

PROJECT INFORMATION DOCUMENT (PID) CONCEPT STAGE

Report No.: PIDC420

Project Name	Third Phase Disaster Vuln.Reduction APL for Dominica (P129992)
Region	LATIN AMERICA AND CARIBBEAN
Country	Dominica
Sector(s)	Flood protection (50%), Public administration- Water, sanitation and flood protection (20%), Central government administration (15%) , Other social services (15%)
Theme(s)	Natural disaster management (50%), Climate change (50%)
Lending Instrument	Adaptable Program Loan
Project ID	P129992
Borrower(s)	Government of Dominica
Implementing Agency	Government of Dominica
Environmental Category	B-Partial Assessment
Date PID Prepared/ Updated	01-Apr-2013
Date PID Approved/ Disclosed	09-Apr-2013
Estimated Date of Appraisal Completion	24-Jun-2013
Estimated Date of Board Approval	26-Sep-2013
Concept Review Decision	Track II - The review did authorize the preparation to continue

I. Introduction and Context

Country Context

Dominica is a small island state with an area of 750 square km, 148 km of coastline, and an estimated population of 71,293 . An upper-middle income small island state, Dominica has a GNI per capita of US\$6,828 in 2011 . Despite relatively strong social indicators –UNDP’s 2011 Human Development index ranked Dominica as 81st out of 187 countries – nationwide, the poverty rate was estimated at 28.8 percent (2008/09), and approximately 13.9 percent of the population is unemployed (2009). While poverty is found in both urban and rural areas, three quarters of Dominica’s poor households live in rural areas – where half of all households live in poverty.

Dominica’s economy reflects many of the classic features of a small island economy. High dependence on agriculture and agricultural exports, primarily bananas, as a proportion of GDP and source of foreign reserves make the country economically vulnerable to international commodity

price fluctuations. Coupled with high levels of under-employment and unemployment as well as heavy dependence on foreign capital and aid for investment into productive sectors and for infrastructure development further exacerbate the country's macroeconomic vulnerability. Attempts to diversify have been slow, however recent trends indicate that the island is making progress in its move towards developing "ecotourism" and the tourism sector, more generally. Through this effort, Dominica has become more acutely aware of the need to protect the environment and of the growing threat climate change presents to its valuable natural resources and biodiversity.

Dominica has unsustainable debt levels, which have largely resulted from inadequate fiscal management and the nation's economic exposure to external shocks. Both the International Monetary Fund (IMF) and the World Bank have implemented programs in an effort to promote economic stabilization. Through the Poverty Reduction and Growth Facility (PRGF), key policy measures and structural reforms aimed at poverty reduction and pro-poor growth were identified and prioritized, while fiscal targets were modified to allow for more pro-poor spending in response to a crisis. Through the Dominica Economic Recovery Support Operation, the World Bank supported Dominica's efforts to regain fiscal sustainability and to restart growth (while protecting social gains) through a medium-term reform program and a single-tranche structural adjustment credit, whereby (a) public expenditure management was improved, (b) financial and debt management was reformed and (c) the public sector investment program was restructured.

Dominica is also highly vulnerable due to geographic and climactic factors. As the island is located within the Atlantic hurricane belt, higher-intensity weather events can have very serious impacts on the productive sectors of the economy (i.e. tourism and agriculture), with particularly severe effects on vulnerable communities and households. In this context of high vulnerability, natural hazards often become disasters with large associated costs imposed on the country's fragile economy exacerbating poverty. The economy's susceptibility to a variety of natural hazards is underscored by its rank as 12th on the list of 111 countries on the composite vulnerability index of the Commonwealth Secretariat and the World Bank.

Particularly, the agriculture sector is highly vulnerable to weather conditions. In 2010, for example, the island suffered from a severe drought followed by a late hurricane. Together, these events represented a severe shock to Dominica's agriculture sector which currently employs almost one third of the labor force and generates on average 15% of GDP. In 2007, Hurricane Dean caused heavy losses in agricultural crops, including a considerable loss in banana exports, in addition to the destruction of the country's infrastructure, especially roads, with an overall damage estimated at US \$162 million. Given the difficult circumstances confronting the agriculture sector, efforts have been made to diversify with the introduction of new production crops, including coffee, aloe vera, patchouli, and an assortment of tropical fruits. And most recently, in view of climate change and its impacts on food security and crops, agricultural diversification has become a major goal of public policy. However, the government/Ministry of Agriculture and Forestry will require considerable technical assistance to ensure that it has: (i) the scientific knowledge of sustainable alternative/ climate resilient crops for continued diversification; and (ii) the level of technical capacity such that its Extension and other services can provide the needed support for each new crop that is targeted in the diversification process.

With regards to physical vulnerability, steep topographic conditions and rugged interior have led to human settlements and physical development being highly concentrated along narrow coastal areas (particularly in the south and west). Approximately 44,000 persons (62% of the total population)

live on the coast, with 21% of the total population (14,850) living in the coastal capital city, Roseau. A significant proportion of Dominica's population as well as assets are therefore highly vulnerable to hurricanes as well as high-intensity rainfall, wind and storm surge events.

Overall, over the years, disasters in Dominica have had impacts on livelihood, destroyed infrastructure and disrupted provision of essential services and have absorbed a growing share of the national budget to cover for recovery and reconstruction efforts. More recently, in 2011, for example, record level flooding and landslides associated with heavy rain caused in excess of US \$100 million in damage. With climate change threatening to heighten the impacts of hydro-meteorological hazards, the result in the decades to come may be an increase in the burden of weather-related disasters that can threaten the sustainability of Dominica's development processes

Sectoral and Institutional Context

Disaster Risk Management. Disaster preparedness and emergency response in Dominica is implemented under the authority of the Emergency Powers Act of 1951 (amended in 1973 and 1990). A National Disaster Plan (NDP) was initially developed in 1988 and subsequently revised, most recently in 2006. The National Disaster Plan includes policy documents to guide prevention, mitigation and response. Together with the National Climate Change Adaptation Policy and the National Hurricane Disaster Management Plan and Disaster Preparedness Plan for the Agriculture Sector, these documents guide disaster mitigation, management and response by assigning specific responsibilities and procedures under a policy framework for disaster risk management and reduction. The Office of Disaster Management (ODM) which operates under the auspices of the National Emergency Planning Organization (NEPO) chaired by the Prime Minister, is charged with handling disaster preparedness, planning and response, and risk mitigation activities.

Dominica has developed and approved a number of policies, plans and standard operating procedures relevant to disaster risk reduction. These include:

- 2010 National Integration Water Resources Management Policy (Draft)
- 2009 Disaster Management Plan
- 2009 National Emergency Management Policy
- 2009 National Shelter Policy
- 2004 National Environment Policy/National Environment Management Strategy
- 2002 Dominica's Policy on Planning for Adaptation to Climate Change
- 2002 Physical Planning Act
- 1998 Plan to Reduce the Vulnerability of School Buildings to Natural Disasters

Regionally, Dominica is a signatory to the Caribbean Disaster Management Response Agency Agreement, which provides disaster management related institutional strengthening, capacity building and technical assistance support to member states.

In Addition, Dominica is part of a multi-country risk pooling facility, the Caribbean Catastrophe Risk Insurance Facility (CCRIF), which was established in 2007 and is owned, operated, and registered in the Caribbean for Caribbean governments. The Facility allows participating countries to purchase insurance coverage to finance immediate post-disaster recovery needs and to finance their risks through risk pooling, risk retention, and risk transfer.

With support from the World Bank, Dominica implemented an emergency recovery and disaster risk management program in the early 2000s. The Dominica Emergency Recovery & Disaster

Management Project's objectives were to (i) strengthen key economic and social infrastructure and facilities with the aim of minimizing damage caused by future natural disasters and reducing the disruption of economic activity in the event of disaster emergencies (pre-disaster works); (ii) to reconstruct and rehabilitate key social and economic infrastructure following disasters; and (iii) to strengthen the country's institutional capacities to prepare for and respond to disaster emergencies in an efficient and effective manner.

Climate Change Adaptation and Mitigation. Dominica has also undertaken a number of initiatives to respond to the threats posed by climate change. Dominica ratified the UN Framework Convention on Climate Change (UNFCCC) in 1993, and given its commitment to reducing the impacts of climate change, it was among the 3 countries in the region (along with Saint Lucia and Saint Vincent and the Grenadines) to adopt a comprehensive adaptation framework, which allowed the island to be chosen to pilot adaptation investments under the GEF Caribbean Planning for Adaptation to Climate Change (CPACC) Project (1998 – 2001). The CPACC project supported Dominica in developing a National Climate Change Adaptation Policy, adopted by the Cabinet in 2002. In 2003, a follow on GEF-funded Mainstreaming Adaptation to Climate Change (MACC) regional project supported the development of an enabling environment for climate change adaptation in Dominica. The third phase project, the Special Program on Adaptation to Climate Change (SPACC), approved in 2007, supported efforts by Dominica to implement specific pilot adaptation measures addressing primarily the impacts of climate change on the island's natural resources base, focused on biodiversity and land degradation along coastal and near coastal areas. Having established a strong track record on climate change adaptation, Dominica is now one of six countries selected in the Caribbean to participate in the Pilot Program for Climate Resilience (PPCR).

In the context of the PPCR, Dominica's recently developed the Low Carbon Climate Resilient Development Strategy, which includes the Strategic Programme for Climate Resilience (SPCR), and provides an overview of the country climate change circumstances, the development context and identifies climate change vulnerabilities in key sectors, including agriculture, eco-systems, natural resources and to some extent the infrastructure sector. The SPCR also provides an overview of linkages to existing development plans and programs, most importantly Dominica's Growth and Social Protection Strategy and Dominica's National Climate Change Adaptation Policy.

Overall, while some progress has been made in reducing the country's vulnerability to disasters and in implementing climate change adaptation programs, primarily with a strong focus on biodiversity protection -, Dominica still faces challenges in strategically and comprehensively managing natural hazard risk, particularly in the context of a changing climatic environment that threatens to increase disaster risk, further expose existing vulnerabilities, and complicate the search for efficient long-term solutions. Similar to other Eastern Caribbean countries, an overall structure for analyzing and integrating disaster risk information in the development process is lacking. Development decisions in Dominica commonly do not account for disaster risk and expected climate change impacts due to a lack of available information on hazards, vulnerability, exposure, and expected climate change impacts. Secondly, information sharing among agencies (both regionally and nationally) is weak, largely due to limited capacity and lack of an overall mechanism to share information with low transaction costs. Finally, disaster risk management (DRM) responsibilities are dispersed among various government agencies, with limited collaboration between entities.

To overcome several of these challenges, there is an urgent need to improve the overall information

base upon which national policymakers can better plan physical development and design more effective climate change adaptation measures. This would also facilitate the move from primarily response and recovery after natural disasters to a more proactive approach of making systematic and strategic DRM decisions. Moreover, a mechanism for data sharing (both nationally and regionally) is required to make information available to all agencies involved in the DRM process.

Relationship to CAS

The World Bank Group's assistance to the Organization of Eastern Caribbean States (OECS) for FY2010-2014, under the Bank's Regional Partnership Strategy (RPS) 2010-2014, focuses on two strategic objectives: (i) building resilience; and (ii) enhancing competitiveness and stimulating growth over the medium term. The RPS notes that reducing vulnerability to adverse natural events is among the key challenges facing the sub-region.

In line with the RPS objectives, the proposed project would focus on activities contributing to vulnerability and climate risk reduction by strengthening fiscal sustainability through improved risk management and increased resilience to natural hazards and longer term impacts of climate change in key sectors.

II. Proposed Development Objective(s)

Proposed Development Objective(s) (From PCN)

The proposed Project Development Objective (PDO) is to measurably reduce vulnerability to natural hazards and climate change impacts in Dominica.

Key Results (From PCN)

The achievement of the PDO would be measured using the following key indicators:

- a) Reduced risk of Dominica's population to failure of public buildings and infrastructure due to natural hazards or climate change impacts; and
- b) Increased capacity of the Government of the Commonwealth of Dominica (GoCoD) to identify and monitor climate risk and impacts.

III. Preliminary Description

Concept Description

The proposed Project would consist of the following four components: (1) Prevention and Adaptation Investments; (2) Regional Platforms for Spatial Data Management, Hazard and Risk Evaluation, and Applications for Improved Decision-Making; (3) Natural Disaster Response Investments; and (4) Project Management and Implementation Support. The Project would address risks associated with, among others, flood, landslides, and, to some extent, seismic risks.

Component 1: Prevention and Adaptation Investments (TBD). This component would be designed to reduce physical vulnerability and pilot adaptive measures to build resilience to current and future hydro-meteorological shocks. Activities under this component would include a suite of civil works to improve infrastructure resilience to disaster events and climate change adaptation measures.

Activities to be financed are expected to include, but would not be limited to, the following:

- (a) Construction of community multi-purpose emergency shelters;
- (b) Retrofitting and rehabilitation of water infrastructure;
- (c) Slope stabilization interventions (also through re-vegetation);
- (d) Climate resilient rehabilitation of primary and secondary roads and bridges;

- (e) Improved climate resilient drainage systems, including maintenance of storm water drainage;
- (f) Construction of coastal and river defenses.

In addition to the urgent repair and retrofitting investments identified above, a prioritization of further vulnerability reduction and adaptation investments based on a multi-criteria evaluation would be carried out. Baseline information on critical facilities (primarily in the education sector), and emergency shelters would be gathered as well as information regarding characteristics and current condition. Information on hazards, risks and potential climate change impacts along with geospatial information would also be collected. The relative importance of specific infrastructure (i. e. schools, emergency shelters) as well as the projected number of individuals expected to benefit from project activities would further inform the prioritization of investments.

Component 2: Regional Platforms for Spatial Data Management, Hazard and Risk Evaluation, and Applications for Improved Decision-Making (TBD). This component would finance a series of capacity-building and technical assistance in Dominica to support disaster risk management and climate change adaptation. Activities for strengthening spatial data management and the information sharing platform in Dominica, as well as linking it to a regional platform could include: (i) adoption of standards on spatial data, metadata and data quality; (ii) collection of spatial data relevant to disaster risk management activities; and (iii) capacity building and knowledge exchange on spatial data management. Additionally, for the agriculture sector, crop diversification studies and technical assistance would be included to support the Ministry of Agriculture and Forestry with its diversification and food security program.

Activities to be performed at the regional level, in collaboration with other OECS countries and regional institutions would include, inter alia: (i) creation of a regional backbone technology infrastructure and collaboration mechanisms that would allow countries and regional technical entities to share geospatial data for DRM and other purposes, including the establishment of data sharing protocols for the region; (ii) knowledge sharing and learning process to develop and enforce harmonized infrastructure codes, standards and methods for critical public infrastructure; and (iii) improving physical/territorial planning practices.

Component 3: Natural Disaster Response Investments (TBD). Due to the high risk of a catastrophic event in Dominica, a provisional component would be added under this project designed as a mechanism that would allow for rapid response in the event of an emergency. Following an adverse natural event and the Government's declaration of emergency in accordance with its national law, and subject to the Bank's satisfaction that a situation of national emergency exists, the contingent component would be activated and implemented following the rapid response procedures governed by OP/BP 8.00. The component facilitates rapid re-categorization of financing and additional financing request under streamlined procedures during an emergency, should the Government so request. Preparatory work would be undertaken for the design of the component, including i) preparation of an agreed preliminary emergency recovery Action Plan of activities; ii) compilation of a positive list of eligible critical imports/needs; iii) ToRs and contracts for technical services to support the scoping and design of the emergency recovery and reconstruction subprojects; and iv) a list of firms (national & regional) that have a demonstrable track record in emergency response activities related to the anticipated nature and scope of those required.

Component 4: Project Management and Implementation Support (TBD). Activities under this

component relate to the institutional support and capacity development for project management and execution. Specifically, this component will finance: (i) the establishment of a new Project Coordination Unit (PCU), including staffing (fiduciary, safeguards, financial sector specialist, etc.), training, and operating costs; (ii) project audits and project studies, including performance reviews and impact evaluations; and (iii) the hiring of a Climate Change Coordinator for the Environmental Coordinating Unit within the Ministry of Environment, Natural Resources, Physical Planning and Fisheries which will be the Project's technical advisory department on climate change issues.

IV. Safeguard Policies that might apply

Safeguard Policies Triggered by the Project	Yes	No	TBD
Environmental Assessment OP/BP 4.01	x		
Natural Habitats OP/BP 4.04	x		
Forests OP/BP 4.36			x
Pest Management OP 4.09	x		
Physical Cultural Resources OP/BP 4.11	x		
Indigenous Peoples OP/BP 4.10	x		
Involuntary Resettlement OP/BP 4.12	x		
Safety of Dams OP/BP 4.37		x	
Projects on International Waterways OP/BP 7.50		x	
Projects in Disputed Areas OP/BP 7.60		x	

V. Financing (in USD Million)

Total Project Cost:	39.00	Total Bank Financing:	18.00
Total Cofinancing:		Financing Gap:	0.00
Financing Source		Amount	
BORROWER/RECIPIENT		0.00	
International Development Association (IDA)		18.00	
Climate Investment Funds		21.00	
Total		39.00	

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