

Government of GRENADA

United Nations Development Programme

**GRENADA' SECOND NATIONAL COMMUNICATION PROJECT
DOCUMENT**

PIMS # 3451, CC-Mitigation, EA, SNC Grenada

Brief description

This document aims at enabling Grenada to prepare and to report its Second National Communication to the Conference of the Parties (CoP) of the UN Framework Convention on Climate Change (UNFCCC) according to 17/CP.8 and other guidelines. The study draws on the experiences of the INC and work conducted under CPACC, ACCC and MACC projects to identify areas of acute vulnerability to the impacts of climate change. The document includes: (i) an inventory of GHG emissions and removal (ii) an assessment of climate change vulnerability and adaptation and (iii) an assessment of climate change mitigation measures. The preparation of the SNC and its implementation are also expected to result in an increase in public awareness of climate change issues and concerns and to strengthen national capacity for responding to climate change.

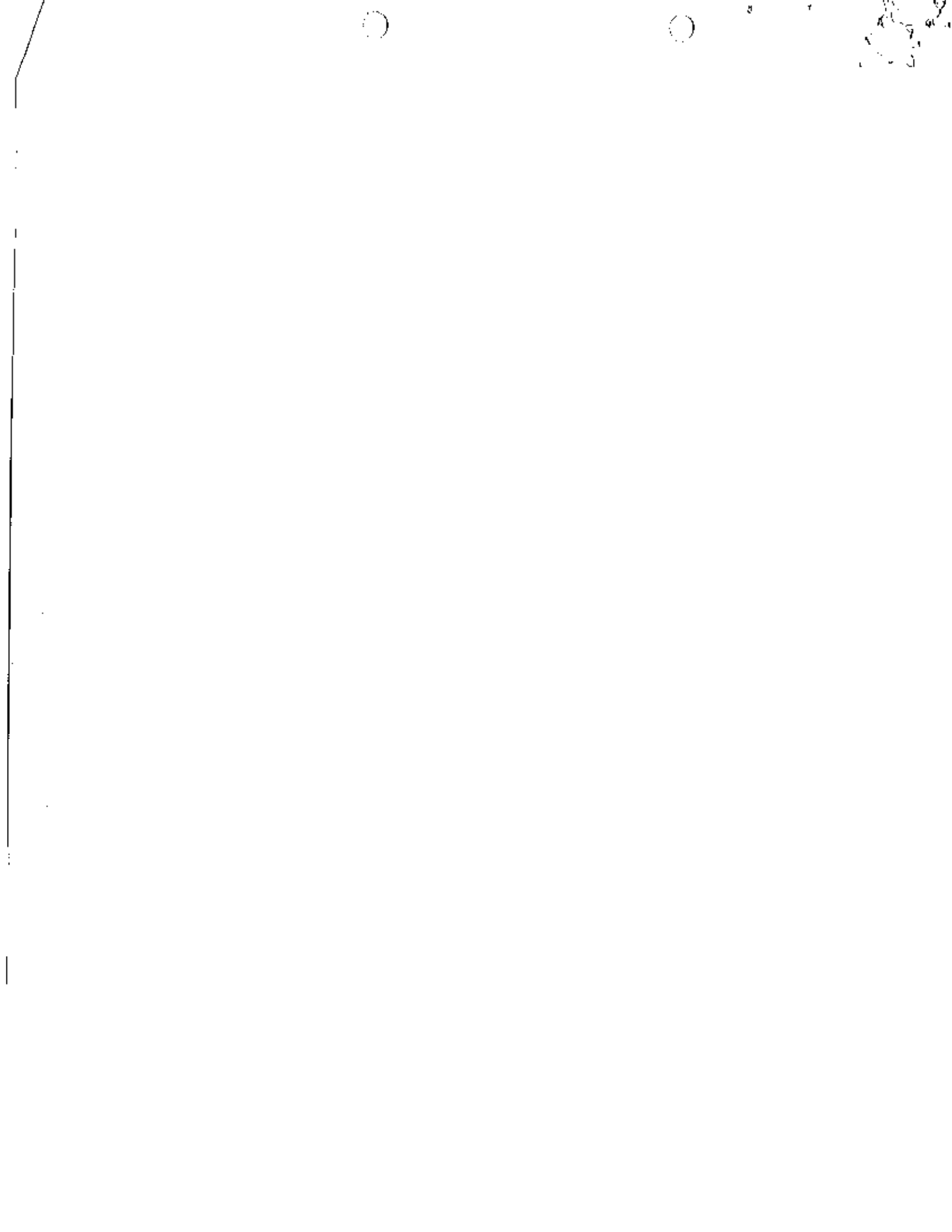
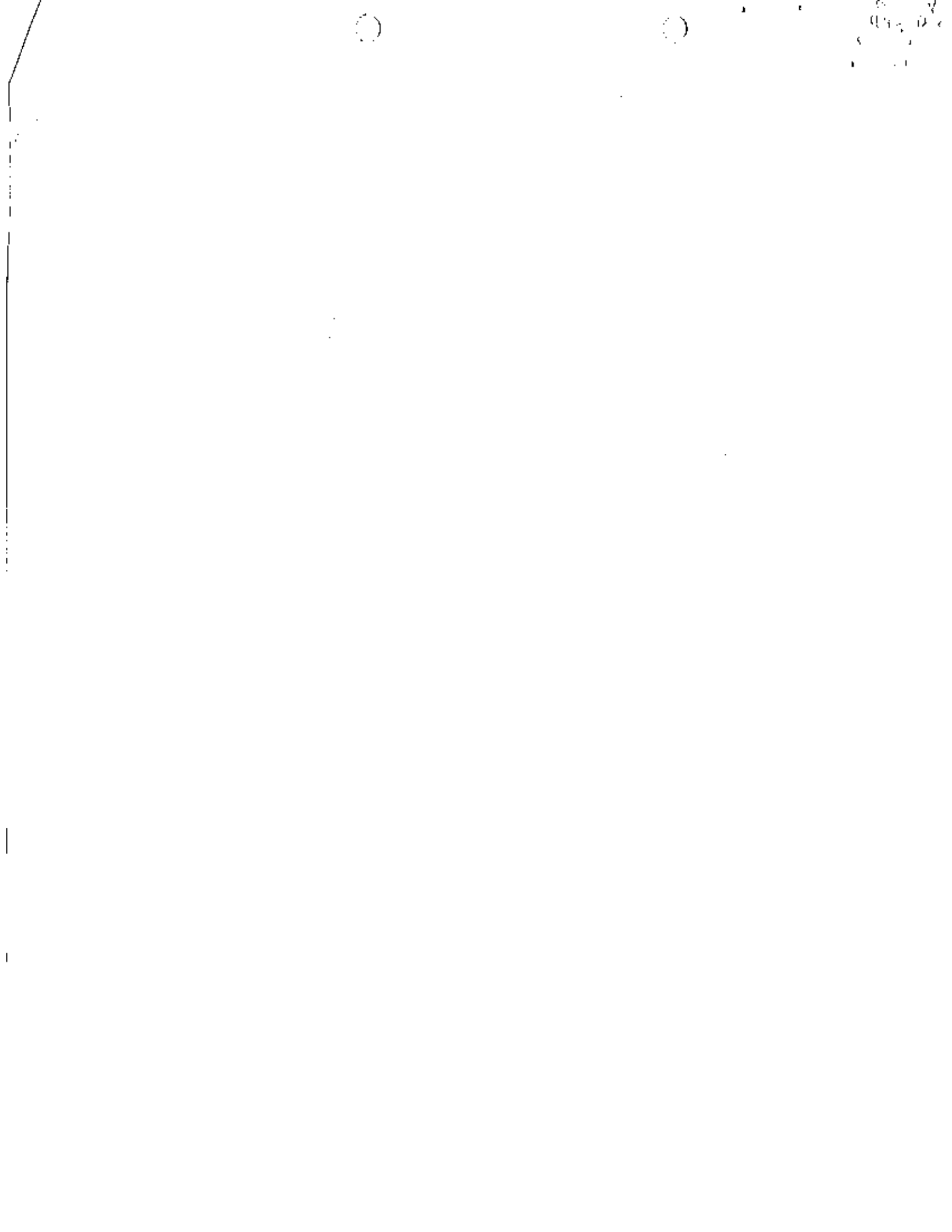


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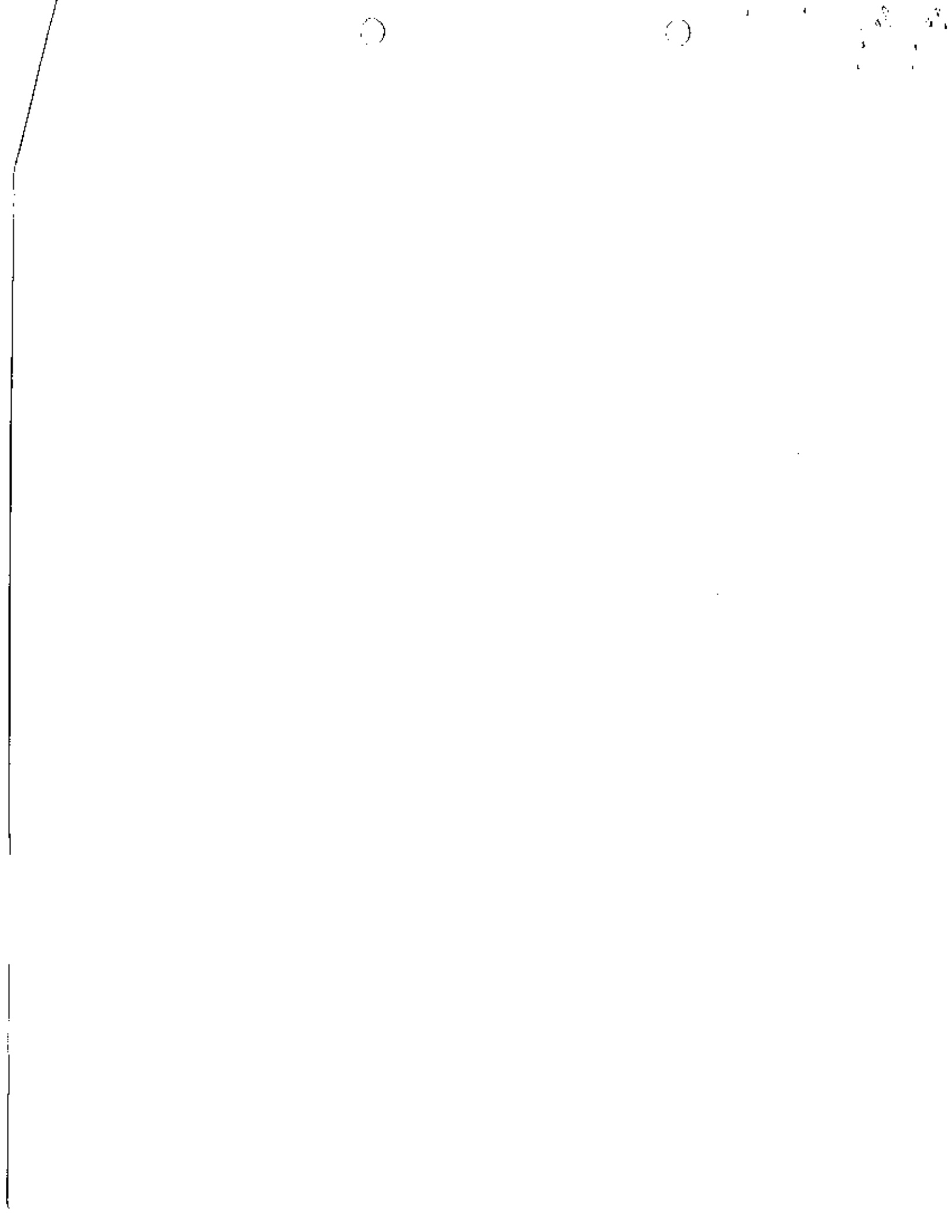
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ACRONYMS

ACCC	Adaptation to Climate Change in the Caribbean
CARICOM	Caribbean Community of Nations
CCCCC	Caribbean Community Climate Change Centre
CDB	Caribbean Development Bank
CFC	Chlorofluorocarbons
CHAMP	Caribbean Hazard Mitigation Capacity Building Programme, CDERA
CIDA	Canadian International Development Agency
CoP	Conference of the Parties to the UNFCCC
CPACC	Caribbean Planning for Adaptation to Global Climate Change
DMFC	Disaster Mitigation Facility for the Caribbean, CDB
GEF	Global Environment Fund
GETF	Global Environment Trust Fund
GCC	Global Climate Change
GOG	Government of Grenada
IPCC	Inter-Governmental Panel (of Experts) on Climate Change
MACC	Mainstreaming Adaptation to Climate Change
MoF	Ministry of Finance
NBSAP	National Biodiversity Strategy & Action Plan
NCC	National Climate Change Committee
NCCFP	National Climate Change Focus Point
NDO	National Disaster Office
NGO	Non-Governmental Organization
NPD	National Project Director
NPM	National Project Manager



NHMC	National Hazard Mitigation Council
NHMP	National Hazard Mitigation Policy
NHRM	Natural Hazard Risk Management
NPDP	National Physical Development Plan
NSTC	National Science and Technology Council
OAS	Organization of American States
OECS	Organization of Eastern Caribbean States
PDC	Policy Development Committee
PSCCC	Project Steering Climate Change Committee
SDC	Sustainable Development Council
SIDS	Small Island Developing States
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UWI	University of the West Indies
UWICED	University of the West Indies Centre for Environment and Development
V&A	Vulnerability and Adaptation Assessment

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Part 1: Elaboration of the Narrative

1.1 Situation Analysis

1. Grenada¹ is located in the Caribbean Sea and is situated between the latitudes 11°59' and 12°20' North, and longitudes 61°36' and 61°48' West. The island of Grenada has a width of 18 km, a length of 34 km, a coastline of about 121 km and an area of 312 km². The highest point is Mount Saint Catherine, at 840m. Carriacou is much less mountainous than Grenada, with an area of about 34 km². Carriacou is located 24 km to the northeast of Grenada while Petit Martinique lies 4 km east of the northern section of Carriacou. Petit Martinique is 2.3 km².
2. Grenada experience impressive growth from real GDP growth of 4.42% in 1997 to 7% in 2000, a period of relative stability. The September 11th, 2001 disaster in the United States of America led to a drastic cut back in travel, contributing to a decline in GDP of 4.36%. The economy is relatively diversified with agriculture, manufacturing, tourism, communications and transportation all making significant contributions to output 9%, 7.4%, 8.6%, 12%, 13.3% respectfully on 2003.
3. Based on pre Hurricane Ivan projections, it was anticipated that the economy of Grenada would grow at an overall annual average rate of 5.0%, accounting for natural economic growth and the stimulus provided activities associated with hosting the Cricket World Cup in 2007. The fiscal operations of Central Government were expected to record a current account surplus of \$17m (1.3% of GDP) with an overall balance (after grants) of \$60m (4.8% of GDP). This was not realized due to the passing of Hurricane Ivan which in fact eroded the country's economic base and wreaked havoc on social sectors such as housing, education and health. The decline in GDP was estimated at 3.02% in 2004 and was anticipated to expand by 1.5% in 2005.
4. Grenada was represented at the Rio Convention in 1992 when the United Nations Framework Convention on Climate Change (UNFCCC) was drawn up and was one of the countries that signed the Convention on 3rd December in 1992 with formal ratification taking place on 11th August 1994.
5. Grenada was also an active participant in the negotiations on the Kyoto Protocol and ratified the Protocol on August 06, 2002. It was also one of the original Parties to the Protocol when it came into force on 16th February 2005.
6. Climate Change programming in Grenada began in 1997 as part of the regional project, Caribbean Planning for Adaptation to Global Climate Change (CPACC). Grenada participated in the four regional components of that project, and was the site for one of the pilot projects.
7. Grenada's pilot project was done on "*Coastal Vulnerability and Risk Assessment*" and examined the vulnerability to sea level rise of three selected areas in Grenada. The assessment highlighted the vulnerabilities of most of Grenada's economic infrastructure and

¹ The state of Grenada includes the islands of Grenada, Carriacou, Petit Martinique and some uninhabited small islands off the east coast of the Caribbean Sea. Hereafter, reference to 'Grenada' will also include Carriacou, Petit Martinique and those small islands, unless otherwise specified.

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computed estimates of the potential economic impact of sea level rise on Grenada. Grenada's Initial National Communication was instrumental in the establishment of a National Climate Change Committee (NCCC) comprised of stakeholders from all of the key sectors and institutions that were identified by the INC as having the potential to be directly impacted by Climate Change.

1.2 Strategy

8. The development objective of this project is to strengthen the technical and institutional capacity and assist mainstream Grenada's climate change concerns into sectoral and national development priorities. The immediate objective of this project is to enable Grenada to prepare and submit its Second National Communication to the UNFCCC and meet its Convention obligations.
9. Drawing on the conclusions reached in conducted needs assessment exercises, extending the primary research undertaken on the GEF regional project on coastal vulnerabilities, and implementing these activities within the framework of a climate change policy and strategic plan will enable the project goal to be achieved. Synergies with other ongoing climate change activities, such as, the GEF regional project on GHG inventories will be utilized. Equally, close liaison with related projects under Biodiversity and Land Use will improve the quality of decision making and project outputs.
10. The project will involve professionals previously involved in Grenada's INC and additional professionals will be invited to join the team. This strategy will enhance the sustainability of the teams and the process of preparation of national communication. Participation in training and workshops to be organized from UNFCCC Secretariat and UNDP will enhance capacities. Engagement of other local experts is a strategy which will enrich knowledge bases in the related areas. In addition, the project will hire an international consultant to over see the overall implementation of the Project. Grenada's experience in institutional and technical capacity building and development regarding National Communication would be sustained and leveraged to support the preparation of the SNC exercise.
11. Closely liaising with relevant governmental institutions, international organizations, academia and NGOs will ensure that the sense of national ownership is maintained and new expertise or understandings are introduced.
12. The initial emphasis of the project will include an assessment of adaptation and vulnerability for the selected areas, plus the preparation of the GHG inventory. Building on results of these studies, the options to mitigate climate change by facilitating adaptation to climate change and addressing GHG emissions for the selected area will be analyzed and reviewed in the light of country development context. Gaps, uncertainties and constraints along with other information related to the UNFCCC will be addressed as indicated by 17/CP.8. Finally, information gained during the project will be communicated to the CoP in the form of the Second National Communication of Grenada

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1.3 Management Arrangements

13. The project will be implemented through the Projects Unit within the Ministry of Finance. The National Climate Change Focal Point will be responsible for guiding the process with support from the National Climate Change Committee. For more information refer to Section 5 of Appendix B.

1.4 Monitoring and Evaluation

14. Monitoring responsibilities and events. A detailed schedule of project review meetings will be developed by the International consultant, in consultation with project implementation partners and stakeholder representatives for incorporation 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.
15. Day to day monitoring of implementation progress will be the responsibility of the Project Manager. It will be based on the project's Annual Workplan and its indicators. The Project Manager will inform the UNDP of any delays or difficulties faced during implementation through the Ministry of Finance, so that appropriate support or corrective measures can be adopted in a timely and remedial fashion.
16. Periodic monitoring of implementation progress will be undertaken by the UNDP 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.
17. Project Monitoring Reporting: The Project Manager 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)

18. 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.
19. 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.



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20. 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.

(b) Quarterly Progress Reports

21. 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.

(c) Technical Reports

22. 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.

(d) Audit Clause

23. The Government will provide the Resident Representative with certified periodic quarterly financial statements. 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

24. This Project Document shall be the instrument referred to as such in Article I of the Standard Basic Assistance Agreement between the Government of Grenada and the United Nations Development Programme, signed by the parties on 3rd December 1992. The host country-implementing agency shall, for the purpose of the Standard Basic Assistance Agreement, refer to the government co-operating agency described in that Agreement.
25. 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.
26. 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:

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- a) Revision of, or addition to, any of the annexes to the Project Document;
- b) 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;
- c) 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
- d) Inclusion of additional annexes and attachments only as set out here in this Project Document.

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PART 2: PROJECT BUDGET

Award ID: 40728		Award Title: PIMS/2018/CC/EA/SNC of Grenada		Project ID: 45243		Project Title: PIMS/2018/CC/EA/Second National Communication of Grenada		Executing Agency: Ministry of Energy and Planning (MEP)		PLANNED BUDGET	
CIRCUMSTANCES (corresponding indicators)	UNDP	PARLEY	Scheme/contract ID	Status Code	Budget Description	Year 1 (USD)	Year 2 (USD)	Year 3 (USD)	Total Budget (USD)		
						(USD)	(USD)	(USD)	(USD)		
1- National Circumstances	MFP		62000	71300	Local Consultants	2,650	2,650	-	5,300		
					Contractual services	2,500	2,000	-	4,500		
Sub-total						5,150	4,650	-	9,800		
2- National Greenhouse Gas Inventories	MFP		62000	71300	Local Consultants	20,000	20,000	8,000	48,000		
					Service Contracts-Individuals	5,000	5,000	5,000	15,000		
					Travel	4,000	3,000	2,000	9,000		
					Contractual services	3,500	3,500	3,500	10,500		
Sub-total						31,000	31,000	19,000	81,000		
3. Programmes containing measures to mitigate CC	MFP		62000	71200	International consultants	3,000	2,500	2,500	8,000		
					Service Contracts-Individuals	9,000	9,000	3,000	21,000		
					Local Consultants	6,000	6,000	6,000	18,000		
					travel	5,900	-	-	5,900		
Sub-total						14,900	17,500	11,500	43,900		

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OBJECTIVE (and corresponding indicators) (indicators)	RUSP (MFP)	Source of funds	Budget Code	Budget Description	Year 1 (USD)	Year 2 (USD)	Year 3 (USD)	Year 4 (USD)	Total Budget (USD)
4- Programmes containing measures to facilitate adaptation	MFP	62000	71200	International consultants	5,000	5,000		5,000	15,000
				Service Contracts-Individuals	8,000	8,000		8,000	24,000
				Local Consultants	8,000	7,000		7,000	22,000
				Travel	7,000	5,000		2,000	14,000
Sub-total									
5- Other relevant information	MFP	62000	71400	Local consultants	3,000	3,000		3,000	9,000
				Service Contracts-Individuals	1,000	1,000		1,000	3,000
				Travel	2,000	2,000		1,000	5,000
				Printing and Publications		1,500		1,500	3,000
Sub-total									
6- Constraints & Gaps: Related Financial, Technical, & Capacity Needs		62000	71405	Service Contracts-Individuals	1,500	1,500		1,500	4,500
				International consultants	800	800		800	2,400
Sub-total									
7- Technical Assistance		62000	71405	Service Contracts-Individuals	3,500	3,500		3,000	10,000
Sub-total									
8- Compilation, including Executive summary, Production & Dissemination		62000	71405	Service Contracts-Individuals	-	4,500		4,500	9,000
				Printing and Publications	-	-		6,000	6,000
Sub-total									

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CHIEFSES (and corresponding mandatory indicators)	KOSP (K3)	PLANNED BUDGET						Total Budget (USD)
		Source of Funds	Item Code	Project Description	Year 1 (USD)	Year 2 (USD)	Year 3 (USD)	
9- Project Management	MFP	62000	71405	Service Contracts-Individuals	25,000	25,000	25,000	75,000
		62000	72200	Equipment and Furniture	12,000	6,000	2,700	20,700
		62000	72400	Communic & Audio Visual Equip	4,200	2,000	2,000	8,200
		62000	72500	Supplies	1,400	1,400	1,600	4,400
		62000	74000	Operational costs	1,500	1,500	1,500	4,500
		62000	74500	Misc.	2,000	1,700	1,400	5,100
Sub-total								
10- Monitoring & Reporting	MFP	62000	74100	Professional Services	1,900	1,900	1,900	5,700
		62000	74210	Printing and Publications	900	900	900	2,700
		62000	74110	Audit Fees	2,200	2,200	2,200	6,600
Sub-total								

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PART 3: APPENDICES

Appendix A: Summary Report of Self-Assessment Exercise

A1. Introduction

27. The main objective of the self-assessment exercise performed in accordance with GEF Operational Procedures for the Expedited Financing of National Communications of Non-Annex I Parties (GEF/C.22/Inf.16) is to identify and validate the critical priorities for UNFCCC implementation in Grenada in general and the SNC project proposal in particular via a consultative and participatory process of needs assessment.
28. This exercise is considered as the first step in preparing the proposal for the SNC to the UNFCCC. The synthesis report produced as the main output serves as a baseline document for the SNC proposal. The synthesis report also functions as an input to identify and validate priorities for further in-depth studies and new areas of work to be conducted during the SNC. In addition, it will provide an assessment of gaps, uncertainties, barriers and lessons learnt during previous and ongoing activities. This approach helps to ensure that the SNC is built upon previous activities, studies, experiences, and institutional settings. The stocktaking exercise is focused on all thematic areas related to National Communication as indicated by 17/CP.8.
29. The approach applied for the stocktaking exercise is based upon the Terms of Reference by requesting a brief summary of activities and results achieved under prior and/or ongoing activities² that will ensure that proposal for the SNC is built upon them.
30. A Climate Change Consultant under the auspices of the Climate Change Focal Point led the stocktaking and also performed as the facilitator and coordinator of this exercise. The following tools were used for stocktaking: (i) a review of relevant documentation; (ii) interviews with stakeholders; (iii) discussions within the framework of a questionnaire; (iv) consultative meetings/workshops³. The stocktaking exercise brought the engagement of some 30 stakeholders from different ministries, public institutions, NGOs, academia and the private sector.
31. The technical guidance provided by the UNDP-GEF National Communication Support Program (NCSP) either on-line, or by distributed documents and recommendations made in the course of a workshop on stocktaking held at UN House, Barbados, on 5th and 6th May 2005, organized by the UNDP-GEF, has been consciously applied in this setting. In addition, the experiences of other countries completing the stocktaking exercise either under the SNC or NCSA have been considered. Other fora, mainly regional, have provided the possibility of

² All prior and ongoing projects for climate change funded by organizations such as the World Bank, the Global Environmental Facility (GEF) and the Organization of American States (OAS), which financed Caribbean Planning for Adaptation to Climate Change (CPACC) Project, the Top-Up phase - the Adaptation to Climate Change in the Caribbean (ACCC) Project and the Mainstreaming Adaptation to Climate Change (MACC) Project. These projects aimed at supporting Caribbean countries to more effectively cope with the adverse impacts of global climate change through vulnerability assessment, adaptation planning and related capacity building initiatives.

³ Three consultative meetings were held in the course of the stocktaking exercise. The first focused on the GHG inventory and mitigation. The second was concerned with Vulnerability and Adaptation. The main emphasis of the third was the social impacts of climate change.

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discussion and experience sharing. The *User Manual for the Guidelines on the Preparation of NC from non-Annex I Parties* prepared by the UNFCCC Secretariat and the *Guide for Self-Assessment of Country Capacity Needs for Global Environmental Management* also provided useful ideas on ensuring successful stakeholder participation.

32. For the thematic area of vulnerability and adaptation, prioritization of issues / studies was required. For establishing priority activities a prioritization matrix has been created. Matrix criteria were chosen through consultations with experts and stakeholders and the weighting applied to each of the activities is the same. Allocated scores for the criteria were totaled and issues with the highest points can, by definition, be considered as priorities.

A.2 Summary of the Assessment Findings

The Caribbean Planning for Adaptation to Climate Change Project

The Caribbean Planning for Adaptation to Climate Change (CPACC) Project began in 1997. It was a four year project financed by the World Bank, through the Organization of American States (OAS) and the CPACC Regional Implementation Project Unit in Barbados. The project was developed in response to concerns in relation to global climate change raised by CARICOM countries. Within the context of Grenada the CPACC project comprised four regional components⁴ and a single pilot action component⁵.

33. The CPACC project provided an opportunity for the participating countries to demonstrate their strengths and weaknesses in the management of climate change on an operational and technical level.

CPACC Project – Deficiencies Highlighted

34. Technical and experiential deficiencies were identified in the design and installation of the Sea-level Monitoring System, particularly in parts of the Eastern Caribbean, an issue which can be systematically addressed through appropriate training.
35. Global Positioning System (GPS) surveying activities enjoyed limited success primarily due to real limitations in vertical GPS surveying training, practice and equipment were identified. Consequently, vertical data references could not be appropriately recorded in order to conduct GPS sea-level surveys. The tendency to collect tidal data generated by other external parties has contributed to local sea-level surveys lacking the appropriate detail.
36. There was a lack of public education and outreach (PEO) data and information introduced to the database by the participating countries. A key CPACC Web site objective to provide current information and non-technical information was not met. Also, provisions to address network support and training were limited.
37. Formulation of Policy Framework for Integrated Adaptation Planning and Management – The lack of scientific data being fed into existing systems such as CRIS, IKONOS and GPS limit

⁴ The regional components were as follows: (i) design and establishment of a sea-level/climate monitoring network; (ii) establishment of databases and information systems; (iii) inventory of coastal resources; and (v) the formulation of a policy framework for integrated coastal and marine management.

⁵ A Coastal Vulnerability and Risk Assessment formed the pilot action component for Grenada.

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opportunities to conduct in-depth impact/vulnerability studies and develop global climate models. There is also limited capacity to conduct in-depth impact/vulnerability studies or develop downscaled global climate models within the participating countries.

38. The Coastal Vulnerability Assessment Pilot Study conducted in Grenada highlighted the limited regional capacity to conduct comprehensive Vulnerability and Adaptation Assessments in the face of funding constraints. Significant limitations in baseline data compromised the ability of in-depth analysis to be conducted for this exercise; existing systems such as CRIS, IKONOS and the GPS need to be populated with urgency.

Initial National Communication

39. Work on Grenada's Initial National Communication (INC) began in March 1999 and was completed in November 2000. The INC comprised of a comprehensive review of:

- (i) National circumstances - this section included features of geography, climate and the (socio-) economy of Grenada.
- (ii) An inventory of greenhouse gas emissions by sources – as a non-Annex I Party and in accordance with Article 4, paragraph 1 and Article 12, Grenada produced a national inventory of anthropogenic emissions by sources and sinks not controlled by the Montreal Protocol. The GHG inventories were estimated for the year 1994.
- (iii) An analysis of Grenada's vulnerability to the negative impacts of climate change – this section is designed to provide information on the existing strengths and weaknesses of Grenada, as they are impacted by climatic change and its implications.
- (iv) Proposed national measures aimed at fulfilling Grenada's commitments under the UNFCCC, which can be addressed through funding – this section dealt with the national, environmental, social and economic factors that influence the extent to which climate change issues are translated into adaptive or mitigative measures.
- (v) Proposed policy changes designed to promote the understanding of climate change within society at large and amongst decision makers.

National Circumstances

40. The National Circumstances section of the INC contained information on the physical resources, economic performance and public health. Decision 17/CP.8 of the CoP⁶ provides recommendations for non-Annex I Parties to complete the National Circumstances section. Consequently the SNC will include data and information not presented in the INC such as: (i) geographic, biodiversity and wild life data; (ii) economic data, which may more extensively apply per capita, and GDP indicators to greenhouse gas emissions; (iii) agricultural data, fisheries data; (iv) tourist data – energy consumption of tourists, tourist ecological footprints,

⁶ *Guidelines for the Preparation of National Communications from Parties not Included in Annex I to the Convention*, paragraphs 3 and 4.

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etc; (v) mapping in support of the above in general and in specific terms, highlighting watersheds, land use, beach location and their usage, population densities, fish stocks, etc.

41. This section will need to be demonstrably linked to information provided in subsequent chapters of the national communication. Therefore, all sections and themes pursued in subsequent chapters of the SNC should directly relate to the issues explored in the national communication section. Information included will link climate change policies and activities to other Conventions, ie, Biological Diversity and the Convention on Combating Desertification.

National Circumstances - Priorities/new areas of work under SNC

42. The National Circumstances section needs to be linked to information provided in subsequent chapters of the national communication. Therefore, all sections and themes pursued in subsequent chapters of the INC should directly relate to the issues explored in the national circumstances section. Information should be included which links climate change policies and activities to other Conventions, ie, Biological Diversity and the Convention on Combating Desertification.
43. Referring to the new UNFCCC guidelines, the National Circumstances chapter under Grenada's SNC shall contain information on the following items: (i) Geographic profile; (ii) Climate profile (iii) Natural resources: water resources, forests, land use, biological and ecosystem diversity; (iv) Economic and sector profile: agriculture, livestock, energy, mining, transport, industry, tourism, fisheries, (v) Infrastructure: population, public health, education, environment; (vi) Institutional arrangements relevant to the implementation of the UNFCCC and NC preparation process.
44. The geographic profile information will need to be expanded to include a resume of Grenada's geological characteristics such as soil type and extrusive disposition. Wildlife information should be included, making reference to endangered species such as the Grenada Dove. The role played by rivers and their location were not highlighted in the INC. The geographic profiles of Carriacou and Petit Martinique should be detailed in the SNC.
45. The climate profile (temperature and precipitation) will require updating in the face of extreme weather events. However, in the absence of a full 30 year climate time series, extensive climatic data analysis will not be possible.
46. Information on public forest reserves, dry forests, and land use will be amended. Updates will also be made to legislative and policy developments regulating forestry and land use in Grenada.
47. Information on sand types and beaches as it relates to sand mining and erosion will be introduced.
48. GDP trends for the period 1990-2004 will be introduced. The economic and sector profile will include a review of the economic impacts of Hurricanes Ivan and Emily as well as present information on post-hurricane strategies for economic development and tourism development strategies.

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49. Trends on population development, state of the public health and education during 1990-2004 will be updated. A review of the specific impacts of Hurricanes Ivan and Emily will be included as well as post-hurricane strategies for infrastructural development.
50. Include datasets and profiles for Carriacou and Petit Martinique with socio-economic data with pre and post hurricane scenarios.
51. The SNC will provide information on required institutional developments designed to more effectively implement the objectives of the UNFCCC. This section would provide information on issues such as: (i) the Climate Change Strategy in Grenada; (ii) the National Climate Change Focal Point; (iii) the role played by other institutional and non-institutional actors in the promotion of UNFCCC objectives in Grenada; (iv) the status of Grenada under the UNFCCC and Kyoto Protocol; (v) state of implementation of the UNFCCC and Kyoto Protocol; (vi) stakeholders involved in the process.

Greenhouse Gas (GHG) Inventory

52. The Grenada inventory of greenhouse gas emissions and removals by sinks was calculated for the base year 1994 using the Revised Intergovernmental Panel on Climate Change (IPCC) Guidelines (1996) for National Greenhouse Gas Inventories. The IPCC Good Practice Guidance has been used for the uncertainty assessment and key source estimates. Tier 1 and Tier 2 methods were used and the reference ('top-down') and sectoral ('bottom-up') approaches were used to estimate carbon dioxide released as a whole and carbon dioxide alongside the emission of other gases and particulates respectively.
53. Given that country specific data were unavailable default values as prescribed in the IPCC 1996 Revised Guidelines were used. The default values selected were for regions with similar geographies and practices to Grenada.
54. Activity data gaps have mainly been related to the data availability (disaggregated activity data or inconsistency with IPCC format) and their variability. Activity data reported were in aggregate form since the proposed emission factors were not developed in comparable circumstances. Lack of reporting from the private sector due to the lack of enforcing legislation was identified as a significant constraint for data gathering.

GHG Inventory - Priorities/New Areas of Work under the SNC

55. Grenada's second national GHG inventory will cover all sources and sinks as well as all gases as mandated by 17/CP.8. Therefore it will consider three direct GHGs: CO₂, CH₄ and N₂O and other indirect GHGs such as NO_x, SO_x and NMVOC. In addition, data on Grenada's HFC, PFC and SF₆ emissions, which were not included in the INC, should be included. Emissions released from bunker fuels will be estimated and reported separately as instructed by the guidelines. The second GHG inventory will report on estimates of aggregated CO₂ equivalent GHG emissions. The introduction of per capita CO₂, CH₄ and N₂O emissions information will enable an analysis of GHG emissions over time and regions within Grenada.
56. Although the base year for Grenada's second national GHG inventory will be 2000, data from preceding years (1994-1999) will be used in order to establish emission trends and provide a context for abatement analysis. Special attention will be given to the key source categories

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and a sensitivity analysis will be required in order to identify how or whether the key emissions source levels have changed.

57. Estimates of GHG emissions must be improved. Measures will need to be initiated to guarantee that information gaps are identified and filled with appropriate and updated data. Existing databases at the Customs & Excise Department, the Central Statistical Office and the Inland & Revenue Departments should be modified and harmonized in this pursuit.
58. The procedural stages characterizing GHG inventory development will be presented in a report forming part of the SNC.

GHG Abatement Analysis

59. Abatement technologies are currently not in widespread use in Grenada. Abatement analysis will involve a detailed examination of Grenada's GHG baseline and abatement scenarios. An effective GHG abatement measure would be to enforce the use of emission control devices on all motorized transport and the retrofitting of all imported vehicles with emission control devices. The introduction of compulsory exhaust emission testing as part of an annual vehicle examination of roadworthiness would also support this measure.
60. Environmental legislation could be used to enforce periodic environmental/energy audits and the introduction of emission abatement technology/energy saving techniques at all manufacturing sites within Grenada. The initial corporate costs could be offset by taxation incentives and or favorable abatement equipment purchasing conditions.
61. Analysis methodologies or tools, which should be used to mitigate GHG emissions, will be referenced in the SNC and their merits, or otherwise, highlighted. These include:

Bottom-up models:

- STAIR (Services, Transport, Agriculture, Industry and Residential energy model) : flexible model for long-term mitigation scenarios);
- GACMO: Spreadsheet module for project-based mitigation analysis;
- COPATH (Carbon Pasture Agriculture Total Harvesting): spreadsheet model for the estimation of carbon flows associated with forest use;
- LEAP: (Long-range Energy Alternatives Planning system) end-use accounting modeling system for energy;
- ETO (Energy Technology Optimization): compares energy supply sources to identify the lowest cost option;
- EM (Environmental Manual for power development): tool for the inclusion of environmental and cost data into decision-making for energy projects, especially in developing countries;

Top-down models:

- MARKAL-MACRO (market allocation macro-economic model): an energy-economy-environment optimization model (combined bottom-up and top-down);
- ENPEP (Energy and Power Evaluation Program); integrated approach for modeling energy system (partial bottom-up characteristics).

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GHG Abatement Analysis – Priorities/New Areas of Work under future NCs

62. Identify levels of CO₂ emissions associated with transport usage in St Georges, in particular Grand Anse, Carenage.
63. Subject data to analysis via a GHG emissions software tool.
64. Present a cost benefit analysis Report identifying the merits of introducing emission control devices on all motorized transport/the retrofitting of all imported vehicles with emission control devices/the introduction of compulsory exhaust emission testing as part of an annual vehicle examination.
65. Present a feasibility study charting the transition of two mitigation sentiments into legislation, namely: (i) the compulsory exhaust emission testing as part of an annual vehicle examination and (ii) periodic corporate environmental auditing of manufacturing sites throughout Grenada alongside the introduction of emission abatement technology at manufacturing sites.

Vulnerability and Adaptation

66. The initial findings of the pilot project *Coastal Vulnerability and Risk Assessment* under the CPACC fed into the vulnerability and adaptation analyses of the INC. The pilot project assessment considered Grenada's vulnerability to the effects of climate change, in particular, sea level rise, which was examined in three selected areas. The assessment in the INC focused on the anticipated impacts climatic changes will have on Small Island Developing States (SIDs). These impacts can be summarized as follows: (i) an increase in temperature; (ii) an increase in CO₂ concentration; (iii) a rise in sea level and (iv) an increase in the frequency and severity of extreme weather events.

67. Baseline data requirements included:

- Meteorological data
- Population location/density/housing
- National agriculture capacity
- Food security
- Water resources – water availability and quality
- Climate and health
- Environmental concerns (coastal erosion, reef exploitation /conservation)
- Waste management
- Tourism and energy consumption/environmental concerns
- The relationship between environmental concerns and socio-economic conditions
- Financial services, insurance and related economic services available for the management of climate risks

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Vulnerability and Adaptation - Priorities/New Areas of Work under the SNC

68. Four (4) adaptation options were selected through use of an Evaluation Matrix, which in turn was used to identify two (2) priority areas for vulnerability assessment and adaptation strategies. Evaluation Matrix is shown in Table I below.
69. The preliminary vulnerability assessment focused on areas with a range of vulnerabilities, ie, where there is both high vulnerability and a likelihood of significant climate change impacts. Four areas were identified for analysis, namely: (i) Telescope Region (St Andrews); (ii) Tufton Hall Region (St Marks); (iii) Grand Anse Bay and Area (St Georges); (iv) Sauteurs Bay and Area (St Particks).
70. A set of selection criteria with equal weighting was developed as follows: (i) Scale of Vulnerability; (ii) Relevance to National Development Priorities; (iii) Development Benefits; (iv) Data Availability. The point system is as follows: (i) High (+++); Medium (++); Low (+). On the basis of these selection criteria, Grand Anse Bay and Area alongside Tufton Hall Region were considered to be priorities for vulnerability and adaptation assessment. The summary matrix of evaluation is presented in Appendix A.3, Table 1.
71. The vulnerability assessment is sector-specific and will consider the following sectors: (i) water resources; (ii) agriculture; (iii) energy; (iv) forestry; (v) tourism; (vi) population and settlement.
72. The assessments focused on existing conditions i.e. current vulnerability to climate change impacts and on this basis the future vulnerability will be projected. The assessments will also review the scope and effectiveness of adaptation measures that may have been implemented. Three baselines will be developed for the selected area: (i) an environmental baseline (including climatic data); (ii) social baseline and (iii) an economic baseline.
73. Vulnerability and climate impact factors will be assessed through the use of indicators: For the climate system the indicators will be seasonal temperature, seasonal precipitation, wind, cloudiness and sunshine duration. The average change in mean runoff will be used as the main indicator for water resources. The main indicators for the energy sector will be energy demand, supply and GHG emission levels. For forestry the indicators will be levels of deforestation and land erosion. For the agriculture and livestock sectors the indicators will be plant production, irrigation systems, cattle breeding and poultry production. The indicators used under the tourism sector will be the impact of the sea level rise and the rise of temperatures. Settlements will be assessed in terms of the constructional suitability of accommodation and building location, plus the impact of droughts and flooding on public health.
74. The Vulnerability and Adaptation Assessments to be conducted under Grenada's SNC will demonstrate the value of a Climate Change Policy and Strategic Plan. The assessments will also support the process of mainstreaming climate vulnerability and adaptation assessment into the National Planning and Policy framework.
75. An assessment of vulnerabilities and adaptation measures will require a variety of analytical methods, including software tools. These will include: experimentation, impact projections, empirical analogue studies and expert judgment. Statistical models were developed or empirical analogues have been used (regional analogies of present climate and regional

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analogies of future climate). Socio-economic scenarios or integrated system models will need to be applied to the actual or projected environmental conditions.

Vulnerability and Adaptation – Priorities for the V&A Assessment

76. Begin key data entry and research projects for the SNC in general and specified V&A projects in the Grand Anse area and Tufton Hall region:
77. (i) Meteorological data entry – Climate Change Project, Meteorological Office. A climatologic baseline of 30 years is required for temporal analyses of climatic data. The digitalization of these data is an urgent requirement and may need to be (partially) financed by funds from the SNC project.
78. (ii) Beach management data – Climate Change Project, Forestry Division, National Science and Technology Council. New field surveys need to be undertaken to identify the current level of beach erosion in the Grand Anse area.
79. (iii) Population density and physical infrastructure data – Physical Planning Unit, Ministry of Works, Statistical Office, Lands and Surveys Division (Min of Agriculture), NaDMA. Localized data on population density and physical infrastructure will be required for V&A projects.
80. (iv) Environmental data – Ministry of Health and Environment, Ministry of Agriculture, Forestry Division, Grenada Board of Tourism, NaDMA. Sea level rise, coastal erosion, coral reef location and damage data, hydrological analysis, etc, will be required for V&A projects as will localized data on forestry, flora and fauna inventories for project locations, tourist ecological footprints; data should be updated periodically in keeping with good Hazard Management Practice. Resources need to be identified for the mapping of forestry, flora and fauna data.
81. (v) Water resources data – NAWASA, Ministry of Works, Communications and Public Utilities, NaDMA. (a) water quality and availability data will be required for the V&A projects from NAWASA; (b) water infrastructure flows and hazard spots should be updated and digitally recorded; Water Treatment Plants must be recorded and maintained throughout Grenada. It is imperative that resources are identified for this ongoing operation.
82. (vi) Energy resources data – GRENLEC, Ministry of Works, NaDMA, Grenada Board of Tourism. Local data on energy usage patterns, etc will be required for V&A projects.
83. (vii) Given that limited resources compromise efforts to effectively maintain, update and analyze data, which should be held by Public Ministries and utility organizations, a National Communication Data Maintenance Protocol will need to be formulated to guarantee required data maintenance through Public Ministries and utility organizations. This protocol will feature in the proposed Climate Change Policy and Strategic Plan.
84. Tufton Hall Project: support the restoration of critical watersheds and natural environmental capacities by primarily: (i) enhancing water quality and availability by: (a) facilitating engagements with the public and utility services, (b) introducing good watershed practices, (ii) replanting local species, (iii) identifying and planting species which compliment and enhance sustainable ecosystems, (iv) identify local areas prone to natural hazards and

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specify/enhance related adaptive strategies, (v) use local activity-oriented committees to foster community participation in project activities (vi) train local community members in good watershed management practices and plant propagation, (vii) project progress reporting on the above in collaboration with the Forestry Division, Ministry of Works, NaDMA, NAWASA and other relevant agencies.

85. Grand Anse Project: support the restoration of beach quality and socio-economic capacities by primarily: (i) conducting research on current: (a) local beach erosion levels, (b) levels of coral reef damage experienced at Boss Reef, (c) sea level rise (ii) disseminating good beach coral reef practices through public and utility services; (iii) use local activity-oriented committees to foster community participation in project activities (iv) train local community stakeholders in good beach and coral reef management practices, (v) research the local ecological footprint of tourism, (v) micro report on the socio-economic impact of climate change scenarios in Grand Anse, (vi) micro report on the infrastructural impact of climate change scenarios in Grand Anse, (vii) report project progress, including adaptive measures which were or should be introduced following this study in collaboration with the Forestry Division, Ministry of Works, NaDMA, National Science and Technology Council, NAWASA and other relevant agencies.
86. The V&A projects require considerable inter-ministerial collaboration, which will serve to enhance collective sensitivity towards practical climate change affairs on an institutional level and highlight climate change resource requirements on a technical level. Activity points of convergence between public and utility services furnish a conceptual map of climate change in its most integrated form. Therefore, institutional operationality can be enhanced through an understanding of the junctures between the policies and strategic plans of public and utility services, which have implications for mitigative and adaptive climate change measures. These insights should be reflected in an overarching Climate Change Policy and Strategic Plan.

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Table 1: Summary Evaluation Matrix for Preliminary Assessment of Priority Areas for Proposed SNC Project

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+++	+++	+++	+	+++	13
+++	+++	++	+	+++	13
++	++	++	+	+++	10
+++	+++	+++	+	+++	13
+	+	+	+	+	5
+++	++	++	+	+++	11
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+++	+++	+++	+	+++	13
+++	+++	+++	+	+++	13
+	+	+	+	+	5
+++	+++	+++	++	+++	14
+	+	+	+	+	5
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+++	+++	+++	++	+++	14
+++	+++	+++	+	+++	13
+++	+++	+++	+	+++	13
+++	+++	+++	+	+++	13
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Other Sustainable Projects

Adaptation to Climate Change in the Caribbean

1. Adaptation to Climate Change in the Caribbean (ACCC) was funded by CIDA and was designed to compliment the programs developed under CPACC. Key objectives of ACCC include:
 - Enhancing the role of the Caribbean Community Climate Change Centre (CCCCC) as the central institution for all climate-change related activities in the Caribbean
 - Adaptation to climate change strategies form part of national development plans in key economic and social sectors of Caribbean countries
 - Scientific and technical competence in relation to climate change issues is strengthened in the Caribbean
 - International climate change negotiations are fully supported by national and regional measures
 - Dissemination of necessary climate change knowledge and information throughout the private sector and governments throughout the Caribbean in order to effectively support and conduct national/international response initiatives

Mainstreaming Adaptation to Climate Change

2. The Mainstreaming Adaptation to Climate Change (MACC) Project is funded by GEF and further compliments program activities under CPACC. The key objectives of the MACC project is to develop Stage II adaptation strategies and measures in the CARICOM Small Island Developing States (SIDs), as defined by the UNFCCC, through:
 - The mainstreaming of climate change imperatives into national development planning and sectoral investment projects
 - Development of technical and institutional response mechanisms for adaptation to global climate change
 - Improved climate change monitoring and modelling throughout the region

The MACC project will be introduced through:

- Strengthening the knowledge base networks established under CPACC at a level of competence to accommodate global climate change impact assessments in Caribbean-wide decision making
- Focusing on the integration of climate change concerns into planning and practices of vulnerable sectors and the formulation of appropriate policies in water resources, agriculture, forestry and food security, tourism, fisheries and health

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- Developing cross sectoral mainstreaming across key economic sectors such as land use planning, infrastructure, disaster risk management and insurance
- Intensifying public education and outreach strategies and introducing collaborative dissemination measures between CARICOM and non-CARICOM countries
- Providing technical assistance in order to integrate adaptation measures in keeping with the UNFCCC.

The Top Up Programme

3. The Top Up Programme was funded by UNDP/GEF as a means to assist countries in meeting objectives of the UNFCCC. Finances were directed to a range of climate change related activities, which were identified as requiring priority support, namely: (i) institutional strengthening, (ii) training, education and public awareness, (iii) technical and administrative support, and (iv) data gathering/ research. The provision of IPCC resource materials, which were introduced to Government Ministries and schools throughout Grenada, enhanced public awareness of climate change. Technical and research capacities within NAWASA were enhanced through the provision of equipment, such as water gauge stations, velocity meters and water measuring/ analysis software. The Meteorological Unit and Land Use Division were given equipment to analyze and store weather data in computer form. Other examples of funding through the Top Up Programme included teacher training workshops on climate change and training in the compilation and analysis of data.

Synergies with related programmes

4. Since climate change is an interdisciplinary concern it houses some complexity and will interface with a wide thematic audience. The aim of NAPA is to streamline this complexity through financial and technical support in the knowledge that the least developed countries and SIDs are less likely to be able to draw upon resource economies of scale to manage change.
5. Grenada is a beneficiary of the National Capacity Self Assessment program, which also serves to support countries that identify capacity problems, which inhibit sustainable development practices. NAPA and the NCSA are two mechanisms through which Grenada can be assisted in its efforts to attain and maintain good practices.
6. Synergies between related programs were acknowledged, and can address common issues from different perspectives. The Ministry of Agriculture and Forestry, for example, will have a commitment to meet its obligations under the UNCCD in view of the impacts of deforestation and soil degradation. Ensuing initiatives to address soil erosion will be endorsed by a Climate Change Body, which seeks to introduce policies that reduce the impacts of extreme weather events. Climatic change destabilizes and removes plant life including trees, thus heightening soil susceptibility to degradation, which in turn endangers the ability of ecosystems to remain stable and retain biodiversity.

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Table 2: Stakeholders Matrix

Ministry of Finance	Projects Unit	<ul style="list-style-type: none"> ▪ Serves as National Focal Point for the UNFCCC; ▪ Serves as National Focal Point for the IPCC; <p>Instrumental in the:</p> <ul style="list-style-type: none"> ▪ Preparation of inventories of GHG emissions and removals by sources; ▪ Periodic archiving of data and inventory estimates; ▪ Development of scenarios of GHG emissions and proposal of mitigation policies and measures; ▪ Assessment of vulnerability and proposal of adaptation measures related to climate change; ▪ Preparation of Constraints, Gaps and Capacity Assessment; ▪ Preparation of National Communications and arrange their submission to the CoP of UNFCCC as mandated by CoP decisions; ▪ Raising of general awareness and knowledge on climate change and related issues; ▪ Strengthening the dialogue, information exchange and co-operation among all the relevant stakeholders including governmental, non-governmental, academic, private sectors on climate change and related issues; ▪ Mobilization of resources for implementation of the UNFCCC; ▪ Designs and implementation of projects related to the implementation of the UNFCCC; 	<ul style="list-style-type: none"> ▪ Body responsible for climate change and related issues in Grenada. ▪ Body responsible for the coordination of stocktaking and preparation of the final stocktaking report and the Project Proposal for the Grenada's Second National Communication to the UNFCCC. <p>Role in the self-assessment: Lead implementing agency and data provider</p>
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	<p>Physical Planning Unit</p>	<ul style="list-style-type: none"> ▪ Monitors, controls and provides surveillance of development planning; ▪ Develops national policies on settlements, technical standards of construction of buildings; ▪ Coordinates some environmental issues within the context of social, economic and physical development planning and programmes 	<ul style="list-style-type: none"> ▪ Provides policy advice for the development of tourism sector and settlements; ▪ Provides technical and financial advice on matters with external agencies coordinated by the Ministry of Finance and Planning ▪ Role in the self-assessment: Technical implementing agency and data provider
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<p>Ministry of Health and the Environment</p>	<p>Env. Department</p>	<p>The Environment Department:</p> <ul style="list-style-type: none"> ▪ Drafts and implements governmental policies, strategies and action plans for environmental protection; ▪ Follows up the implantation of bills and laws and by-laws for environmental protection; ▪ Coordinates the cooperation between relevant Ministries, research institutions, academia and NGOs ▪ Supervises the monitoring of the state of the environment in collaboration with relevant Ministries, research institutions, academia and NGOs; ▪ Designs and endorses projects for the protection and remediation of the environment; ▪ Manages environmental funds; ▪ Raises public awareness on environmental protection and related issues; 	<ul style="list-style-type: none"> ▪ Provides expertise for GHG mitigation analysis and energy for GHG inventory; ▪ Potential provider of technical expertise under the SNC (expertise on estimates of GHG emissions inventory and mitigation analysis); ▪ Potential provider of activity data for different source categories of GHG emissions (industrial activities and wastes); ▪ Provides policy advice on development of GHG emission scenarios, ie, industrial activities and solid waste; ▪ Role in the self-assessment: Technical implementing agency and data provider
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	<p>Health Department</p> <ul style="list-style-type: none"> ▪ Set standards and propose policies and measures to ensure the improvement of food safety, and protect consumers; ▪ Design agro-food policies that will be oriented towards the coordination of agriculture sector development with the regional one, by highlighting integrated rural development; designs national programs and undertakes activities in favour of food security. 	<ul style="list-style-type: none"> ▪ Provides policy advice regarding the development of the health sector and related impact of climate change and adaptation strategy for this sectors; ▪ Potential data provider for health sector. ▪ Role in the self-assessment: Data provider
<p>Ministry of Finance</p>	<p>Central Statistics Office</p> <ul style="list-style-type: none"> ▪ Collects, process, analyses and disseminates statistical data related to the economy, demography, and social life; ▪ Provides statistical information, data and analysis to the users – the Governmental institutions, private and academic sector, individuals in order to improve the process of business decision-making, democratization of society and scientific research; ▪ Establishes and manages the databases and statistical registries on national level, setting down statistical methodologies, maintenance collaboration in the domain of the statistics, communication with the beneficiaries, etc. 	<ul style="list-style-type: none"> ▪ Represented to the PSCCC ▪ Major data provider for all sectors relevant to all thematic areas covered by SNC; ▪ Role in the self-assessment: Data provider

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<p>Ministry of Agriculture, Lands, Forestry and Fisheries</p>	<p>Agriculture Division</p>	<ul style="list-style-type: none"> ▪ Drafts and implements governmental policies, strategies and action plans for development of agriculture and food sector by aiming at: (i) increasing agricultural, livestock, agro-industrial, fishery production; (ii) sustainable management of natural resources; ▪ Develops policies and action plans for development of agriculture and food sector and achievement of the above aims; ▪ Follows-up the implementation of laws, by-laws and decisions of the Council of Ministers for development of agriculture and food sector; ▪ Develop institutional capacities, capable to design and implement agricultural policies; ▪ Coordinates the cooperation between relevant Ministries, local government, research institutions, and NGOs regarding the development of Agriculture and Food. 	<ul style="list-style-type: none"> ▪ Provides policy advice regarding the development of the LUCF and agriculture and livestock sector and related GHG mitigation and adaptation strategies; ▪ Potential data provider on LUCF and Agriculture and Livestock; ▪ Role in the self-assessment: Technical agency and data provider
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	<p>Forestry Division</p> <ul style="list-style-type: none"> ▪ Supervises and manages the issues related to biodiversity and species (forests, flora, fauna, land and other natural resources, Grenada dove); ▪ Supervises and coordinates issues related to the Protected Areas, their administration, protection, and provision of such a status to the new ones; ▪ Supervises the administration of natural resources (forests, land, rivers, lakes etc) and their sustainable use); ▪ Proposes rules and standards for land administration and management and its protection from erosion; ▪ Develops policies and action plans for protection of the biodiversity and Protected Areas; ▪ Supervises and coordinates the monitoring process of biodiversity indicators; ▪ Participates and provides advice and technical expertise to the process of environmental protection for those activities that have impact to biodiversity and nature protection; ▪ Provides technical support to the implementation of many treaties related to the protection of the biodiversity, nature and land. 	<ul style="list-style-type: none"> ▪ Potential provider of the technical expertise related to GHG emissions/sinks released/absorbed from the category of Land Use Change and Forestry (LUCF) and Agriculture; ▪ Potential provider of the technical expertise related to the impact of vulnerability assessment to the Forest category, Agriculture, Land and Coastal Zone; ▪ Potential of data for the category of LUCF; ▪ Provider of policy advice on the development of forestry sector, land use and coastal zone management; ▪ Provider of advice in relation to synergies with UN Convention of Biological Diversity and Convention on Desertification. ▪ Role in the self-assessment: Data provider
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<p>Ministry of Works, Communications and Public Utilities</p>	<ul style="list-style-type: none"> ▪ Manages physical infrastructure development during project implementation phases; ▪ Provides development and maintenance of national drainage and infrastructure; ▪ Supervises provision of national energy supplies ▪ Designs and implements measures for the rehabilitation of the road network; ▪ Designs and implements measures for the introduction and rehabilitation of telecommunication. 	<ul style="list-style-type: none"> ▪ Potential provider of policy advice in relation to sustainable building, transport and telecommunication networks; ▪ Potential provider of policy advice in relation to flood hotspots; ▪ Potential provider of advice in relation to the Montreal Protocol and issues relating to energy, water and sustainable development. ▪ Role in the self-assessment: Data provider
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<p>Ministry of Legal Affairs</p>	<ul style="list-style-type: none"> ▪ Responsible for drafting and implementing all laws and by-laws. 	<ul style="list-style-type: none"> ▪ Facilitates mainstreaming of climate change issues into national planning and policies; ▪ Provides assistance and advice to the National Climate Change Focal Point and Climate Change Committee regarding the legal issues related to the implementation of the UNFCCC. ▪ Role in the self-assessment: Data provider
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<p>Ministry of Education</p>	<ul style="list-style-type: none"> ▪ Co-raising public awareness in connection with climate change issues; ▪ Providing formal climate change knowledge nationally; 	<ul style="list-style-type: none"> ▪ supporter in the dissemination of climate change understanding and good environmental practices; ▪ potential provider of policy advice on educative processes required to introduce good environmental practices nationally. ▪ Role in the self-assessment: Data provider
<p>Grenada Meteorological Unit</p>	<ul style="list-style-type: none"> ▪ Systematically observes and monitors meteorological parameters from all national stations; ▪ Process the data and information received from the observations; ▪ Develop data base and information system on the metrological indicators of the country; ▪ Develops weather forecast and provide it to the interested parties; ▪ Report data to the World Meteorological Organization and to other regional / sub-regional networks established; 	<ul style="list-style-type: none"> ▪ Provider of technical expertise on climatological vulnerability and adaptation measures; ▪ The Meteorological Unit is the metrological data provider; ▪ Role in the self-assessment: Data provider

<p>Grenada National Water and Sewage Authority</p>	<ul style="list-style-type: none"> ▪ Maintains water plants and related equipment; ▪ Provides national potable water ▪ Maintains drinking water quality; ▪ Manages issues related to the prevention of water pollution; ▪ Supervises the monitoring of pollution indicators into air and water (surface, ground); ▪ Supervises the control and monitoring of sewage; ▪ Prepares, follows and controls the implementation of the monitoring process of water and wastes; ▪ Propose control measures regarding the meeting of discharging standards into water. 	<ul style="list-style-type: none"> ▪ Provider of technical expertise on vulnerability and adaptation measures which relate to the maintenance of water quality; ▪ Provider of policy advice on water management techniques. ▪ Role in the self-assessment: Data provider
<p>Grenada Solid Waste Authority</p>	<ul style="list-style-type: none"> ▪ Manages the collection, storage and disposal of solid waste; ▪ Supervises the monitoring of pollution indicators into air and water (surface and ground); ▪ Supervises the control and monitoring of solid wastes; ▪ Supervises the control and monitoring of hazardous wastes; ▪ Provides advice and technical expertise to the process of environmental hazard warning that have negative impacts in the air, water and soil; ▪ Provides technical support to many international treaties related to solid waste. 	<ul style="list-style-type: none"> ▪ Provider of policy advice on the development of GHG emission scenarios, in particular, industrial and solid waste emissions; ▪ Role in the self-assessment: Data provider

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<p>Grenada Chambers of Commerce</p>	<p>Provides private enterprise with legal and technical advice, in relation to:</p> <ul style="list-style-type: none"> ▪ Importation; ▪ Exportation ▪ Suppliers ▪ Product quality 	<ul style="list-style-type: none"> ▪ Potential provider of activity data for different sources of GHG emissions; ▪ Provider of policy advice on green procurement; ▪ Provider of policy advice on corporate environmental auditing ▪ Role in the self-assessment: Data provider
<p>Grenada Board of Tourism</p>	<ul style="list-style-type: none"> ▪ Supervise the provision of tourism opportunities for tourists; ▪ Achieve sustainable tourism development ▪ Protect national heritage and cultural forms 	<ul style="list-style-type: none"> ▪ Potential provider of activity data for tourist related sources of GHG emissions; ▪ Provider of policy advice on energy efficiency; ▪ Potential provider of data on vulnerability and adaptation measures. ▪ Role in the self-assessment: Data provider

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<p>Agency for Reconstruction and Development (ARD)</p>	<ul style="list-style-type: none"> ▪ Support the processes of institutional change post Hurricane Ivan and Emily ▪ Enhance system operations across all Government Ministries 	<ul style="list-style-type: none"> ▪ Provider of policy advice on Ministry operations ▪ Role in the self-assessment: Data provider
<p>National Disaster Management Agency (NaDMA)</p>	<ul style="list-style-type: none"> ▪ Provide national emergency relief in the face of national emergencies, in relation to: <ul style="list-style-type: none"> ▪ Land based activities; ▪ Territorial sea based activities; ▪ Places of refuge. 	<ul style="list-style-type: none"> ▪ Provider of policy advice on vulnerability and adaptation; ▪ Provider of data on vulnerability and adaptation scenarios. ▪ Role in the self-assessment: Data provider
<p>Grenada Ports Authority</p>	<ul style="list-style-type: none"> ▪ Designs national policies and action plan for the protection of territorial waters, in relation to: <ul style="list-style-type: none"> ▪ Oil spills; ▪ Hazardous wastes; ▪ Unlawful practices within territorial waters. 	<ul style="list-style-type: none"> ▪ Provider of policy advice on vulnerability and adaptation; ▪ Provider of data on vulnerability and adaptation scenarios ▪ Role in the self-assessment: Data provider

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<p>Royal Grenada Police Force</p>	<ul style="list-style-type: none"> ▪ Maintenance of civil order within the territorial border of Grenada. 	<ul style="list-style-type: none"> ▪ Provider of policy advice on vulnerability and adaptation; ▪ Role in the self-assessment: Data provider
<p>The Grenada Bureau of Standards</p>	<ul style="list-style-type: none"> ▪ All matters relating to the import, export, consumption and use of goods and materials which have a potential to adversely impact their users or environment; ▪ All quality issues relating to the import, export, consumption and use of goods and materials. 	<ul style="list-style-type: none"> ▪ Provider of policy advice on vulnerability and adaptation; ▪ Provider of data on vulnerability and adaptation scenarios; ▪ Provider of policy advice on GHG emissions; ▪ Provider of data on GHG scenarios; ▪ Provider of policy advice on sustainable products. ▪ Role in the self-assessment: Data provider

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<p>Inter-Agency Group of Developmental Organizations (LAGDO)</p>	<ul style="list-style-type: none"> ▪ Umbrella group representing the interests of local NGOs such as the Agency for Rural Transformation (ART) and the Granada Community Development Agency (GCDA). ▪ Promoting and engaging in the development of the rural economies ▪ Serving as a watchdog in relation to: <ul style="list-style-type: none"> ▪ Coastal and marine degradation and pollution; ▪ Wetland conservation; ▪ Development of arable landscape; ▪ Protection of potable water resources 	<ul style="list-style-type: none"> ▪ Provider of policy advice on vulnerability and adaptation; ▪ Provider of data on vulnerability and adaptation scenarios; ▪ Provider of policy advice on GHG emissions; ▪ Potential provider of data on GHG scenarios; ▪ Role in the self-assessment: Data provider
<p>Academia</p>	<ul style="list-style-type: none"> ▪ Provides education at all levels, including Environmental Science, Public Health, Computing Science and Mathematics. ▪ Conducts scientific research and implements projects on, but limited to, Environmental Science, Public Health, Computing Science and Mathematics. 	<ul style="list-style-type: none"> ▪ Potential provider of the technical expertise for, vulnerability and adaptation assessment, GHG inventory and GHG mitigation analysis. ▪ Role in the self-assessment: Data provider

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<p>UNDP</p>	<p>UNDP is uniquely placed to advise the government on policies and institutions to meet development challenges, to work with partners to mobilize talent and resources, and to play the advocacy role through the Human Development Report and the Millennium Development Goals (MDGs). UNDP programs and projects have focused on three main MD goals, namely, Poverty, Gender and the Environment. In general and specific ways, these themes crosscut many initiatives promoted by the UNDP, given that:</p> <ul style="list-style-type: none"> ▪ 'Poverty' is related and addressed through improvements of personal and community security levels; ▪ 'Gender' reflects its impacts within cluster programs and extends to all other clusters from policy formulation to its application; ▪ The 'Environment' is directly linked to poverty reduction and improvement of livelihoods. 	<ul style="list-style-type: none"> ▪ UNDP holds the capacity of the Implementing Agency of all GEF funded Projects; ▪ UNDP provides technical support to the implementation process of the project ▪ Role in the self-assessment: Data provider
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<p>WORLD BANK (WB)</p>	<p>The WB supports Grenada in its pursuit of sustainable development through the provision of loans and grants to finance development projects, technical assistance, as well as analytical and policy advice.</p>	<ul style="list-style-type: none"> ▪ WB has implemented and implements projects related to the management of natural resources including forests, the data requirements for which will be considered under the SNC; ▪ WB is a potential innovative financing mechanism for innovative GHG abatement technology. ▪ Role in the self-assessment: Data provider
<p>The WB's Country Assistance Strategy for Grenada for the period 2002-2005 focuses on reducing poverty and supports the Grenadan Government's NSSED. The WB is working closely with the Grenada's Government to achieve the priorities set in their strategy. The main priorities envisaged in the WB's strategy are to improve governance and strengthen institutions, promote sustainable private sector growth, and foster human development.</p>		

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Appendix B: Technical Components of the Proposal

B.1 Background/Context

87. The United Nations Framework Convention on Climate Change (UNFCCC) was signed in June of 1992 at the Rio "Earth Summit". The ultimate objective of the Convention is to stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate. By becoming Parties to the Convention, both developed and developing countries accepted a number of commitments which include, *inter alia*, to:

- Develop, periodically update, publish and make available to the Conference of the Parties (CoP) of the UNFCCC national inventories of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol;
- Formulate, implement, publish and regularly update national and, where appropriate, regional programs containing measures to mitigate climate change by addressing anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, and measures to facilitate adequate adaptation to climate change; and
- Communicate to the CoP information related to implementation of the Convention, in accordance with Article 12.

88. Grenada's commitment to measures and control of the adverse impact of GHG emissions has been demonstrated by its ratification of the Convention on 9th November 1994 and the Kyoto Protocol on 6th August 2002. Thus, Grenada was one of the original Parties to the Kyoto Protocol when it became a legally binding treaty on 16th February 2005. Grenada is also a signatory to other international agreements promoting sustainable development, such as the Barbados Plan of Action, and St George's Declaration (OBS).

B.2 Project Objectives

89. The project objective is enable Grenada to prepare and submit its Second National Communication to the CoP of the UNFCCC in accordance to its commitments as a Non Annex I Party to the Convention as mandated by Article 4 and 12 of the Convention.

90. The development objective of the project is to strengthen the technical and institutional capacity and assist Grenada's mainstream climate change concerns into sectoral and national development priorities.

91. The immediate objective of the project is to enable Grenada to prepare and submit its Second National Communication to the UNFCCC and meet its Convention obligations.

B.3 Project Strategy

92. Drawing on the conclusions reached in conducted needs assessment exercises, extending the primary research undertaken on the GEF regional project on coastal vulnerabilities and implementing these activities within the framework of a climate change policy and strategy plan will enable the project goal to be achieved. Synergies with other climate change ongoing activities such as with GEF regional project on GHG

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inventories will be utilized. Equally, close liaison with related projects under Biodiversity and Land Use will improve the quality of decision making and project outputs.

93. The project will involve professionals previously involved in Grenada's INC and additional stakeholders will be involved in project implementation (see Stakeholders Matrix above). This strategy will enhance the sustainability of the teams and the process of preparation of national communication. Participation in training and workshops to be organized from UNFCCC Secretariat, UNDP will enhance capacities. Engagement of other local experts is a strategy, which will enrich knowledge bases in the related areas. The project will hire a short-term international consultant to provide technical guidance to the project. Grenada's experience in institutional and technical capacity building and development regarding National Communication will be sustained and leveraged to support the preparation of the SNC exercise. Extensive collaboration with regional programmes, such as activities of the Caribbean Community Climate Change Centre, is also envisaged.
94. Closely liaising with relevant governmental institutions, international organizations, academia and NGOs will ensure that the sense of national ownership is maintained and new expertise or understandings are introduced the National Communication exercise, which should remain porous to learning and modification at all times.
95. The initial emphasis of the project will be on GHG inventory. Building on results of these studies, the options to mitigate climate change by addressing GHG emissions and facilitating adaptation to climate change will be analyzed and reviewed in the light of country development context. Gaps, uncertainties and constraints along with other information related to the UNFCCC will be addressed as indicated by 17/CP.8. Finally, information gained during the project will be communicated to the CoP in the form of the Second National Communication of Grenada.

B.4 Project Activities

4.1 National Circumstances

96. Information on national circumstances provided under Grenada's INC was relevant to all thematic areas of the National Communication and aimed at providing an extensive and comprehensive picture of all national sectors.
97. Grenada's National Circumstances section contained information on: (i) geographic profile; (ii) climate profile; (iii) natural resources (water, forests, land use); (iv) economic and sector profile (agriculture, livestock, energy, transport, industry, tourism, fisheries), as well as a (v) resources and infra structure (population; public health, education, environment).
98. For some of the areas/sectors described under Grenada's INC the reporting time frame was around 1990-1999, although there were instances where analyzed time frames were shorter due to the lack of data and information. Given that the inventory base year was 1994, relevant inventory sectors were analyzed around this year and for other years where data were available.
99. In view of economic developments between the years 1999-2003 and significant impacts of Hurricanes Ivan and Emily in the years 2004 and 2005, there is need to reflect upon the socio-economic implications of these events and to update sector profiles, especially for agriculture and land use change /forestry (LUCF).

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100. The National Circumstances would be developed taking in consideration areas that was not included in the INC, but is a requirement of the UNFCCC new guidelines.

4.1.1 Output: National Circumstances Review, Updated and Described

Activities

1. Contact the Project Contractors identified in keeping with the Terms of Reference.
2. Organize a Project Initiation Workshop with key stakeholders.
3. Organize a scoping meeting with project contractors and key stakeholders.
4. Maintain and upgrade the network among experts/institutions.
5. Validate the gaps of information identified under stocktaking in view of new developments, if necessary.
6. Identify the respective sources of information and establish links to get these data as necessary.
7. Collect data and information from different sources in the course of project implementation.
8. Fill the gaps, update and add the new information.
9. Draft national circumstances sections relevant to Grenada's circumstances.
10. Draft the National Circumstances section under the SNC in compliance with the guidelines set by 17CP/8.
11. Circulate the National Circumstances section for comments and incorporate these into the report.
12. Finalize the National Circumstances section for inclusion in the SNC.

4.2 Greenhouse Gas Inventory

The Grenada inventory of greenhouse gas emissions and removals by sinks was calculated for the base year 1994 using the Revised Intergovernmental Panel on Climate Change (IPCC) Guidelines (1996) for National Greenhouse Gas Inventories. The IPCC Good Practice Guidance has been used for the uncertainty assessment and key source estimates. Tier 1 and Tier 2 methods were used and the reference (top-down) and sectoral (bottom-up) approaches were used to estimate carbon dioxide released as a whole and carbon dioxide alongside the emission of other gases and particulates respectively.

The inventory covered all sources and sinks as well as all gases as mandated by 10/CP.2. Grenada's first GHG inventory considered GHG categories such as energy; agriculture, and waste, and LUCF, as guided by revised IPCC of 1996 and accounted for the three direct GHGs, namely, CO₂, CH₄ and N₂O. The emission estimates for Oxides of Nitrogen (NO_x), Carbon Monoxide (CO), Sulphur Dioxide (SO₂), Sulphur Hexafluoride (SF₆), Hydro fluorocarbons (HFC's) and Per fluorocarbons (PFC's) were not calculated for the following three reasons: (i) the emitting activities addressed in the 1996 Revised IPCC Guidelines are not relevant to Grenada; (ii) imports of products containing SF₆, HFCs and PFCs was a recent phenomenon; (iii) whilst Chlorofluorocarbons (CFCs)

were calculations were accounted for under the Montreal Protocol. Estimates for Grenada's first national GHG inventory have been made for the base year 1994.

4.2.1 Outputs: a) Greenhouse gas inventory conducted and documented

Activities: *(a) Greenhouse gas inventory conducted and documented*

1. Greenhouse gas inventory team selected
2. Initiation and Greenhouse Gas Inventory training workshop conducted
3. Methodologies for analyzing GHG emissions selected and validated
4. Review the existing information on the previously archived GHG inventory and familiarize with guidelines.
5. Identify all new sources of information for filling data gaps.
6. GHG Inventory data collected, and analyzed in accordance with the IPCC guidelines
7. Sensitivity analysis conducted to determine whether key emissions have changed
8. National inventory documented based on IPCC guidelines
9. Circulate the inventory for internal review.
8. Organize a national workshop to present findings of the GHG inventory.
9. Incorporate comments received from the review process.
10. Finalize the inventory to be submitted as part of the SNC of Grenada.

4.3 GHG Abatement Analysis

101. Abatement technologies are currently not widespread in Grenada. Abatement analysis will involve a detailed examination of Grenada's GHG baseline and abatement scenarios. It can be assumed that the road transport and energy sectors will be responsible for the most significant levels of CO₂ emissions in Grenada. As such the analysis of these sectors should be primarily quantitative. The abatement scenario will assess the emissions in the baseline scenario against the emission reductions introduced by various abatement options being evaluated. It is also expected that the SNC would report on initiatives and measures underway or proposed relating to GHG abatement/mitigation in Grenada.

4.3.1 Output: Report on GHG Abatement Measures

Activities

1. Consider estimates of GHG inventory for the base year 2000
2. Develop a comparative analysis of figures/estimates obtained under the GHG Inventory

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3. Collect all relevant macro-economic data and assumptions to be made for the purpose of emissions scenario development
4. Analyze and report on the necessary technologies that can be used to adapt and or mitigate climate change
4. Conduct feasibility study on mitigation measures
5. Organize a national workshop to present findings from the GHG abatement report.
6. Finalize the GHG abatement chapter to be submitted as a part of the SNC.
7. Archive and document all the GHG abatement analysis related studies and estimates.

4.4 Measures to Facilitate Adequate Adaptation to Climate Change

4.4.1 Vulnerability Assessment and Scoping Exercise

Vulnerability and adaptation assessment are critical elements of Grenada's national communications given the country's high vulnerability to various weather events including flooding, hurricanes, droughts, sea-level rise, and storm surge. Recent experiences with active hurricane seasons in 2004 and 2005 have highlighted the importance of minimizing risks and reducing vulnerability. Such vulnerability is likely to increase with projected changes in global climate.

In-depth scoping exercises will be conducted to select areas for the vulnerability assessment. Attention would be paid to areas identified in the self-assessment exercise. The self-assessment process has identified a number of areas and communities likely to be particularly at risk from climate change. These include important watershed and touristic areas. Projected areas for assessment under the SNC are:

- Agriculture
- Freshwater and Forestry
- Tourism
- Health
- Coastal resources and Fisheries, and
- Tourism and Human Settlements

The assessments will aim to utilize internationally available methods and tools for climate change impact and adaptation assessment such as those developed by IPCC, UNEP, and UNDP/NCSP. It is expected that the assessments will benefit from training and other capacity building measures being conducted at the regional level.

Based on results of the self-assessment, this component will include focus on areas of the agriculture sector where livelihood would be affected as a result of climate change.

102. The project would seek to assess the impacts of climate change on agriculture, particular, the major crops of Grenada - nutmeg, cocoa, and bananas. The extent to which carbon dioxide enrichment could boost productivity in C3 plants (such as tree-crops (nutmegs and cocoa), cassava, maize, yams, bananas, coconut, sweet potatoes, pigeon peas, and beans) is not known. The extent to which reduced annual precipitation

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would adversely impact nutmeg and banana production plant adaptation would dampen these effects is also unclear.

103. Output: Scoping Exercise and Vulnerability Assessment Report Developed

Activities:

1. Establish vulnerability and adaptation assessment teams
2. Conduct necessary training and capacity building measures.
3. Identify areas for conducting scoping exercise
4. Develop and utilize methodologies and approaches
5. Conduct vulnerability assessments utilizing agreed methods and tools.
6. Undertake Adaptation assessments utilizing appropriate tools and methods
7. Draft results of the Vulnerability and Adaptation assessment
8. Organize consultations to present findings from the Vulnerability and Adaptation Assessment
9. Finalize the Vulnerability and Adaptation Assessment Model to be submitted as part of the SNC
10. Document and archive all Vulnerability and Adaptation Assessment related documentation

4.5 Constraints and Gaps plus related Financial, Technical and Capacity Needs

104. The guidelines defining a National Communication on Climate Change and the activities undertaken in order to successfully complete the INC in Grenada highlighted constraints and which were directly related to financial, technical and capacity requirements. Key constraints and gaps were presented in the INC.
105. Emission estimates for Oxides of Nitrogen (NO_x), Carbon Monoxide (CO), Sulphur Dioxide (SO₂), Sulphur Hexafluoride (SF₆), Hydro fluorocarbons (HFC's) and Per fluorocarbons (PFC's) were not calculated for the following three reasons: (i) the emitting activities addressed in the 1996 Revised IPCC Guidelines are not relevant to Grenada; (ii) imports of products containing SF₆, HFCs and PFCs was a recent phenomenon; (iii) whilst Chlorofluorocarbons (CFCs) are still being used, their calculations are accounted for under the Montreal Protocol. Estimates for Grenada's first national GHG inventory have been made for the base year 1994.
106. Appropriate measures will be initiated to ensure that the information gaps identified are filled with the relevant and updated information/data. This could be achieved by the improvement of existing databases at the Customs & Excise Department, the Central Statistical Office and the Inland & Revenue Departments.
107. Options for capturing annual production and consumption data on primary fuels (firewood, charcoal, coconut and nutmeg shells, sugar cane products, and the like) will be assessed. This assessment can be undertaken by the Energy Unit, Ministry of Communications, Works & Public Utilities, working along with the Ministry of Finance (Central Statistics Department) and the Ministry of Agriculture. The assessment

should include a survey to determine with greater accuracy the levels of fuel wood and charcoal consumption, and the impact that this is having on Grenada's natural forest reserves.

108. Active collaboration will be fostered with other regional countries in the development of emissions factors for activities that emit greenhouse gases, which will more accurately reflect the practices in the region. This will include a review of emissions factors for activities already reported in this initial inventory, as well as the development of emissions factors for activities not included in this initial inventory.
109. There were no specific climate change scenarios available for Grenada and pending more accurate regional data on variation in climate, and a consensus on a regional climate change scenario, the scenarios adopted for temperature changes and sea level rise are based on the IPCC (1995) accepted and recommended scenarios i.e. temperature rise of 1.0°C to 3.5°C and sea level rise of 15 cm to 95cm by 2100.
110. At the point when Grenada's INC was developed there was no coordinated policy framework for the management of the environment. Even in cases where there was clear sectoral responsibility, clear-cut policy frameworks were few and far apart.

*4.5.1 Outputs a) Report on the status of the constraints and gaps identified in previous studies
b) Establishment and Updating of Databases*

Activities: *a) Report on the status of the constraints and gaps identified in previous studies*

1. Review the status of the constraints and gaps from previous studies.
2. Identify new constraints and gaps for each thematic area and specify requirements to address constraints.
3. Summarize the constraints, gaps and needs identified and draft a synthesis report.
4. Distribute the above draft paper for comments, collect comments and introduce these into the document.
5. Finalize the above chapter as part of Grenada's SNC.
6. Implement follow-up activities

b) Establishment and Updating of Databases

1. Establish strategy for review and updating databases
2. Update databases

4.6 Other Information Relevant to the National Communication Process

111. Behavior and behavioral change are rooted in evaluative systems. Consequently, the nature of policy making and its enforcement will have a direct influence on both attitudes and responses to societal practices. It is argued that an unavoidable correlation exists between the strength of institutional frameworks and the mobilization of public awareness. This is corroborated by existing levels of societal awareness of climate change and its implications in Grenada. Regardless of the current levels of climate change sensibility, which

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has been largely shaped by INC engagements, a practical shift must be made from awareness strategies to enabling strategies. This will be singularly demonstrated when INC stakeholders are provided with the software/technical and institutional resources to promote climate change, as has been requested in the INC. Equally, available finances must be properly and effectively allocated towards projects in order to avoid delays in enabling activities, as has been experienced during the development of the INC and Top-up phase. Without the provision of enabling resources and their appropriate allocation, the objectives of Grenada's SNC cannot be achieved.

- 4.6.1 Output:** a) Public Awareness Programme developed and implemented
b) Equipment, technical and institution resources procured

- Activities:** a) *Public Awareness Programme developed and implemented*
1. Public awareness consultant engaged
 2. Public awareness programme design and approved by project manger and Project Steering Committee
 3. Programme initiated and implemented
- b) *Equipment, technical and institution resources procured*
1. Equipment and technical needs identified, procured and installed
 2. Webpage updated and maintained
 3. Information on public awareness for SNC compiled and reported

4.7 Other information considered relevant to the achievement of the objectives of the UNFCCC

4.7.1 Systematic Observation

A key dimension for the implementation of Articles 4.1 (g) and 5 has been the cooperation with Global climate observation System (GCOS) secretariat of the World Meteorological Organization and other agencies participating in WMO's climate agenda. COP3 and COP 4 adopted decisions supporting GCOS and its Partners agencies, and urged Parties to engage fully with their work. At COP 5, the COP adopted decision 5/CP.5, inviting the GCOS secretariat, in consultation with the Global Environmental Facility (GEF) and others to organize regional workshops to identified priority capacity building need to enhance the participation of developing countries in systematic observation. It is in this context, the project would assess the status of Systematic Observation and Monitoring activities in Grenada, within the context of its national needs and the commitments under the UNFCCC; and initiate activities for implementation of the recommendations.

4.7.1 Output: (a) Systematic Observation assessment conducted

Activities:

1. Systematic observation consultant engaged

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2. Review of existing data needs based on the Reporting Guideline of UNFCCC for GCOS
3. Essential climate variables assessed and designed to generate the information required by the UNFCCC Reporting Guidelines
4. Draft report prepared and discussed with relevant stakeholders
5. Comment incorporated in draft and submitted to project manager for drafting of SNC

4.7.2 Technology Needs Assessment

Technology needs has been identified as one of the key elements of an overall integrated framework for technology transfer in support of sustainable development activities. Within the context of reporting in the SNC an effort will be made to report on this issue. To the extent possible, the project will assess the technology needs of Grenada based on work already completed and identified under the SNC. The project will also seek to build capacity in this area.

Activities: *Technology Needs for Grenada Identified and documented and Action Plan developed*

1. Information collected, analyzed and disseminated on suitable technologies for mitigation in the energy and non-energy sectors
2. Information gathered, assessed and disseminated on suitable technologies for adaptation in the various sectors
3. Report prepared on technology needs for Grenada.

4.8 Second National Communication

The ultimate objective of the project is the preparation of the SNC as a requirement under the UNFCCC. The report will be developed taking into consideration the guideline of the IPCC, the decision of the Conference of parties and the reports from the various components of the project.

Output: Second National Communication developed, approved and submitted to the UNFCCC

Activities

1. Compile a draft of Grenada's Second National Communication
2. Circulate the draft comments and review
3. Finalize the Second National Communication of Grenada.



4. Publish Grenada's SNC to the CoP of the UNFCCC
5. Prepare e-copies of Grenada's SNC in CD-ROM, etc
6. Officially submit Grenada's SNC to the CoP of the UNFCCC
7. Organize a national workshop to launch and present the findings of Grenada's SNC

PART 5: PROJECT IMPLEMENTATION

5.1 Institutional Framework for Project Implementation

The Second National Climate Change Project will be located in the Ministry of Finance and Planning (MFP), which will be the executing agency for the project and will contract all project personnel. The projects Unit in the Department of Economic Affairs of the MFP will provide direct oversight and support to the project team, in consultation with the National Climate Change Committee and UNDP. UNDP will serve as the GEF Implementing Agency. The Climate Change Focal Point will serve as the focal point for the project.

The SNC project will establish a Project Management Unit (PMU) that will include two full time project staff – a project Manager and an Administrative Assistant. The Project Manager will have sufficient experience in environmental management issues and the evaluation of institutional policies and projects. The Project Manager will coordinate the work of the project's consultants, and will be the lead author of the National Report and the Strategy and Action Plan.

The Project will hire a part-time International Consultant who will provide technical support to the project. He/she will have full responsibility of reviewing reports from the technical teams for inclusion in the SNC. The International Consultant is expected to work closely with Project Manager in preparing the SNC Report.

It is envisaged that a group of local professionals will be engaged in preparing the technical components of the SNC. Since the project seeks to strengthen existing frameworks and build capacity of the country's experts, the project will draw experts from within government ministries, public utilities, academia and other key actors who were already engaged in climate change initiatives. Attempts will be made to employ new comers into the climate change arena, and as such, individuals will be assigned to work along with the technical experts to be trained in specific areas.

The Sustainable Development Council (SDC) will act as a clearing house for the issues identified in the Second National Communication (SNC). This council which was launched in 1996 has proven to be instrumental in promoting public awareness on national concerns, as well as, progress monitoring instrument of key national sustainable development oriented projects. In addition, Cabinet has mandated that the Council act as a clearing house for climate change issues.

The project will create international and regional linkage among organizations such as the Caribbean Community Climate Change Centre, and the University of the West Indies with the aim of building and strengthening the project implementation where necessary. In addition, the project would also utilize results and lesson learnt for other ongoing or finalized international, regional and national projects.

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Activities of the project will be undertaken in a coherent manner to enable smooth transitioning of activities. For instance the Green House Gas Abatement would build on the result of the inventory, and adaptation analysis and the vulnerability assessment. Based on the results of the study, a national action plan for effective responses would be developed.

It is expected that a public awareness programme will be developed, through consultation with key stakeholders in addition to sensitizing the general public of the project and climate change activities and issues.

PART 6: ASSESSING PROJECT IMPACT

The project strategy delineated in sections 3 will be employed to assess project impact. Notably, the strategy method is rooted in the measures identified in Grenada's INC. The National Communication process should identify capacity requirements and build capacities through resources provided by, but not exclusive to, the UNDP-GEF. The muted impact of the INC on both operational and institutional levels does not affirm an inherent weakness in the INC strategy. Rather, the current impact is in direct relation to the paucity of active data and demonstrates how easily development is arrested in the absence of enabling resources. Progress to date is lauded in the face of Hurricanes Ivan and Emily and may pick up momentum as NEMS assumes a more central role in national development strategies.

Interdepartmental collaboration, which the INC successfully encouraged, will be heightened during the SNC and serve to promote the relevance of a climate change rationale in national policy and planning. It is envisaged that executive reprioritizing will forward the interests of Grenada's SNC.

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 Communication 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 linkage between the SNC and development issues.

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3. GHG Abatement Analysis										
1. Consider estimates of GHG inventory for the base year 2000								X	X	
2. Develop comparative data analysis								X	X	
3. Collect all relevant macro-economic data								X	X	
4. Conduct Feasibility Study on mitigation measures								X	X	X
5. Develop the draft chapter on the Feasibility of mitigation measures								X	X	
6. Circulate the draft chapter of GHG abatement analysis for internal / external review										X
7. Organize a national workshop to present findings from the GHG abatement analysis										X
8. Finalize the GHG abatement analysis chapter to be submitted as a part of the SNC									X	X
9. Archive and document all the GHG abatement analysis related studies and estimates								X	X	X
4. Programmes containing measures to facilitate adequate adaptation to climate change										
4.1 Vulnerability and Adaptation Assessment										
1. Establish Vulnerability and Adaptation assessment teams							X			
2. Conduct necessary training and capacity building							X	X	X	X
3. Identify areas for conducting exercise							X			
4. Develop and utilize appropriate methodologies and tools							X			
5. Conduct vulnerability assessment using appropriate tools.								X	X	X
6. Adaptation assessment using appropriate methods and tools									X	X
7. Draft results of the assessment										X
8. Organize consultations to present findings							X		X	X
9. Finalize the Vulnerability and Adaptation Assessment Model to be submitted as part of the SNC									X	X
10. Document and archive Vulnerability and Adaptation Assessment related documentation										X

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5. Constraints, gaps, and related financial, technical and capacity needs

5.1: Constraints, gaps and related needs identified

1. Review the status of the constraints and gaps from previous studies												X			
2. Identify new constraints and gaps for each thematic area											X	X			
3. Identify new constraints and gaps related to Article 6 activities											X	X			
4. Summarize constraints, gaps and needs identified													X	X	
5. Distribute the above draft chapter for comments, collect comments and introduce to the document													X		
6. Finalize the above chapter as part of Grenada's SNC														X	
7. Establish strategy for reviewing and updating databases															X
8. Update data bases															X

6 Other Information Relevant to the National Communication Process

6.1 Public Awareness Programme & Procurement of Equipment, technical, institutional resources

1. Public awareness consultant engaged	X														
2. Public awareness programme design and approved by Project Manger and MFP	X														
4. Equipment and technical needs identified, procured and installed						X	X								
5. Public Awareness Programme implemented						X	X	X	X	X	X	X	X	X	X
6. Webpage updated and maintained						X	X	X	X	X	X	X	X	X	X

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7 Other information considered relevant to the achievement of the objectives of the UNFCCC

7.1 Systematic Observation										
1. Systematic observation consultant engaged										
2. Review of existing data needs based on the Reporting Guideline of UNFCCC for GCOS			X							
3. Essential climate variables assessed and design to generate the information required by the UNFCCC Reporting Guidelines			X							
4. Draft report prepared and discussed with relevant stakeholders					X					
5. Comment incorporated in draft and submitted to project manager for drafting of SNC					X					
7.2 Technology needs assessment										
1. Consultant engaged							X			
1. Information collected, analyzed and disseminated on suitable technologies for mitigation in the energy and non-energy sectors							X			
2. Information gathered, assessed and disseminated on suitable technologies for adaptation in the various sectors							X		X	
3. Report prepared on technology needs for Grenada									X	

8 Second National Communication

1. Compile a draft of Grenada's Second National Communication									X	X
2. Circulate the draft comments and review										X
3. Finalize the Second National Communication of Grenada										

[REDACTED]										
2. Print SNC Report									X	
3. Publish Grenada's SNC to the CoP of the UNFCCC									X	
Prepare e-copies of Grenada's SNC in CD-ROM										X
4. Officially submit Grenada's SNC to the CoP of the UNFCCC										X
5. Organize a national workshop to launch and present the findings of Grenada's SNC										X

Appendix C

List of National Climate Change Committee Members

- The Ministry of Finance, Climate Change Focal Point, Chairman
- Project Coordinator – Deputy Chairperson
- Ministry of Finance, Physical Planning Unit
- Ministry of Health, Environment Department
- Ministry of Agriculture, Land Use Division
- Ministry of Works, Energy Unit
- Ministry of Legal Affairs
- Ministry of Education, Education/Curriculum Division
- Grenada Meteorological Unit
- Grenada Chamber of Commerce
- Grenada Board of Tourism
- National Disaster Management Agency (NaDMA)
- Grenada Ports Authority
- Royal Grenada Police Force
- The Inter-Agency Group of Developmental Organizations (IAGDO)

Appendix C: Terms of Reference

1. TOR for National Project Manager (NPM)

In consultation with the National Climate Change Committee the National Project Manager (NPM) is responsible for day-to-day management, co-ordination and supervision of the implementation of the above project. Specifically, his/her responsibilities are, but not limited to the following:

- Supervises and ensures the timely implementation of the project relevant activities as scheduled in the working plan
- Prepares a detailed work plan for the project and draft terms of reference for the subcontracts (in consultation with the UNDP, the MOF and other project actors).
- Compiles the scope and content of the overall SNC report and relevant sections in consultation with Team Leaders/Consultants.
- Co-develops the scope of the work and TORs and other procurement documentation required to identify and facilitate recruitment of experts and consultants.
- Supervises project support staff and national consultants.
- Organizes and supervises the workshops and training needed during the project.
- Liaises with the relevant ministries, national and international research institutes, NGOs, and other relevant institutions in order to involve their staff in project activities.
- Prepares periodic progress reports of the project.
- Summarizes and synthesizes the results of the project.
- Identifies the follow up activities and mobilizes other resources as required in liaison with project actors.
- Monitors the realization of synergies between the SNC and other relevant ongoing / new projects.
- Finalizes the Second National Communication of Grenada along with the project actors.
- Ensures 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.
- Oversees the maintenance and updating of Grenada's climate change web page.
- Collaborates with all relevant stakeholders and the NCCC) and other partners to ensure their involvement in the SNC.

Qualifications and Experience

- An advanced degree (at least MSc. or equivalent) in energy, environmental management or other field relevant to the project.
- A minimum of three (3) years of working experience relevant to the project.
- A demonstrated ability to manage projects and liaising with all project personnel including government officials, scientific institutions, NGOs, and private sector.
- Good understanding of Grenada's environment/development issues as well as the thematic areas under investigation
- Excellent communication (written and oral) skills
- Demonstrated experience in project management

Qualifications and experience continued

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- Expertise in developing budgeted, results-oriented action plans
- Demonstrated experience in working with government, donors and International Organizations
- 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 mandatory
- Familiarity with computers and word processing
- Involvement in the preparation of the national GHG inventory and National Communications preferred
- Knowledge of methodologies for inventories (IPCC Revised 1996 Guidelines and Good Practice Guidance) preferred
- A very good knowledge in English is absolutely necessary

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2. TOR for Administrative Assistant

The Administrative Assistant will be a full time position on a contract for 18 months, reporting directly to the Project Manager, responsible for all administrative activities related to the effective implementation of the Project.

Scope of Work:

- To Assist the Project Manager and short-term consultants on climate change in the implementation of all project activities;
- To organize the office work and responsible for all filing relating to the project;
- To assist the Chairman of the National Climate Change Committee in the scheduling and convening of all meetings;
- To assist the Project Manager in arrangements related to the organization of the national, initiation and training workshops under the project;
- To assist the Project Coordinator in dealing with relevant international institutional and organizations such as UNDP and other relevant agencies as appropriate;
- To assist the Project Manager in the preparation of project reports; among similar tasks;

Qualifications and Experience:

The administrative assistance should have;

- A minimum qualification of a High School Diploma (preferably a Bachelor's degree);
- Computer skills (familiarity with a variety of word processing, data base and spreadsheet packages);
- Knowledge of Public Service rules and procedures;
- Three (3) to six (6) years experience in a similar position

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3. TOR for Project Steering Climate Change Committee

In order to ensure a successful implementation of the projects, the Ministry of Finance of Grenada as the Executing Agency will utilize the existing National Climate Change Committee to act as a steering committee to oversee project implementation. The Ministry of Finance will chair the Committee and the Project Manager will act as the Deputy Chairperson during project implementation.

The duties, responsibilities and operating rules of the above Committee will be as following:

- Provides assistance and support to the Project Manager, National Climate Change Focal Point, and other experts and counterparts during the implementation process of all project activities
- Reviews and make necessary comments for the all draft documents prepared by the project's implementation team
- Receives information on a regular basis on the status of project activity implementation and project challenges
- Ensure that the project is implemented as required by the UNFCCC

Rules under which the NCCC operates:

- The NFP serves as the active chairman of Committee
- The Committee shall meet every quarter for the duration of the project or as decided by the chairs
- Modus operandi of the committee would be determined on the first meeting of the committee.

In principle, the Steering Committee shall operate on the basis of consensus. If consensus cannot be reached, then the case under discussion might be put to a vote. Voting is performed through a secret ballot.

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4. TOR for the International Consultant

An International Consultant will be contracted to oversee the technical aspects of the project. He/she will work closely with Project Manager and the other consultation employed under the project. Responsibilities include:

- An advanced degree (at least MSc. or equivalent) in energy, environmental management or other field relevant to the project.
- At least three (3) years working experience in the area of Climate Change
- Review reports for all components of the project
- Developing and verifying methodologies for the different components of the project
- Providing technical guidance and advice at the different stages of the project
- Make recommendations and evaluations as deemed necessary
- Participate in meeting of the National Climate Change Committee as requested by the Project Manager
- Demonstrated ability of drafting and analytical work
- Familiarity with computers and word processing
- Fluency in English

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Generic Draft
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.



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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 workplan 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

6. 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.
7. 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.
8. 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)

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9. 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.
10. 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.
11. Assess in-country expertise required to apply the selected methods/tools and prepare training/technical backstopping strategy as required.
12. 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

13. 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 timeline for such support.

Q. 11. 10. 1994

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Letters of endorsement:

- a) GEF Operational Focal Point

Ref. No.
In replying the above
Number and date of this
letter should be quoted.



MINISTRY OF FINANCE,
FINANCIAL COMPLEX,
THE CARENAGE,
ST. GEORGE'S,
GRENADA, W.I.

June 13, 2006

Ms. Rosina Wiltshire
Resident Representative
UNDP
P. O. Box 625C
Bridgetown
Barbados

Attention: Mr. Reynold Murray

Dear Ms. Wilshire,

Submission of Grenada's Second National Communication Project Proposal

The Government of Grenada endorses the proposal entitled, "Grenada's Second National Communication Project" and requests the United Nations Development Programme UNDP to take the necessary steps to ensure the prompt submission of the proposal for consideration and approval by the Global Environmental Facility (GEF).

The objective of the project is to enable Grenada to fulfill its reporting obligation to the United Nations Framework Convention on Climate Change, as well as to strengthen Grenada's ability to develop a structured and coherent response to climate change.

We thank you for your usual kind support.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Lennox J. Andrews'.

.....
Lennox J. Andrews
GEF Operational Focal Point
Grenada

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b) UNFCCC Focal Point

Ref. No.
In replying the above
Number and date of this
letter should be quoted



MINISTRY OF FINANCE,
FINANCIAL COMPLEX,
THE CARENAGE,
ST. GEORGE'S,
GRENADA, W.I.

September 8th, 2006

Ms. Rosina Wiltshire
Resident Representative
UNDP
P. O. Box 625C
Bridgetown
Barbados

Attention: Mr. Reynold Murray

Dear Ms. Wiltshire,

Endorsement of Grenada's Second National Communication Project Proposal

In my capacity as United Nations Framework Convention on Climate Change (UNFCCC) focal point for Grenada, I hereby endorse the proposal to access GEF funding to conduct Grenada's Second National Communication through the United Nations Development Programme (UNDP).

Grenada considers the project to be an important and valuable exercise on our ongoing efforts to address climate change while working to achieve our national sustainable development goals.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Jocelyn Paul', written over a horizontal dotted line.

Jocelyn Paul
Climate Change Focal Point

SIGNATURE PAGE

Country: Grenada

UNDAF Outcome(s)/Indicator(s):
(Link to UNDAF outcome. If no UNDAF, leave blank)

Outcome:

[Redacted]

Indicator:

[Redacted]

Outcome:

[Redacted]

Indicator:

Expected Outcome(s)/Indicator (s):
(CP outcomes linked to the SRF/MYFF goal and service line)

[Redacted]

Implementing partner: [Redacted]

(designated institution/Executing agency)

Other Partners:

(formerly implementing agencies)

[Redacted]

[Redacted]

Programme Period: 2006-2009
Programme Component:
Project Title: PIMS #3340 CC EA SNC of Grenada
Project ID: 00045243
Project Duration: 3 years
Management Arrangement: NEX

Budget \$405,000
General Management Support Fee _____
Total budget: \$405,000
Allocated resources:
• Government _____
• Regular _____
• Other: _____
 ○ Donor _____
 ○ Donor _____
 ○ Donor _____
• In kind contributions _____
Unfunded budget: _____

Agreed by (Government):
Agreed by (Implementing agency):
Agreed by (UNDP):
12/19/2006



Annual Work Plan

Grenada - City Pgmm

Award ID: 00040126
 Award Title: PIMS 3451 CC PDF A: Grenada Self Assessment for SNC
 Year: 2005
 Report Date: 15/1/2007

Project ID	Expected Outputs	Key Activities	Timeframe		Responsible Party	Planned Budget				
			Start	End		Fund	Donor	Budget Descr	Amount US\$	
00045249	PIMS 3451 CC PDF A: Grenada Se	Preparation of Project propo	20/5/05	31/1/206	BAR-Government of Grenada	62000	GEF Trustee	71300	Local Consultants	0.00
		Stakeholder consultation	20/5/05	31/1/206	BAR-Government of Grenada	62000	GEF Trustee	74500	Miscellaneous Expenses	666.00
		Stocktaking exercise	20/5/05	31/1/206	BAR-Government of Grenada	62000	GEF Trustee	71300	Local Consultants	3,547.00
		Supplies	20/5/05	31/1/206	BAR-Government of Grenada	62000	GEF Trustee	74500	Miscellaneous Expenses	2,021.00
		Travel	20/5/05	31/1/206	BAR-Government of Grenada	62000	GEF Trustee	71600	Travel	0.00
TOTAL										6,234.00
GRAND TOTAL										6,234.00

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Annual Work Plan

Grenada - City Pgmin

Award Id: 00040128

Report Date: 15/1/2007

Award Title: PIMS 3451 CC PDF A: Grenada Self Assessment for SNC

Year: 2006

Project ID	Expected Outputs	Key Activities	Timeframe		Responsible Party	Planned Budget					
			Start	End		Fund	Donor	Budget Descr	Amount US\$		
00045243	PIMS 3451 CC PDF A: Grenada Se	Billings			BAR-Government of Grenada	62000	GEFTrustee	74500	Miscellaneous Expenses	1,000.00	
		Contractual Services			BAR-Government of Grenada	62000	GEFTrustee	72100	Contractual Services-Companie	20,000.00	
		Equipment			BAR-Government of Grenada	62000	GEFTrustee	72200	Equipment and Furniture	5,000.00	
		Local Consultants			BAR-Government of Grenada	62000	GEFTrustee	71300	Local Consultants	10,000.00	
		Miscellaneous			BAR-Government of Grenada	62000	GEFTrustee	74500	Miscellaneous Expenses	2,000.00	
		Preparation of Project propo	20/5/05	31/12/06	BAR-Government of Grenada	62000	GEFTrustee	71300	Local Consultants	4,000.00	
		Stakeholder consultation	20/5/05	31/12/06	BAR-Government of Grenada	62000	GEFTrustee	74500	Miscellaneous Expenses	3,287.00	
		Travel	20/5/05	31/12/06	BAR-Government of Grenada	62000	GEFTrustee	71600	Travel	6,379.00	
		TOTAL									51,666.00
		GRAND TOTAL									51,666.00





Annual Work Plan

Grenada - Cty Pgnm

Award Id: 00040128
 Award Title: PIMS 3451 CC PDF A: Grenada Self Assessment for SNC
 Year: 2006
 Report Date: 15/1/2007

Project ID	Expected Outputs	Key Activities	Timeframe		Responsible Party	Planned Budget			Amount US\$
			Start	End		Fund	Donor	Budget Descr	
00045243	PIMS 3451 CC PDF A: Grenada Se	Audit			BAR-Government of Grenada	62000	GEFTrustee	74500 Miscellaneous Expenses	2,200.00
		Billings			BAR-Government of Grenada	62000	GEFTrustee	74500 Miscellaneous Expenses	2,000.00
		Communications			BAR-Government of Grenada	62000	GEFTrustee	74500 Miscellaneous Expenses	2,000.00
		Contractual Services			BAR-Government of Grenada	62000	GEFTrustee	72100 Contractual Services-Companies	62,500.00
		Equipment			BAR-Government of Grenada	62000	GEFTrustee	72200 Equipment and Furniture	2,700.00
		International Consultants			BAR-Government of Grenada	62000	GEFTrustee	71200 International Consultants	8,300.00
		Local Consultants			BAR-Government of Grenada	62000	GEFTrustee	71300 Local Consultants	24,000.00
		Miscellaneous			BAR-Government of Grenada	62000	GEFTrustee	74500 Miscellaneous Expenses	1,400.00
		Operating Costs			BAR-Government of Grenada	62000	GEFTrustee	74500 Miscellaneous Expenses	1,500.00
		Printing			BAR-Government of Grenada	62000	GEFTrustee	74500 Miscellaneous Expenses	8,400.00
		Professional Services			BAR-Government of Grenada	62000	GEFTrustee	74100 Professional Services	1,800.00
		Supplies	20/5/05	31/12/06	BAR-Government of Grenada	62000	GEFTrustee	74500 Miscellaneous Expenses	1,600.00
		Travel	20/5/05	31/12/06	BAR-Government of Grenada	62000	GEFTrustee	71600 Travel	5,000.00
TOTAL									143,500.00
GRAND TOTAL									143,500.00

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Annual Work Plan

Grenada - City Pgmin

Award Id: 00040128 Report Date: 15/1/2007
 Award Title: PIMS 3451 CC PDF A: Grenada Self Assessment for SNC
 Year: 2007

Project ID	Expected Outputs	Key Activities	Timeframe		Responsible Party	Planned Budget				
			Start	End		Fund	Donor	Budget Descr	Amount US\$	
00045243	PIMS 3451 CC PDF A: Grenada Se	Audit			BAR-Government of Grenada	62000	GEFTrustee	74500	Miscellaneous Expenses	3,200.00
		Billing			BAR-Government of Grenada	62000	GEFTrustee	74500	Miscellaneous Expenses	2,000.00
		Communications			BAR-Government of Grenada	62000	GEFTrustee	74500	Miscellaneous Expenses	6,200.00
		Contractual Services			BAR-Government of Grenada	62000	GEFTrustee	72100	Contractual Services-Companies	104,000.00
		Equipment			BAR-Government of Grenada	62000	GEFTrustee	72200	Equipment and Furniture	13,000.00
		International Consultants			BAR-Government of Grenada	62000	GEFTrustee	71200	International Consultants	17,100.00
		Local Consultants			BAR-Government of Grenada	62000	GEFTrustee	71300	Local Consultants	67,500.00
		Miscellaneous			BAR-Government of Grenada	62000	GEFTrustee	74500	Miscellaneous Expenses	1,700.00
		Operating Costs			BAR-Government of Grenada	62000	GEFTrustee	74500	Miscellaneous Expenses	3,000.00
		Printing			BAR-Government of Grenada	62000	GEFTrustee	74500	Miscellaneous Expenses	3,300.00
		Professional Services			BAR-Government of Grenada	62000	GEFTrustee	74500	Miscellaneous Expenses	3,800.00
		Supplies	20/5/05	31/12/06	BAR-Government of Grenada	62000	GEFTrustee	74500	Miscellaneous Expenses	2,800.00
		Travel	20/5/05	31/12/06	BAR-Government of Grenada	62000	GEFTrustee	71800	Travel	21,000.00
TOTAL										
GRAND TOTAL										
248,600.00										
248,600.00										

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