Convention on the Control of Trans-boundary Movements of Hazardous Wastes and Their Disposal. iii. Promote sustainable waste management, including by: a. Identifying cost-effective and environmentally sound waste management systems; b. Exploring and engaging in innovative forms of financing of waste management infrastructure, including the creation of appropriate national environmental trust funds; c. Promoting reduction, reuse and recycling of waste and waste management initiatives; d. Developing projects appropriate to SIDS for the use of waste as a resource, including for the production of energy as a waste management solution; iv. Promote national, regional and international cooperation to reduce the quantity of waste disposed of at sea, including by working with others in the international community to strengthen regimes relating to the disposal of waste at sea, particularly those regimes established by the International Maritime Organization, the Convention on the Prevention of	✓ ✓ ✓ ✓ ✓	✓

			Marine Pollution by Dumping of Wastes and Other Matter (London Convention of 1972),10 and the International Atomic Energy Agency;	✓
		v.	Promote the broad participation in and early implementation of the new International Maritime Organization Convention on Ballast Water.	✓
4	**Coastal and marine resources**	i.	Complete the delimitation of their maritime boundaries;	✓
		ii.	Submit any claims to the Continental Shelf Commission by 13 May 2009 or such later date as may be applicable in accordance with the provisions of the Convention on the Law of the Sea;	✓
		iii.	Further the work on the assessment of living and non-living seabed resources within their national jurisdiction.	✓
		iv.	Establish effective monitoring, reporting and enforcement, and control of fishing vessels, including by SIDS as flag States, to further implement international plans of action to prevent, deter and eliminate illegal, unreported and unregulated fishing and to manage fishing capacity;	✓
		v.	Strengthen or develop, where necessary, national and regional sustainable and responsible fisheries management mechanisms consistent with the 1995 Food and Agriculture Organization of the United Nations Code of Conduct for Responsible Fisheries;	✓
		vi.	Fully implement surveillance and monitoring systems;	✓
		vii.	Analyse and assess the status of fish stocks;	✓
		viii.	If they have not yet done so, consider becoming parties to the 1995 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks and the Food and	

		Agriculture Organization of the United Nations 1993 Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas,14 as well as relevant regional agreements for the conservation and management of fisheries;	✓	
		ix. Establish or enhance the necessary infrastructure and legislative and enforcement capabilities to ensure effective compliance with, and implementation and enforcement of, their responsibilities under international law. In this regard, until such action is undertaken SIDS flag States are encouraged to consider declining the granting of the right to fly their flag to new vessels, suspending their registry or not opening a registry.	✓ ✓	
5	**Land Resources**	i. Develop capacity to implement the multilateral environmental agreements and other relevant international agreements in relation to land resources;	✓	
		ii. Develop capacity for sustainable land management and self-generating agro-ecosystems by building on communal tenure systems and traditional land-use planning and practices for crop, livestock and aquaculture production, taking into account the increasing competition for land resources resulting from tourism, urbanization and other activities;	✓	
		iii. Strengthen land tenure and management systems, move from primary to tertiary agricultural production and diversify agricultural production in a sustainable manner.	✓	
		iv. Create an enabling environment for sustainably enhancing agricultural productivity and promoting agricultural diversification and food security;	✓	
		v. Remove production constraints and build programmes in such areas as seed production and integrated pest management		✓

		systems; vi. Enhance food processing, marketing and product development and quality control; vii. Promote relevant research and development and the use of appropriate modern technologies; viii. Promote sustainable aquaculture. ix. Develop and strengthen partnerships for sustainable forest management; x. Increase stakeholder participation in all discussions regarding the development, management and conservation of forest and tree resources; xi. Ensure adherence to national forest policies and legislation that have been developed to safeguard the rights of resource owners and legitimate or licensed users through the use of administrative and management mechanisms for the alienation, licence or transfer of "traditional rights" for commercial development purposes; xii. Increase the awareness, promotion, adoption and enforcement of legislation to ensure that sustainable rotational logging practices and replanting initiatives are implemented.	✓ ✓ ✓	✓ ✓ ✓
6	**Energy Resources**	i. Develop and implement integrated energy programmes	✓	
7	**Biodiversity resources**	i. Integrating biodiversity protection into national sustainable development strategies; ii. Building effective partnerships between all relevant stakeholders essential to the conservation and sustainable use of biological resources;	✓	✓

		iii.	Addressing island biodiversity under the Convention on Biological Diversity in a manner that responds to the unique characteristics of small SIDS and to the threats related to climate change, land degradation and their particular vulnerabilities;		
		iv.	Implementing the guidelines of the Convention on Biodiversity and tourism development;	✓	
		v.	Enhancing national efforts, both by Governments and other stakeholders, in the implementation of the programme of work of the Convention on protected areas, including the establishment of protected areas consistent with international law and based on scientific information; Controlling major pathways for potential alien invasive species in SIDS;	✓	
		vi.	Developing local capacities for protecting and developing the traditional knowledge of indigenous groups for the fair and equitable sharing of the benefits arising from the use of genetic resources, taking into account the Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of Benefits Arising out of their Utilization as adopted at by the Conference of Parties to the Convention at its sixth meeting;	✓	
		vii.	Developing the capacity to promote cooperation among SIDS for biodiversity resources, shared ecosystem management and exchange of experience, including through support for strong networks, by both Governments and other stakeholders;	✓	
		viii.	Participating in the Ad Hoc Open-Ended Group of the Convention on an international regime on access and benefit-sharing to elaborate and negotiate the nature, scope and elements of an international regime on access and benefit-sharing in accordance with the terms of decision VII/19 of the Conference of Parties to the Convention, including, inter alia, the issue of unauthorized access to and misappropriation of genetic resources and traditional knowledge, which is of particular concern to small		

		island developing States; ix. Developing human and institutional capacity at the national and regional levels in SIDS for research in the area of biodiversity, including taxonomy; x. Supporting, through the Convention and its Cartagena Protocol, the development and implementation of national bio-safety frameworks; xi. Supporting SIDS efforts in building community capacity to conserve important species, sites and habitats.	✓ ✓ ✓ ✓	

Table 4: Checklist showing SKN's performance with regard to the MSI

4.0 Review of Agenda 21 Recommendations

During the National Preparatory Process for the Rio +20 Conference on Sustainable Development, stakeholders examined the countries performance with regard the implementation of Agenda 21 recommendations. The consultation concluded the following:

- No nation can secure its future alone, but all countries can assure themselves of a safer, more prosperous future by dealing with environment and development issues TOGETHER in global partnership. **(SKN has been participating in the global partnership under several conventions and protocols e.g UNFCCC, UNCBD, UNCCD, CITES, etc)**
- Trade and environment should be mutually supportive since international economic relations and the economic policies of every country have great relevance to sustainable development. **(SKN has been participating in regional and international trade agreements. However, there is an opportunity for greater stakeholder involvement at the local level)**
- The poor need access to basic education and health care, safe water and sanitation, and to resources, especially land. **(SKN has a universal education and healthcare care system. General there is access to safe water and sanitation. GOSKN's Special Land Initiative has provided land to the landless at below market rates)**
- Individuals need to accept that they have choices when making decisions about their own consumption patterns. **(There is a need for further education and awareness on household income and expenditure)**
- Countries need to know their national population carrying capacity and deal with the combination of population growth, health of the ecosystem, technologies and access to resources. **(SKN has completed two population censuses since 1992. The MSD undertakes population forecasting during the inter census period)**
- Human health depends on a healthy environment, clean water supply, sanitary waste disposal, adequate shelter and healthy food. The overall goal is health for all by the year 2000. **(SKN general has a healthy environment with good access to healthcare)**
- Governments should reduce migration to the big cities by improving rural living and see that the homeless get access to land, credit and low-cost building materials. **(Though not a wide spread problem in SKN, the GOSKN has instituted an economic decentralization policy based on the growth pole concept)**
- Nations and corporate enterprises should integrate environmental protection and restoration costs in their decision-making. **(There is a need for the corporate community to be more involved in sustainable development. Presently participation is limited space adoption and contributions to coastal cleanup annually)**
- Greater energy efficiency out of existing power stations is needed as well as developing new, renewable energy sources such as solar, wind, hydro, ocean and human power, while reducing reliance on non-renewable sources of energy such as fossil fuels. **(The GOSKN established a renewable energy task force and recently has set up a Department of Energy at the Ministry of Public Works, Utilities, Etc)**
- Sustainable use and management of land should include landscape ecological planning, traditional and indigenous land practices and the active participation in decision-making

by people affected by land planning. **(GOSKN recently completed its SLMP. GOSKN has been using the NPDP to guide its land use decision making process)**

- There is a need for concerted international research and conservation efforts to control the harvesting of forests by promoting indigenous technologies and agro-forestry and expanding the shrunken world-forest cover. **(GOSKN has participated in the OPAAL Project and has designated the CFR as a protected area)**
- One of the major tools to fight the spread of deserts is the planting of trees and other plants that retain water and maintain soil quality. **(There is need to undertake a re-forestation programme for sections of SKN)**
- Measures are needed to protect mountain ecosystems from erosion, landslides and the rapid loss of habitat, animals and plant life. **(There is a need to develop a comprehensive drainage infrastructure plan for SKN)**
- The priority must be to maintain and improve the capacity of agricultural lands with new technologies to support an expanding population. **(GOSKN has embarked on an agriculture diversification programme. Technical assistance has been obtained over the years through the Taiwanese Agricultural Mission to SKN)**
- Urgent and decisive action is needed to conserve and maintain genes, species and ecosystems. **(There is a need to implement fully the Biodiversity Action Plan. The NBSAP is currently under review)**
- Nations must control and reduce the pollution of the marine environment and maintain its life support capacity. **(There is a need to develop a comprehensive waste water management plan, particularly for urban areas in SKN)**
- A cleanup of the most obvious sources of pollution is needed in order to have safe water and sanitation for all by the year 2025. **(Watersheds in SKN are adequately managed but there is need for improvement)**
- Countries need to develop and share expertise for a sound management of toxic chemicals and prevent illegal international traffic in toxic and dangerous products. **(The GOSKN has established a Pesticide Board and a Multi Purpose Lab. There is in place a licensing procedure for the importation of refrigerants)**
- Developed countries have an obligation to promote the transfer of sound technologies and reduce hazardous waste. **(Generally the transfer of technology has been slow but that SKN is more advanced, particularly in the telecom sector than other developing countries)**
- An urban waste prevention approach needs to be implemented so that by 2010, all countries should have national plans for waste management. **(GOSKN has established a Solid Waste Management Corporation. (The SWMC has been conducting regular public outreach programmes. There is a general coordinated approach to waste collection in SKN however there is no comprehensive waste management plan in place)**
- Sustainable development is primarily the responsibility of every government, but the commitment and involvement of all social groups is critical to the effective implementation of the objectives, policies and mechanisms agreed to by all governments at the Earth's Summit. **(GSKN through the MSD has been performing the**

lead role in sustainable development. There is a need to engender participation by the private sector, NGOs and the wider community)

- Governments are urged to give girls equal access to education, to make health-care systems responsive to women's needs and to bring women into full participation in social, cultural and public life. **(Generally SKN has been satisfying this obligation)**
- **Governments are urged to combat abuse of the rights of youth, especially females in certain cultures, and to ensure that all children have access to education. (Generally SKN has been satisfying this obligation)**
- Non-governmental organizations (NGOs) form a network in both developed and developing countries and play a vital role in the shaping and implementation of participatory democracy which is integral to the implementation of sustainable development. **(The SCNT and the NHCS have been involved in several sustainable development initiatives. However, there is significant room for NGO engagement on the sustainable development platform in SKN)**
- Local authorities, such as municipal governments, should consult citizens and community, business and industrial groups on local programs, policies, laws and regulations to achieve Agenda 21's objectives. **(Several public sector agencies in SKN have public relations programmes as part of their work plans that seek to provide the public with information. Most of these programmes are sector specific and hence narrow in scope of coverage)**
- Through elected representatives, workers must be involved in promoting socially responsible economic development. **(While there have been a few instances in the recent past where community seminars have been convened especially with regard to banking and financial responsibility, there remains significant room for improvement)**
- Entrepreneurship can play a major role in improving the efficiency of resource use, minimizing wastes and protecting human health and environmental quality. **(There is an ongoing programme by the Eastern Caribbean Central Bank that promotes entrepreneurship among young people. The hospitality programme at the Clarence Fitzroy Bryant College and the National Youth Skills programme also fosters entrepreneurship)**
- Scientists and technologists (engineers, architects, industrial designers, urban planners, and other professionals) have special responsibilities to search for knowledge and to help protect the biosphere. **(There is a need to promote inter-disciplinary collaboration among professionals in SKN toward the advancement of the sustainable development agenda)**
- Women, who do much of the world's farming, should have access to tenure and the use of land, to credits and technologies. **(GOSKN has provided access to land for all farmers)**
- Special attention should be given to nations whose economies are in transition. **(The economy of SKN is presently in transition and that this recommendation is more relevant to SKN and the OECS than ever before. The role of tourism as an engine for growth needs to be emphasized in the context of sustainable development).**
- Developing countries should access environmentally-sound technology and know-how through a collaborative international network of laboratories. **(While there is the**

Caribbean Epidemiology Center (CAREC) that focuses on environmental health and health issues, there is no similar mechanism in the region that focuses on a programmatic approach toward developing sustainable technologies. The Caribbean Community Climate Change Centre only functions as the key archive for information on climate change issues, solutions and projects in the Caribbean.)

- In the face of threats of irreversible environmental damage, improved knowledge of the Earth's systems is crucial as well as the integration of the natural, social and engineering sciences. **(There is a need to integrate sustainable development as a focus are of SKN's education system)**
- Because sustainable development must ultimately involve everyone, access to education must be increased for all children and adult illiteracy must be reduced. **(There is a need to integrate sustainable development as a focus are of SKN's education system)**
- Developing countries especially need to build their own capacity to implement Agenda 21 in cooperation with UN organizations, developed countries and with each other. **(SKN has been generally slow in developing the capacity to direct the country's sustainable development agenda)**
- It is recommended that the UN create a high-level Commission on Sustainable Development which would draw on expertise of UN organizations, international financial organizations and NGOs, industry, business and scientific groups. (For the most part this has been done through the United Nations Department of Economic and Social Affairs, Division for Sustainable Development)
- It is essential that all countries and all sectors within countries, participate in the negotiation of international agreements that create effective international standards for environmental protection. **(For the most part the negotiations and discussions on international agreements are handled by the government with limited consultation with other national stakeholders)**
- In order to base decisions on sound information, the availability, quality and accessibility of data needs to be improved between developed and developing countries. **(There needs to be a standard platform for data sharing. In the local context, the DPPE in the MSD is developing its GIS lab as a central repository for data)**

5.0 CONSTRAINTS TO IMPLEMENTATION

The constraints experienced with implementing sustainable development initiatives can be summarized as follows:

1. Capacity: There is an inadequate human, financial and technical resource base dedicated to sustained implementation and evaluation of environmental management activities. Particular attention is required in areas such as research, public education, further policy development, lobbying and advocacy and demonstration projects.

2. **Information for Decision-making**: Sustainable Development and environment data are not readily available. SKN is working assiduously to develop a coordinated approach to statistics and data collection. Where data is available it exists in differing formats and in different

locations, which makes it problematic for decision-makers to get information on a sustained basis and at opportune moments.

3. In terms of **enforcement**, there is a lack of legal authority and institutional capacity needed for the implementation and enforcement associated environmental management. While a significant amount of legislation exists for the management of natural resources, some of it needs to be updated to reflect current national goals and circumstances. A number of agencies play an important regulatory role but there is still room for improvement especially with respect to coordination. Current resource constraints mean that environmental enforcement is not a priority for the Security Forces or other relevant legal entities.

4. The need to **sensitize policy makers** many who still operate on the premise that economic development can only be achieved through increases in economic growth which results in significant funding being allocated primarily to economic development.

5. Although SKN is a developing country, it has a high standard of living which means its primary economic and social indicators follow those exhibited by developed countries. This brings with it waste management, health and conservation problems which tax the limited resources of finance and physical space needed for adequate management of associated issues.

6. Communicating sustainable development to the general population is a challenge. For effective education, a variety of messages have to be transmitted to a number of different stakeholders in differing formats. The resources required to adequately provide the volume of information required in the appropriate format have been ad hoc and information is usually provided in response to various situations.

7. There is inadequate opportunity for timely reviews and evaluation of the planning process.

6.0 Gaps and Current Initiatives

As previously mentioned, the legal and institutional framework for sustainable development in SKN is derived from several existing legislations and regulations discussed above. In many instances however, legislation only reflects or translates into implied policy and good intentions, both of which are compromised by lack of enforcement and weak and/or insufficient institutional strength. The absence of relevant regulations is cited often as the main factor that hinders effective enforcement.

Other than regulations, there are several other tools and strategies that can be employed in support of SKN's sustainable development objectives. The need for effective stakeholder involvement is a key factor for sustainable development. It is important that the GOSKN work together with the key stakeholders in the crafting and implementation of sustainable development interventions. This should assist the GSKN in maintaining a clear vision for sustainable governance of all sectors involved in the national development process, including formulation, implementation, monitoring and evaluation of programmes.

Additionally, there are a number of issues that have to be addressed in order to effect an improvement in the institutional framework for sustainable development in SKN. These issues have been highlighted in the "**Guidelines for Mainstreaming Sustainable Land Management in National Development**" prepared as an output of the SLMP. The Guidelines seek to provide direction to users to help them mainstream SLM in national development policies, plans and projects. These same guidelines are generic enough to be applied to other sustainable development initiatives.

7.0 Recommendations

The review of legislative, regulatory, policy and institutional arrangements indicates that the effective advancement of sustainable development in the Federation of SKN requires several interventions. These include the following:

1. Development of appropriate regulations and or guidelines to effectively support legislative provisions.
2. Re-design and implementation of clearly articulated policies that govern land management.
3. Monitoring and evaluation of institutional and capacity development interventions including education, training, advocacy and awareness
4. Development and implementation of integrated financing and programme strategies such as the PSIP.

The development of regulations should aim at creating an enabling environment for private sector participation, information sharing, technological transfer, physical investment, payment for environmental services and resources, and promoting fair, secure and effective sustainable development interventions.

The Legislative, Regulatory, Policy and Institutional Framework for SLM report conducted under the SLMP recommends the development of the St. Christopher and Nevis Sustainable Land Management Regulations. The adoption of these regulations would strengthen overall sustainable development policies, interventions and overall national physical development in SKN. Also, the regulations would assist in consolidating enforcements efforts in land management as required by the Development Control and Planning Act No. 14 of 2000 and the National Conservation and Environmental Protection Act.

Further, there is a need to develop a comprehensive land policy for SKN. The basic Land policy seeks to achieve certain objectives relating to the security and distribution of individual and collective land rights, land use and land management. For the most part, it is a general expression of the government's perception of the direction to be taken on major issues that relate to land use and the proposed allocation of the national land resources over time. It has a production and a conservation component. Hence, a sound national land-use policy is effectively part of the enabling environment for sustainable development.

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ACRONYMS

BPOA: Barbados Programme of Action
CDAP: Capacity Development Action Plan
CEHI: Caribbean Environmental Health Institute
CEP: Country Environmental Profile
CFR: Central Forest Range
DOA: Department of Agriculture
DOLS: Department of Lands and Surveys
DPPE: Department of Physical Planning and the Environment
DPPNRE: Department of Physical Planning, Natural Resources & Environment
EIA Environmental Impact Assessment
EU: European Union
GEF: Global Environment Facility
GSKN: Government of St. Kitts and Nevis
IWCAM: Integrated Watershed and Coastal Areas Management (Project)
MSI: Mauritius Strategy for Implementation
MEA: Multilateral Environmental Agreement
MSD: Ministry of Sustainable Development
NAS: National Adaptation Strategy
NAP: National Action Plan
NBSAP: National Biosafety Action Plan
NCEPA: National Conservation and Environmental Protection Act
NCSA: National Capacity Self Assessment
NEMS: National Environmental Management Strategy and Action Plan
NHC: National Housing Corporation
NHCS: Nevis Historical and Conservation Society
NHLDC: Nevis Housing and Land Development Corporation
NIA: Nevis Island Assembly
NPDP: National Physical Development Plan
OECS: Organisation of Eastern Caribbean States
OPAAL: OECS Parks and Associated and Associated Livelihoods Project
SGD: St. Georges Declaration
SLMP: Sustainable Land Management Project (Project)
SWMC: Solid Waste Management Corporation
PSIP: Public Sector Investment Programme
PWD: Public Works Department
SCNT: St. Christopher National Trust
SKN St. Kitts and Nevis
UNCBD: United Nations Convention on Biological Diversity
UNCCD: United Nations Convention to Combat Desertification
UNDP: United Nations Development Programme
UNFCC: United Nations Framework Convention on Climate Change
WGDC: White Gate Development Corporation