

DOMINICA
Pilot Program for Climate Resilience (PPCR)
First Joint Mission
July 20-22, 2011

Aide-Memoire

A. Introduction

1. The Pilot Program for Climate Resilience (PPCR) is the only adaptation funding window of the Climate Investment Fund (CIF), which was established by the Multilateral Development Banks (MDBs) to finance climate change support for their developing member countries (DMCs). PPCR seeks to mainstream climate change adaptation into national development planning processes through a long-term programmatic approach which, ideally, frames all donor climate change adaptation interventions. To date, nine countries and two regions have been invited to participate in the global PPCR program. Dominica is part of Caribbean regional program, which includes six countries (Dominica, Grenada, Haiti, Jamaica, Saint Lucia and Saint Vincent and the Grenadines) as a well as a Regional Track.

2. The objective of the PPCR is to provide incentives for scaled-up action and transformational change through pilot projects that demonstrate how to integrate climate risk and resilience into core development planning, while complementing other ongoing development activities in pilot countries. The PPCR program is country-led and driven, and will enable pilot countries to transform country-specific plans and investment programs to address climate risks and vulnerabilities, building on national adaptation plans and policies as well as other relevant country studies, plans and strategies.

3. Under the PPCR, funds have been allocated to each of the six pilot countries in the Caribbean Regional Program for the preparation of their respective Strategic Program for Climate Resilience (SPCR). In addition, US\$60-\$75 million in grants and up to US\$36 million in concessional funds will be split between the six pilot countries and the Regional Track for the implementation of the SPCRs. Pilot countries will not be obliged to accept concessional loan financing as a condition for receiving grants.

4. The PPCR process is divided into two phases. In Phase I, a SPCR and related Investment Plan will be developed, and, in Phase II, the specific projects/program identified in the SPCR will be implemented. The indicative timeframe for the Dominica Phase I is in the range of five to six months. The key activities executed during Phase I of the PPCR include:

- Joint Scoping Mission to initiate the development of the draft proposal for Phase I;
- First Joint Mission to finalize the proposal for Phase I;
- Tasks related to Phase I including the development of the SPCR;
- Second Joint Mission to review and finalize the SPCR; and
- Submission of the final SPCR and correlating Investment Plan as the output of Phase I.

5. Following a Scoping Mission held March 4-5, 2010 and the approval of Dominica's Phase I proposal in April 2011, a Joint Mission led by the World Bank visited Dominica from July 20-22, 2011¹.

¹ The mission consisted of Mr. Niels Holm-Nielsen (TTL, Hazard Risk Management Specialist, World Bank), Justin Locke (Disaster Risk Management Specialist, World Bank), Nancy Charani Meza (Operations Analyst, World Bank), Marco Giussani (Operations Officer, IFC) and Patricia Mendoza (Coordinator of the PPCR Caribbean Regional Track).

The Joint Mission held discussions with relevant government line ministries, the private sector, civil society and key stakeholders (see Annex 1: List of Persons Met) to: (i) launch the PPCR process in Dominica following the approval of the Phase I proposal by the PPCR Sub-Committee; (ii) meet with stakeholders (CSOs and private sector representatives, among others) and development partners to increase awareness and understanding of the PPCR process; (iii) finalize the terms of reference for the consultants for Phase I of the PPCR, and; (iv) agree on next steps in the process of development of the SPCR and related investment plan.

6. This Aide Memoire summarizes the First Joint Mission's findings and recommendations, as well as the immediate next steps for Government and the MDBs to take, leading to the completion of the implementation of Phase I, the development of the SPCR and the subsequent submission of the SPCR to the CIF Sub-Committee. The Joint Mission discussed this Aide Memoire with the Environmental Coordinating Unit under the Ministry of Environment, Natural Resources, Physical Planning and Fisheries.

B. Mission Findings

1. Climate Resilience in Dominica

7. Small Island Developing States (SIDS) such as Dominica are characterized by unique circumstances that pose serious challenges to their sustainable development. Among these are their relatively small size; remoteness; limited natural resource base; limited human capacity and resources; limited technological capability; open economies, with a heavy dependence on imports; and fragile ecosystems. The onset of the climate change phenomenon imposes new hazards on Dominica, and exacerbates existing ones.

8. The Commonwealth of Dominica is a small island developing state within the Organization of Eastern Caribbean States (OECS). It is located at about 15° N and 65° W, between the French dependencies of Martinique to the South and Guadeloupe to the North. It is the largest of the member states, measuring 47 kilometers in length by 25 kilometers wide and occupies an area of 750 square kilometers (290 square miles/195,000 acres).

9. The combination of Dominica's size and location results in the climate being strongly influenced by features of the north tropical Atlantic. The climate regime is described as humid tropical marine and is characterized by a dry winter-wet summer pattern and high and fairly uniform temperatures year-round. The rugged topography of Dominica's interior also results in micro-climatic variability within very short distances on the island.

10. The country is among the wettest in the eastern Caribbean. Dominica receives, on average, between 250 and 380 centimeters of rain each year. The rainfall climatology shows a dry season from January through April and a primary wet season from September through November. The mountainous interior produces a rainfall shadow on the western Caribbean coast, where average rainfall falls below 200 centimeters per year. In contrast, rainfall in the mountainous inland regions can reach as high as 700 centimeters per year.

11. Based on Dominica's *Second National Communication* to the United Nations Framework Convention on Climate Change (UNFCCC-SNC) vulnerability and adaptation (V&A) process, the following sectors have been identified as priority sectors: (i) Agriculture (Food Security); (ii) Water Resources; (iii) Coastal and Marine Resources; (iv) Forestry; (v) Human Health; (vi) Tourism, and; (vii) Infrastructure (transport links (roads and airport), telecommunications systems, electricity network (hydropower)).

12. The Government of the Commonwealth of Dominica (the Government) is committed to aligning PPCR interventions with ongoing national climate change adaptation and disaster risk management policies and ensuring that all proposed activities under the PPCR are harmonized with existing government and donor adaptation/disaster risk management initiatives.

2. Stock-taking of Climate Change and Climate Data Activities

13. Over the last decade, Dominica has participated in a number of climate change projects and activities, with assistance from development partners. An initial assessment of climate change risks and impacts affecting Dominica was presented in *Dominica's Climate Change Adaptation Policy and Action Plan* (2002). This assessment of risks and impacts was updated in the *Second National Communication to the UNFCCC*.

14. Site-specific climate risks were identified during the *Special Programme for Adaptation to Climate Change* (SPACC), and the *Sustainable Land Management* (SLM) Project. Resource-specific risks from climate change have been identified in *Dominica's Biodiversity Strategy and Action Plan* and as part of the process to develop the *Policy for Sustainable Water Resource Management Plan*.

15. The UNFCCC-SNC process revealed a number of interesting findings from various sector reports. During the launch of the Joint Mission, it was highlighted that a review of these documents will be essential in obtaining stakeholder consensus concerning the nature and scope of climate change risks and locational-specific impacts affecting Dominica, which will guide the formulation of the SPCR.

16. The Joint Mission also recognized information gaps concerning climate change risks and impacts affecting Dominica. Due to the limited information available in Dominica and other Caribbean PPCR countries concerning the impacts of climate change and increased global carbon levels, the Joint Mission highlighted the need for increased coordination with the Regional Track PPCR and regional institutions such as the Caribbean Community Climate Change Centre (CCCCC) to provide improved data to support the risk assessment process which will be undertaken as part of Dominica's PPCR Phase I analysis.

C. Mission Recommendations

1. PPCR Focus

17. Given the wide range of potential activities for the PPCR in Dominica, the Joint Mission and Government agreed on an intervention that would deliver a "transformational" change through a successful pilot program that could be up-scaled with CIF PPCR funding. The Government was informed by the Joint Mission that the total PPCR grant envelope available to Dominica will be in a range of US\$5-7 million², and the total concessional envelope available to Dominica will be in a range of US\$4-9 million.³

18. Key activities to be undertaken in Phase I include: 1) an in-depth assessment of climate change impacts and risks; 2) an adaptation capacity assessment; 3) the identification of priority interventions to address identified risks for inclusion in the Investment Plan; 4) a cost benefit analysis and return on

² The available PPCR grant envelope range is set with the understanding that the lower range would apply if the total Caribbean pilot grant envelope is at the lower end of US\$60 million.

³ The available PPCR concessional financing envelope range is set with the understanding that the lower range would apply if the total Caribbean pilot concessional financing envelope is at the lower end – US\$36 million.

investment analysis for potential public and private sector interventions; and 5) convening of a 2nd Joint Mission to review and finalize draft SPCR and Investment Plan.

19. Some factors informing the decision on the focus and the key activities to be undertaken in Phase I were:

(i) country needs/priorities, as outlined in *Dominica's Climate Change Adaptation Policy and Action Plan* (2002), the *Second National Communication* to the UNFCCC and other relevant documents as outlined above;

(ii) the results of the PPCR launch during the Joint Mission, including strategies for engagement in the PPCR developed by the various stakeholders (see Annex 4) to ensure that the PPCR process is informed by a wide group of stakeholders – international, national and local;

(iii) the need to improve the understanding of climate change impact through better data and analysis;

(iv) the need for cross-sectoral information/knowledge sharing, capacity building and institutional strengthening, as highlighted by the technical meetings held with various line ministries and government agencies during the mission; and

(v) CIF guidelines suggesting that PPCR should complement existing/planned MDB investments and government activities, and build on climate resilience donor/regional organization/NGO initiatives.

20. ***Private Sector Engagement.*** The Joint Mission and the Government of the Commonwealth of Dominica (the Government) have identified the need to build climate resilience in the agriculture, tourism and certain manufacturing sectors, which is dominated by private enterprises. In this respect, the PPCR Phase I Team has included a private sector focus on all of the key activities to be undertaken in Phase I by means of establishing a private sector working group to be organized by clusters. The Dominica Association of Industry & Commerce (DAIC) will lead one of the clusters summoning the merchant, banking and insurance business sectors, the Hotel and Tourism Association (DHTA) has been proposed to lead the hospitality and water sport industry sectors and the Windward Islands Farmers' Association (WINFA) and FAIRTRADE, the agri-producers. In addition, discussions were held in respect to adding a specialist on private sector adaptation in the PPCR Phase I Team to support the risk assessment and adaptive capacity assessment, and guide the identification of priority interventions to address expected risks and preparation of the corresponding section of the Investment Plan. This specialist will work very closely with the PCR Team, the private sector working group and the corresponding line ministries. The cost of this specialist should be included in the budget available for the Phase I Consultancy Team. In case this is not doable, IFC will evaluate the possibility to cover this additional cost.

21. The PPCR Phase I Team Leader (see paragraph 30 for reference) requested the support from: (a) the CCCCC to assist with the costs-benefit analysis on proposed PPCR adaptation measures, including an analysis of the costs of inaction; and (b) the IFC to undertake the return on investment analysis of priority adaptation interventions identified and selected by the private sector and for the loan component. The type and form of this support will become clearer at a later stage.

22. IFC informed the Environmental Coordinating Unit (ECU) in the Ministry of Environment, Natural Resources, Physical Planning and Fisheries and the PPCR Team about the work being undertaken by Castalia Strategic Advisors. The objective of Castalia's assignment is to identify, cost and technical describe appropriate interventions by the private sector for "improving the resilience" of key economic

activities/sectors in Dominica to the predicted impacts of climate change. The proposed private sector interventions recommended by Castalia will go through a review and feedback process involving ECU, the PPCR Team and the working groups and will be formatted / adjusted in such a way that ensures easy integration to the SPCR and Investment Plan.

Other points raised in the discussion on private sector engagement included:

- (i) The opportunities to use financial institutions to improve access to finance to small businesses and farmers for adaptation and climate resilience type investments.
- (ii) The opportunities for climate-proofing renewable energy sources such as geothermal energy. Dominica is undergoing the prospecting phase of the Wotten Waven Geothermal Energy Project that is receiving advisory support from IFC.
- (iii) The need to explore public-private partnerships as a vehicle to climate-proof projects in infrastructure, waste management and development of alternative sources of energy.

23. ***Linkages with the PPCR Regional Program.*** Discussion on linkages to the regional track activities with Dominica's National PPCR centered on possible measures to form that link during Phase I - rather than limiting these to the respective SPCRs. Suggestion for beneficial measures in this regard included regional track support to the national level to identify resources such as technical expertise in economic analysis of the impacts of climate change and the cost of inaction. It was acknowledged that the regional track PPCR Phase I budget did not accommodate the financing of possible required inputs in this regard, such as the cost of technical inputs in terms of the actual cost benefit assessment (i.e. cost of consultant's travel and fees). Notwithstanding, it was agreed that the regional track pilot would support this effort by facilitating communication with the relevant institutional bodies and capacities where the required expertise are housed. The regional Track PPCR could also advise as to methodologies to be used for such economic analysis which has been undertaken by the Caribbean Community Climate Change Centre (CCCCC) and United Nations Economic Commission for Latin America and the Caribbean (UNECLAC).

24. It was agreed that this approach will be piloted for the procurement of technical assistance for the costs/benefits analysis of taking adaptation measures and of inaction. The pilot should be geared toward establishing architecture for receiving and responding to the need for capacity building/exchange of information and lessons learned by participating PPCR countries in the region.

25. It was agreed that the lead consultant for the development of Dominica's SPCR would prepare a terms of reference to support the identification of the technical capacity needed for the costs/benefit analysis, and forward to the PPCR Regional Coordinator for assistance in sourcing. The PPCR National Coordinator will work with the World Bank Task Team on the procurement of financial resources that may be needed to field an expert.

26. Other points raised in the discussion of PPCR regional and national track linkages included:

- (iv) The need for criteria to be designed/articulated, especially in terms of the adaptation requirement for the PPCR, vis-à-vis mitigation and disaster risk reduction. This is especially important to avoid diffusion of the regional track efforts and therefore ensure higher impact and effectiveness; and
- (v) The lack of specific reference in the respective Eastern Caribbean national SPCR documents to the involvement of the PPCR Regional Coordinator in joint missions. The point was made such that participation and actions aimed at synergies would be documented.

2. Implementation Arrangements

27. **Government Implementing Agencies.** The Environmental Coordinating Unit (ECU) in the Ministry of Environment, Natural Resources, Physical Planning and Fisheries is the focal point for the PPCR. The ECU will coordinate all activities of the PPCR, including the implementation of Phase I and the development of the SPCR and Investment Plan, in close collaboration with the Ministry of Finance and relevant technical line ministries/agencies. The development of the SPCR will benefit from the inputs of five Thematic Working Groups, which were created during the 1st Joint Mission. These Working Groups (water resources, agriculture, energy/disaster management/met services, private sector, civil society) are comprised of representatives of relevant line ministries / government agencies and civil society (see Annex 5 for the list of persons present during technical meetings to create the Thematic Working Groups). It was recommended that the Thematic Working Groups should keep an open membership in order to benefit from the expertise of a wide range of practitioners and technical staff. The Thematic Working Groups will convene at regular intervals to: (a) undertake a climate change risks assessment; (b) undertake an adaptive capacity assessment; (c) help identify priority investments; (d) provide guidance on the SPCR development; and (e) provide inputs and receive updates on the PPCR process.

28. In addition to the Government arrangements, it is vital for PPCR success that political leadership on a whole-of-government cross sectoral climate change adaptation mainstreaming approach through utilizing existing and creating new government-non government, civil society and private sector partnership mechanisms to facilitate a participatory PPCR-decision making process.

29. **MDB Arrangements for Phase I.** As requested by the Government in a formal letter, the fiduciary aspects of Phase I will be executed by the World Bank. The ECU, Ministry of Environment, Natural Resources, Physical Planning and Fisheries will be responsible for the coordination of the Phase I activities and liaising with multilateral and regional agencies, as appropriate. The IFC will determine whether resources can be made available to engage an additional member of the PPCR team who will be responsible for ensuring close Private Sector engagement through the Private Sector Thematic Working Group.

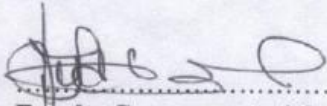
30. **Phase I Consultancy Team.** A team of consultants will be procured to undertake activities during Phase I and formulate the SPCR and related Investment Plan. The consultancy team will be comprised of an International Team Leader/Senior Climate Change Adaptation Specialist with extensive experience in climate change and managing integrated teams, a Data and Information Systems Management Specialist, and a Water Resource/Watershed Management Specialist, an Economist, an Agriculture Specialist and a National Coordinator. It is anticipated that the Team Leader will be contracted for the entirety of Phase I, and the specialist consultants will be contracted for specific timeframes based on their area of expertise and required contribution to the SPCR. All the consultants will work closely with the Team Leader and report to the National Coordinator for technical direction and supervision. The respective specialist consultants will work with the appropriate line ministry and Thematic Working Groups to collate the information and data needed, undertake the risk assessment and adaptive capacity assessments, identify priority needs and intervention, which is required to complete their respective section of the SPCR and related Investment Plan. The Team Leader will be responsible for managing and delivering all the proposed deliverables / activities under Phase I – most importantly, the SPCR and the Investment Plan. The terms of reference for the Phase I Consultancy Team will be highly integrated, and based on the activities under approved Phase I proposal. At the end of the process the Working Groups will review the draft SPCR and provide comments to the Team Leader.

D. Next Steps


31. To keep the desired schedule, the Government and the Joint Mission agreed on the following next steps:

	Action/Agreement	Date	Responsibility
1	Comments on TORs for Phase I Consultant Team submitted to the Ministry of Environment, Foreign Trade and Export Development	August 1, 2011	World Bank
2	Final Phase I TORs for Consultant Team submitted to the World Bank for contracting	August 7, 2011	ECU, Ministry of Environment, Natural Resources, Physical Planning and Fisheries
3	Convening of Thematic Working Groups	August 2011	Working groups, coordinated by ECU
4	Assessment of Climate Change Risks	August/September 2011	ECU
5	Adaptation Capacity Assessments	August/September 2011	ECU
6	Identification of priority interventions	Early October 2011	Working Groups / ECU
7	Cost-benefit analysis / return on investment analysis	October 2011	ECU
8	Donor Roundtable and technical review of proposed priority interventions	Late October 2011	ECU / World Bank
9	Development of draft SPCR	November 2011	Phase I Consultant team / ECU
10	2 nd Joint Mission	Late November 2011	ECU
11	SPCR posted on national PPCR website for comments by stakeholders	January 2012	ECU,
12	Submission of the SPCR and Investment Plan to the CIF Secretariat	February 2012	Ministry of Finance

32. The Joint Mission wishes to express its appreciation to the Government of the Commonwealth of Dominica, particularly the Environmental Coordinating Unit, Ministry of Environment, Natural Resources, Physical Planning and Fisheries, for the assistance provided to the Joint Mission. In accordance with CIF guidelines, a publicly available report of the Joint Mission will be prepared and forwarded to CIF.



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For the Government of the Commonwealth of Dominica:
~~Mrs. Rosamund Edwards~~ FRANCISCA PASCAL
Financial Secretary AS
Ministry of Finance



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For the Joint Mission:
Mr. Niels Holm-Nielsen
Hazard Risk Management Specialist,
Latin America and Caribbean Region
The World Bank

Date: August 31, 2011

ANNEX 1: List of Persons Met during the Joint Mission

**DOMINICA
PILOT PROGRAM FOR CLIMATE RESILIENCE (PPCR)
FIRST JOINT MISSION
FORT YOUNG HOTEL
JULY 20TH, 2011 - 9:00AM TO 4:00PM**

NO.	NAME	ORGANISATION	CONTACT NUMBERS	EMAIL ADDRESS(ES)
1.	Mr. Hilarian Jules	Housing Division	266 3740/2753931	julesh@dominica.gov.dm
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3.	Lolell Williams	Dominica National Council on Women	448 3935	Williams-101@hotmail.com
4.	Lolita Raffoul	Discover Dominica Authority	448 2045	Lraffoul@dominica.dm
5.	Kyle Gordon	Dominica Bureau of Standards	448 1685	kgordon@dominica.org
6.	Greta Green	DOAM inc	265 8570	inquiry@doamdominica.org
7.	Tarnia Green	Government Information Service	277 2819/448 1542	chouette@gmail.com
8.	Eddie Henry	Waitukubuli National Trail	266 3592	wntp@cwdom.dm
9.	Tatsuya Morita	JICA	235 3183	Morita.Tatsuya@jica.go.jp
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13.	Florian Mitchel	Dominica Solid Waste Management	616 8170	Mnitchelf.dswmc@cwdom.dm
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NO.	NAME	ORGANISATION	CONTACT NUMBERS	EMAIL ADDRESS(ES)
20.	Harold Guiste	Fisheries Division	266 291	Fisheriesdivision@cwdom.dm
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22.	Agnes Esprit	GEF/SGP Compact	448 4345	agnese@unops.org
23.	Vindrani Shillingford	Ministry of Finance	266 3515	shillingfordv@dominica.gov.dm
24.	Roland Royer	Waitukubuli National Trail Project	225 2899	Royee22@hotmail.com
25.	Mandela D. Christian	Office of Disaster Management	225 8149	demandela@gmail.com
26.	Daniel	Ministry of Tourism and Legal Affairs	266 3001	Wlyd21@hotmail.com
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28.	Sylvester St. Ville	Environmental health	266 3466	environhealth@hotmail.com
29.	Atherton Martin	The Development Institute	276 1878	Aem_75@hotmail.com

30.	Bradley Guye	ECU	2665256	
31.	Winnifred Lewis	Dominica National Council of Women	245 6886	
32.	Ashton Lugay	Forestry Division	265 1458	Asstforestofficer3@cwdom.dm
33.	Vernon Daniel	Portsmouth Town Council	277 5640	ibrahimdaniel@gmail.com
34.	Errol Harris	Dom SETCO/ Poultry Association	501 822 7104	Patricrab.mendoza@gmail.com
35.	Patricia Mendoza	Regional Track PPCR	718 282 2685/347 553 2581	
36.	Adisa Trotter	Division of Agriculture	266 3810	aictudoa@gmail.com

ANNEX 2: Terms of Reference for the First Joint Mission for the Pilot Program on Climate Resilience (PPCR)

**Terms of Reference
First Joint Mission
Pilot Programme for Climate Resilience (PPCR)
in
Dominica**



July 20-22, 2011

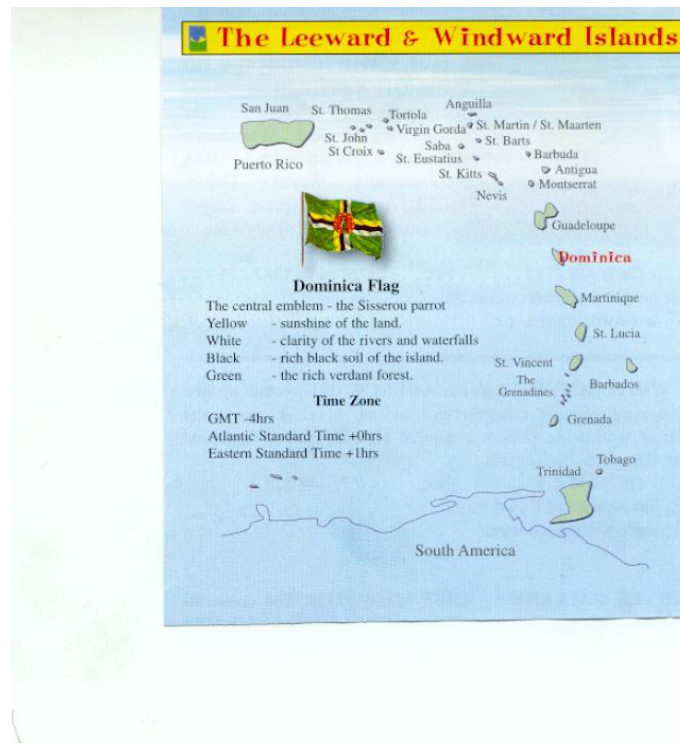
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BACKGROUND

The Commonwealth of Dominica is a small island developing state within the Organization of Eastern Caribbean States (OECS). It is located at about 15° N and 65° W, between the French dependencies of Martinique to the South and Guadeloupe to the North. It is the largest of the member states, measuring 47 Km in length by 25 Km wide and occupies an area of 750 square kilometres (290 square miles/195,000 acres).

Figure 1.1



Current Climate: General Features

The combination of its size and location results in the climate of Dominica being strongly influenced by features of the north tropical Atlantic. There is modulation by the annual migration of the north Atlantic subtropical high, the eastward spreading of the tropical Atlantic warm pool, the fairly steady easterly trades, and the passage of tropical waves, depressions, storms and hurricanes. The resulting climate regime is described as humid tropical marine and is characterized by a dry winter-wet summer pattern and high and fairly uniform temperatures year-round. The rugged topography of Dominica's interior also results in micro-climatic variability within very short distances on the island.

Rainfall

The country is among the wettest in the eastern Caribbean. Dominica receives, on average, between 250 and 380 cm of rain each year. The rainfall climatology shows a dry season from January through April and a primary wet season from September through November. More than half the rainfall received in the course of the year, occurs in the primary rainfall season which coincides with peak tropical storm activity in the tropical Atlantic. There is bimodality in the rainfall climatology as May is a wetter month prior to the onset of the main rainy season. The mountainous interior produces a rainfall shadow on the western

Caribbean coast, where average rainfall falls below 200 cm per year. In contrast, rainfall in the mountainous inland regions can reach as high as 500 cm per year.

Temperature

The annual variation in maximum, minimum and mean temperatures has been analysed. The annual range is small for the mean temperature (~3 degrees), with peak temperature values occurring between July and August. Maximum temperature values may reach as high as 31 degrees C and peak slightly later in the year, while minimum temperature values may drop to less than 22 degrees C in the mean in January/February. Diurnal ranges are usually no greater than 3°C in most places. The steep interior slopes of Dominica also alter temperatures. During the warmest period of the year a maximum of 33 degrees C may be observed along the coast compared to 27 degrees C in the mountains. In the nights, minimum temperatures of 18 degrees C and 13°C respectively are not uncommon.

The climate is classified as “humid tropical marine”, which is characterized by little seasonal or diurnal variation with strong and steady trade winds. There is a distinct “dry” season (between February and June) and the “wet” season (between July and December). In this connection, the lush forested interior enjoys an average annual rainfall in excess of 10,000mm (400 inches) at the central peaks, which rise to over 1300m. This reduces to an average of about 50 inches per annum along the central portion of the west coast, which tends to be the driest section of the island. Average temperature values range from 27 degrees Celsius on the coast to approximately 21 degrees at the highest elevations and there is little seasonal fluctuation, generally less than two degrees Celsius. These realities make the Pilot Programme for Climate Resilience (PPCR) pilot project for Dominica both timely and beneficial. The PPCR pilot project will afford the island the opportunity to build on a number of climate change project and programme activities, which are aimed at building Dominica’s resilience to climate change.

Economy

The economy of Dominica is described as being small, open and primarily agricultural-based. Export dependent with commodity and market concentration, the island has always been in a vulnerable position economically, socially, culturally, and environmentally. Economic developments, in particular, are significantly affected by both natural and man-made external factors as is increasingly evidenced by the negative impact on the local economy of changes associated with such international phenomenon as globalization and trade liberalization.

The agricultural sector is the main determinant of economic growth and the main source of food and income for most of the population. In this regard, for the period 1992 – 1999, agriculture accounted for, an average **25%** of GDP, **70%** of total export earnings and **60%** of foreign exchange. Moreover, it supplied **60%** of the food requirements of the population and employed **30%** of the labour force (CSO, 1999). In this situation, the small domestic market makes economic growth highly dependent on exports. Over the last five years (1995 – 1999) real growth average 2.0% per annum and growth is estimated at less than 1% for the year 1999. Decline and stagnation characterized the major productive sectors, agriculture and manufacturing and tourism between the period 1995 – 1999.

FIRST JOINT MISSION

Timeframe

The First Joint Mission for Dominica's PPCR pilot is scheduled for the period **July 20th to 22nd, 2011**. Dominica is requesting a three day joint mission - as much of the groundwork has already been done, including a Joint Scoping Mission held in 2009, and the timeframe of three days is seen as ideal for conducting the activities necessary to make the joint mission a success.

Mission Objectives

Dominica would like the objectives of the joint mission to be:

1. Undertake stakeholder stocktaking on climate change risks and impacts in Dominica to identify gaps in information that can be addressed during Phase 1 - activities include critical review of *Dominica's Climate Change Adaptation Policy and Action Plan* (2002);
2. Provision of technical guidance concerning – (a) the level and conditions of PPCR funding (grant and loans) available to Dominica, (b) process and timing for the finalization of SPCR proposal to ensure rapid approval and release of funds;
3. Agreement on proposed Work Program to develop Dominica's SPCR;
4. Provision of technical guidance and input for the development of an Investment Plan that will include Dominica's Private Sector and IFC;
5. Identification of and agreement on modalities for engaging key development partners in the design of the SPCR;
6. Identification of and agreement on mechanisms for integration Dominica's Phase 1 activities or SPCR into the Caribbean Regional PPCR program;
7. Agreement on a public outreach program that will increase awareness and understanding of the PPCR project;
8. Preparation of an aide-memoire on activities undertaken, with details of consultations held, and agreements concluded, prepared jointly by the World Bank and the Government of Dominica.

Scope of Work

The PPCR aims to build a partnership framework for integrating climate resilience into national processes, including those that engage other development partners. The main activities to be conducted during this joint mission include:

- (1) Country stocktaking on climate change risks and impacts in Dominica to identify gaps in information that can be addressed during Phase 1 activities – possibly with support from the Caribbean Community Climate Change Centre (CCCCC) under the Regional PPCR;
- (2) Broaden engagement with key stakeholders and development partners;
- (3) Launch of PPCR public outreach program;

- (4) Formulation of work program to develop Dominica's SPCR.

Country Stocktaking on Climate Change Risks and Impacts

Since 2001, Dominica has participated in a number of climate change projects and activities. During the joint mission, it is anticipated that the team will take stock of ongoing and upcoming country climate change and related activities on the island in order to identify gaps in information concerning climate change risks or impacts affecting Dominica. An initial assessment of climate change risks and impacts affecting Dominica was presented in *Dominica's Climate Change Adaptation Policy and Action Plan* (2002). This assessment of risks and impacts has been updated in the *Second National Communication* to the United Nations Framework Convention on Climate Change (UNFCCC-SNC), while site-specific risks have been identified during the *Special Programme for Adaptation to Climate Change* (SPACC), and the *Sustainable Land Management* (SLM) Project. Resource-specific risks from climate change have been identified in *Dominica's Biodiversity Strategy and Action Plan* and as part of the process to develop the *Policy for Sustainable Water Resource Management Plan*.

Based on Dominica's UNFCCC-SNC vulnerability and adaptation (V&A) process, the following sectors have been identified as priority sectors:

- Agriculture (Food Security)
- Water Resources
- Coastal and Marine Resources
- Forestry
- Human Health
- Tourism
- Infrastructure (transport links (roads and airport), telecommunications systems; electricity network (hydropower))

The UNFCCC-SNC (V&A) process has revealed a number of interesting findings from the various sector reports. Review of these documents would be essential in obtaining stakeholder consensus concerning the nature and scope of climate change risks and impacts affecting Dominica which will guide the formulation of the SPCR.

During the stocktaking which shall be undertaken in the form of a National Consultative Workshop on day 2 of the Joint Mission, stakeholders shall identify:

- (a) gaps in information concerning climate change risks or impacts affecting Dominica - In light of the limited information available in Dominica and other Caribbean PPCR countries which have highlighted agriculture as a key focus (Haiti and Jamaica) concerning the impacts of climate change and increased global carbon levels on agricultural productivity and plant growth, assistance will be sought from the Regional PPCR to support and provide improved analysis in these areas to as to support the risk assessment process which will undertaken as part of Dominica's PPCR Phase 1 analysis;

- (b) Modalities for addressing any gaps in information concerning climate change vulnerability or risks affecting Dominica identified through this stocktaking which can be addressed during Phase 1 activities – possibly with support from the Caribbean Community Climate Change Centre (CCCCC) under the Regional PPCR.

Broaden Engagement with Key Stakeholders and Development Partners

Broad-based engagement and consultations with key stakeholders and development partners has been initiated during the preparation of the PPCR proposal, and will be broadened to facilitate the development of Dominica's SPCR. During this process, representatives from the multi-lateral development banks (MDBs) will interact with national stakeholders, including the Cabinet-appointed *National Climate Change Committee* (NCCC), which was established in 1998 and reconstituted in 2010, The *National Climate Change Committee* will perform an advisory role for the PPCR program. The members comprise: Environmental Coordinating Unit; Division of Agriculture; Fisheries Division; Department of Forestry, Wildlife and Parks; Dominica Meteorological Services; Ministry of Finance; Ministry of Tourism; Office of Disaster Management; Physical Planning Department; Environmental Health Department of the Ministry of Health; Ministry of Public Works, Energy and Ports; Dominica Solid Waste Management Corporation; Dominica Water and Sewerage Company; Discover and Invest Dominica Authority; Dominica Bureau of Standards; National Youth in Agriculture; Local Government Authority and NANGO.

Other stakeholders will be engaged in the process to formulate Dominica's SPCR including but not limited to representatives from the Dominica State College, University of the West Indies Dominica Open Campus, LIME Dominica, Dominica Electricity Services, Digicell and Marpin, Dominica Association of Industry and Commerce (seeking to have representatives of the farming and agricultural sector as well as Tourism and Hotel Association), and the Bankers' Association. The Office for Kalinago (Indigenous) People, Dominica Association for Women, the National Youth Environment Network, Waitikubuli Ecological Foundation, and Representative from the Bankers Association. Participants involved in the Joint Mission will provide input into the design of an appropriate process to engage key stakeholders (including women, youth, civil society) and development partners to ensure their input into the design of Dominica's SPCR. It is anticipated that this process will also allow the Ministry of Environment, Natural Resources, Physical Planning and Fisheries to obtain a better understanding of the island's knowledge gaps and information needs with regard to climate change that will guide the PPCR Public Outreach Program.

Co-operation arrangements with development/investment partners are still evolving. This will become more defined as the SPCR and Investment Plan are developed. It is anticipated that Joint PPCR missions of the World Bank Group will include representatives from interested key donor agencies and other partners to assist in the preparation of the SPCR. The PPCR process will also seek to build on existing partnerships with development partners, including:

- United Nations Development Programme (UNDP) (Contact: Dr. Reynold Murray, UNDP Barbados) - Second National Communications Project (UNDP-SNC) , Sustainable land Management (SLM) project), and Investment and Financial Flows Project (UNDP-IFF)
- World Bank (WB) and the Caribbean Community Climate Change Centre (CCCCC) - Special Adaptation to Climate Change Project (SPACC);
- United Nations Economic Commission for Latin America and the Caribbean – Review of Economics of Climate Change Project(UNECLAC-RECC);
- United Nations Environment Programme (UNEP) (Contact Dr. Mark Griffith, UNEP, Panama) and United Nations Food and Agricultural Organisation (FAO) – Organic Dominica Project.

Dominica has limited engagement with the IFC but considers a key area to be addressed in the SPCR will be to build climate resilience in the agriculture sector which is dominated by the private sector. Provision of technical guidance and input for the development of an Investment Plan that will include Dominica's Private Sector will be sought from the IFC during the Joint Mission. A break-out consultation on agriculture specifically, bringing together relevant government agencies, farmer and agriculture sector associations (including suppliers of inputs to farmers, especially seeds and agricultural chemicals; agricultural processors and exporters), banks, and other companies in the supply chain, may be the best way to understand the current state of knowledge and identify potential opportunities in order to develop an initial action/work plan.

Other potential partners that may be able to provide input and support in the development of Dominica's SPCR include, but are not limited to:

- Caribbean Development Bank (CDB)
- United States Agency for International Development (USAID)
- United Nations Environment Programme-Caribbean Environment Programme (UNEP-CEP)
- OECS-Environment and Sustainable Development Unit(ESDU)

Identification of and agreement on modalities for engaging key development partners in the design of the SPCR will be sought during the Joint Mission.

Finally, expertise and information on undertaking costs-benefit analysis for Dominica's SPCR will be sought from the CCCCC under the Regional Track PPCR Phase 1, and possible synergies with the *Caribbean Programme for Development Resilient to Climate Change* endorsed by CARICOM Heads of Government in June of 2009 and *Regional Programme for Implementation* (under development) will be clarified.

Launch of PPCR Public Outreach Program

- (c) Climate change will affect all sectors of society and many livelihoods, particularly members of the farming community which constitutes one of the country's principal productive sectors. However, certain groups, such as women, the poor and children are also likely to be severely affected due to their particular vulnerability and their limited ability to cope. Climate change affects women and men differently, depending on their respective status and roles in society. There is a need to ensure that the concerns and requirements of particular groups and segments are considered in the development of Dominica's SPCR. This will require education and empowering vulnerable groups, such as farmers, women and the youth to allow them to participate fully in building a climate resilient Dominica. It is anticipated that the PPCR outreach program would include capacity-building, where appropriate, in order to ensure that these vulnerable groups and segments are able to participate, to the fullest extent possible, in the design of the SPCR. Stakeholders participating in the Joint Mission will assist in the design of a PPCR public outreach program that will engage these constituent groups and ensure their active participation and involvement in the SPCR planning process. Additionally, during the Joint Mission, the PPCR website that is to be developed in Dominica during Phase 1 will be linked to and draw upon the information sharing modalities established under the Regional Track Phase 1, while best practices in developing Dominica's SPCR and undertaking the cost-benefit analysis to be undertaken during SPCR preparation will be sought from the CCCCC. Lessons learned from undertaking this analysis will be shared for dissemination with the Regional Track Phase 1.

Formulation of work program to develop Dominica's SPCR

Based on the work conducted during the Joint Mission and the work which preceded the joint mission by the project team, it is anticipated that shortly thereafter, a detailed work program to develop Dominica's SPCR will be concluded for inclusion in the aide-memoire that shall report on activities undertaken, with details of consultations held, and agreements concluded.

The work program will be developed with the intention to submit Dominica's SPCR to the PPCR Sub-Committee's for endorsement by February 2012.

Mission Outcome

The outcomes of the Joint Missions are anticipated to be as follows:

1. Identification of and consensus on climate change risks and impacts in Dominica that will guide the development of the SPCR;
2. Identification of gaps in information concerning climate change risks and impacts in Dominica that can be addressed during Phase 1;
3. Improved understanding within the Government of Dominica concerning – (a) the level and conditions of PPCR funding (grant and loans) available to Dominica, (b) process and timing for the finalization of SPCR proposal to ensure rapid approval and release of funds, (c) mechanisms for integration Dominica's Phase 1 activities or SPCR into the Regional PPCR program, (d) modalities for engaging key development partners and stakeholders (including civil society) in the design of the SPCR.
4. Agreement on and launch of public outreach program that will increase awareness and understanding of climate change risks and impacts in Dominica and the PPCR project;
5. An aide-memoire on activities undertaken, with details of consultations held, and agreements concluded, prepared jointly by the World Bank and the Government of Dominica.

Mission Composition

Dominica requests that technical expertise for the first joint mission is consistent with the activities outlined above and will give consideration to ensuring the active participation of national expertise as an integral component of capacity building and country ownership of the PPCR.

In light of past or ongoing engagement with Dominica in related programs and potential for broadening development-partner engagement in the formulation of Dominica's SPCR, it is expected that representatives from the following organisations will be invited to participate in the Joint Mission:

- United Nations Development Programme (UNDP) (Contact: Dr. Reynold Murray, UNDP Barbados) - Second National Communications Project (UNDP-SNC) , Sustainable land Management (SLM) project), and Investment and Financial Flows Project (UNDP-IFF);
- World Bank (WB) Group (World Bank Task Team and International Finance Corporation) and the Caribbean Community Climate Change Centre (CCCCC) - Special Adaptation to Climate Change Project (SPACC);
- United Nations Economic Commission for Latin America and the Caribbean – Review of Economics of Climate Change Project (UNECLAC-RECC);

- United Nations Environment Programme (UNEP) (Contact Dr. Mark Griffith, UNEP, Panama) and United Nations Food and Agricultural Organisation (FAO) – Organic Dominica Project.

Multi-Lateral Development Bank Mission Composition. The World Bank Group delegation will be led by Mr. Niels Holm-Nielsen (email: nholmnielsen@worldbank.org), Senior Disaster Risk Management Specialist/Task Team Leader. He will be accompanied by: Mr. Justin Locke, Disaster Risk Management Specialist who will also address gender and social issues related to disaster risk management and climate change adaptation; Ms. Nancy Chaarani Meza, Operations Analyst who will be responsible for providing technical guidance to Dominica on the Climate Investment Funds requirements concerning the level and conditions of PPCR funding (grant and loans) available and process / timing for the finalization of the SPCR and Investment Plan; and Mr. Jerry Meier, GIS/Technical Specialist who will be responsible for providing technical guidance to the Bank team, and co-lead technical discussions with the relevant line ministries in Dominica. The International Finance Corporation will be represented by Mr. Marco Giussani, Operations Officer. The IDB consultant for the PPCR Caribbean Regional track, Pat Mendoza, will also join the mission to ensure the linkages between the regional and national tracks

Government of Dominica Mission Focal Points. The Government of Dominica PPCR Focal Points for the Joint Mission are Mr. Lloyd Pascal (email: ecu@dominica.gov.dm), Director, Environmental Coordinating Unit, Ministry of Environment, Natural Resources, Physical Planning and Fisheries and Mr. Collin Guiste (email: collinguiste@hotmail.com), PPCR National Coordinator.

ANNEX 3: Agenda for Dominica's First PPCR Joint Mission

PILOT PROGRAM FOR CLIMATE RESILIENCE (PPCR)

First Joint Mission

July 20th -22nd, 2011

AGENDA

Wednesday July 20 th	
Day 1	PPCR Phase 1 Launch (Fort Young Hotel)
Purpose	To Launch the PPCR Phase 1 Process in Dominica & Identify initial priority areas and initiatives for the SPCR and Investment Plan
Time	Session
09:00-09:10	Welcome and Introduction
09:10-09:20	Presentation on Climate Change in Dominica: National Coordinator
09:20-09:40	Presentation on Overview Global PPCR and Process: World Bank Presentation on Caribbean Regional Track SPCR
09:40-09:50	Presentation on PPCR and the Private Sector: IFC
09:50-10:00	Key Note Address: Minister of Environment
10:00-10:30	BREAK
10:30-10:45	Presentation of Phase 1 Proposal:-Priority Areas: PPCR Team Leader
10:45-11:00	Presentation and Questions: Agriculture and Food Security
11:00-11:20	Presentation and Questions: Water Resource Management
11:20-11:35	Presentation and Questions: Data Management
11:35-12:00	Presentation and Question: Economics of Climate Change
12:00:-12:30	Presentation and Questions: Private Sector Role in Climate Change Adaptation
12:30-02:00	LUNCH

02:00-02:30	Break Out Sessions: Review of Phase 1 Proposal and Recommendations
02:30-03:00	Group Presentations
03:00-03:30	Discussion on needs and priorities for Phase 1 and Phase 2
03:30-04:00	Next Steps and Closure: Team Leader

Thursday July 21st	
Day 2	Meeting with Joint Mission
Time	Session
09:00 - 09:15	Overview of PPCR Launch Meeting
09:15 - 09:30	Feedback on PPCR Launch Meeting
09:30 - 10:30	Discussion on Activities for Phase 1 and Timelines
10:30 - 11:30	Next Steps and Closure
	AFTERNOON SESSION
	Meeting with Office of Disaster Management, Meteorological Office, Water Resources, Agriculture and Energy.

Friday July 22nd	
Day 3	Meeting with World Bank Group Team
	Morning Session
9:00am	Ministry of Finance and World Bank Group Team

ANNEX 4: Results of Break-Out Group Exercise – PPCR Launch on July 20, 2011

Strategy for engaging stakeholders: Public Sector

1. Establish working group per sector (water resources, agriculture) to be spearheaded by respective Ministries
 - The chairpersons of these working groups will report to the climate change committee
2. Inter-sectoral dialogue among various working groups (sectors) is needed
3. Consultants to the project should meet one on one with key decision makers in the various sectors, eg. Permanent Secretaries, Ministers, Financial Secretary, Heads of Departments, key technical persons.
4. Hold town hall meetings
 - To create awareness
 - To seek input on the PPCR
5. Create awareness & education on the process & needs for Dominica, eg.
 - Radio & TV programmes in English & Creole
 - Use of media such as visual demonstrations
 - One-on-one public sensitization at churches, schools, rum shops, barbers shops, etc.
6. Host two national workshops to seek further input on what was gathered
7. Determine and conduct training (identified in phase I) during phase II

Private Sector Strategy

The private sector interests were clustered into three groupings. The three clusters could be coordinated by the following:

- DHTA – Tourism related businesses, e.g. taxi association, water sports association, hotel & tourism association, etc.
- WINFAR & Fair Trade – all agri-producers, farmers groups, etc.
- DAIC – grouping of non-producers business (bankers, insurances, agri-processors, utilities
- NAFCOOP – Fisher groups and cooperatives

The consultant to the PPCR would meet with these groupings to present the information. The coordinating groups would then be charged with the responsibility to coordinate the response from their respective membership and to present a documented assessment of their risk, adaptive capacity and needs to build climate resilience.

A consultative process would then bring all the partners together to review and integrate their reports into a national report representing the Private Sector.

Civil Society Strategy

The areas where CSO organizations will claim ownership:

- Awareness
- Data collection
- Defining strategy and priority
- Mobilization and facilitation

Coordinate and liaise with climate change unit. Various members of civil society groups volunteered to convene thematic working groups to: (a) undertake a climate change risks assessment; (b) undertake an adaptive capacity assessment; (c) help identify priority investments; (d) provide guidance on the SPCR development; and (e) provide inputs and receive updates on the PPCR process.

Development Partners

Development partners committed to mapping ongoing and proposed climate change and disaster risk management programs/projects. It was also agreed that Development partners will convene a Donor Roundtable in October 2011 to undertake a technical review of the proposed intervention options and coordinate interventions.

ANNEX 5: List of Persons present at the PPCR Technical Meetings

1. List of Persons Present at the PPCR Technical Meeting (DWASCO &Min Ag.)

World Bank

Justin Locke

Niels Holm-Nielsen

Nancy Chaarani-Meza

IFC

Marco Giussani

PPRC Regional Track

Patricia Mendoza

ECU

Lloyd Pascal

Collin Guiste

Spencer Thomas

DWASCO

Bernard Ettinoffe

Magnus Williams

Ivanira Da Costa-James

Division of Agriculture

Ricky Brumant – Director

Almario Casimir

Reginald Thomas

Dominica Organic Agriculture Movement

Greta Green

Olo Obonyo

2. List of Persons Present at the PPCR Technical Meeting (Energy, Met & Disaster Mgt.)

World Bank

Justin Locke

Niels Holm-Nielsen

Nancy Chaarani-Meza

IFC

Marco Giussani

PPRC Regional Track

Patricia Mendoza

Dominica Meteorological Service

Marshal Alexander

Office of Disaster Management

Nathanael Isaac

Don Corriette

Renewable Energy

Michael Fadelle - RE Coordinator

Jason Timothy – Geothermal PMU Coordinator

JICA

Tatsuya Morita