

NATIONAL ENVIRONMENTAL SUMMARY FEDERATION OF ST. KITTS & NEVIS 2010



UNITED NATIONS ENVIRONMENT PROGRAMME

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Acronyms

CCA	Common Country Assessment
CARICOM	Caribbean Community
CARIFORUM	Caribbean Forum of African, Caribbean and Pacific States
CBO	Community Based Organisation
CIDA	Canadian International Development Agency
CBD	Convention on Biological Diversity
CDEMA	Caribbean Disaster Emergency Management Agency
CDM	Comprehensive Disaster Management
CRFM	Caribbean Regional Fisheries Mechanism
CRDEP	Caribbean Renewable Development Energy Programme
CSR	Corporate Social Responsibility
EC	European Commission
EDF	European Development Fund
ENCAPD	Environmental Capacity Development
EIA	Environmental Impact Assessment
EU	European Union
FAO	Food and Agricultural Organisation
FFEM	Fonds Francais pour l'Environnement Mondial/
GDP	Gross Domestic Product
GOSKN	Government of St. Kitts and Nevis
GEF	Global Environment Facility
GSEII	Global Sustainable Energy Islands Initiative
GTZ	German Technical Corporation
IBRD	International Bank for Reconstruction and Development
IDA	International Development Association
IWCAM	Integrated Watershed and Coastal Area Management
JICA	Japan International Cooperation Agency
MACC	Mainstreaming Adaptation to Climate Change
MEA	Multilateral Environmental Agreements

MTSEP	Medium Term Economic Strategy Paper (2003–2005)
NCSA	National Capacity Needs for Self Assessment
NEMA	National Emergency Management Agency
NEMS	National Environmental Management Strategy
NES	National Environmental Summary
NODS	National Office of Disaster Services
OAS	Organisation of American States
OECS	Organisation of Eastern Caribbean States
OPAAL	OECS Protected Areas and Associated Livelihoods National Project
PAHO	Pan American Health Organisation
POP	Persistent Organic Pollutants
SIDS	Small Island Developing States
SIRMM	Sustainable Island Resource Management Mechanism
SIRMZP	Sustainable Island Resource Management Zoning Plan
SKN	St. Kitts and Nevis
SLM	Sustainable Land Management
SPAW	Protocol Concerning Special Protected Areas and Wildlife
UNEP	United Nations Environment Programme
UNCBD	United Nations Convention on Biological Diversity
UNCCCD	United Nations Convention to Combat Desertification
UNCLOS	United Nations Convention on Law of the Sea
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNCCD	United Nations Convention to Combat Desertification
UNIDO	United Nations Industrial Development Organisation
USAID	United States of America International Development
USDA	United States Department of Agriculture
WB	World Bank

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EXECUTIVE SUMMARY

From a review of national reports and technocrats interviewed, environmental issues of national priority for the Federation of St. Kitts and Nevis (SKN) are:

1. Negative effects of Climate Change and Natural Disasters;
2. Land Degradation;
3. Degradation of Coastal and Marine Ecosystems;
4. High Energy Cost and
5. Pollution.

National efforts are heavily supported by international agencies which fund programmatic and project oriented responses to the issues listed above due to a general lack of financial resources. Given the latter, in particular during the current economic recession, there is a need to strengthen the existing framework in terms of an increase in the staff complement of various institutions; provision of requisite training for staff; provision of relevant regulatory and enforcement capabilities of some institutions; maintenance of a baseline of programmatic activities such as data collection and monitoring; the ability to use information from various sources for decision making; and the development of fiscal policies to stimulate corporate environmental stewardship, and to incentivise new business models that focus on the sustainable utilisation of natural capital. The United Nations Common Country Assessments (UNCCA) and United Nations Development Assistance Framework UNDAF process can therefore assist in orienting and aligning international development assistance and partnerships in support of the SKN's development goals in a sustainable manner.

INTRODUCTION AND BACKGROUND

The Federation of St. Kitts and Nevis lies in the northern part of the Leeward Islands in the eastern Caribbean, 19 degrees north of the equator, separated by a channel two miles wide. The island of St. Kitts is approximately 37 kilometres long and 8 kilometres across at its' widest, encompassing an area of 176 square kilometres. St. Kitts highest point of elevation is Mt. Liamuiga, at 1,137 metres. Nevis, the smaller island, lies to the south and is approximately 11kilometres in diameter, covering a total of 93 square kilometres. Nevis' highest elevation point is 985 metres at Nevis peak. Yearly average temperature is 26 degrees Celsius; annual rainfall averages 55 inches; humidity is low, and constant northeast trade winds keep the islands cool. The terrain is volcanic with mountainous interiors.¹

The National Environmental Summary (NES) for St. Kitts & Nevis (SKN) is an information tool to support the incorporation of environment in United Nations Common Country Assessments (UNCCA) and United Nations Development Assistance Framework (UNDAF). It provides a critical analysis of gaps in existing policy/programmes responses and in the national legislation in addressing environmental issues and their critical linkages to poverty reduction and development.

Method

The Driving Forces-Pressures-State-Impacts-Responses (DPSIR) framework was used to frame information gathering and analysis for the development of the NES. Information gathering involved the review of national assessment and policy documents, national legislation, as well as interviews with key stakeholders in the Federation of St. Kitts & Nevis. Interviews took place on July 19 and 20, 2010.

¹ <https://www.cia.gov/library/publications/the-world-factbook/geos/sc.html>;
<http://www.state.gov/r/pa/ei/bgn/2341.htm>: Accessed August 9, 2010

<http://www.geographia.com/stkitts-nevis/>;

1. STATE OF THE ENVIRONMENT & ENVIRONMENTAL ISSUES

The following environmental issues were identified as being of national priority for St. Kitts and Nevis .

Climate Change and Natural Disasters

St. Kitts and Nevis is prone to natural disasters such as hurricanes, floods, droughts, earthquakes and volcanic activity, with hurricanes having had the most devastating effects. Between 1995 and 2004 over 20 hurricanes passed within 60 nautical miles of the Federation with nine (3 in particular of Category 3 or higher) having impacted. Hurricane damage to St. Kitts and Nevis has been estimated at 85% and 140% of GDP in 1995 and 1998 respectively - significantly impacting on fiscal viability of the islands they not only damage natural resources closely linked to economic activities but require commitment of funds towards rebuilding infrastructure and the provision of the requisite social services. Moreover, the destruction caused by natural disasters often results in the fall of households or communities into poverty and a negative impact on tourist arrivals thereby affecting an important foreign exchange service sector.

Interviewees have identified that climate change has caused shifts in rainfall patterns (shorter more intense rainfall and longer more severe droughts) which have negatively affected agricultural productivity.² They also noted the shifts in hurricane paths stating that there has been more infrastructural damage on the leeward side of the island.

Natural disaster events precipitated by climate change is projected in addition to an increase in hurricanes, to cause widespread flooding- the result of not only heavy rainfall but existing poor drainage system and drainage system maintenance; landslides; coastal damage as well as water contamination and arable land loss thereby increasing the risks of epidemics and famine. Sea level rise is also expected to have a significantly adverse effect on coastal low-lying areas where much of the development in St. Kitts and Nevis is concentrated.

Land Degradation

Land degradation has occurred as a result of the historic overuse of lands for monocrop agriculture i.e. sugar cane; clearing of lands for residential and tourism, development; and squatting and unregulated settlements. National land degradation concerns include deforestation, soil erosion, poor drainage, flooding, sedimentation, hoof damage and over-grazing, discharge of contaminated water and fires. In Nevis, there is also the challenge of regulating privately owned quarries, which are a major contributor to siltation in terrestrial and coastal waters.

² Recent seasonal shifts have affected specific crops, *inter alia*, white potato and onion crops.

The land degradation problem is further exacerbated by the absence of a national land use management plan, the absence of effective Environmental Impact Assessments³, weak enforcement of legislation and regulations, limited awareness and education and removal of vegetation cover for sub-divisions and infrastructural development. The land resource is subject to competing demands from various sectors such as agriculture, tourism and housing.

Degradation of Coastal Marine Ecosystems

The primary problems facing the coastal and marine environment were identified as the destruction of marine ecosystems such as coral reefs (bleaching of reefs -already pressured from siltation and pollution, storms) and mangroves; and the reduction in population of coastal fisheries.

The causes of these problems were listed as lack of awareness of human impacts on the coastal zone; apathy towards the environment; inadequate appreciation of the benefits of sustainable development; user conflicts; overfishing caused in some instances by spear fishing; damage of coral reefs by boat anchors; chemical pollution from land sources; littering from land sources; climate change and El Nino; inadequate regulation of boats; unclear lines of authority among agencies; lack of comprehensive environmental conservation measures; issues surrounding the carrying capacity of the inshore fisheries; the lack of translation of existing government policy into measurable impacts; and shortage of skilled human resources.

The impact of coastal degradation includes loss in recreational opportunities, loss of natural habitats for flora and fauna, loss of natural protection of the coastline, as well as loss of livelihoods and economic opportunities to fishers, hoteliers and related business.

Energy

The Federation, like other Caribbean nations, is faced with rising cost of energy coupled with increasing demand. This is brought about by dependence on external traditional fossil based sources of energy which pollute the environment. The primary causes of dependence on fossil based energy sources include the limited knowledge base on alternative energy as well as ways and means of conserving energy; limited indigenous expertise; the lack of financial resources; and passive acceptance of the type of energy in use.

Pollution

Urban areas in SKN lack adequate treatment facilities for domestic sewage and waste water. Sewage is generally disposed of using the septic system. However, package sewage treatment plants are also utilised in the residential and tourist areas of Frigate Bay, and some large hotels such as the Marriott, have sewage treatment facilities.

With the current system of sewage disposal, the oceans are receiving effluents from a variety of land based sources of pollution, delivered directly to the coastal waters or via

³ Environmental Impact Assessments are mandated by way of provisions of the Development Control and Planning Act, No. 14, 2000.

streams and underground seepage. This has an injurious implication for both public health and the natural environment.

Litter and dumping is also a significant issue in SKN. Such solid waste management issues can be attributed to an increased level of consumerism - a high demand for non-biodegradable goods as well as lackadaisical attitudes regarding their disposal. Stakeholders report a high instance of dumping in terrestrial watercourses, which eventually end up in the coastal areas. As it stands, the major challenge is not only shifting attitudes of SKN residents regarding solid waste disposal but finding economically viable ways to use recyclable materials.

Key drivers of the environmental issues listed above include:

1. *Poverty* - In St. Kitts 35% of these households are considered to be in indigence; and 53% of households in Nevis are below the poverty line⁴. The consequences of environmental degradation are often borne by the poor who tend to be dependent on the physical environment for their livelihood. This is supported by the fact that one of the strategies for alleviating poverty included a revamp of the agriculture sector⁵. Causes of poverty include decline of the sugar industry⁶, the global economic crisis and natural disasters. There is therefore a significant causal relationship between the environmental issues of national priority and the incidence of poverty. Poverty reduction therefore hinges on the sustainability of natural capital – the ability to maintain agricultural workforce by ensuring the sustainable use of and highly productive lands; ability to provide low cost locally grown food; and the development of mechanisms to reduce the impact of natural disasters on the poor in terms of preparedness of appropriate housing, adaptive farming practices, and access to necessary social services.
2. *Economic crisis* – there is a dearth of funds available for national programming across the board. As such a number of issues can only be addressed immediately with the injection of funds from donor agencies. A negative impact of this, is that local environmental issues are often addressed within the parameters set by the donor;
3. *Attitudes* as well as traditional practices in the face of a changing environment - this is particularly challenging as rapid changes in environment (such as those caused by climate change) does not allow for incremental human behavioural shifts. This in turn affects the political will of politicians to support measures necessary to effect change;

⁴ The GINI coefficients measures the inequality of a distribution whereby total equality is 0 and total inequality is 1) for SKN are 0.445 and 0.370 respectively. The difference in GINI coefficients probably reflects a greater maldistribution of wealth on St. Kitts despite the higher levels of indigence on Nevis.

⁵ St. Kitts and Nevis Poverty Assessment Report. March, 2001.

⁶ In 2005, SKN shifted its focus away from sugar production due to the decline in sugar prices.

4. *Urbanisation* and development demands – housing, agricultural, tourism and industry;
5. *Inadequate institutional capacity* – lacking in manpower, requisite training, and equipment for research and monitoring; and
6. Existence of *outdated legislation* and poor enforcement.

2. NATIONAL RESPONSES

The Government of St. Kitts and Nevis (GOSKN) has adopted the *St. George's Declaration of Principles for Environmental Sustainability* in the OECS in 2001 which mandates OECS Member States to ensure the sound management of the biophysical environment. As such, SKN has developed and adopted in April 2005, a National Environmental Management Strategy (NEMS) which defines the specific directions and mechanisms for more effective policy implementation, as well as identifies key strategies and priority actions for environmental management in the context of sustainable development. Specifically, it proposes to restore environmentally degraded areas and to ensure the sustainable use of natural resources while taking into account complex linkages between ecological systems in small island states as well as between these systems and human activity, and which reflect the principles of island systems management. Activities identified include the formulation of criteria for and identification of environmentally degraded areas; identification of critical areas for erosion control, and develop and implement remediation projects with community participation; and, preparation of Special Area Plans or Local Area Plans to restore these areas, with assigned responsibilities, costs, and schedule. Line ministries and other relevant agencies in SKN are expected to have a phased adoption of recommendations/policies that are relevant to their work plan.

The Ministry of Sustainable Development⁷ is the lead government agency with overall responsibility for the development and coordination of policies and programmes to protect SKN's natural environment, including the management of all matters pertaining to Multilateral Environmental Agreements (MEAs). There are however a number of other agencies with specific responsibilities for various areas of environmental management and sustainable development. They specifically include, *inter alia*, the departments responsible for Agriculture, Fisheries, Lands and Housing, Health, Public Works, Utilities, Transport, Tourism, the Education, Legal Affairs, the Solid Waste Management Corporation, the National Emergency Management Agency (NEMA), as well as the Nevis Island Administration.

National responses to the issues identified above include:

ISSUE	NATIONAL RESPONSES
Climate Change and Natural Disasters	<p>SKN is signatory to the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto protocol. They were ratified respectively on 1993 and 2008.</p> <p>SKN acceded to the Vienna Convention for the protection of the ozone layer and the Montreal Protocol on substances that deplete the ozone layer in 1992.</p> <p>While there is no legislation specific to climate change, in responding to the high incidence of natural disasters, GOSKN has enacted the Development</p>

⁷ The Ministry is made up of a number of departments which include: Physical Planning and Environment; Economic Affairs and Public Sector Investment Planning; and Statistics.

	<p>Control and Planning Act #14/2000. The Act's provisions aid in effecting a reduction in SKN's vulnerability to disasters through regulation and monitoring the construction industry.</p> <p>With World Bank (WB) funding GOSKN has increased its emergency sheltering capacity with the construction of 3 Community Centres/Emergency Shelters in St. Kitts and 2 in Nevis. Built to resist earthquakes and hurricanes, these shelters provide temporary accommodation in the event of national disaster. Also, National Emergency Management Agency (NEMA) and Emergency Operations Centre constructed a disaster relief warehouse which acts as a coordination point, a location for pre and post hazard impact activities which may include training sessions, meetings and simulation exercises.</p> <p>GOSKN has embraced the regional initiative, Comprehensive Disaster Management (CDM) which incorporates disaster management in national development. This strategy with other national efforts will be used to minimize the impact of future disasters on SKN.</p> <p>SKN has also benefitted from the Mainstreaming Adaptation to Climate Change in the Caribbean (MACC) Programme seeks to reduce physical, social, economic and environmental vulnerability to the impacts of climate change.</p>
<p>Land Degradation</p>	<p>The United Nations Convention to Combat Desertification (UNCCD) was ratified in 1997. SKN has completed its First National Report on the Implementation of the United Nations Convention to Combat Desertification.</p> <p>The Medium Term Economic Strategy Paper: 2003–2005 (MTSEP) speaks to the reduction of existing and predicted environmental degradation and the adverse effects of, <i>inter alia</i>, current and future economic development. Specifically, the enactment of legislation to address land degradation issues; and the development of a public awareness strategy to sensitize the public about land degradation issues. The plan also noted GOSKN's intention to have a soil conservation programme to address the most vulnerable areas; an audit of activities that lead to land degradation and the execution of an evaluation of the type and extent of land degradation.</p> <p>The National Physical Development Plan, 2006 (NPDP) guides physical development in reference to land use taking into account demands of stakeholders; and directs future changes with respect to land use, re-zonings, natural and heritage conservation, the provision of public infrastructure and aiding decisions for private sector investment. The draft SKN Land Use Code seeks to strengthen the development and planning policies and proposals of the 2006 National Physical Development Plan and reduce the negative environmental, economic and social impacts of development projects.</p>

	<p>The Agricultural Strategic Plan 2005–2009 expands the development of non-sugar agriculture and increase its contribution to national development. It involves the development of farmer groups, strengthening the programme of services to farmers, and developing surface water sources in an effort to encourage crop and livestock production.</p> <p>Nevis Integrated Strategic Development Plan (2001 – 2005) seeks to promote balanced growth and effective resource utilization in achieving sustainable development. Relevant land degradation strategies identified include research and experimentation in agricultural management practices relative to soil, stemming problems of desertification and soil erosion through maintenance of vegetation cover on lands susceptible to erosion, minimizing soil pollution and upgrading the administrative framework for environmental management.</p> <p>The OECS Protected Areas and Associated Livelihoods (OPAAL) Project funded by the GEF and the World Bank and co financed by the Organisation of American States (OAS) and the Fond Francais de L'Environment Mordial (FFEM) and OECS member countries like SKN, seeks to contribute to the conservation of biological diversity of global importance in the OECS by removing barriers to the effective management of protected areas and increasing the involvement of civil society and the private sector in the planning, management and sustainable use of protected areas. The project also seeks to contribute to the economic development of Small Island Developing States (SIDS) in the OECS through the sustainable use of natural resources.</p> <p>Preventing Land Degradation In Small Island Ecosystems Through Sustainable Land Management Project aimed to mitigate land degradation by maintaining the ecological integrity, stability and productivity of their terrestrial resources by strengthening capacity in government, civil society and private sector institutions by focusing on: integrating SLM into national development policies, plans and regulatory frameworks; developing institutional and individual capacities for SLM; developing capacities for knowledge management in support of SLM, including a computerised Land Resources Information System; and investment planning and resource mobilisation for implementation of SLM interventions.</p>
<p>Degradation of Coastal and Marine Ecosystems</p>	<p>SKN is signatory to the following MEAs are relevant to coastal marine ecosystems: the United Nations Convention on Biological Diversity (Ratified: 1993); the International Convention for the Regulation of Whaling (Entered into force for SKN: 1992); the Basel Convention on the control of transboundary movements of hazardous wastes and their disposal (Acceded (with declaration): 1994); the International Convention on the establishment of an international fund for compensation for oil pollution damage (Acceded: 1994); and the International Convention on Civil Liability for oil pollution damage (Acceded (with declaration): 1994).</p>

	<p>The GOSKN with UNDP has undertaken the Integrating Watershed and Coastal Area Management (IWCAM) in the Small Island Developing States of the Caribbean Project. The Project aims to demonstrate integrated watershed and coastal area management systems, which will stress the need for development of a cross sectoral management approach. Components include the requirements for institutional and infrastructural realignment; adoption of modalities for sectoral participation; capacity building; linkages to social and economic root causes of environmental degradation; and the overall need for sustainability. The long-term goal is enhancement of local capacity to plan and manage aquatic resources and ecosystems on a sustainable basis and to ensure the protection and sustained use of the main coastal water aquifer – the Basseterre Valley.</p> <p>The Wingfield Watershed Management Project allowed for the assessment of the major watersheds to reduce degradation. It involved protection and mapping and the development of a watershed management plan for the area.</p> <p>The Medium Term Economic Strategy Paper (2003–2005) (MTSEP) states that the GOSKN aims to reduce coastal degradation (erosion) by the development of beach rehabilitation projects in the Friars and Frigate Bay areas; and to establish a moratorium on beach sand mining.</p>
Energy	<p>In the MTESP GOSKN commits to exploring alternative ways of supplying power and the introduction of economic incentives for the renewable energy sector, particularly solar energy, with emphasis on energy conservation in residential and commercial sectors.</p> <p>GOSKN is also seeking to encourage the use of alternative sources of energy by introducing economic incentives energy saving devices.</p> <p>SKN is part of the Caribbean Renewable Energy Development Programme, a GEF funded project which aims is to remove barriers to renewable energy use in the Caribbean.</p> <p>A Draft Sustainable Energy Plan produced in 2006 by Organisation of American States (OAS), Global Sustainable Energy Islands Initiative (GSEII); SKN accessed US\$175,000 add-on to develop its Clearing House Mechanism and to conduct a capacity needs assessment.</p>
Pollution	<p>At present, Environmental Health relies on the Public Health Act to give effect to its programming. There is however a revised Environmental Health Act awaiting cabinet approval, as well as outstanding regulations for the Litter Abatement Nuisance Act. In response to the pollution issues Environmental Health unit currently monitors the state of pollution in SKN. In terms of liquid waste currently data is collected from 4 or 5 beaches in south and will soon include the south east peninsula.</p> <p>There is also a Development of Basseterre aquifer project to secure the quality of underground water, a UNEP sponsored through IWCAM.</p>

The issue of solid waste management is being aggressively addressed by the government. The commencement of operation by the Solid Waste Management Corporation and the preparation of the regulatory framework by way of the Solid Waste Management Act, No. 11, 2009, is open indication of Government's commitment to attack environmental degradation on all fronts.

3. International Assistance Programmes

Table 2 presents an analysis of existing United Nations assistance programs and aid provided by other international organisations, as well as bilateral donors relevant to the issues identified, taking into account critical linkages to poverty reduction and development. In all instances, the government of SKN partners/partnered/will

partner with the international funding agencies identified. Regional entities such as the Organisation of Eastern Caribbean States (OECS) and the Caribbean Community (CARICOM) tend to act as facilitators for regional initiatives funded by international organisations.

TABLE 2: INTERNATIONAL ASSISTANCE PROGRAMMES AND PROJECTS – FEDERATION OF ST. KITTS & NEVIS

INTERNATIONAL INSTITUTION	MAJOR INTERNATIONAL PARTNERS	WHAT HAS BEEN OR IS CURRENTLY DONE	FUTURE PROGRAMMES
United Nations Development Programme (UNDP)	GEF	<ul style="list-style-type: none"> • National biodiversity Strategy, Action Plan and Report to the CBD • Biodiversity Enabling Activity Add-ON: assessment of Capacity Building Needs and Country-Specific Priorities • Enabling the SKN to Prepare its First National Communication in Response to its Commitment to UNFCCC • Climate Change Enabling Activity (Additional Financing for Capacity Building in Priority Areas) • Integrating Watershed and Coastal Area Management (IWCAM) in the Small Island Developing States of the Caribbean. 	
United Nations Environment Programme	GEF	<ul style="list-style-type: none"> • National Capacity Needs for Self Assessment (NCSA) for Global Environmental Management of the three major MEAs UNCCD, UNFCCC, 	

INTERNATIONAL INSTITUTION	MAJOR INTERNATIONAL PARTNERS	WHAT HAS BEEN OR IS CURRENTLY DONE	FUTURE PROGRAMMES
(UNEP)		UNCBD; <ul style="list-style-type: none"> • Enabling Activities for the Stockholm Convention on Persistent Organic Pollutants (POPs) • Preventing Land Degradation In Small Island Ecosystems Through Sustainable Land Management Project 	
United Nations Educational Scientific And Cultural Organisation (UNESCO)		The “Man and the Biosphere” programme focuses on the identification of heritage sites for protection/preservation, the development of a national policy in relation to science and a management plan of action.	
United States Agency For International Development (USAID)			Currently conceptualising a climate change based project based on water resources and coastal zone management for OECS countries.
European Union (EU)		Under the 10 th EDF (2008-2013), the EU will focus 80% of the funding (€4.7M) goes towards Public Safety and Security to help decrease the increasing crime rate. Under the 9 th EDF while there would have been some trickle down benefits to environmental issues, the funds allocated to SKN went towards addressing socio-economic development issues.	
World Bank (WB)	International Bank for Reconstruction & Development (IBRD)/	<ul style="list-style-type: none"> • The Mainstreaming Adaptation to Climate Change in the Caribbean (MACC) Programme seeks to reduce physical, social, economic and 	

INTERNATIONAL INSTITUTION	MAJOR INTERNATIONAL PARTNERS	WHAT HAS BEEN OR IS CURRENTLY DONE	FUTURE PROGRAMMES
	International Development Association (IDA) <ul style="list-style-type: none"> • OAS • France • OECS 	environmental vulnerability to the impacts of climate change. <ul style="list-style-type: none"> • Protected Area and associated livelihoods Project (OPAAL): contributes to the conservation of biodiversity by removing barriers to the effective management of protected areas (PAs), and increasing the involvement of civil society. The demonstration site is Central Forest Reserve, St Kitts and Nevis. 	
Canadian International Development Agency	<ul style="list-style-type: none"> • PAHO • WB • OAS 	While there are no long term bilateral projects, current Caribbean wide initiatives include: Health Sector Disaster Risk Management, Disaster Risk Management Facility, Caribbean Catastrophe Risk Insurance Facility, Caribbean Disaster Responsive Fund, Disaster Preparedness, OECS Environmental Capacity Development (ENCAPD) (coastal and marine environmental management).	There is no bilateral programme but SKN can benefit from geographic programme and Interamerican programmes.
UK Department for International Development (DFID)		Funds a number of Caribbean project in the areas of Climate Change and Disaster Risk Reduction. These include: <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, 	

INTERNATIONAL INSTITUTION	MAJOR INTERNATIONAL PARTNERS	WHAT HAS BEEN OR IS CURRENTLY DONE	FUTURE PROGRAMMES
		<ul style="list-style-type: none"> • 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. 	
Japan International Cooperation Agency (JICA)	<ul style="list-style-type: none"> • CARICOM • Caribbean Regional Fisheries Mechanism (CRFM) • Spain 	<p>Diagnostic Study to Determine the Poverty Levels in Fishing Communities in Selected CARICOM/CRFM Member States: examines the socio-economic and demographic situations in fishing communities, in particular, with reference to the extent of poverty levels in these communities, and its impact on the quality of life and community structures. This diagnosis allows for the identification of suitable models for planning and implementing alternative livelihood programmes and alleviating poverty in fishing communities. St. Kitts is one of the selected countries.</p>	

4. Critical Gaps and Opportunities to Support Country Environmental Priorities

Review of national documents and information gathered from interviews indicate that the following gaps in existing response mechanisms (policies, programmes, legislation) to the environmental issues taking into account the relationship between the natural environment, social needs and economic development, as well as opportunities to support environmental priorities (See Table 3).

MAIN THRUST

While SKN is policy rich it lacks the financial resources to implement many of the policies. As articulated by interviewees and the various national reports various components of the current framework must be strengthened in terms of an increase in the staff complement of various institutions; provision of requisite training for staff; provision of relevant regulatory and enforcement capabilities of institutions; maintenance of a baseline of programmatic activities such as data collection and monitoring; the ability to use information from various sources for decision making; and the development of fiscal policies to stimulate corporate environmental stewardship, and to incentivise new business models that focus on the sustainable utilisation of natural capital to attract foreign exchange.

The UNCCA and UNDAF process can therefore assist in orienting and aligning international development assistance and partnerships in support of the SKN's development goals in a sustainable manner.

TABLE 3: CRITICAL GAPS & OPPORTUNITIES TO SUPPORT ENVIRONMENTAL PRIORITIES

	GAPS	OPPORTUNITIES
Mainstreaming environment by the creation of an overarching policy framework	<p>While there is acknowledgment of the import of natural resources to the achievement of national development goals, there is still a need to mainstream natural resource management in all sectors.</p> <p>Concerted efforts have been made by various agencies including various stakeholders in the formulation of policies, plans, programmes and projects. The existence and mandate of the Ministry of Sustainable Development and it's placement under the Prime Minister's portfolio speaks to this. Broad structures exist and there is sharing and cooperation to some extent. However in practices, there are still issues concerning the flow of information among agencies and unclear lines of authority.</p>	<ul style="list-style-type: none"> • Implementation of plans and policies formulated by SKN. Many have not been implemented due to a lack of resources - especially financial resources; • Rationalisation of policies plans programmes projects, legislation and institutional arrangement in a manner that will promote effective and efficient use of resources. The NCSA output can be used to inform this process. Note that under the GEF the NCSA fed into an implementation programme/projects in some countries, e.g. Ghana. It is important that SKN and other Caribbean countries articulate for special facilities within GEF5 and GEF6 to address the ongoing systemic capacity challenges as shown by the NCSA. • There is a need for a formal instrument to embed environment into other relevant sectors. As such, the National Conservation Commission (as provided for under the current National Conservation and Environmental Protection Act 1987) could be established to aid in this regard; and • Mechanism to incorporate environmental values, revenues and management costs into national accounting system.
Legislative & Enforcement Framework	<p>Absence of legislation to give specific institutional powers to manage natural resource use, and in many instances, there are no Statutory Rules and Orders necessary to effect purposes of legislation enacted.</p> <p>Backlog of draft legislation that are relevant to environmental matters and sustainable development in the drafting or enacting stage.</p>	<ul style="list-style-type: none"> • In keeping with mainstreaming efforts, conduct institutional and legislative assessments of existing institutions and statues; • Increase staff of Legal Affairs; • Training and involvement of legal personnel in sustainable development and specifically environmental management to foster a holistic understanding of the role environment and related legislation in the national framework; • Education via training courses for law enforcement (Police)

	GAPS	OPPORTUNITIES
	<p>Limited exposure and understanding of the legal personnel to environmental issues and impacts.</p> <p>Weak enforcement of existing legislation relevant to the environment in all sectors;</p> <p>Outdated penalties – fees and fines too low especially for penalties related to agriculture.</p>	<p>regarding the national importance of enforcement of environmental legal provisions; and</p> <ul style="list-style-type: none"> • Development of programmes/projects that encourage compliance to work in tandem with legislative penalties for breach of law.
Private Sector and Non-Governmental multi-sectoral participation	<p>Environmental issues of national priority are largely addressed primarily by SKN. There is limited involvement of private sector in decision making and the implementation of safeguarding activities and no thrust towards Corporate Social Responsibility (CSR) in private sector.</p>	<ul style="list-style-type: none"> • Development of policies and incentives to encourage CSR as a means of tackling environmental issues identified; and the promotion of fiscal benefits of CSR (by way of Costs Benefit Analysis) to private sector entities. • Capacity building of private sector and civil society (especially Community Based Organisations (CBOs) to increase participation. • To lower energy costs, in addition to the thrust towards alternative sources of energy, there are initiatives such as a move towards encouraging the construction of energy efficient building can run concurrently with the current strategy. This will not only involve government agencies such as Physical Planning Unit, Environmental Health Dept but private sector developers, designers, engineers that work towards the development and implementation of energy saving strategies that lock into the national policy of lowering energy costs and decreasing environmental degradation.
Attitudes & Education	<p>Poor attitudes/behaviour regarding environmental.</p> <p>Inadequate consistent efforts for awareness building and education on environment matters particularly on land degradation.</p> <p>Information overload and insufficient interest among the</p>	<ul style="list-style-type: none"> • Assessment of education strategies and development of new sector specific educational strategies for issue/topic. This should include senior managers in the environmental field as well as media managers who should be aware of the cross-sectoral nature of issues and solutions, and the need to develop appropriate strategies.

	GAPS	OPPORTUNITIES
	media managers to be actively involved in the dissemination process for environmental information were identified as critical concerns.	
Environmental Standards, Information Gathering & Monitoring	<p>There is a lack of environmental standards and more long termed sustained monitoring of productivity of the natural resource base and the ecosystem services provided</p> <p>There is inadequate infrastructure for the provision of information to support decision making and a shortage of, inaccurate and inaccessible scientific data for decision making. For example, time series meteorological data needed due to decline in information collecting capacity with the loss of banana plantations;</p>	<ul style="list-style-type: none"> • Development of environmental standards and codes of action e.g. water quality standards • More data collection and management e.g. data to determine climatic shifts , reef monitoring, land management activities, pollution; • Development of an integrated data collection system, possibly incorporated into or working in collaboration with the national statistical unit which would need to be strengthened; and • Laboratory capability to test for pesticides in water
Capacity Building: Manpower & Professional Development	Many of the agencies charged with responsibility for environmental matters are understaffed, lack the necessary tools and budgets to effectively and efficiently execute their duties.	Across the board there is a need for increase manpower and specialised training to effect institutional responsibilities e.g. Ministry of agriculture stated that there is a need for more UWI programmes focussed on livestock farming.
Horizontal Cooperation	As a small island with limited financial resources, finding solutions to some issues can be challenging. Examples of such include determining a viable method for the disposal of used oil, batteries and recyclable materials.	<ul style="list-style-type: none"> • Facilitation of horizontal cooperation programmes, not only among OECS, CARICOM (Caribbean Community) members states but SIDS. Initiatives in need of such cooperation include the regional cooperation on waste to energy and finding external markets for waste.
Consumption	Absence of tackling solid waste issue at the point of the consumer and importer	<ul style="list-style-type: none"> • Develop a Sustainable Consumption and Production Strategy – involves engaging retailers and wholesalers in the process.
Infrastructure	Inadequate system to manage liquid waste.	<ul style="list-style-type: none"> • Development of a sewage treatment system to abate liquid waste pollution.

References

1. [AGRIFOR Consult \(2009\)](#) Caribbean Region Environmental Profile. Initial findings (Inception Report). Prepared for European Commission. Provision of services in the Sector of Cooperation related to: Lot 6: Environment Framework AGRIFOR Consult, Avenue Einstein, 3 – 1300 Wavre – Belgium. Version dated 18th February 2009.
2. [Government of St. Kitts and Nevis](#), St. Kitts-Nevis Initial National Communication
3. [Government of St. Kitts and Nevis](#), National Biodiversity Strategy and Action Plan for St. Kitts and Nevis, 2004
4. [Government of St. Kitts and Nevis](#), St. Kitts and Nevis Medium Term Economic Strategy 2003-2005
5. [Homer, Floyd](#) for Government of St. Kitts and Nevis, St. Kitts and Nevis National Capacity Self Assessment Final Report, February, 2006.
6. [National Report](#) on the Follow-Up and Implementation of the Plan of Action Issued at the III Summit of the Americas (Quebec City 2001) and the Declaration of Nuevo Leon At The Special Summit Of The Heads Of States Of The Americas (Monterrey) 2004.
7. [St. Kitts and Nevis](#) – European Community Country Strategy Paper and National Indicative Programme for the period 2008-2013 (10th EDF).
8. [St. Kitts and Nevis](#) Poverty Assessment Report March, 2001.
9. [Williams, Allan N](#), PhD. ACT Consulting Associates (ACA) Ltd. Under Subcontract to Development Alternatives, Inc. Financed by U.S. Agency for International Development, Country Experience in Land Issues: St. Kitts/Nevis, April 24, 2003.

WEBSITES

1. http://www.delbrb.ec.europa.eu/en/eu_and_country/stkitts_overview.htm
2. http://www.sidsnet.org/docshare/other/20041104160840_ST_KITTS_AND_NEVIS.pdf
3. <http://www.caricom-fisheries.com/Projects/MajorProjects/tabid/58/Default.aspx>
4. <http://www.bb.undp.org/index.php?page=capacity-building>

5. <https://www.cia.gov/library/publications/the-world-factbook/geos/sc.html>
6. <http://www.geographia.com/stkitts-nevis/>
7. <http://www.state.gov/r/pa/ei/bgn/2341.htm>

ANNEX 1: STAKEHOLDERS AND/OR INFORMANTS

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⁸ Interviewed By Dr. Asha Singh.

⁹ *Ibid.*

ANNEX 2: FEDERATION OF ST. KITTS AND NEVIS' PARTICIPATION IN MULTILATERAL ENVIRONMENTAL AGREEMENTS

MULTINATIONAL ENVIRONMENTAL AGREEMENTS	STATUS
Wildlife /Conservation	
Convention of International Trade in Endangered Species, 1972 (CITES)	A -1997
International Convention for the Regulation of Whaling 1948 ad 1959	Ad-1992
Biodiversity/Bio-safety, Traditional Knowledge	
International Plant Protection Convention, Rome, 1951	Ad-1990
Convention on Biological Diversity, 1992	R-1993
Cartagena Protocol on Bio-Safety	A-2001
Marine Protection and Safety	
Convention on the Protection and Development of the Marine Environment in the Wider Caribbean, 1983 (Cartagena Convention) (RE)	A-1999
Protocol Concerning Cooperation in Combating Oil Spills in the Wider Caribbean, 1983 (RE)	A-1999
Protocol of 1973 to the International Convention for the Prevention of Pollution from Ships as Amended (MARPOL 1973/78)	A-1997
International Convention on Civil Liability for Oil Pollution Damage, 1969 (CLC, 1969)	A-1994
Protocol of 1992 to Amend the International Convention on Civil Liability for Oil Pollution Damage, 1969 (CLC PROT, 1992)	A-2004
International Convention for the Establishment of an International Fund for the Compensation of Oil Pollution, 1971 (FUND,1971)	A-1994
International Convention relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, 1969; (INTERVANTIONS, 1969)	A-2005
Protocol of 1992 and 2003 to the International Convention for the Establishment of an International Fund for the Compensation of Oil Pollution, 1971	A-2005
1996 Protocol to the International Convention on the Prevention of Marine Pollution by Dumping Wastes and Other Matter, 1972, (LC PROT 1996)	A-2004
International Convention on Liability and Compensation from Damage in Connection with Carriage of Hazardous and Noxious Substances by Sea (HNS Convention, 1996)	A-2004
International Convention on Oil Pollution Preparedness, Response and Cooperation (OPRC Convention), 1990	A-2004
International Convention for the Control and Management of Ship Ballast Water and Sediment, 2004 (BMB, 2004)	A-2005
Marine Resources	
United Nations Convention on the Law of the Sea, 1982	R-1993

MULTINATIONAL ENVIRONMENTAL AGREEMENTS		STATUS
Chemicals/Waste Management		
Basel Convention on the Control of Transboundary Movement of Hazardous Waste and their Disposal		A-1994
Sustainable Land Management		
United Nations Convention to Combat Desertification		A-1997
Atmospheric/Climate Systems		
Vienna Convention for the Protection of the Ozone Layer, Vienna, 1985		A-1993
Montreal Protocol on Substance that Deplete the Ozone, 1989*		A-1993
United Nations Frame- work Convention on Climate Change, 1992		R-1993
Protection of Human Health and the Environment		
Stockholm Convention on Persistent Organic Pollutants (POPs), 2001		A-2004
Culture and Natural Heritage		
Convention for the Protection of World Culture and Natural Heritage, 1972		Ac-1986

Key

A:	Accession
Ac:	Accepted
Ad:	Adherence
R:	Ratification
RE:	Regional MEA

ANNEX 3: LIST OF INTERNATIONAL PROJECT IMPLEMENTED IN 2005-2009 AND PLANNED FOR 2010-2015

DONOR <i>(IMPLEMENTING AGENCY)</i>	INTERNATIONAL PROJECT	TOTAL FUNDS US \$(000,000.00)	TIMELINE	NOTES
ST. KITTS & NEVIS AS PART OF THE REGION OR GROUP				
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	
CIDA	OECS Environmental Capacity Development (ENCAPD) (coastal and marine environmental management)	CAN \$4.50	1999-2009	
DFID/CIDA, EC and OECS Secretariat <i>(CDEMA)</i>	Comprehensive Disaster Management -Harmonised Implementation Programme (CDM-HIP)	USD 3.6	April 2009- March 2013	
DFID/UNECLAC; IADB/CDB and AusAid) <i>(UNECLAC and CCCCC)</i>	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	Caribbean Climate Change Risk Atlas (CARIBSAVE CCRA)-Phase 1 for tourism sector	USD1.125	March 2010-June 2011	

DONOR <i>(IMPLEMENTING AGENCY)</i>	INTERNATIONAL PROJECT	TOTAL FUNDS US \$(000,000.00)	TIMELINE	NOTES
<i>(OUCE and CCCCC)</i>				
DFID/Climate Development Knowledge Network (CDKN) <i>(CCCCC)</i>	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 <i>(CCCCC)</i>	CCCCC/regional task force support	USD 0.269	Oct 2007-June 2010	
DFID <i>(UNDP with CCCCC)</i>	Copenhagen and beyond-Capacity building for CARICOM policy makers involved in climate change negotiations	USD 0. 2245	Sept 2009- June 2010	
DFID <i>(CCCCC)</i>	ECACC-Enhancing Capacity for Adaptation to Climate Change in the Caribbean Overseas Territories	USD~450,000	2007-2010	
DFID <i>(National Disaster Offices)</i>	DRR Capacity building in the UK Overseas Territories	USD450,000	2008-2011	
DFID	Low carbon/renewable energy development	tbc	2010-	Regional (pipeline)
DFID	Research -Climate Change Adaptation in Asia, Latin America and the Caribbean (CCA-ALAC)	tbc	??	
DFID	Global Environmental Facility – Sustainable environmental management	£11 million	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	€8.00	2000-2007	

DONOR <i>(IMPLEMENTING AGENCY)</i>	INTERNATIONAL PROJECT	TOTAL FUNDS US \$(000,000.00)	TIMELINE	NOTES
EC (7th EDF)	Caribbean Regional Environmental Programme	€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	€2.70	2005-???	
ST. KITTS & NEVIS				
GEF/UNDP	National biodiversity Strategy, Action Plan and Report to the CBD	US\$0.104		Approved
GEF/UNDP	Biodiversity Enabling Activity Add-ON: Assessment of Capacity Building Needs and Country-Specific Priorities	US\$0.175		Approved
GEF/UNDP	Enabling the St. Kitts and Nevis to Prepare its First National Communication in Response to its Commitment to UNFCCC	US\$0.159		Project Completion
GEF/UNDP	Climate Change Enabling Activity (Additional Financing for Capacity Building in Priority Areas)	US\$0.100		Project Completion
GEF/UNEP	National Capacity Needs for Self Assessment (NCSA) for Global Environmental Management	US\$0.225 [+0.030 Co-financing]		Under Implementation