Cover Page for Project/Program Approval Request			
1. **Country/Region**:	Dominica/Caribbean	2. **CIF Project ID#**:	XPCRDM056A
3. **Source of Funding:**	☐ FIP	☒ PPCR	☐ SREP
4. **Project/Program Title:**	**Dominica Disaster Vulnerability Reduction Project (DVRP)**		
5. **Type of CIF Investment:**	☒ Public	☐ Private	☐ Mixed
6. **Funding Request in million USD equivalent:**	*Grant:* USD 12 million (including USD 5 million in additional PPCR grants)	*Non-Grant:* USD 9 million	
7. **Implementing MDB(s):**	World Bank, *International Development Association (IDA)*		
8. **National Implementing Agency:**	*Ministry of Finance* *Ministry of Environment, Natural Resources, Physical Planning and Fisheries, Roseau, Dominica*		
9. **MDB Focal Point and Project/Program Task Team Leader (TTL)**:	*Headquarters- Focal Point:* *Kanta K. Rigaud* *Lead Environment Specialist and PPCR Program Coordinator*	*TTL: Zoe Trohanis* *Senior Urban Development Specialist* *Task Team Leader* *World Bank*	

10. **Project/Program Description** (including objectives and expected outcomes)**:**

I. Introduction

The DVRP was developed out of the country-driven Strategic Program for Climate Resilience (SPCR), a five year strategy to build resilience to climate change, endorsed by the PPCR sub-committee in November 2012. In light of the additional US$5 million in PPCR grant funds allocated during the November 2012 PPCR Sub-Committee Meeting, the Government of the Commonwealth of Dominica has requested the scope of the Disaster Vulnerability Reduction Project be expanded, incorporating the additional PPCR resources, to support improved drainage systems, national community level risk mapping and a high resolution topographic/bathymetric model for the island.

II. Context

Dominica is exposed to a high level of risk to meteorological (high wind/excess rainfall/hurricanes and drought) and geophysical (seismic/volcanic/tsunami) hazards, which have significant negative impacts to its economic stability. These hazards often result in significant and recurrent damages to national infrastructure including housing, transportation networks, schools, hospitals as well as communications networks, water and electrical services. As is the case with most island states, a single hazard event can impact the entire population and economy of Dominica due to its' small population and limited geographical area.

Disasters in Dominica have had deleterious impacts on livelihoods, destroyed infrastructure and disrupted the provision of essential services and have absorbed a growing share of the national budget to cover

recovery and reconstruction efforts. In 2011, for example, record level flooding and landslides associated with heavy rain caused in excess of US$100 million in damage. In April 2013, heavy rains caused landslides, flooding and a 40-foot deep split in a section of the East Coast main road resulting in two deaths. More recently, in December 2013, heavy rainfall caused extensive landslides, rockfalls and flooding with restoration and rehabilitation works estimated at US$18,022,000. 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.

It is therefore, opportune that the PPCR has allocated an additional US$ 5 million to Dominica, which will support the scale-up of activities under the DVRP and further the objectives already identified in the SPCR.

III. Program Description

Project Development Objective (PDO). The proposed PDO of the DVRP is to measurably reduce vulnerability to natural hazards and climate change impacts in Dominica. This would be achieved through investment in resilient infrastructure, as well as improved hazard data collection and monitoring systems to better inform future investment decisions.

The DVRP consists of the following four components: (1) Prevention and Adaptation Investments; (2) Capacity Building and Data Development, Hazard Risk Management and Evaluation; (3) Natural Disaster Response Investments; and (4) Project Management and Implementation Support.

Component 1: Prevention and Adaptation Investments (US$28 million – IDA (US$16 million), SCF credit (US$9 million); SCF Grant (US$3 million)). 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. Subprojects to be financed under this component, through the provision of works, technical advisory services, operating costs, and acquisition of goods, include: (a) Construction of water storage and distribution infrastructure; (b) Slope stabilization interventions; (c) Climate resilient rehabilitation of primary and secondary roads and bridges along the East coast and in the South; and (d) Improved climate resilient drainage systems, including maintenance of storm water drainage systems. Integrated hazard/climate analysis will inform engineering designs with respect to future service demands and infrastructure design life and will be built into the pre-engineering phase of each subproject.

Component 2: Capacity Building and Data Development, Hazard Risk Management and Evaluation (US$7 million SCF Grant). The Project would support building the capacity for analysis and assessment of risks from natural hazards and climate change, including the integration of this analysis in the development decision making process at both the project/investment level and at the national level to inform policy and investment plans. This component will support the creation of relevant core data and data collection systems as well as the integration analytical tools to permit improved decision making and engineering design for risk reduction and climate change adaptation. Core data systems to be developed under this component include: (a) creation of a high resolution digital topographic and bathymetric model for Dominica; (b) creation of a high resolution soils survey map including chemical and physical characteristics for each soil unit; c) design and deployment of a robust hydromet network to provide high resolution hydrologic data for use in a wide range of activities to support, for example, engineering design, national land use and coastal zone planning, disaster management, resilient road construction practices and

design, agricultural development and others; and (d) community level risk mapping and training on climate adaptation measures.

Component 3: Natural Disaster Response Investments (US$1 million IDA – no SCF/PPCR funds). This provisional component would allow rapid reallocation of the IDA credit, under streamlined procurement and disbursement procedures, to cover emergency response and recovery costs following an adverse natural event that causes a major disaster in Dominica. The emergency mechanism component would be triggered, by an official Government of the Commonwealth of Dominica declaration of a national emergency, following an adverse natural event. Dominica may ask the Bank to re-categorize and reallocate financing from other project components to partially cover emergency response and recovery costs. This component could also be used to channel additional funds, should they become available, in response to the emergency.

Disbursements would be made either against a positive list of critical goods, both domestic and imported, and/or against the cost of procuring goods, works, consultant services, and emergency operations required to support the immediate response and recovery needs. All expenditures under this component, should it be triggered, would be in accordance with the Bank's policy BP/OP 10.00 and would be appraised, reviewed, and found to be acceptable to the Bank before any disbursement is made. A specific Operations Manual (OM) would apply to this component, detailing financial management, procurement, safeguards, and any other necessary implementation arrangements.

Component 4: Project Management and Implementation Support (US$2 million SCF Grant). Activities under this component would support strengthening and developing the institutional capacity for Project management, including: (a) financing the establishment of a new Project Coordination Unit (PCU) within the Ministry of Environment, including staffing, training, and operating costs; (b) preparation for designs and tender documents; (c) preparation of Project reports; (d) processing of contracts and tender evaluation; (e) coordination of participating line Ministries; (f) supervision of the quality of works; (g) training of staff in Project management and implementation support; (h) monitoring and evaluation of Project progress and results, and (i) related activities to support efficient Project management and implementation, through the provision of technical advisory services, training, operating costs, and acquisition of goods. The project will also support knowledge sharing and lessons learning activities at the program level and coordination with the PPCR Caribbean Regional Program in terms of knowledge management and M&R. There is a process underway at the country level supported by the CIF to align the project indicators with the PPCR core indicators and streamline M&R framework across the OECS.

Project Beneficiaries

The Project would benefit the entire population of Dominica (71,680 people), including women and other vulnerable groups, due to the reduced risk of key infrastructure failure and the increased capacity of the Government to quickly rehabilitate damaged public infrastructure following an adverse natural event. The Project would have specific benefits for people living in the geographical locations of Project interventions or using public infrastructure that would have a reduced risk of failure as a consequence of the Project activities. In addition, the Island's Indigenous Population would be well served by the Project as some of the planned infrastructure, namely the road resilience investments, will likely be implemented in the Kalinago Territories.

A successful creation of a robust spatial data management platform, early warning systems and data collection/management infrastructure will allow the country to improve decision-making applications in the context of disaster reduction and climate adaptation. There is national benefit in improved understanding of risk and devising risk reduction solutions allowing for improved Government and

agency-wide physical planning.

11. Consistency with Investment Criteria[1]:

Within the context of the PPCR, Dominica has recently developed the Low Carbon Climate Resilient Development Strategy, which includes the country-driven Strategic Program for Climate Resilience (SPCR) and provides an overview of the country's climate change circumstances and its development context; it also identifies climate change vulnerabilities in key sectors, including agriculture, eco-systems, and natural resources and the infrastructure sector. Dominica developed its SPCR based on a comprehensive and consultative planning process. The SPCR, a five year strategy to build the country's resilience to climate change impacts, was endorsed by the PPCR sub-committee in November 2012. The SPCR positions Dominica on a climate resilient development path, consistent with national poverty reduction and sustainable development goals. 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.

These additional resources would contribute to vulnerability and risk reduction within Dominica through a combination of civil works, capacity building, and institutional development activities at the national and local levels. These activities are designed to improve national resilience to natural hazards and longer-term impacts resulting from climate change and are fully in line with the goal of the country's SPCR. The project activities support sound design and construction measures to enhance resilience of the selected drainage sub-projects, which would have a transformative impact in the transport and other sectors by focusing on enhancing resilience of critical infrastructure and supporting improved data collection to support climate resilient construction and design standards of future investments. Improved planning to minimize climate risks will benefit from digital surveys using LIDAR technology for the entire country to identify, among others, the potential landslide areas in advance to prioritize future activities as well as other opportunities for resiliency in other sectors, such as agriculture, water supply, and land use planning.

Under this project innovative approaches to climate resilience will be financed:

- A new engineering process regarding the design of drainage structures integrating hydraulics and hydrology modeling scenarios will be implemented. Initial analysis will be based on a compilation of existing data to be supplemented as additional data systems are developed under the wider PPCR-funded project, such as improved hydromet monitoring, land use classification, topography and soils mapping.
- LIDAR modeling will substantially strengthen data analysis systems island-wide through furthering the specific understanding of topography and bathymetry of the island establishing a sound platform for policy and engineering decision making as well as supporting improved hazard monitoring capacity; through the LIDAR digital elevation model, integrated analysis with applications for engineering, agriculture and physical planning amongst others, can be derived.
- Building codes will be reviewed and upgraded with a focus on climate adaptation

These tools and strategies have been used and incorporated in other countries but have not been done before in Dominica. To this end, additional financing support seeks to ensure that activities

[1] Please provide the information in the cover page or indicate page numbers in the accompanying project/program document where such information can be found.

in Dominica are informed by climate change risks and incorporate climate analysis. Please refer to the Project Appraisal Document for more information.

12. **Stakeholder engagement[2]:**

The country-driven SPCR was based on a comprehensive process comprised of stakeholder consultations, assessments and studies. The outcome of the SPCR process informed project investments as well as the considerations for proposed activities to be completed with the additional grant funding. All proposed sub-components and investments have been vetted by the Government and approved by Cabinet.

Additionally, project stakeholders will be further engaged through the consultations carried out by the Ministry of Environment as part of project preparation as well as of the social and environmental safeguards assessments, which are currently being prepared – the outcomes and findings of these assessments will be disclosed on the World Bank website and on the Ministry of Environment's website. During implementation of subprojects, the Project Coordination Unit would disseminate relevant information to stakeholders and beneficiaries to further increase awareness of the proposed Project and activities. Additionally, a communications specialist will be brought on board to the PCU responsible for this dissemination of information and consultations with key stakeholders as necessary. During implementation, the Project Steering Committee, chaired by the PS of the Ministry of Environment, would ensure communication and coordination across relevant ministries involved in the project. In addition, the Carib Council would be regularly consulted as part of the Indigenous Peoples' Plan under preparation.

13. **Gender considerations[3]:**

The gendered impacts as well as benefits of the project will be captured through the Social Assessment, currently underway. In addition, one of the development objectives of the project includes monitoring of male and female beneficiaries. Males and females will benefit from this project on both a national level as well as on a community level through improved and more resilient infrastructure, as well as locally specific hazard risk mapping and development of adaptation plans for vulnerable areas and communities in the country that would include gender dimensions.

14. **Indicators and Targets (consistent with results framework):**

Please see more details and complete project results framework in Annex 1 of the PAD

Core Indicator	Target
World Bank Core Indicator: Direct project beneficiaries (disaggregated by gender) Aligned with PPCR Core Indicator 5: "Number of people supported by the PPCR to cope with the effects of climate change" of the PPCR Results Framework.	Total number of people supported directly by the project to cope with the effects of climate change: - No. of people: 71,680 - No. of women: 35,124
World Bank Custom Indicator: LIDAR mapping of	National LIDAR Topographic and Bathymetric Mapping

[2] Ibid.
[3] Ibid.

the entire country completed Aligned with PPCR Core Indicator #2: "Evidence of strengthened government capacity and coordination mechanism to mainstream climate resilience"	Completed by Project Year 3.
World Bank Custom Indicator: Reduction in number of days of interrupted traffic due to landslips, flooding and other climate-related events Aligned with PPCR Core Indicator #1: "Evidence of strengthened government capacity and coordination mechanism to mainstream climate resilience"	Construction of Storm Drains: The location and quantity to be determined on the outset of a pre-engineering study to be contracted in the first year of the project.
World Bank PDO level Indicator: Climate risk analysis reflected in drainage and transport infrastructure design Aligned with PPCR Core Indicator #2: "Evidence of strengthened government capacity and coordination mechanism to mainstream climate resilience" of the PPCR Results Framework.	Construction of Storm Drains: The location and quantity to be determined on the outset of pre-engineering studies to be contracted in the first year of the project.
World Bank PDO level Indicator: Number of households with uninterrupted water service in project area due to water shortage or hazard events Aligned with PPCR Core Indicator #5: "Number of people supported by the PPCR to cope with effects of climate change."	3000 Households with increased and reliable water supply within project areas and enhanced capacity for water storage
World Bank Custom Indicator: Number of Government ministries/agencies connected to a spatial data sharing platform Aligned with PPCR Core Indicator 2: "Evidence of strengthened government capacity and coordination mechanism to mainstream climate resilience"	10 Government agencies connected to spatial data sharing platform capacity to capture and manage hazard and climate risk data
World Bank Custom Indicator: Number of Government officials trained in spatial data management and data analysis under the Project Aligned with PPCR Core Indicators 2: "Evidence of strengthened government capacity and coordination mechanism to mainstream climate resilience"	60 Government officials trained in spatial data management and associated analysis , increasing national capacity to capture, manage and analyze hazard and climate risk data
World Bank Custom Indicator: District climate	6 Climate Adaptation Plans to be prepared

adaptation plans prepared Aligned with PPCR Core Indicators 1 and 3 "Quality and extent to which climate responsive instruments/investment models are developed and tested		
15. **Co-Financing:**		
	Amount (in USD million):	*Type of contribution:*
• Government	1.5	In kind
• MDB	17	IDA
• Private Sector (please specify)		
• Bilateral (please specify)		
• Others (please specify)		
Co-Financing Total:	18.5	
16. Expected Board/MDB Management[4] approval date:		
Expected Sub-Committee approval date: 28 February 2014 Expected World Bank Board approval date: April 2014		

[4] In some cases activities will not require MDB Board approval.