UNDP Project Document Format

Government of the Federation of St Kitts and Nevis

United Nations Development Programme

ENABLING ACTIVITIES FOR THE PREPARATION OF ST. KITTS AND NEVIS' SECOND NATIONAL COMMUNCIATION TO THE UNFCCC

PIMS 3452 CC – Mitigation EA SNC St Kitts and Nevis

Brief description

The project will enable St. Kitts and Nevis to prepare and submit its Second National Communication (SNC) to the Conference of the Parties of the UNFCCC in accordance with its obligations under the UNFCCC and in conformity with decision 17CP.8. The activities for the SNC expand and build on the work done for the Initial National Communication, the phase II activities, and a number of related initiatives. The main components of the project are: a) an Inventory of GHG Emissions b) an assessment of vulnerability to climate change in St Kitts and Nevis as well as identification of adaptation options; and c) analysis of potential measures to abate increase of GHG emissions.

The Project is also intended to enhance national technical capacities and raise public awareness of climate change.

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Acronyms

ACCC Adaptation to Climate Change in the Caribbean CCCCC Caribbean Community Climate Change Centre

CDM Clean Development Mechanism

COP Conference of the Parties (to the UNFCCC)

CPACC Caribbean Planning for Adaptation to Global Climate Change

CGE Consultative Group of Experts

DPPE Department of Physical Planning and Environment

GDP Gross Domestic Product

GEF Global Environmental Facility

GHG Greenhouse gas

GNP Gross National Product

GPG Good Practice guidance of the IPCC Revised guidelines

INC Initial National Communications (UNFCCC)
IPCC Intergovernmental Panel on Climate Change
MACC Mainstreaming Adaptation to Climate Change

MDG Millennium Development Goals NCCC National Climate Change Committee

NCSA National Capacity Self-Assessment (Project)
NCSP National Communications Support Programme

NGO Non-governmental Organization SIDS Small Island Developing State

SNC Second National Communications (to the UNFCCC)
UNCBD United Nations Convention on Biological Diversity
UNCCD United Nations Convention to Combat Desertification
UNDAF United Nations Development Assistance Framework
UNDP-CO United Nations Development Programme- Country Office

UNEP United Nations Environment Programme

UNFCCC United Nations Framework Convention on Climate Change

UWI University of the West Indies

V and A Vulnerability and Adaptation Assessment WMO World Meteorological Organization

1.0 Elaboration of the Narrative

1.1 Situation Analysis

The Federation of St Kitts and Nevis is a Small Island Developing State (SIDS) located in the Eastern Caribbean. The country consists of two volcanic islands separated by a three-km-wide channel. Both islands are mountainous, rising to 1156 meters at Mt Liamuiga on St Kitts while Nevis is dominated by Nevis Peak in the center of that island. The climate of the Federation is classified as tropical maritime with fairly uniform daytime and nighttime temperatures and marked wet and dry seasons.

The economy of the country is dependent on tourism and related service sectors with efforts to diversify the economy severely restricted by constraints of market size, limited natural resources, and high production costs. The Federation is vulnerable to existing climatic conditions, particularly droughts and hurricanes, and will need to build national capacity to respond to the challenges presented by global climate change.

St. Kitts and Nevis is classified as a high human development country. Ongoing programmes within the UN system include efforts to strengthen governance structures, reduce poverty in vulnerable groups, advance gender equity, and promote environmental sustainability.

Climate change related issues and concerns, including preparation of the country's initial national communications have been coordinated through the Department of Physical Planning and Environment within the Ministry of Sustainable Development. This department will be responsible for implementation of the SNC project working in collaboration with other stakeholder agencies in public and non-governmental sectors.

The project will support St Kitts and Nevis in implementing its obligations under the UNFCCC particularly as these relate to reporting and capacity building. The project will also assist St Kitts and Nevis in meeting its Millennium Development Goals (MDG) commitments. Specifically the project will address elements related to environmental stewardship and will assist in integrating sustainable development concerns relating to climate change into country policies. The project will also support MDG efforts in developing global partnerships for development through the transfer of technology, and through focusing on the peculiar needs of

SIDS. The project is closely linked to development objectives being pursued at national and regional levels in areas such as disaster prevention, public health, food production, land-use planning, and development of renewable energy sources.

1.2. Strategy

At the global level the project is consistent with Millennium Development Goals (MDG) for environmental management and global partnerships. At the regional level the SNC project will support St Kitts and Nevis in implementing its commitments within the framework of the UN Barbados Plan of Action for SIDS agreed in 1994. At the national level the project will complement government's efforts at sustainable development including plans for an environmentally sustainable socio-economic transition from sugar production to other economic activities.

The project is consistent with Objective 1 of the UNDP Sub-Regional Cooperation Programme for 2005-2009 (Barbados and the Eastern Caribbean) to build resilience and mitigate negative impacts of external shocks including natural disasters.

The project will further enable St. Kitts and Nevis to develop its national capacity for preparation of its greenhouse gas inventory, assess its vulnerability to climate change and identify possible adaptation responses, identify and implement technology for mitigation of climate change, report on climate change issues and concerns, as well as to increase public awareness of climate change related issues and concerns.

The project provides synergies with various ongoing national and regional GEF supported programmes in climate change, biodiversity, land degradation/desertification, ozone protection, and renewable energy. Where possible it will build upon previous studies, training activities, and institutional arrangements from the initial national communication process as well as from CPACC and MACC programmes. The project strategy is aimed at enhancing St Kitts and Nevis' capability for responding to climate change through a structured programme of training, public awareness, institutional networking and technology transfer.

1.3. Management Arrangements

See management arrangements in Appendix B Section 5.

1.4 Monitoring and Evaluation

Monitoring responsibilities and events

A detailed schedule of project reviews meetings will be developed by the project management, in consultation with project implementation partners and stakeholder representatives and incorporated in the Project Inception Report. Such a schedule will include: (i) tentative time frames for Steering Committee Meetings, (or relevant advisory and/or coordination mechanisms) and (ii) project related Monitoring and Evaluation activities.

<u>Day to day monitoring</u> of implementation progress will be the responsibility of the Project Coordinator, Director or CTA (depending on the established project structure) based on the project's Annual Work Plan and its indicators. The Project Team will inform the UNDP-CO of any delays or difficulties faced during implementation so that the appropriate support or corrective measures can be adopted in a timely and remedial fashion.

<u>Periodic monitoring</u> of implementation progress will be undertaken by the UNDP-CO through quarterly meetings with the project proponent, or more frequently as deemed necessary. This will allow parties to take stock and to troubleshoot any problems pertaining to the project in a timely fashion to ensure smooth implementation of project activities.

Project Monitoring Reporting

The Project Coordinator in conjunction with the UNDP-GEF extended team will be responsible for the preparation and submission of the following reports that form part of the monitoring process.

(a) Inception Report (IR)

A Project Inception Report will be prepared immediately following the Inception Workshop. It will include a detailed First Year Work Plan divided in quarterly timeframes detailing the activities and progress indicators that will guide implementation during the first year of the project. The Report will also include the

detailed project budget for the first full year of implementation, prepared on the basis of the Annual Work Plan, and including any monitoring and evaluation requirements to effectively measure project performance during the targeted 12 months time-frame.

The Inception Report will include a more detailed narrative on the institutional roles, responsibilities, coordinating actions and feedback mechanisms of project related partners. In addition, a section will be included on progress to date on project establishment and start-up activities and an update of any changed external conditions that may effect project implementation.

When finalized the report will be circulated to project counterparts who will be given a period of one calendar month in which to respond with comments or queries. Prior to this circulation of the IR, the UNDP Country Office and UNDP-GEF's Regional Coordinating Unit will review the document.

Quarterly Progress Reports

Short reports outlining main updates in project progress will be provided quarterly to the local UNDP Country Office and the UNDP-GEF regional office by the project team.

Technical Reports

Technical Reports are detailed documents covering specific areas of analysis or scientific specializations within the overall project. As part of the Inception Report, the project team will prepare a draft Reports List, detailing the technical reports that are expected to be prepared on key areas of activity during the course of the Project, and tentative due dates. Where necessary this Reports List will be revised and updated, and included in subsequent APRs. Technical Reports may also be prepared by external consultants and should be comprehensive, specialized analyses of clearly defined areas of research within the framework of the project. These technical reports will represent, as appropriate, the project's substantive contribution to specific areas, and will be used in efforts to disseminate relevant information and best practices at local, national and international levels.

Audit Clause

The Government will provide the Resident Representative with certified periodic financial statements, and with an annual audit of the financial statements relating to the status of UNDP (including GEF) funds according to the established procedures set out in the Programming and Finance manuals. The Audit will be conducted by the legally recognized auditor of the Government, or by a commercial auditor engaged by the Government.

1.5 Legal Context

This Project Document shall be the instrument referred to as such in Article I of the Standard Basic Assistance Agreement between the Government of St Kitts and Nevis and the United Nations Development Programme, signed by the parties on the 30th day of January 1985. The host country implementing agency shall, for the purpose of the Standard Basic Assistance Agreement, refer to the government cooperating agency described in that Agreement.

UNDP acts in this Project as Implementing Agency of the Global Environment Facility (GEF), and all rights and privileges pertaining to UNDP as per the terms of the SBAA shall be extended mutatis mutandis to GEF.

The UNDP Resident Representative is authorized to effect in writing the following types of revision to this Project Document, provided that he/she has verified the agreement thereto by GEF Unit and is assured that the other signatories to the Project Document have no objection to the proposed changes:

Revision of, or addition to, any of the annexes to the Project Document;

Revisions which do not involve significant changes in the immediate objectives, outputs or activities of the project, but are caused by the rearrangement of the inputs already agreed to or by cost increases due to inflation;

Mandatory annual revisions which re-phase the delivery of agreed project inputs or increased expert or other costs due to inflation or take into account agency expenditure flexibility; and

Inclusion of additional annexes and attachments only as set out here in this Project Document.

2.0 Total Budget

Award ID:	000 40164												
Award Title:	PIMS # 3452 CO	C EA SNO	C of St K	itts and Nevis									
Project ID	000 45305				<u>- </u>								
Project Title:	PIMS # 3452 CC	EA Seco	nd Natio	nal Commun	ication c	of St Kitts	and Nev	is					
•	Department of Physical Planning and												
Executing Agency:	Environment												
OUTPUTS (and corresponding	RESPONSIBLE PLANNED BUDGET PARTY												
indicators)		Source of Funds	Budget Code	Budget Description	Year 1 (US\$)	Year 2 (US\$)	Year 3 (US\$)	Total Budget (US\$)					
1. National Circumstances	DPPE	6200	71300	Local consultants	0	6,000	4,000	10,000					
Sub total					0	6,000	4,000	10,000					
2. National Greenhouse Gas	DPPE	6200	71200	International consultants	10,000	5,000	5,000	20,000					
Inventories			71300	Local consultants	5,000	5,000	0	10,000					
			71600	Travel	4,000	4,000	4,000	12,000					
			71400	Contractual services	5,000	5,000	3,000	13,000					
Sub total					24,000	19,000	12,000	55,000					
3. Programmes containing measures to	DPPE	6200	71200	International consultants	15,000	10,000	5,000	30,000					
facilitate adequate adaptation to climate			71300	Local consultants	10,000	10,000	5,000	25,000					
change	71600 Tra		Travel	4,000	4,000	4,000	12,000						
			71400	Contractual services	5,000	5,000	3,000	13,000					
Sub total				<u> </u>	34,000	29,000	17,000	80,000					

OUTPUTS (and corresponding	RESPONSIBLE PARTY												
indicators)		Source	Budget	Budget	Year 1	Year 2	Year 3	Total Budget					
		of Funds	Code	Description	(US\$)	(US\$) (US\$)		(US\$)					
4. Programmes	DPPE	6200	71200	International	0	15,000	10,000	25,000					
containing measures to mitigate climate			71300	consultants Local	0	15,000	15,000	30,000					
change			71600	consultants Travel	2,000	4,000	4,000	10,000					
			71400	Contractual services	0	5,000	0	5,000					
Sub total		2,000	39,000	29,000	70,000								
5. Other relevant information (e.g.	DPPE	6200	71300	Local consultants	0	7,000	3,000	10,000					
research and systematic			71400	Contractual		3,000	3,000	5,000					
observation, technology transfer, education and public			74210	services Printing and publications	0	3,000	1,000	5,000					
awareness, capacity building)					0								
Sub total	-		_		0	13,000	7,000	20,000					
6. Constraints & Gaps; Related	DPPE	6200	71300	Local consultants	0	0	4500	4500					
Financial, technical, & capacity needs		71400 Contractual services		0	0	5500	5500						
Total Constraints and Gaps							10,000	10,000					
7. Technical Assistance	DPPE	6200	71200	International consultants	4,000	3000	3,000	10,000					
Sub total			<u>.</u>		4,000	3,000	3,000	10,000					

OUTPUTS (and corresponding indicators)	RESPONSIBLE PARTY	PLANNED BUDGET									
marcators,		Source of Funds	Budget Code	Budget Description	Year 1 (US\$)	Year 2 (US\$)	Year 3 (US\$)	Total Budget (US\$)			
8. Compilation, Production of communication,	DPPE	6200	71405	Service contracts – individuals		4,500	4,500	9,000			
including Executive Summary & its				Printing and publication		0	6,000	6,000			
translation Sub total					0	4,500	10,500	15,000			
9. Project Management	DPPE	6200	71405	Service contracts – individuals	25,000	25,000	25,000	75,000			
			72200	Equipment and furniture	10,000	5,000	5,000	20,000			
			72400	Communications & audio-visual		5,000		5,000			
			72500	Supplies	2,000	4,000	2,000	8,000			
			74000	Operational costs	2,000	2,000	2,000	6,000			
			74500	Misc.	2,000	2,000	2,000	6,000			
Sub total	,			,	41,000	43,000	36,000	120,000			
10. Monitoring and reporting	DPPE	6200	74100	Professional services	2,000	2,000	2,000	6,000			
			74110	Audit fees	3,000 5,000	3,000	3,000	9,000			
Sub total						5,000	5,000	15,000			
GRAND TOTAL					110,000	161,500	133,500	405,000			

Notes: Responsible partner would be either the Implementing partner or 'other partners' listed on the cover page. Source of funds GEF will be listed in all rows unless there are other sources of funds for given outputs, in which case the source will be listed accordingly

Budget Description is the Atlas input budget code (i.e., personnel, contract, etc.)

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3.0 APPENDICES

APPENDIX A: SUMMARY REPORT OF THE SELF-ASSESSMENT EXERCISE

A.1 Description of the process and approach adopted for the stocktaking exercise

St Kitts and Nevis has completed a self-assessment of its climate change enabling activities. The self-assessment was conducted in accordance with GEF Operational Procedures for the Expedited Financing of National Communications from Non-Annex I Parties. The self-assessment consisted of two components involving:

- 1. A stocktaking of climate change enabling activities conducted to date in St Kitts and Nevis, and
- 2. Stakeholder consultations to promote stakeholder ownership of SNC activities and to advance institutional arrangements for project implementation.

The principal aim of the exercise was to undertake a consultative process for review of previous project activities, and to conduct a needs assessment with a view to identifying and validating priorities for formulation and implementation of the SNC project proposal. This approach is intended to ensure that the SNC is based on previous activities, studies, experiences, and functional institutional arrangements.

The self-assessment was undertaken by a regional consultant utilizing (i) a desk review of relevant documents; (ii) internet exchanges of information and data with stakeholders; (iii) interviews with stakeholders; (iv) and a consultative meeting¹. The stocktaking exercise brought together approximately 50 stakeholders from different ministries, public institutions, and NGOs in St Kitts and Nevis. A list of persons consulted is provided as Annex I of Appendix A.

A.2 Main Outcomes of INC Process Including Priorities Identified

St Kitts and Nevis submitted its INC to the UNFCCC Secretariat in 2001 and followed the guidelines laid down in UNFCCC COP decision 10/CP.2.

¹ The consultative meeting followed shortly on another climate change consultation for the NCSA and information from that exercise fed into the SNC consultative process.

Coordination for preparation of the INC was provided by the Environment Department of the (then) Ministry of Health and Environment. A number of regional and international consultants were utilized in preparation of the St. Kitts and Nevis INC.

The National Circumstances chapter of the INC provides an overview of the country with emphasis on those aspects of the national circumstances most related to weather, climate, and climate change. As recommended in Decision 10/CP.2 a table is used to provide a tabular format for certain data. The chapter was prepared by a local technical expert. For the Greenhouse Gas Inventory the year chosen was 1994. Information provided within the Inventory utilized the 1996 IPCC Revised Guidelines for Greenhouse Gas Inventories (Volumes 1, 2 and 3) with accompanying Microsoft Excel software.

The Inventory was done on an individual sector basis for the Energy, Industrial Processes, Agriculture, Forestry, Land-Use Change, and Wastes sectors. In accordance with the IPCC Revised Guidelines, emissions from international aviation and from biomass burning were treated as memo items and not included in the national Inventory totals.

A number of methodological and technical problems were encountered in completing the national GHG inventory. These problems were related to the lack of data in many areas of the Inventory particularly in the agriculture, land use, and forestry sectors. The use of the IPCC default values, in all sectors, is generally not reflective of national circumstances (e.g. variations in soils and topography). The lack of and/or limited number of experts available in the country presented challenges for completing the inventory.

In relation to analysis of issues relating to climate change vulnerability and adaptation, St. Kitts and Nevis conducted an assessment of the country's vulnerability to projections of climate change in certain sectors and areas. Methodologies used were from IPCC and UNEP although data and time constraints limited the extent of analysis possible and the results are to be seen as preliminary.

The INC provides an overview of projected impacts of climate change in St Kitts and Nevis for forestry and terrestrial resources, agriculture, coastal ecosystems, water resources, human settlements, tourism, and human health. Analysis is based on expert judgment including assessment of technical literature and information

from IPCC and Caribbean sources. A number of adverse impacts are identified as likely outcomes of IPCC projections for climate change in the Caribbean.

Chapter 4 of the INC is termed Institutional Framework and outlines the various responsibilities and portfolios of government and non-government organizations involved in sustainable development activities, the existing environmental legislative provisions, and the various United Nations and other environmental conventions to which the country is party. This chapter was prepared by government in-house personnel and is consistent with information requirements under decision 10/CP.2.

Chapter 5 of the INC is entitled "National Response Measures" and provides an overview of national sustainable development strategies that include both climate change mitigation and adaptation measures. In relation to mitigation the INC focuses on the main sources as identified in the GHG Inventory, these being the residential, transport and electricity generation sectors. Response actions identified include actions for achieving improved efficiencies in energy use, reductions in emissions in the road transport sector, and the use of renewable energy technologies. In relation to measures for adaptation to climate change, the INC identifies a number of preliminary "win-win" proposals targeted at priority concerns such as water resources, tourism, agriculture, and health.

In addition to the INC, St Kitts and Nevis has also participated in various activities intended to strengthen national capacity for climate change through UNDP/GEF Phase 2 activities. This has involved an assessment of climate change technology needs, and an assessment of requirements for the systematic research and observation of climate in St. Kitts and Nevis. Both of these activities provided stakeholders in various government and NGO agencies with an opportunity to enhance awareness of climate change issues in the period since preparation of the INC.

The Report on the Systematic Observations Systems of St Kitts and Nevis identifies a number of technology needs required for enabling St Kitts and Nevis to meaningfully participate in global climate observation networks. These include an Automatic Weather Station, telecommunications equipment, and tide monitoring instruments. The report notes that a particular challenge to systematic observation arises from the closure of a number of sugar estates that have historically collected weather data. Various institutional strengthening requirements are also identified. The outputs of this report are expected to be reflected in the SNC.

A.3 Lessons learned/recommendations for the preparation of the SNC

The self-assessment identifies a number of recommendations for strengthening capacity for climate change in St Kitts and Nevis particularly in terms of measures for improving preparation of the SNC. This includes recommendations for:

- 1. Strengthening climate related data collection;
- 2. Sectoral based training in vulnerability and adaptation for technical experts including short-term overseas technical training for representatives of lead agencies;
- 3. Identification of regional and international technical support and assistance for vulnerability and adaptation;
- 4. Public outreach and awareness of climate related concerns.
- 5. Establishment of a multi-agency technical committee charged with overseeing technical outputs of the project. This will probably be based on existing multi-agency, multi-sector coordinating structures;
- 6. Ensuring adequate representation of non-governmental and Nevis Island Administration representatives in project implementation activities.
- 7. Reporting on synergies with other sustainable development programmes and initiatives:
- 8. Strengthening the role of the meteorological forecasting agency including climate change related issues;
- 9. Early identification of the local implementing agency for the GHG Inventory;
- 10. Identification of mitigation options measures for St Kitts and Nevis within the SNC in view of increasing concerns for energy costs and security of supply;
- 11. Early identification of expert technical support for the Inventory;
- 12. Early initiation of data collection for the Inventory;
- 13. Provision of short-term overseas training of national counterpart technical experts; and
- 14. Involvement of a wide range of stakeholders in GHG Inventory training/preparation workshops.

A.4 Synergies with Relevant Initiatives

St Kitts and Nevis is involved in implementation of a number of multilateral environmental conventions. These include the UN Convention on Biological

Diversity (UNCBD), the UN Convention to Combat Desertification (UNCCD), and the Montreal Protocol for protection of the Ozone Layer. The country is involved in implementation of its GEF national capacity self-assessment (NCSA) and this is expected to result in identification of opportunities for enhanced synergy in implementation of programmes related to these conventions.

The implementation of the NCSA has among other things served to increase stakeholder awareness of climate change and the links to other ongoing sectoral programmes. Limited technical capacity within St Kitts and Nevis for implementation of these conventions is a major constraint and points to the significance of integrating and coordinating action among the conventions where possible, so as to maximize use of limited national technical capability as well as drawing on regional sources for technical assistance and cooperation (e.g. exchange of information, joint training).

A significant factor driving some measure of integration among a number of these programmes derives from a single agency, the DPPE, being responsible for coordination and implementation of these programmes. Similarly, the various coordinating bodies required for implementing the programmes also all draw upon a limited number of resource persons. This situation opens up possibilities for establishing programmed synergies between the various conventions and other initiatives through jointly sponsored workshops and public awareness activities where possible. From a technical point of view, information generated from implementation of the UNFCCC and the other environmental conventions as well as from activities such as the NCSA should feed into the SNC process and vice versa.

It is also important that the SNC be closely linked to other ongoing development initiatives such as those for tourism development, agricultural diversification, and environmental health. Training and sensitization activities for technical personnel, and more general public awareness measures, are intended to establish links with development planning and project implementation activities in private and public sectors.

A.5 Priorities for SNC Project Implementation

Completion of the INC has highlighted a number of core requirements for enhancing possibilities for successful implementation of the SNC. These are:

Training of technical personnel;

- ➤ Data collection leading to select studies;
- > Public awareness; and
- > Equipment acquisition to support institutional strengthening

These elements will contribute to building sustainability of national capacity for responding to climate change. The aim of these measures should be for St Kitts and Nevis to adequately report and prepare its SNC and to support mainstreaming of climate change concerns and considerations into national project planning and implementation in St Kitts and Nevis.

Annex I of Appendix A

Stakeholders Consulted

Ms June Hughes, Conservation Officer, Department of Physical Planning and Environment, Ministry of Sustainable Development, St. Kitts.

Ms Cheryl Jeffers, Assistant Physical Planning Officer, Department of Physical Planning and Environment, Ministry of Sustainable Development, St. Kitts.

Mr. Ellis Hazel, Director, Department of Physical Planning and the Environment, Ministry of Sustainable Development

Mr. Randolph Edmeade, Senior Environmental Officer, Ministry of Sustainable Development, St Kitts.

Mr. Patrick Williams, Senior Physical Planning Officer, Department of Physical Planning and Environment, Ministry of Sustainable Development, St. Kitts.

Mr. Errol Rawlins, Chief Environmental Officer, Ministry of Health, St. Kitts

Mr. Elton Morton, Deputy Chief Environmental Officer, Ministry of Health, St. Kitts

Mr. Maurice Mills, Senior Meteorological Officer, RL Bradshaw International Airport, St Christopher Air and Sea Ports Authority, St Kitts.

Mr. Thomas Jackson, Crop Programme Leader, Ministry of Agriculture

Mr. Brewster, Delta Petroleum Corporation.

Mr. Randolph Hamilton, Product Development and Cruise Manager, St Kitts Tourism Authority

Mr. Howard Richardson, Director of Economic Affairs and Public Sector Investment Planning, Ministry of Sustainable Development

Ms. Beverly Harris, Director of Statistics, Ministry of Sustainable Development

Mr. Andrew Skerritt, Health Sector Planner, Ministry of Health

Mr. Cromwell Williams, Manager/Water Engineer, Water Services Departtment

Mr. Raphael Payne, Operations Supervisor, Sol St Kitts and Nevis

Mr. Vern Cenac, Country Manager, Sol St Kitts and Nevis Ltd.

Mr. John A. Channer, Chief Engineer and Manager, Administration Division, Electricity Department

Mr. Ralph Wilkins, Acting Chief Fisheries Officer, Department of Fisheries

Ms. Jacqueline Armony, Executive Director, St Christopher Heritage Society

Ms. Lilith Richards, Director of Department of Physical Planning, Natural Resources and Environment, Nevis Island Administration

Mr. Ernest Stapleton, Permanent Secretary, Ministry of Physical Planning, Public

Works and Development. Capt. R. Arthur Anslyn, Director of Fisheries, Nevis Island Administration Mr. John Guilbert, Executive Secretary, Nevis Historical Society

Mr. Floyd Robinson, Manager, Nevis Water Department.

Mr. Carl Herbert, National Disaster Coordinator, National Emergency Management Agency

APPENDIX B: TECHNICAL COMPONENTS OF THE PROJECT PROPOSAL

1.0 BACKGROUND/CONTEXT

The Federation of St Christopher and Nevis is an archipelagic State in the eastern Caribbean located at 17 degrees north and 62 degrees west. The Federation occupies a territory of 269 sq. kms and has a population of approximately 40,000 persons. Both in terms of land size and population, St Kitts and Nevis is one of the smallest independent states in the western hemisphere and is one of the smallest countries in the world.

St. Kitts and Nevis experiences a tropical maritime climate characterized by warm annual temperatures with little seasonal variation, and a rainy season from May to November. Annual mean temperatures average 27 degrees centigrade. A prominent climatic feature is the annual hurricane season that coincides with the rainy season. Despite their small size both islands possess significant biodiversity resources of flora and fauna in terrestrial and marine environments.

The economy of St Kitts and Nevis has witnessed significant growth over the past decade, with transformation and development driven by growth in the tourism sector and related activities such as transportation, construction, and government services. Other areas of economic activity include agriculture and a small manufacturing sector. Plans for economic growth center around further expansion of the country's tourism product including cruise and land based tourism. Ecotourism and heritage tourism type attractions constitute a significant part of the tourism offering in both islands. An important development has been the decision taken to close the sugar industry in 2005. This will have major implications for employment and land use. Official plans for use of former sugar lands include tourism, residential and agricultural development.

For the 2003 UN Human Development Index, the Federation was ranked as a high human development country signaling the important advances that have been made in various areas of social and economic development including health care, educational opportunities and economic development.

Notwithstanding these significant achievements, a number of constraints continue to restrict opportunities for sustainable development. These include high vulnerability to natural disasters, a small domestic market, limited technical and

institutional capabilities, limited financial resources, weaknesses in public policy frameworks, and a fragile environmental resource base.

A number of environmental problems exist and these include improper solid and liquid waste disposal, coastal erosion, pressure on limited water supplies (especially in Nevis), alienation of agricultural lands, and loss of wetlands. Empirical evidence suggests that early signals of changes in climate are already being experienced in parameters such as rainfall variability and intensity, coral bleaching, accelerated coastal erosion, and higher daytime and nighttime temperatures. A significant weakness is the lack of climate and weather data. Underlying all of these are the problems of limited technical capability to manage environmental concerns including limited personnel, limited financial resources, and low public awareness of environmental concern.

The Federation of St Christopher and Nevis (St Kitts and Nevis) became a signatory to the United Nations Framework Convention on Climate Change (UNFCCC) in 1992 and submitted its INC to the UNFCCC in 2001.

2.0 PROJECT OBJECTIVES

Project Development Objective:

The project will strengthen technical and institutional capacity to assist St Kitts and Nevis to mainstream climate change concerns into sectoral and national development priorities.

Project Immediate Objective:

The project will enable St Kitts and Nevis to prepare and submit its second national communication to the UNFCCC and meet its Convention obligations.

3.0 PROJECT STRATEGY

The SNC will seek to feed into the policy decision processes of relevant areas, including linkages with national development priorities through enhancing awareness of key stakeholders in public and private sectors to climate change issues and concerns, providing training for persons involved in sectoral planning, and facilitating inter-agency collaboration and cooperation in implementation of SNC activities.

The project is expected to collaborate extensively with outputs related to CPACC, MACC, CCCCC, UNCBD, UNCCD and other similar programmes. Attempts will be made to build on and extend work done in preparation of the INC.

The SNC will be implemented by the Department of Physical Planning and Environment within the Ministry of Sustainable Development. This is intended to facilitate integration of climate change and SNC outputs within an institutional setting with a record of, and capacity for, effective implementation of a project of this nature. This will also facilitate integration of SNC concerns with other national development priorities.

4.0 PROJECT ACTIVITIES

Preparation of the SNC is intended to focus on building capacity to undertake the SNC and subsequent national communications while enabling linkage between these activities and those related to other development concerns such as economic growth, environmental protection, and public health.

The studies conducted under the INC indicate that a number of adverse impacts can be expected to result from projected changes in future climate. This requires that efforts towards climate change adaptation be initiated. On the mitigation side it is important that St Kitts and Nevis be in a position to benefit from new technologies, demonstrate its commitment under the UNFCCC to reduce GHG emissions, and be able to take advantage of any possibilities for assistance under Kyoto Protocol instruments².

A major constraint facing action on climate change in the Federation is the limited technical expertise that exists in most sectoral agencies to respond to long-term issues such as climate change. In this regards training of personnel in key areas such as GHG Inventory preparation, vulnerability and adaptation assessment, and mitigation assessment will be critical elements of capacity building. Short-term overseas training as well as in-country training workshops will probably be the most effective mechanisms for delivery of these programmes.

Another constraint is that only limited meteorological and climatological data collection and analysis presently occurs in St Kitts and Nevis serving primarily to provide aeronautical and general weather advice. An important requirement

² The Kyoto Protocol establishes a Clean Development Mechanism (CDM) to assist developing countries (non-annex 1 Parties to the UNFCCC) to reduce emissions through financing for GHG mitigation measures involving GHG emissions trading arrangements with partners from developed countries (annex 1 Parties to the UNFCCC).

therefore is to build up a data-base of information on climate for St Kitts and Nevis. This information will be helpful towards a range of existing purposes and be important for identifying vulnerability and adaptation options, as well as providing crucial data for mitigation of GHGs. In some instances meteorological monitoring equipment and other equipment may required.

Stakeholder consultations highlighted the importance of public awareness as a requirement for enhancing St Kitts and Nevis ability to respond to climate change issues and concerns. Public awareness is required for enabling adaptation measures at the individual, community and enterprise levels, and also in guiding public policy. Efforts for strengthening awareness should accompany virtually all of the technical activities of the SNC process. Target groups will need to be identified, and material developed in this regards, aimed at providing information on results of climate change activities in St Kitts and Nevis and at regional and global levels.

The following priority areas of capacity building are suggested for emphasis during the SNC process³:

- > Training of technical personnel;
- ➤ Data collection leading to select studies;
- > Public awareness; and
- > Equipment acquisition to support institutional strengthening

All components of the SNC are to be prepared in accordance with the requirements and guidance of UNFCCC decision 17CP.8. The following are presented as indicative activities for the St Kitts and Nevis SNC.

4.1 National circumstances

The National Circumstances section is expected to provide information on the national context for other sections of the SNC report. This will include information on the climatic, physical, socio-economic, and institutional features of St Kitts and

³ The Thematic Assessment Report on the UNFCCC for St Kitts and Nevis prepared as part of the GEF National Capacity Self Assessment has pointed out that capacity development needs include: a database of expertise for climate related and environmental matters; a climate change sensitisation programme for senior decision makers; a management system and infrastructure for protected areas as GHG sinks/reservoirs; a clear national policy on the protection and rehabilitation of ghauts; methods to integrate climate change considerations into social and economic development planning and the training of persons in use of such methodologies; a national scientific, research and monitoring agenda; additional personnel with suitable scientific/technical training and expertise; a multi-year climate change awareness programme; and training of personnel in climatology, climate modeling, vulnerability and adaptation. See F. Homer "St. Kitts and Nevis Draft Thematic Assessment Report: The UN Framework Convention on Climate Change". September 2005.

Nevis along the lines recommended in Decision 17CP.8. It is expected that a tabular format will be used for presentation of certain statistical information.

- 1. Review UNFCCC 17/CP8 and St Kitts and Nevis INC
- 2. Identify the respective sources of information and establish links to obtain data.
- 3. Collect data and information.
- 4. Update information.
- 5. Draft the National Circumstances section.
- 6. Circulate the National Circumstances section for comments and incorporate where necessary.
- 7. Finalize the National Circumstances section.

4.2 Greenhouse gas inventory

Preparation of a national Inventory of GHG is a requirement for all State Parties to the UNFCCC. The preparation of the inventory is a technical task requiring information from stakeholders in various sectors. It is likely in a number of instances that data required for the inventory is not available so that default values and other variables will need to be used.

The Revised 1996 IPCC Guidelines for National greenhouse gas Inventories and the IPCC good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories and accompanying software will be used. Other IPCC approved data and sources will also be used. Where values and methods other than from the IPCC are used these will be consistent with established methods and transparent in providing necessary source and other information. In accordance with the requirements of Decision 17CP.8 the Inventory will be prepared for the year 2000.

Efforts are aimed at building capacity within St Kitts and Nevis to conduct the GHG Inventory on a sustained basis in line with the requirements of the UNFCCC as well as to provide information on GHG emissions emanating from St Kitts and Nevis.

The following are presented as indicative activities for the St Kitts and Nevis SNC.

- 1. The GHG inventory team established and strengthened.
 - a. Identify and mobilize national experts in targeted sectors and areas of relevance.
 - b. Identify and mobilize regional and international technical assistance.
 - c. Training conducted of national personnel.
 - d. Review of existing information, tools and methods.
- 2. Methodologies for GHG inventory estimates analyzed, selected and validated.
 - a. Analyze and agree on IPCC Methodologies and other methodological tools to be used.
 - b. Conduct necessary national level training
 - c. Prepare and dispatch surveys for filling data gaps
- 3. GHG inventory data collected.
 - a. Review available data
 - b. Identify new data needs
 - c. Collect the necessary data
- 4. GHG Inventory prepared for target years in accordance with decision 17/CP.8.
 - a. Estimate the GHG emissions inventory for 2000 and select years.
 - b. Prepare a draft inventory of anthropogenic greenhouse gas emissions by sources and removals by sinks using IPCC methodologies.
 - c. Develop key sources analysis (year 2000) and develop a key sources inventory for 2000 and undertake uncertainty assessment.
- 5. GHG inventory data and estimates documented and archived
 - a. Draft GHG Inventory report circulated for technical review.
 - b. National consultation to review Inventory
 - c. GHG Inventory chapter of SNC finalized.
 - d. Archive and document GHG Inventory studies.

4.3 Programmes containing measures to facilitate adequate adaptation to climate change

As a Small Island Developing State, St Kitts and Nevis is particularly vulnerable to a range of adverse impacts associated with global climate change. These are likely to include changes in rainfall regime, warmer temperatures, more intensified hurricane activity, and increased coastal erosion and inundation. These impacts have the potential for severely disrupting socio-economic development and it is therefore crucial that national capability be developed to assess and respond to these challenges. Activities under the SNC are therefore intended to provide information on the extent of vulnerability to climate change and adaptation measures and to enable strengthening of indigenous capacity to respond in this area.

Various methodological tools have been developed for conducting climate change vulnerability and adaptation assessments. These include tools and approaches developed by UNEP, IPCC, and UNDP. Vulnerability and adaptation assessments will make use of these tools. The possibility for use of computer generated global circulation models will be explored.

Sectors to be examined in the assessments are:

Water resources including forestry
Coastal and marine resources including fisheries
Agriculture
Tourism
Health
Human settlements

The following are presented as indicative activities for the St Kitts and Nevis SNC.

- 1. Technical Team Established and Strengthened.
 - a) Identify and mobilize national experts in targeted sectors and areas.
 - b) Identify and agree on scope, methods and tools for assessment.
 - c) Identify and mobilize regional and international technical assistance.
 - d) Training conducted of national personnel.
 - e) Stakeholders introduced to activities.
- 2. Baseline Data Compiled, Tools, Methods and Scope Agreed
 - a. Develop an environmental and socioeconomic baseline.

- b. Identify data needs and sources and agree on information surveys.
- c. Site specific activities and data agreed upon.
- d. Ongoing training of technical personnel.
- 3. Current Vulnerability and Adaptation Assessed
 - a. Identify existing weather and climate risks.
 - b. Identify previous and ongoing adaptive responses.
 - c. Ongoing training of technical personnel.
- 4. Climate Change Vulnerability Assessment Completed
 - a. Climate modeling activities undertaken.
 - b. Climate change impacts identified and assessed.
 - c. Stakeholder engagement.
 - d. Technical review of vulnerability findings.
 - e. Packaging and dissemination of public information
- 5. Climate Change Adaptation Options Identified
 - a. Methods and tools identified.
 - b. Adaptation options identified and analyzed.
 - c. Training of national personnel.
 - d. Technical review of adaptation findings.
 - e. Stakeholder engagement.
 - f. Packaging and dissemination of public information.
- 6. Compilation and Preparation of SNC Vulnerability and Adaptation Report and Chapter
 - a. Prepare and circulate draft chapter of V&A for review and comments.
 - b. Organize national consultation to highlight findings from the V&A study.
 - c. Finalize the V&A chapter to be submitted as a part of the SNC.
 - d. Archive and document all the V&A related studies and estimates.
 - e. Packaging and dissemination of public information.

4.4 Programmes containing measures to mitigate climate change

The ultimate objective of the UNFCCC for the stabilization of GHGs within the Earth's atmosphere will require shifts towards more environmentally friendly forms of energy use. The SNC process provides St Kitts and Nevis with an opportunity to report on measures underway, proposed or planned in relation to

GHG mitigation activities. The coming into force of the Kyoto Protocol, the country's potential for renewable energy production, and the escalation in prices of petroleum based fuels mean that mitigation issues are critical to sustainable development for St Kitts and Nevis.

Efforts will need to be made to build capacity for conducting climate change mitigation assessments and identifying potential mitigation opportunities. This should involve use of appropriate technologies for Small Island States like St Kitts and Nevis. Opportunities for regional training and data exchange should be pursued.

Priority areas for mitigation assessment are renewable energy technologies (particularly wind, solar, and biomass), electricity conservation and efficiency, motor vehicle efficiency and use, and geothermal energy development. Outputs from ongoing energy policy development activities are expected to feed into the SNC.

The following are presented as indicative activities for the St Kitts and Nevis SNC.

- 1 Mitigation Technical Team Established and Strengthened.
 - a. Identify and mobilize national experts in targeted sectors and areas.
 - b. Identify and agree on scope, methods and tools for assessment.
 - c. Identify and mobilize regional and international technical assistance.
 - d. Training conducted of national personnel.
 - e. Stakeholders introduced to activities.

2. GHG Baseline Scenario Developed

- a. Collate data from relevant sectors Conduct required training or have appropriate personnel trained.
- b. GHG baseline scenario developed for priority sectors.
- c. Training of national personnel.

3. GHG Mitigation Scenarios Developed

- a. Develop GHG mitigation scenario for the energy sector for 2000-2025
- b. Develop the GHG mitigation scenario for road transport sector.
- c. Estimate GHG reduction potential against the baseline scenario.

- 4. GHG Mitigation Technologies and Measures Identified
 - a. Undertake technology, environmental, socio-economic, and financial analysis of key options
 - b. Mitigation barriers identified.
 - c. Conduct screening process of technologies.
 - d. Final list of technology and measures prepared.
 - e. Packaging and dissemination of public information.
- 5. Compilation and Preparation of Mitigation Chapter.
 - a. Develop the draft chapter of the Mitigation assessment.
 - b. Circulate the draft chapter of GHG abatement analysis for review and comments.
 - c. Organize national consultation to highlight findings from the GHG abatement analysis
 - d. Finalize the GHG Mitigation chapter to be submitted as a part of the SNC
 - e. Archive and document Mitigation related studies and data.

4.5 Other information considered relevant to the achievement of the objective of the Convention

This section provides for the provision of other information considered relevant to the achievement of the objectives of the Convention. This information could include relevant national, social, economic and environmental policies and activities geared towards the implementation of the Convention including steps taken to integrate climate change into relevant social, economic and environmental policies.

In the context of addressing climate change at the national level, the following information should be included:

- ➤ Activities related to technology transfer,
- ➤ Climate change research and systematic observations
- > Research to adapt to and mitigate climate change
- Information on education, training and public awareness
- ➤ Information on capacity building at the national, regional and subregional levels

The following are presented as indicative activities for the St Kitts and Nevis SNC.

- 1. Report on and review the status of the constraints and gaps (technical, institutional, methodological, financial, and capacity) from previous studies.
- 2. Report on and identify new constraints and gaps (technical, institutional, methodological, financial, capacity), if any related to each thematic area (inventory, abatement analysis, V&A) and indicate required needs.
- 3. Prepare and distribute the draft chapter for comments, collect comments and reflect in the document.
- 4. Finalize the chapter for the SNC.

4.6 Constraints and gaps, and related financial, technical and capacity needs

Taking into account Article 4, paragraph 7, and Article 4, paragraphs 3 and 5, of the UNFCCC, the extent to which developing countries like St. Kitts and Nevis effectively implement their commitments under the UNFCCC will depend on the implementation by developed countries of their commitments under the Convention relating to financial resources and transfer of technology. Accordingly, it is important that the SNC include information on the constraints and gaps and the related financial, technical and capacity needs associated with implementing the provisions of the convention in St Kitts and Nevis.

The following are presented as indicative activities for the St Kitts and Nevis SNC.

- 1. Review the status of the constraints and gaps from previous studies
- 2. Identify new constraints and gaps for each thematic area
- 3. Summarize constraints, gaps and needs identified and draft a synthesis report as a separate chapter
- 4. Distribute draft chapter for comments, collect comments and reflect in the document
- 5. Finalize the chapter.

5.0 INSTITUTIONAL FRAMEWORK FOR PROJECT IMPLEMENTATION

The Department of Physical Planning and Environment within the Ministry of Sustainable Development will be responsible for implementation of the SNC project in St Kitts and Nevis. This agency forms part of the portfolio of the Prime Minister of St Kits and Nevis and is the office responsible for environmental and physical planning. The agency also coordinates implementation of the various environmental conventions and covenants to which the country is a party. In addition to its in-house expertise the DPPE also works in collaboration with other sectoral agencies to plan and monitor development activities.

St Kitts and Nevis's federal structure of government mandates environmental and sustainable development responsibilities across various institutional layers. The type of institutional arrangements in place will affect the sustainability and success of the project for managing and overseeing the SNC project. It is suggested that a Technical Advisory Committee (TAC) be established to provide guidance to, and oversight of, technical aspects of project implementation. This would comprise one representative each from:

- 1. Department of Physical Planning and Environment (DPPE), Ministry of Sustainable Development, St Kitts;
- 2. NGO Representative, St. Kitts;
- 3. Meteorological Department, Robert L. Bradshaw International Airport. St Kitts:
- 4. Department of Physical Planning, Nevis Island Administration;
- 5. NGO representative, Nevis;
- 6. Meteorological Office, Vance W Amory International Airport.

A senior representative of the DPPE will chair the TAC. The TAC will meet at agreed regular intervals to monitor technical issues associated with project implementation. Given the limited technical capabilities and multiplicity of environmental and other coordinating structures already in existence, efforts should be made to ensure linkages and synergies at various levels. Where possible this could include joint workshops and programmes e.g. public awareness; coordination/symbiosis in TAC structures; and joint research and data collection activities. To support capacity building at the national level, external consultants will be required to provide training and technical backstopping.

A Project Manager/Coordinator will be appointed within the DPPE who will be responsible for delivery of project outputs. The Project Manager/Coordinator would be an *ex officio* member of the TAC and serve as executive secretary to that body. In addition to the Project Manager there will also be need for an Administrative Assistant to perform and oversee certain administrative tasks.

Table 1 below indicates potential primary project stakeholder agencies and their role in the SNC process.

Table 1: SNC Project Primary Stakeholders

Name of institutions / stakeholders consulted	Stakeholder interests, official position or mandate	Reasons for inclusion	Role in the self-assessment process (e.g. consultation, preparation of draft report, data provider)
Department of Physical Planning and Environment, Ministry of Sustainable Development.	Management of the project. Responsible for coordination of environmental issues.	Central stakeholder and project manager.	Coordination and management of project activities. Data provider.
Ministry of Physical Planning, Public Works and Development.	Responsible for environmental project management in Nevis.	Central stakeholder and project manager.	Coordination and management of project activities. Data provider.
Ministry of Agriculture	Promotes agricultural development.	Agriculture sector and issues critical to GHG, V&A and mitigation issues.	Data provider, technical advisory, and awareness roles.
Meteorological Office, RLB International Airport. Met Office, Vance W. Amory International Airport, Nevis.	Responsible for collection, analysis and distribution of weather and climate information.	Meteorological information central to all aspects of climate change.	Data provider, technical advisory, and awareness roles.
Electricity Department, Ministry of Public Works	Sole public distributor of electricity.	Vital to GHG, Mitigation and V&A components.	Data provider and technical roles.
Water Department, Nevis Island Administration. Water Department, Ministry of Public Works.	Public supplier of potable water.	Water management issues will be critical impact of climate change.	Data provider and technical roles.
Fisheries Department, Ministry of Agriculture. Fisheries Department, Nevis Island Administration.	Protection and management of fisheries including habitats.	Important environmental management agency especially in coastal activities.	Data provider and public awareness roles. Participation in technical roles.
Ministry of Health.	Responsible for management and delivery of health services.	Health policy and management agency.	Data provider and public awareness roles. Participation in technical roles.
St Christopher Heritage Society	Leading non-governmental environmental pressure group.	Leading awareness and advocacy group. Technical support capabilities.	Data provider and public awareness roles. Participation in project technical advisory roles.

Nevis Historical Society	Leading non-governmental environmental pressure group.	Leading awareness and advocacy group. Technical support capabilities.	Data provider and public awareness roles. Participation in project technical advisory roles.
Solid Waste Management Corporation.	Government agency responsible for collection and management of solid wastes.	Important environmental management agency in health related matters.	Data provider and public awareness roles.
National Emergency Management Agency	Responsible for disaster response coordination and management	Information source for climate risk and vulnerability. Implementation role for adaptation.	Data provider and public awareness roles. Participation in project technical advisory roles.
Economic Planning Unit, Ministry of Sustainable Development	Responsible for coordination of multi-sector planning.	Important for efforts to integrate climate change concerns into development planning and activities.	Enhance coordination and synergy with stakeholders.
Statistics Division, Ministry of Sustainable Development	Provider of statistical data. Archiving center.	Important in providing data across a range of INC chapters.	Data provider.
Oil import companies (Sol, Texaco etc)	Importer of aviation fuels and other petroleum products.	Important distributor of petroleum products.	Data provider.

6.0 ASSESSING PROJECT IMPACT

The SNC project is expected to enable St Kitts and Nevis to prepare and submit its SNC to the UNFCCC, as well as to allow it to begin to mainstream climate change concerns into development planning.

At the beginning of the project, a practical framework to assess capacity development and the potential impacts of the national communication process will be developed. The framework will identify practical indicators to assess the impacts of the SNC in incorporating climate change concerns into development and sectoral planning, as appropriate. The project management will collaborate with the National Communications Support Programme (NCSP) on developing an impact assessment framework, linked to the different components of the SNC, and the possible indicators that may be used to assess impacts.

The development of the framework will be a country-driven process that seeks to bring the SNC process closer to development priorities in the context of national policy-making, and is aimed at designing an impact assessment framework that meets the country's needs and priorities in terms of facilitating the linkages between the SNC and development issues.

7.0 BUDGET

See Budget outlined at Chapter 2 "Total Budget" above.

8.0 DETAILED WORKPLAN

Outputs/Activities	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
Implementation arrangements and project inception:							-					
1. Contract the project office staff	X											
2. Establish technical teams	X	X										
3. Update the composition of the TAC	X	X										
4. Organize a project initiation workshop	X											
5. Maintain and upgrade the electronic network among			X	X	X	X	X	X	X	X	X	X
experts/institutions												
4.1 National circumstances												
1. Validate the gaps of information identified under					X	X						
stocktaking												
2. Identify the respective sources of information					X	X						
3. Collect data and information from different sources					X	X	X					
4. Fill the gaps, update and add the new information					X	X	X					
5. Draft the National Circumstances section under the SNC							X					
6. Circulate the National Circumstances section for comment,							X					
get comments.												
8. Finalize the National Circumstances section under the SNC							X					
4.2 GHG inventory												
4.2.1 The GHG inventory team maintained and												
strengthened												
1.Identify and mobilize national and international experts in		X										
targeted sectors and related areas of relevance												
2. Review the existing information on the previous GHG	X	X										
inventory and familiarize with guidelines												
4.2.2 IPCC Methodologies for GHG inventory estimates												
analyzed, selected and validated												
1. Analyze the acceptability of the available methodologies		X										
estimates												
2. Decide on methods and tools to be used for inventory		X	X									
3. Decide on the source categories to which surveys for filling		X	X									
data gaps will be carried out												
4.2.3 GHG inventory data collected			1	1	1	1						1
1. Review available activity data already archived		X	X									
2. Identify new activity data needed for estimates of GHG			X	X								
emissions for 1994-2000												
3. Identify possible sources of data		X										
4. Collect the necessary activity data from the available		X	X									
sources				L								
5. Identify gaps.		X	X									
Output 4.2.4 A completed national inventory for 2000 and s	selec	et ye	ars]	_	are	d	ı	1	1			
1. Re-estimate GHG emissions inventory of 1994				X			<u> </u>					
2. Estimate the GHG emissions inventory for 2000 and select				X	X							
years					¥7	* 7	-					
3. Prepare a draft inventory for 2000 and select years					X	X						

Outputs/Activities	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
including key source analysis, and uncertainty analysis.												
4. Technical peer review performed as part of QA/QC plan						X	X					
5. Organize a national workshop to present findings of the								X				
GHG inventory												
6. Incorporate comments received from the review process.								X				
10. Finalize the inventory to be submitted for SNC.									X			
Output 4.2.5 GHG inventory data and estimates									21			
documented and archived												
1. Archive activity data, emission factors and estimates					X	X	X	X	X	X		
4.3 Programmes containing measures to Mitigate climate of	hon	~^			Λ	Λ	Λ	Λ	Λ	Λ		
4.3.1 The Mitigation team established	Пап	ge			l				l			
		X										
1.Identify and mobilize national and international experts in targeted sectors and related areas of relevance		Λ										
2. Training activities undertaken		X	X	X								
4.3.2 Necessary data and relevant information for scenario	dore				loote	. d	mal	uzod	and	talra	n int	•
consideration for scenario development.	ueve	erop.	шеп	it coi	песи	eu, a	mary	yzeu	anu	таке	ıı ını	U
1. Consider estimates of GHG inventory for the base year	l			X	l				l			
2000				Λ								
				X								
2. Identify methodological tools and approaches.				X	X							
2. Collect all relevant macro-economic data and set				A	Λ							
assumptions				3 7								
3. Identify GHG abatement measures presently being				X								
undertaken				T 7	₹7							
5. Review the status of the relevant policy and legal				X	X							
framework				T 7	₹7	T 7						
6. Training activities undertaken.				X	X	X						
4.3.3 GHG baseline scenario developed.	1		1	1	1		1	1	i			
1. Develop a revised baseline GHG emission scenario for						X						
energy & transport	e 1											
4.3.4 GHG Mitigation measures / technology options identi	nea.		_	1	1	T 7	_		1			
1. GHG abatement measures /technology options identified.						X						
Output 4.3.4 GHG Mitigation scenario developed / updated	l			ı	1				1			
1. Develop GHG abatement scenario for energy and transport						X						
sectors												
2. Estimate the GHG reduction potential and other economic						X	X					
costs for scenarios for energy and transport sector.				<u> </u>								
Output 4.3.5 GHG Mitigation priority measures / technology	gies i	iden	tifie	d	1			T	1			
1. Undertake an assessment of measures and select 3-4								X				
priorities.												
2. Identify barriers and policy needs for implementation of								X	X			
such measures.												
3. Training activities undertaken.								X	X			
Output 4.3.6 GHG Mitigation analysis completed for the po	eriod	1 200	00-2	<u>025.</u>								
1. Develop the draft chapter of the GHG abatement analysis									X			
2 Circulate the draft chapter of GHG abatement analysis for									X			
stakeholder review				ļ								
3. Organize a national workshop to present findings from the									X			
GHG abatement analysis				ļ								
4. Finalize the GHG mitigation analysis chapter to be									X	X		
submitted as a part of the SNC												
5. Public awareness activities					X	X	X	X	X	X	X	
6. Archive and document GHG mitigation analysis related							X	X	X	X	X	

Outputs/Activities	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
studies and estimates												
4.4 Programmes containing measures to facilitate adequate adaptation to climate change (V&A)												
4.4.1 The Vulnerability and Adaptation team established												
1.Identify and mobilize national and international experts in		X										
targeted sectors and related areas of relevance												
2. Training activities undertaken		X	X	X								
Output 4.4.2 Specific approaches, tools and methods agreed	d. Pe	rtin	ent	data	and	l inf	orm	atio	n ass	embl	led,	
analyzed, and synthesized.												
1. Decide on the range of the assessment: scope, approaches,		X										
tools and methods												
2. Identify and collect the type and scope of data and		X										
information needed												
3. Develop environmental and socio-economic baselines for		X	X	X								
use in assessments.												
Output 4.4.3 Vulnerability and risk assessment of priority	secto	rs c	omp	lete	d	•	•		•			
1. Refine and utilize scenario modeling to determine			X	X								
magnitude of vulnerability.												
2 Assess vulnerability of climate and sectors in priority			X	X	X							
areas/sectors												
3. Public awareness activities implemented			X	X	X							
Output 4.4.4 Adaptation measures and action plan identifie	ed.		1	I	1	I	I	1	l		ı	
1. Develop adaptation response measures				X	X				l			
Adaptation Training measures implemented					X	X						
3. Public awareness measures initiated				X	X	X	X	X	X	X	X	X
Output 4.4.5 V&A Chapter completed				21	21	21	21	21	21	11	21	71
1. Develop the draft chapter of the V&A							X					
2. Circulate the draft chapter of V&A for internal review and							21	X				
comments.								Λ				
3. Circulate the draft chapter of V&A for stakeholder review								X				
4. Organize a national workshop to present findings from the								Λ	X			
V&A									Λ			
5. Finalize the V&A chapter to be submitted as a part of the									X			
SNC									Λ			
6. Archive and document all the V&A related studies and							X	X	X	X		
estimates							Λ	Λ	Λ	А		
4.5 Constraints, gaps, and related financial, technical and o	ono	aite:	nood	l								
, 0.1	_				2000	:4)	:dar	.4:fi	d 0x	.d	20240	a
Output 4.5.1 Constraint, gaps and related needs (financial	, teci	IIIIC	ai ai X	X	apac	ity)	laei	lume	a ar	ia re	orte	u
1. Review the status of the constraints and gaps from previous studies			Λ	Λ								
					X	X	X					
2. Identify new constraints and gaps for each thematic area					Λ	Λ	Λ	X				
3. Summarize constraints, gaps and needs identified and draft								Λ				
a synthesis report as a separate chapter								3 7	3 7			
4. Distribute draft chapter for comments, collect comments								X	X			
and reflect in the document									T 7			
5. Finalize the chapter.	L	6.41	L			0.41			X			
4.6 Other information considered relevant to the achievement of the objective of the Convention												
Output 4.6.1 The information compiled, analyzed, and fina	lized	l .	I			l	ı —		i			
1. Collect, synthesize and provide the overall information			X	X	X	X						
relevant to the Article 6 activities												
2. Collect, synthesize and provide the information on steps				X	X	X						
taken to integrate climate change into socio-economic												
policies.												

Outputs/Activities	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
3. Collect, synthesize and provide information transfer of and						X	X	X				
access to environmentally sound technologies.												
4. Collect, synthesize and provide information on the research						X	X	X				
and systematic observation systems												
5. Collect, synthesize and provide information on other						X	X					
relevant ongoing projects												
6. Summarize all the information collected in a draft chapter.							X					
Distribute it for review and comments internally.												
7. Incorporate comments to draft chapter and finalize report.							X	X				
8. Public awareness activities undertaken					X	X	X	X	X	X		
Output 4.6.2 SNC produced, translated, submitted and												
disseminated												
1. Compile draft of SNC									X			
2. Circulate the draft for comments and review and									X			
incorporate them												
3. Obtain political approval										X		
4. Finalize the SNC											X	
5. Publish SNC											X	
6. Submit SNC to the COP of the UNFCCC											X	

Appendix C: Terms of Reference

1.0 TOR for National Project Manager

Working within the framework of the Department of Physical Planning and the Environment, the Project Manager (PM) will be responsible for the management, co-ordination and supervision of the implementation of the SNC project. Specifically, responsibilities include are but not limited to:

- Supervising and ensuring timely implementation of the project relevant activities as scheduled in the working plan;
- Preparation of a detailed work plan for the project and draft terms of reference for the subcontracts;
- Timely and accurate preparation and submission of quarterly and other financial and project reports to UNDP;
- Developing the scope of work and TORs and other procurement documentation required to identify and facilitate recruitment of experts and consultants;
- Coordinate activities of the TAC and other project committees;
- Supervise project support staff and consultants who are recruited to provide technical assistance
- Organize and supervise the workshops and training needed during the project;
- Liaison with relevant ministries, national and international research institutes, NGOs, and other institutions in order to involve their staff in project activities, and to gather and disseminate information relevant to the project;
- Preparation of periodic progress reports of the project;
- Control the expenditures and otherwise ensure adequate management of the resources provided for the project;
- Works with relevant national authorities to ensure that the SNC process is in the line with guidance provided by the COP of the UNFCCC and contributes to the improvement of the UNFCCC reporting process.

Qualifications and Experience

- University degree in environment-related studies or related disciplines;
- Good understanding of environment/development issues;
- At least five years senior project management experience relevant to the project;
- Excellent communication (Written and Oral) Skills;
- Demonstrated experience in project management;

- Demonstrated experience in working with government, donors and the United Nations system;
- Appropriate experience working with government structures at local levels, and working with NGOs and private sector;
- Substantial experience in Government and in inter-departmental procedures preferred
- Familiarity with international negotiations and processes under the UNFCCC
- Familiarity with computers and word processing

2.0 TOR for Project Technical Advisory Committee (TAC)

The TAC is expected to provide technical support and oversight to project activities including:

- 1. Providing technical assistance and support during implementation of project activities.
- 2. Review and monitor all technical project components.
- 3. Review and make necessary comments on draft documents prepared by the national clime change teams
- 4. Receive information and offer guidance on the status of the implementation of the project activities and problems.
- 5. Promoting awareness among key stakeholders of climate change issues and concerns
- 6. Facilitating exchange and dissemination of information on climate change among technical agencies in St Kitts and Nevis and
- 7. To provide recommendations to policy makers and the general public on matters related to climate change.

The TAC will be assisted in its work and deliberations by the PM who will attend meetings of the TAC as an *ex officio* member. The TAC will agree on its own working procedures but shall meet at least three times annually.

3.0 TOR for GHG Inventory Consultant

A national GHG inventory consultant is required to work in consultation with, and under the guidance and supervision of the National Project Manager. Specifically the GHG consultant will be required to:

- Assist in establishing the team of experts for performing the GHG inventory on the basis of the roster of experts;
- Provide the training sessions on GHG inventory using approved IPCC methodologies and guidance material;
- Prepare a detailed work-plan for GHG inventory exercise on the basis of the overall project work plan;
- Preparation of GHG Inventories for St Kitts and Nevis for 2000 and select years, utilizing IPCC methodologies and guidance materials and in accordance with the requirements of decision 17CP.8;
- Identify gaps and key sectors for the GHG inventory;
- Identify and recommend on measures for enhancing institutional arrangements for preparation of the inventory in St Kitts and Nevis;
- Prepare and submit to the Project Manager a draft copy of the GHG Inventory;
- Incorporate appropriate comments received from the review process;
- Draft the National Inventory Report for the SNC including an executive summary.
- Submit the report to the National Project Manager.

4.0 TOR for Vulnerability and Adaptation Assessment Consultant(s)

A consultant is required for coordination of activities relating to undertaking climate change vulnerability and adaptation assessment for St Kitts and Nevis, including the preparation and submission of the report to the relevant authorities.

The consultant(s) is expected to have conducted similar previous activities and to be familiar with the eastern Caribbean. The consultant is expected to utilize documented and internationally recognized scientific and technical methodologies, tools and approaches. These should include approaches developed by the IPCC, UNEP, UNFCCC and UNDP.

The consultant's activities are expected to contribute towards capacity building in St Kitts and Nevis and should be aimed at transferring skills and awareness to participants in the assessment activities.

In carrying out the assessment the consultant will be expected to inter alia:

- ➤ Elaborate on the scope (geographic, thematic, sectoral coverage, time horizon) of the V&A study;
- > Design a strategy to build on but advance what was done within INC;

- ➤ Elaborate on the scope of studies to address sectors/regions identified as sensitive/vulnerable to climate change,;
- ➤ Preparing a detailed work plan for each component of the study to be carried out, including a strategy to involve the relevant stakeholders;
- ➤ Designing a strategy, as applicable, to link the V&A studies with previous and ongoing related projects/activities (e.g., land degradation, biodiversity, international waters.)

5.0 TOR for Mitigation Consultant

The GHG Mitigation consultant will work in consultation with and under the guidance and supervision of the Project Manager. The consultant is expected to utilize internationally recognized and accepted methods and tools.

Specifically, his\her responsibilities include but are not limited to the following:

- 1. Assist in establishing the team for performing the GHG mitigation analysis;
- 2. Preparation of a detailed work-plan for GHG abatement analysis on the basis of the overall project work plan;
- 3. Lead the data and information collection process;
- 4. In consultation with the Project Manager, decide on methodologies for the conduct of the mitigation assessment including elaboration of scenarios for the priority sectors;
- 5. Have technical responsibility for preparation of the GHG Mitigation report for the SNC:
- 6. Facilitate relevant consultations/workshops;
- 7. Facilitate training and capacity building activities;
- 8. Ensure synergy with other relevant national, regional and international projects;
- 9. Ensure the timely and effective management of the activities as scheduled;
- 10.Incorporate comments received from the review process;
- 11.Draft the GHG Mitigation assessment Report and respective chapter of the SNC along with the respective part of executive summary.

Generic Terms of reference for scoping and implementing the V&A component of the National Communication

These generic terms of reference for the preparation of the V&A studies identify the basic set of activities that the V&A expert/consultant will be responsible for under the supervision of the National Communication's Coordinator. It is important to note that these generic terms of reference do not intend to limit the work of the expert but to guide countries on the general profile of the V&A expert and on the activities generally expected to be carried out.

Profile of the V&A expert/consultant

The V&A expert should be very knowledgeable and with hands-on experiences on V&A issues, have a solid understanding of the gaps and needs for developing/improving vulnerability assessments, and have technical expertise in the formulation of adaptation options. The V&A expert should be able to scope technical studies in the V&A area and design an implementation strategy to carry out the different V&A activities within the framework of the NC. He/She should also have a solid understanding of the institutional arrangements and resources required to carry out the V&A work.

Although the NC project document already provides the framework for the V&A studies, the expert should be able to advise on any adjustments if needed, both at the organizational and technical levels, for a successful implementation of the V&A studies.

Activities

In general, the V&A expert/consultant should be responsible for ensuring that the following set of activities is carried out. Emphasis on different activities will depend on the scope of the work already described in the NC project document and/or on the specific activities the V&A expert would be assigned to.

Policy and institutional issues

- 1. Identify the key policy issues the V&A study of the SNC project aims to address, e.g.,
 - a. to scope the scale of risks associated with projected climate change;
 - b. to aid in the identification of priorities for adaptation;
 - c. to support the development of a national adaptation strategy.

- 2. Identify the expected output of the V&A study of the SNC project on the basis of the project document, e.g.,
 - a. impacts assessment at the sectoral level for the given priorities identified in the project document;
 - b. a national adaptation strategy, including policies, programs and projects.
- 3. Develop a clear strategy to link the V&A outputs to national development planning. This would include, among others:
 - a. assessment of institutional arrangements/stakeholders engagement required to facilitate linking the outcome of the V&A studies to sectoral or national planning;
 - b. framework for assessing how the above linkage can be monitored and measured in the short and long terms, for instance through the development of practical indicators.

Technical issues

Scope of the V&A study

- 4. Elaborate on the scope (geographic, thematic, sectoral coverage, time horizon) of the V&A study, e.g.,
 - a. designing a strategy to build on but advance what was done within INC, and while applicable, NAPA project;
 - b. elaborating on the scope of studies to address sectors/regions not covered by INC, sectors/regions identified as sensitive/vulnerable to climate change, as per the NC project proposal;
 - c. preparing a detailed work plan for each of the study to be carried out, including a strategy to involve the relevant stakeholders, timeline, etc.;
 - d. designing a strategy, as applicable, to link the V&A studies with previous and ongoing related projects/activities (e.g., land degradation, biodiversity, international waters.)

Methodological framework

- 5. Elaborate on the overall methodological framework for the V&A study as per the project document and in consultation with the project coordinator. In doing so, the V&A expert should ensure that:
 - a. The proposed methodological framework is the most appropriate given the policy questions to be addressed, the characteristics of the study (e.g., sectoral focus, spatial and temporal scales, stakeholders involved, and data requirement, etc.), and data availability;
 - b. In-country expertise required for such a methodological framework is available. If needed, the V&A expert should develop a strategy to address technical capacity gaps. For instance, by exploring the possibility of applying another framework in which more in-country expertise exists, or by designing a training/technical backstopping strategy, etc.

Scenarios development

Identify the types of scenarios required to conduct the V&A assessment, e.g., climate, socio-economic, sea level, adaptive capacity, technology, land-use land-cover.

Identify the temporal and spatial resolution needed for these scenarios (e.g., national, sub-national, watershed, community, farm level, multi-decadal average, annual, monthly, daily, mean conditions, extreme events, etc.). In doing so, the expert should justify the choices.

Develop the strategies for developing such scenarios, e.g., model-based, expert judgment, etc.

In the preparation of the scenarios development strategy, the expert should assess the feasibility of the scenario needs and the methods for developing these scenarios, given the characteristics of the studies, and data availability. For instance, the expert would be expected to advice on alternative options to running regional climate models or other resource intensive and time consuming exercises. The V&A expert would also assess whether there is enough in-country expertise to develop such scenarios and/or identify options to address the needs for additional expertise.

Sectoral assessment (to be considered by each of the sectors to be covered in the V&A study)

Elaborate on the methods and tools, as per the project document, chosen to undertake sectoral assessments, e.g., numerical models, elicitation of expert views, stakeholder consultations, focus groups, etc. In doing so, the expert will advise on any adjustments needed to the options identified in the project document.

Provide justifications for the selection of the methods/tools considering the research questions, characteristics of the study, and requirements of data and technical expertise of these methods/tools.

Assess in-country expertise required to apply the selected methods/tools and prepare training/technical backstopping strategy as required.

Develop a strategy to integrate findings from sectoral assessment, as needed. For instance, by applying an integrated model, synthesizing sectoral information, etc.

Technical assistance needs

Develop a technical backstopping/training strategy to strengthen the national capacity needed to carry out the different V&A studies, This would include details on the type of support needed (training courses on particular methodological frameworks/tools, guidance material, technical documents and good practice) and the, time line for such support.

Appendix D: Endorsement letters

GEF Operational Focal Point



ST. CHRISTOPHER AND NEVIS SUSTAINABLE DEVELOPMENT MINISTRY OF FINANCE, SUSTAINABLE DEVELOPMENT, INFORMATION AND TECHNOLOGY

DEPARTMENT OF PHYSICAL PLANNING AND ENVIRONMENT P O BOX 597, BLADEN COMMERCIAL DEVELOPMENT, WELLINGTON ROAD, BASSETERRE, ST. KITTS TELEPHONE (869) 465-2277 / (869) 465-2521 EXT. 1251 - FAX (869) 465-5842

September 5, 2006

Ms Rosalina Wilshire Resident Representative UNDP Barbados and the OECS Bridgetown Barbados

Dear Madam.

The Government of St. Kitts and Nevis hereby communicates to the United Nations Development Programme its endorsement of the Project Proposal for the 2nd National Communications for St. Kitts and Nevis.

The Government further wishes to communicate to the UNDP its continued commitment to advance the work of the United Nations Framework Convention on Climate Change which lends itself to the overall benefit of Small Island States. The Government conveys its assurances to continue to advance its working relationship with the United Nations Development Programme and its affiliates.

Accept Madam, the assurances of our highest consideration.

GEF Operational Focal Point

Ministry of Sustainable Development

UNFCCC Focal Point



ST. CHRISTOPHER AND NEVIS SUSTAINABLE DEVELOPMENT MINISTRY OF FINANCE, SUSTAINABLE DEVELOPMENT, INFORMATION AND TECHNOLOGY

DEPARTMENT OF PHYSICAL PLANNING AND ENVIRONMENT P O BOX 597, BLADEN COMMERCIAL DEVELOPMENT, WELLINGTON ROAD, BASSETERRE, ST. KITTS TELEPHONE (869) 465-2277 / (869) 465-2521 EXT. 1251 - FAX (869) 465-5842

September 5, 2006

Ms Rosalina Wilshire Resident Representative UNDP Barbados and the OECS Bridgetown Barbados

Dear Madam.

I wish to inform you that the Department of Physical Planning and Environment is committed to further the work set out in the United Nations Framework Convention on Climate Change and its subsequent amendments.

As Focal Point for Climate Change within the Federation of St. Kitts and Nevis, I wish to further communicate to the UNDP our full endorsement of the Project Proposal submitted to conduct the St. Kitts and Nevis 2nd National Communications.

I look forward to working with the UNDP on this and other projects in the future.

Climete Change Cocal Point

Department of Physical Planning and Environment

SIGNATURE PAGE

UNDAF Outcome(s)/Indicator(s): (Link to UNDAF outcome., If no UNDAF, leave blank	Country: St. Kitts and Nevis					
Outcome:	Stronger Environmental management system with improved levels of natural disaster preparedness.					
Indicator:	Island strategy for conservation including policy and advocacy and supporting education programmes.					
Expected Outcome(s)/Indicator (s):	Digital divide reduced through technology development. Appropriate technology identified.					
(CP outcomes linked t the SRF/MYFF goal and service lin	ne)					
Expected Output(s)/Indicator(s): (CP outcomes linked t the SRF/MYFF goal and service lin						
Implementing partner: (designated institution/Executing agency)	_Department of Physical Planning.					
Other Partners: (formerly implementing agencies)						
Programme Period: 2006-2010 Programme Component: Project Title:_PIMS #3452 CC EA SNC of St. Kitts &N Project ID: 000 45305 Project Duration: 3 years Management Arrangement: NEX	Allocated resources:					
Agreed by (Government):Agreed by (Implementing partner/E: Agreed by (UNDP):	xecuting agency):					