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Report No: PAD4009

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT PAPER

ON A

PROPOSED ADDITIONAL CREDIT

IN THE AMOUNT OF SDR 9.40 MILLION (US\$ 12.8 MILLION EQUIVALENT)

TO THE

COMMONWEALTH OF DOMINICA

FOR THE

DISASTER VULNERABILITY REDUCTION PROJECT June 8, 2020

Urban, Resilience And Land Global Practice Latin America And Caribbean Region

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CURRENCY EQUIVALENTS

(Exchange Rate Effective May 31, 2020)

Currency Unit = Eastern Caribbean Dollar (EC\$)

EC \$ 2.7 = US\$1

US\$ 1.37 = SDR 1

FISCAL YEAR July 1 – June 30

Regional Vice President: J. Humberto Lopez (Acting) Country Director: Tahseen Sayed Khan Regional Director: Anna Wellenstein Practice Manager: Ming Zhang Task Team Leader(s): Saurabh Suresh Dani, Mary Elinor Boyer

ABBREVIATIONS AND ACRONYMS

AF	Additional Financing
CERC	Contingent Emergency Response Component
DVRP	Disaster Vulnerability Reduction Project
EA	Environmental Assessment
ECR	East Coast Road
EMF	Environmental Management Framework
EA-EMF	Environmental Assessment and Environmental Management Framework
EMP	Environmental Management Plan
ESIA	Environmental and Social Impact Assessment
FM	Financial Management
GDP	Gross Domestic Product
GoCD	Government of the Commonwealth of Dominica
GRS	Grievance Redress Service
IFR	Interim Financial Report
IPF	Investment Project Financing
IPP	Indigenous People Plan
IST	Implementation Support Team
Lidar	Light Detection and Ranging
MoE	Ministry of Environment, Rural Modernization and Kalinago Upliftment
MoF	Ministry of Finance, Economic Affairs, Investment, Planning, Resilience,
	Sustainable Development, Telecommunications and Broadcasting
OECS	Organization of Eastern Caribbean States
PIU	Project Implementation Unit
PDO	Project Development Objective
PPCR	Pilot Program for Climate Resilience
SDR	Special Drawing Rights
SORT	Systematic Operations Risk-rating Tool
SPCR	Strategic Program for Climate Resilience
STEP	Systematic Tracking of Exchanges in Procurement

Dominica

ADDITIONAL FINANCING TO THE DISASTER VULNERABILITY REDUCTION PROJECT FOR DOMINICA

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BASIC INFORMATION – PARENT (Third Phase Disaster Vuln.Reduction APL for Dominica - P129992)

Country	Product Line	Team Leader(s)			
Dominica	IBRD/IDA	Saurabh Suresh Dani			
Project ID	Financing Instrument	Resp CC	Req CC	Practice Area (Lead)	
P129992	Investment Project Financing	SLCUR (9351)	LCC3C (451)	Urban, Resilience and Land	

Implementing Agency: Ministry of Environment, Rural Modernization and Kalinago Upliftment

Bank/IFC Collaboration

No

Approval Date	Closing Date	Expected Guarantee Expiration Date	Original Environmental Assessment Category	Current EA Category
01-May-2014	30-Jun-2023		Partial Assessment (B)	Partial Assessment (B)

Financing & Implementation Modalities			
[] Multiphase Programmatic Approach [MPA]	[] Contingent Emergency Response Component (CERC)		
[√] Series of Projects (SOP)	[] Fragile State(s)		
[] Performance-Based Conditions (PBCs)	[] Small State(s)		
[] Financial Intermediaries (FI)	[] Fragile within a Non-fragile Country		
[] Project-Based Guarantee	[] Conflict		
[] Deferred Drawdown	[] Responding to Natural or Man-made disaster		
[] Alternate Procurement Arrangements (APA)			



Development Objective(s)

The objective of the Project is to reduce vulnerability to natural hazards and climate change impacts in Dominica through: (i) investment in resilient infrastructure, and (ii) improved hazard data collection and monitoring systems.

Ratings (from Parent ISR)

	Implementation					
	28-Jan-2018	26-Jul-2018	25-Jan-2019	18-Jun-2019	03-Feb-2020	
Progress towards achievement of PDO	S	S	S	S	S	
Overall Implementation Progress (IP)	MS	MS	MS	MS	MS	
Overall Safeguards Rating	S	MS	MS	MS	MS	
Overall Risk	S	S	Н	М	м	

BASIC INFORMATION – ADDITIONAL FINANCING (ADDITIONAL FINANCING TO THE DISASTER VULNERABILITY REDUCTION PROJECT FOR DOMINICA - P174242)

Project ID	Project Name	Additional Financing Type	Urgent Need or Capacity Constraints
P174242	ADDITIONAL FINANCING TO THE DISASTER VULNERABILITY REDUCTION PROJECT FOR DOMINICA	Cost Overrun	No
Financing instrument	Product line	Approval Date	
Investment Project Financing	IBRD/IDA	30-Jun-2020	
Projected Date of Full Disbursement	Bank/IFC Collaboration		



30-Jun-2023	No					
Is this a regionally tag	gged project?					
No						
Financing & Impleme	entation Modalities					
[] Series of Projects ((SOP)]] Fragile State(s)			
[] Performance-Base	ed Conditions (PBCs)	[\	/] Small State(s)			
[] Financial Intermed	liaries (FI)]	[] Fragile within a Non-fragile Country			
[] Project-Based Gua	irantee]	[] Conflict			
[] Deferred Drawdown] Responding to Natural or	Man-made disaster		
[] Alternate Procure	ment Arrangements (A	PA)				
[] Contingent Emerg	ency Response Compo	nent (CERC)				
Disbursement Summa	Disbursement Summary (from Parent ISR)					
Source of Funds	Net Commitments	Total Disbursed	Remaining Balance	Disbursed		
IBRD			1	%		

IBRD				%
IDA	48.00	15.37	30.62	33 %
Grants	21.00	12.96	8.04	62 %

PROJECT FINANCING DATA – ADDITIONAL FINANCING (ADDITIONAL FINANCING TO THE DISASTER VULNERABILITY REDUCTION PROJECT FOR DOMINICA - P174242)

FINANCING DATA (US\$, Millions)

SUMMARY (Total Financing)

	Current Financing	Proposed Additional Financing	Total Proposed Financing
Total Project Cost	70.50	12.80	83.30
Total Financing	70.50	12.80	83.30



ADDITIONAL FINANCING TO THE DISASTER VULNERABILITY REDUCTION PROJECT FOR DOMINICA (P174242)

of which IBRD/IDA	48.00	12.80	60.80	
Financing Gap	0.00	0.00	0.00	
DETAILS - Additional Financing				
World Bank Group Financing				
International Development Association (IDA)			12.80	
IDA Credit			12.80	

IDA Resources (in US\$, Millions)

	Credit Amount	Grant Amount	Guarantee Amount	Total Amount
Dominica	12.80	0.00	0.00	12.80
National PBA	12.80	0.00	0.00	12.80
Total	12.80	0.00	0.00	12.80

COMPLIANCE

Policy

Does the project depart from the CPF in content or in other significant respects?

[] Yes [√] No

Does the project require any other Policy waiver(s)?

[] Yes [🗸] No

INSTITUTIONAL DATA

Practice Area (Lead) Urban, Resilience and Land

Contributing Practice Areas

Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks



PROJECT TEAM

Bank Staff			
Name	Role	Specialization	Unit
Saurabh Suresh Dani	Team Leader (ADM Responsible)		SLCUR
Mary Elinor Boyer	Team Leader		SLCUR
Vinicius Lima Moura	Procurement Specialist (ADM Responsible)		ELCRU
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Christopher Mays Johnson	Social Specialist (ADM Responsible)		SLCSO
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Alexandra Lelouch Loebl	Counsel		LEGLE
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William D. O. Paterson	Team Member		SLCUR
Yasmin Reyes Angeles	Team Member		SLCUR
Extended Team			
Name	Title	Organization	Location



I. BACKGROUND AND RATIONALE FOR ADDITIONAL FINANCING AND RESTRUCTURING

1. This Project Paper seeks the approval of the Executive Directors to provide an additional IDA Credit in the amount of SDR 9.40 million (US\$12.80 million equivalent) to the Disaster Vulnerability Reduction Project (P129992). This would be the second additional financing (AF) to the Disaster Vulnerability Reduction Project (DVRP) and is necessary to cover a cost overrun under Component 1: Prevention and Adaptation Investments. More specifically, the proposed additional credit would cover the increased contract amount for Phase 1 of the East Coast Road (ECR), which entails the full rehabilitation, widening, and resurfacing of 30km of the ECR to resilient standards. The cost overrun is due to the need for more slope stabilization works, retaining walls, and river erosion prevention embankments along the road than previously estimated. The DVRP would also be restructured to increase the financing percentages in the original credit and the other financing sources to facilitate financial accounting. There are no changes proposed to the Project Development Objective, Safeguards, or Results Framework of the Project.

2. **The Commonwealth of Dominica is a small upper-middle-income country in the Caribbean Sea, with a population of 71,625¹ in 2018.** With a gross domestic product (GDP) of US\$550.89 million (2018)², Dominica's economy is driven predominantly by agriculture and tourism, making the country very vulnerable to natural disasters and economic shocks. Poverty remains a pervasive development issue. The last Country Poverty Assessment conducted in 2009³, reported a poverty headcount of over 25.0 percent. Dominica is affected by fiscal sustainability challenges, with public debt levels over 80 percent of GDP⁴. The Debt Sustainability Analysis undertaken in April 2020 concluded that debt is considered sustainable in a forward-looking manner, but Dominica remains at a high risk of debt distress, substantially due to the country's exposure to natural disasters and external shocks.

3. **Dominica is particularly vulnerable to natural disasters from meteorological and geophysical events.** Its location within the Atlantic hurricane belt renders it prone to high-intensity weather events such as high wind, excess rainfall, and hurricanes, which repeatedly have had adverse effects on vulnerable populations and the productive sectors of the country's economy. Moreover, the island's mountainous, rugged landscape creates significant engineering challenges in reducing infrastructure vulnerability to natural disasters and climate change.

4. **On September 18, 2017, Hurricane Maria hit the island of Dominica with catastrophic effect, even as it was still recovering from the damages caused by Tropical Storm Erika (2015).** The floods and landslides triggered by Tropical Storm Erika had destroyed and damaged extensive parts of the transportation network in the country: approximately 17 percent of roads and 6 percent of bridges were fully damaged, while 24 percent of roads and 44 percent of bridges were partially damaged. Hurricane

¹ https://data.worldbank.org/country/dominica

² ibid

³ Kairi Consultants Ltd. *Country Poverty Assessment: Dominica*. 2010. http://www.caribank.org/uploads/publications-reports/economics-statistics/country-poverty-assessment-reports/Dominica+CPA+-

⁺Main+Report+Final+%28Submitted%29.pdf

⁴ International Monetary Fund World Economic Outlook and World Bank staff calculations. Public sector debt includes estimated commitments under the Petrocaribe arrangement with Venezuela.

Maria resulted in damages and losses estimated at US\$1.3 billion (226 percent of GDP). Most economic sectors sustained significant damage, with public infrastructure carrying the brunt of the losses.

5. Dominica ratified the UN Framework Convention on Climate Change (UNFCCC) in 1993 and is firmly committed to reducing the impacts of climate change. It was among the three countries in the region (along with Saint Lucia and Saint Vincent & 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 Project (1998 – 2001). Dominica successfully implemented a follow on GEF-funded Mainstreaming Adaptation to Climate Change regional project and a specific pilot adaptation project addressing primarily the impacts of climate change on the island's natural resource base, focused on biodiversity and land degradation along coastal and near coastal areas. Dominica was one of six countries selected in the Caribbean to participate in the Pilot Program for Climate Resilience (PPCR), one of the targeted programs of the Climate Investment Funds.

6. In addition to adverse climatic events, the ongoing COVID-19 pandemic and its related travel restrictions have been particularly devasting for small island states such as Dominica, negatively impacting both tourism and remittances. With a shutdown of air and cruise ship travel, tourism in Dominica has completely stopped, resulting in significant job loss. The Government has taken numerous actions to contain the spread of the disease, including declaration of a national state of emergency on April 1, 2020, school closures, curfews, shutdown of nonessential services, protocols on social distancing, residential confinement, and closing all ports of entry to non-citizens. In addition, the country is working to strengthen its COVID-19 response efforts by investing in laboratory testing, treatment and isolation of confirmed cases and public education campaigns to raise social awareness. As of June 5, Dominica had reported 18 confirmed COVID-19 cases with no deaths. The Government has identified construction of capital projects and other public infrastructure as an essential activity to boost local employment opportunities during the pandemic lockdown. Construction activities of the ECR are critical to the Government's plan for increasing employment opportunities, especially for those affected by the downturn in the tourism and service industries.

7. **The Disaster Vulnerability Reduction Project (DVRP).** The DVRP, initially financed by an IDA Credit of SDR 11.0 million (equivalent to US\$17 million), a PPCR Grant of US\$12 million and PPCR Credit of US\$9 million, was approved by the Board of Executive Directors on May 1, 2014 and became effective on September 8, 2014 with a closing date of July1, 2020. The DVRP's project development objective (PDO) is to reduce vulnerability to natural hazards and climate change impacts in Dominica through (a) investment in resilient infrastructure and (b) improved hazard data collection and monitoring systems. The devastating losses and damages in the infrastructure and road sector following Tropical Storm Erika in 2015 and Hurricane Maria in 2017 underscored the critical need to upgrade the transport infrastructure works under the Project, focusing on rehabilitation and strengthening of the ECR, which is an alternate road to the international airport. As a result, the DVRP's Contingent Emergency Response Component (CERC) was activated in 2017 following hurricane Maria and US\$7 million was transferred from Component 1 to Component 3 (Natural Disaster Response Investments) to support emergency response efforts.

8. In 2018, an AF of SDR 22.1 million (equivalent to US\$31 million) to the DVRP was approved to: (i) expand the scope of the ECR works to include the full rehabilitation, widening, and resurfacing of the entire 43.1 km of the road to resilient standards, instead of only strengthening works at selected sites as envisaged under the original financing; (ii) replenish the US\$7 million financing gap that was created by the activation of the CERC; and (iii) provide additional funds to Component 4 (Project Management and Implementation Support) to cover the additional three-year implementation period⁵. This AF increased the Project's total financing to US\$70.5 million, comprising US\$1.5 million in counterpart Government funding, US\$48.0 million in IDA credit and US\$21.0 million from the PPCR as credit and grant funding.

9. **Status of Implementation**. The Project experienced implementation delays during its first few years related to low client and institutional capacity, as well as frequent devastating natural disasters. Implementation is now advancing satisfactorily. As of April 30, 2020, the Project had disbursed US\$ 28.33 million, 42 percent of the consolidated IDA and PPCR funding: 32 percent of the IDA Credits and 62 percent of the PPCR grant and credit respectively. Over the past 30 months, the Project has consistently been rated as Satisfactory towards meeting its Project Development Objectives and Moderately Satisfactory towards Implementation Progress.

- 10. The components of the Project and results achieved are:
 - a. **Component 1: Prevention and adaptation investments.** This component comprises the rehabilitation of the ECR⁶ and the construction of the West Coast Water Tanks. Critical repair works at key sites along the ECR, including emergency repair works in Castle Bruce and San Sauveur, have been completed. The Project has also successfully completed strengthening the West Coast Water Tanks distribution system through construction of eight new water tanks and access roads, thus ensuring access to water for up to 3,000 households.
 - b. Component 2: Capacity building and data development, hazard risk management and evaluation. This component focuses on the development of data and information to better manage disaster risks and climate change in Dominica. The bathymetric component of the Light Detection and Ranging (LiDAR) survey was completed in July 2017, before Hurricane Maria struck the country, and the LiDAR Topographic survey was completed in February 2020. The hydrometeorological network analysis and necessary specifications have been completed. The design of the Hydrometeorological Office building has been completed. An estimated 55 percent of the building construction has been completed, and the remainder is proceeding with additional COVID-19 related health and safety precautions. The bidding process for the construction of the forestry nurseries has been launched.
 - c. **Component 3: Natural disaster response investments (CERC).** Following Hurricane Maria in September 2017, the CERC was triggered and US\$7 million was reallocated from Component 1 to this component to support Dominica's Agricultural Emergency Response

⁵ As part of the Project's restructuring to reflect the AF, the closing date was extended from July 1, 2020 to June 30, 2023. ⁶ These include substantial slope and landslide stabilization, flood mitigation activities along the entire corridor, bridge protection and replacement, expansion of road width, and mitigation of river erosion along the road embankments.

Grant program in the wake of Hurricane Maria. The program formally and successfully concluded on June 30, 2019 and the financing for this component is fully disbursed.

d. **Component 4: Project management and implementation support.** This component established the Implementation Support Team (IST) to provide close implementation support to all the Project Implementing Units (PIUs) of World Bank-funded projects in Dominica⁷, as a shared service in the areas of procurement, safeguards, and fiduciary aspects.

11. Dominica has made good use of the PPCR funds and taken significant steps to strengthen climate change adaptation and mitigation as well as disaster risk management. Under the PPCR, Dominica has developed the Low-Carbon Climate-Resilient Development Strategy, including the Strategic Program for Climate Resilience (SPCR),⁸ a five-year strategy to build resilience to climate change impacts, and set itself on a climate-resilient development path.

12. **Rationale for Proposed Additional Financing.** The upgraded resilient design for the ECR has identified the need for more slope stabilization works, retaining walls, and river erosion prevention embankments along the road than previously estimated. The currently allocated funds are insufficient for the corresponding construction cost estimate to rehabilitate and upgrade the entire stretch of 43.1 kilometers. The Government has therefore decided to divide the work into three phases to facilitate implementation. The road segments under each phase are:

- i. Phase 1: 30 kilometers: Bois Diable to Castle Bruce (9.5 km) and Castle Bruce to Hatten Garden (through the Kalinago Territory) (20.5 km)
- ii. Phase 2: 4.5 kilometers: Pont Casse to Bois Diable (4.5 km)
- iii. Phase 3: 8.6 kilometers: Castle Bruce to San Sauveur (8.6 km)

13. A bidding process for Phase 1 (30 kilometers) was completed, but the winning bid was approximately 20 percent higher than the amount estimated. Taking into consideration the cost differential and considering contingencies, the Government has estimated a financing gap of US\$12.8 million for the full implementation of Phase 1. Due to the shortfall in funding requirements, the proposed AF would accordingly cover the cost overrun for Phase 1. Once the contract for Phase 1 works of the ECR has been awarded, the Project will stand at 100 percent commitment. The potential need for additional financing for Phase 2 and Phase 3 will be assessed in the future.

14. **Compliance with fiduciary and safeguard policies and loan covenants**. The Project's financial management arrangements are in compliance with Bank requirements. There are no overdue audits or unresolved audit observations. The DVRP is in compliance with all safeguard policies triggered. The Project is also in compliance with all loan covenants.

II. DESCRIPTION OF ADDITIONAL FINANCING AND RESTRUCTURING

⁷ These include the Housing Recovery Project (P166537) and Emergency Agricultural Livelihoods and Climate Resilience Project (P166328)

⁸ GoCD. Dominica SPCR 2012–2017. https://www.climateinvestmentfunds.org/sites/default/files/meeting-documents/dominica_spcr_final_october2012_0.pdf.

15. **Additional Financing.** As discussed above, the proposed AF of US\$12.8 million is intended to cover the cost overrun for Phase 1 of the ECR and would be added to Component 1: Prevention and Adaptation Investments. As a result, the overall Project cost and financing, as well as the cost of Component 1 will change. The addition of US\$12.8 million will bring the total Project size to US\$83.3 million, as shown in Table 1, below:

Funding Source	Original	Additional	Proposed	Total
	Financing	Financing	Additional	(Cumulative)
	(approved in	(approved in 2018)	Financing (2020)	(US\$ <i>,</i> m)
	2014) (US\$ <i>,</i> m)	(US\$ <i>,</i> m)	(US\$ <i>,</i> m)	
IDA	17.0	31.0	12.8	60.8
PPCR Grant	12.0			12.0
PPCR Credit	9.0			9.0
GoCD Counterpart	1.5			1.5
funding				
Total	39.5	31.0	12.8	83.3

Table 1: Project Funding (in US \$ million)

16. **Restructuring.** The Project would also be restructured to increase the financing percentages in the original credit and the other financing sources to 100 percent, which will facilitate financial accounting. The financing percentages will be aligned with disbursement categories under each financing source rather than representing the percentages as representative allocations of each financing source.

17. **Higher-level objectives to which the project contributes.** The Project focuses on building resilience and increasing capacity in the infrastructure sector to manage risks from natural hazards and climate change. This focus continues to be aligned with the World Bank Group's Regional Partnership Strategy for the Organization of the Eastern Caribbean States (OECS), discussed by the Executive Directors on November 13, 2014 (Report No. 85156), and with the Performance and Learning Review considered by the Executive Directors on May 23, 2018 (Report No. 118511). Specifically, these works contribute to Pillar 2: Enhancing Resilience of the strategy through risk reduction efforts. These will be achieved through a combination of resilience investments and institutional capacity building in the infrastructure sector.

18. The AF will support the Project in contributing to the World Bank's twin goals of ending extreme poverty and boosting shared prosperity. It will provide access to the eastern part of the country, a region that has been lagging in economic development and is home to the indigenous Kalinago people. Further, the ECR, which will be built to withstand future extreme events and enhance the country's resilience, is the alternate road to the airport, connecting the capital city to Douglas Charles Airport (formerly known as the Melville Hall Airport), and hence is critical for connectivity during a natural disaster. The Government is considering building a new international airport in a location less prone to flooding and to allow direct long-haul flights from Europe and the US. The location identified in the master plan (north of the island) would not change the relevance of the ECR. Together with the existing and potential new airport, the ECR will improve internal and external connectivity and strengthen Dominica's appeal as a destination for visitors, making it easier for citizens to access opportunities that will arise from the influx



of visitors. The upgrades to the ECR will benefit the export market of Dominica by reducing the costs of inland transportation for exports. In addition, construction activities of the ECR are critical to the Government's plan for finding sustained and increased employment opportunities, especially for those affected by the economic downturn in the tourism and service industries due to the COVID-19 pandemic.

III. KEY RISKS

19. **The overall risk to achieving the PDO is rated Moderate.** With the exception of Environment and Social risks, all project-related risks have been assessed as Moderate. Recently, the fiduciary risk was downgraded from Substantial to Moderate following better financial management performance by the Government, including improvements in reconciliation of expenditures and strengthening of financial management processes. The stakeholder risk was also downgraded from Substantial to Moderate following the successful implementation of several smaller activities like the LiDAR surveys and water distribution system that required the involvement of different Ministries.

20. **Environment and Social.** The Environment and Social risk rating remains Substantial. The potential environmental impacts include those typically associated with road rehabilitation or major maintenance, mainly landslides, soil stabilization and erosion control, and debris management. Because the Project aims to reduce disaster risk vulnerability, Project investments emphasize resilient design features including substantial slope and landslide stabilization, flood mitigation activities along the entire corridor, bridge protection and replacement, expansion of road width, and mitigation of river erosion along the road embankments. The Project has completed the land acquisition needed for road widening for Phase I. Any labor influx impacts associated with the civil works will continue to be assessed under the Environmental and Social Impact Assessment (ESIA), once the contract has been awarded and construction work has commenced. The contract will include provisions for training of the ECR workforce and a Worker Code of Conduct with sanctions for noncompliance Any additional measures, based on active monitoring, if required, will be put in place.

21. Climate change and extreme weather events, as well as the impact of COVID-19 on project implementation (have been classified as 'Other' in the SORT). The Project has been screened for climate and disaster risks. Dominica is highly exposed to several natural hazards, including extreme precipitation and flooding, strong winds, and landslides. It is estimated that a potential increase in the severity and frequency of such events is likely. The Project will provide structural and nonstructural solutions to better manage future climate and disaster risks related to civil infrastructure. With regard to COVID-19, the ECR construction works provides an employment opportunity to local workers as the contractor is based in Dominica. As the Government has prioritized construction as a sector for helping boost economic activity to counter COVID-19, the pandemic should not have a severe impact on the implementation of the ECR rehabilitation and upgradation works.

IV. APPRAISAL SUMMARY

A. Economic and Financial (if applicable) Analysis



22. An economic analysis carried out at appraisal to rehabilitate the ECR, during the first AF, has been updated using the same methodology. The results of the analysis at the previous appraisal, using Monte Carlo simulation, ranged from a benefit-to-cost ratio of 1.13 to 2.24, with an average of 1.64. With the AF resulting in a cost increase of around 18 percent, the ratio has decreased slightly to an average of 1.48 and will remain satisfactory.

B. Technical

23. The increase in the scope of works and cost estimates for the ECR subcomponent were based on a detailed analysis and study of the rehabilitation of the main road to the airport that was completed in 2013. The increased scope was based on major outputs for pavement reconstruction and surfacing, earthworks for road widening, slope stabilization, and retaining walls and lined surface drainage. These were applied appropriately to each of the four ECR sections.

24. The design of the ECR, which commenced in February 2018, paid particular attention to flood and landslide risks, and provisions have been made for appropriate geotechnical studies. The Project will ensure that the road and all related infrastructure are constructed to a standard that can withstand recurrent natural disaster risks and climate change by using appropriate hydrological and geophysical information. The Project will include substantial slope and landslide stabilization, flood mitigation activities along the entire corridor, bridge protection and replacement, expansion of road width, and mitigation of river erosion along the road embankments. These interventions will minimize the risk of culvert/bridge failures, road subsidence, shoulder erosions, abutment scour, and overall structural and surface deterioration of pavements.

C. Financial Management

25. **Financial Management (FM) arrangements under the AF are expected to be the same as those under the original Project.** The Project's FM functions and responsibilities will continue to be executed by the PIU under the Ministry of Environment, Rural Modernization and Kalinago Upliftment (formerly the Ministry of Environment, Climate Resilience, Disaster Management and Urban Renewal). Project financial management procedures will be guided by the Project Operations Manual. Overall, the FM arrangements under the Project are functioning moderately satisfactorily and are adequate for the AF; the FM risk is rated moderate.

26. The FM system (SmartStream) does not automatically generate the Project's Interim Financial Reports (IFRs); therefore, the PIU relies on manual preparation using Excel, leading to a risk of preparing inaccurate financial information. Moreover, the PIU has faced delays in reconciling expenditures related to the CERC and delays in submitting withdrawal applications to document expenditures. The PIU is in the process of submitting the outstanding withdrawal applications to document expenditures and has strengthened the manual process of preparing IFRs. The IST and IT Department of the Ministry of Finance (MoF) are in the process of automating the generation of IFRs. The PIU's FM performance has recently been rated as "Moderately Satisfactory".



27. **FM Reporting.** The PIU will continue to submit to the Bank quarterly IFRs within 45 days from the end of each quarter in accordance with the format and periodicity agreed with the World Bank. The financial statements will be audited annually in accordance with the terms of reference agreed with the World Bank and will be due to the Bank not later than six months after the end of each fiscal year. There are no overdue audit reports.

D. Procurement

28. **The Project will continue with the existing procurement implementation arrangements.** The PIU has extensive experience in procurement for World Bank-financed projects and has experienced procurement staff. Procurement performance has recently been rated as "Moderately Satisfactory", based on the current implementation status of the Project procurement activities, especially the procurement of the ECR Phase 1 works. This recommendation of contract award has been cleared by the Bank.

29. Procurement going forward under the Project will continue to be carried out in accordance with the World Bank's Procurement Regulations for IPF Borrowers dated July 1, 2016 (revised in November 2017 and August 2018). The Project will also be subject to the World Bank's Anticorruption Guidelines, dated October 15, 2006, revised in January 2011, and as of July 1, 2016.

30. The Project will continue to use the Systematic Tracking of Exchanges in Procurement (STEP) to plan, record and track all procurement transactions. Since the proposed AF does not envisage new procurement activities to be undertaken by the Project, there will be no need to prepare a Project Procurement Strategy for Development. The PIU will update the Project Procurement Plan during implementation as needed.

31. Based on the recent assessment carried out by the Bank, in March 2020, the residual procurement risk rating for the Project is considered "Moderate". The risk of delays that could affect and jeopardize the implementation of procurement activities under the parent project has been mitigated and addressed by the PIU, thereby improving overall project procurement performance.

E. Social (including Safeguards)

32. **The expected social benefits of the DVRP remain positive. The** proposed AF is solely to provide financing for a cost overrun and therefore will not require any additional safeguards requirements or change in safeguard category. The Involuntary Resettlement safeguard policy (OP/BP 4.12) and the Indigenous Peoples safeguard policy (OP/BP 4.10) will remain in effect and the social safeguards team will continue to support the PIU in their implementation for Project beneficiaries. The Project Implementation Review of the DVRP in March 2020 rated the implementation of safeguards relating to OP 4.10 and OP 4.12 to be Moderately Satisfactory.

33. The Project, through its safeguards instruments, grievance redress mechanism and communications strategy, pays specific attention to disadvantaged and vulnerable groups. Safeguards instruments under the DVRP already take into consideration the risks and impacts on disadvantaged or vulnerable individuals or groups who are more likely to be adversely affected or limited in being able to

benefit from the Project by virtue of: their age; gender; ethnicity; physical, mental, or other disability; social, civic, or health status; economic status; or other factors.

34. **Gender**. Dominica has made significant strides toward social inclusion and gender equality, particularly in education and leadership. A gender analysis has been conducted and community consultations held under the Project to identify gaps between males and females. In response, several actions to mitigate gaps and empower both males and females, specifically Kalinago indigenous community members, have been developed.

35. **Citizen Engagement.** The PIU has worked extensively with the Kalinago Council to support engagement with households within the Kalinago indigenous community to help explain the ECR road works, and to promote their active engagement during construction, both for employment opportunity and to make sure their community stays safe. The Project has a robust Grievance Redress Mechanism that has been functioning well and is determined to be satisfactory by the Bank project team.

36. **Labor influx**. The ESIA conducted for the ECR has determined the impacts of labor influx, including the need for housing, food supply, merchandise, transport, health care, entertainment, and social interaction as well as gender-based violence and any related mitigation actions. Training of the workforce for ECR, as well as a Worker Code of Conduct together with sanctions for noncompliance, will be included in the contract. The PIU will ensure the effective management of these aspects of the contract through careful supervision throughout construction.

F. Environment (including Safeguards)

46. The Project was initially classified as Category 'B', as the environmental impacts of the proposed works are mostly of moderate magnitude, localized, and mitigable through good practice environmental management and the EMPs available. No changes in environmental category are proposed. Works for the ECR Phase 1 cross the Kalinago Territory and include substantial slope and landslide stabilization, flood mitigation activities along the entire corridor, bridge protection and replacement, expansion of road width, and mitigation of river erosion along the road embankments, all addressed in the environmental and social impact assessment (ESIA)⁹ specifically developed for this sub-project.

47. As required under OP/BP 4.01, the Borrower prepared a program-level Environmental Assessment with an Environmental Management Framework (EA-EMF) to evaluate and propose mitigation for the potential environmental impacts of the entire program, including screening of future projects for additional assessment needs. The EA-EMF was consulted and disclosed in country on December 4, 2018.

48. The Forests policy (OP/BP 4.36), Natural Habitats policy (OP 4.04), Physical Cultural Resources policy (OP/BP 4.11), and Pest Management policy (OP/BP 4.09) were triggered. The current environmental safeguards instruments have been reviewed and it is determined that the same instruments are adequate for the AF, which will only cover the cost overrun for the same activities for

⁹ Prepared, publicly consulted and disclosed in country on October 2, 2019.



the ECR, in the same locations. There are no changes in the environmental safeguard policies triggered.

49. **The PIU is fully staffed, including competent Environmental and Social Specialists**. The IST provides close implementation support to the PIU, including in the area of environmental and social safeguards, through a Safeguards Adviser. In terms of environmental safeguards, the Project's implementation has been satisfactory. The PIU Environmental Specialist has performed adequate supervision of construction works and development and implementation of specific EMPs.

G. Other Safeguard Policies (if applicable)

Not applicable

V. WORLD BANK GRIEVANCE REDRESS

50. Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints Bank's to the World corporate Grievance Redress Service (GRS), please visit http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.



VI SUMMARY TABLE OF CHANGES

	Changed	Not Changed
Components and Cost	\checkmark	
Reallocation between Disbursement Categories	\checkmark	
mplementing Agency		✓
roject's Development Objectives		✓
Results Framework		✓
.oan Closing Date(s)		✓
Cancellations Proposed		✓
Disbursements Arrangements		✓
afeguard Policies Triggered		✓
A category		✓
egal Covenants		✓
nstitutional Arrangements		\checkmark
inancial Management		\checkmark
Procurement		\checkmark
nplementation Schedule		\checkmark
Other Change(s)		✓

VII DETAILED CHANGE(S)

COMPONENTS

Current Component Name	Current Cost (US\$, millions)	Action	Proposed Component Name	Proposed Cost (US\$, millions)
Prevention and Adaptation Investments	50.13	Revised	Prevention and Adaptation Investments	62.93
Capacity Building and Data Development, Hazard Risk Management and	7.37	No Change	Capacity Building and Data Development, Hazard Risk	7.37



ADDITIONAL FINANCING TO THE DISASTER VULNERABILITY REDUCTION PROJECT FOR DOMINICA (P174242)

Evaluation			Management and Evaluation	
Natural Disaster Response Investments	8.00	No Change	Natural Disaster Response Investments	8.00
Project Management and Implementation Support	5.00	No Change	Project Management and Implementation Support	5.00
TOTAL	70.50			83.30

REALLOCATION BETWEEN DISBURSEMENT CATEGORIES

Current Allocation	Actuals + Committed	Proposed Allocation	Financing % (Type Total)		
			Current	Proposed	
IDA-54950-001 Currency: X	(DR				
iLap Category Sequence No: 1	Current Expend	liture Category: GO, CW, NC	CS, CS, TR & OP -	- Part A	
5,822,232.00	1,820,224.28	5,822,232.00	18.00	100.00	
iLap Category Sequence No: 2	Current Expend	liture Category: GO, CW, NC	CS, CS, TR & OP -	- Part B	
0.00	0.00	0.00	0.01	100.00	
iLap Category Sequence No: 3	Current Expend	liture Category: Emerg.Rec	& Recons.Subp	- Part C	
5,176,412.00	5,731,270.27	5,176,412.00	100.00	100.00	
iLap Category Sequence No: 4	Current Expend	liture Category: GO, CW, NC	CS, CS, TR & OP -	- Part D	
0.00	0.00	0.00	0.01	100.00	
iLap Category Sequence No: 5	Current Expend	liture Category: PPF REFINA	NCING		
1,356.00	1,355.50	1,356.00			
Total 11,000,000.00	7,552,850.05	11,000,000.00			
DA-63140-001 Currency: X	(DR				



iLap Category Sequence No: 1	Current Expend	liture Category: GO, CW, NO	ON-CS, CS, TRG	& OP-Part A			
20,000,000.00	0.00	20,000,000.00	57.00	100.00			
iLap Category Sequence No: 2	Current Expend	Current Expenditure Category: GO, CW, NON-CS, CS, TRG & OP-Part B					
0.00	0.00	0.00	100.00	100.00			
iLap Category Sequence No: 3	Current Expend	liture Category: Emerg.Reco	overy & Recons.	Subprojects			
0.00	0.00	0.00	100.00	100.00			
iLap Category Sequence No: 4	Current Expend	liture Category: GO, CW, NG	ON-CS, CS, TRG	& OP-Part D			
2,100,000.00	0.00	2,100,000.00	60.00	100.00			
Total 22,100,000.00	0.00	22,100,000.00					
TF-16912-001 Currency: L	JSD						
iLap Category Sequence No: 1	Current Expend	liture Category: GO, CW, NG	CS, CS, TR & OP	- Part A			
9,000,000.00	1,608,754.99	9,000,000.00	19.00	100.00			
iLap Category Sequence No: 2	Current Expend	Current Expenditure Category: GO, CW, NCS, CS, TR & OP - Part B					
0.00	0.00	0.00	0.01	100.00			
iLap Category Sequence No: 3	Current Expend	Current Expenditure Category: Emerg.Rec & Recons.Subp - Part C					
0.00	0.00	0.00	0.01	100.00			
iLap Category Sequence No: 4	Current Expend	liture Category: GO, CW, NG	CS, CS, TR & OP	- Part D			
0.00	0.00	0.00	0.01	100.00			
Total 9,000,000.00	1,608,754.99	9,000,000.00					



TF-16955-001	Currency: U	SD				
iLap Categor	y Sequence No: 1	Current Expend	iture Category: GO, CW, NC	CS, CS, TR & OP	- Part A	
	3,000,000.00	555,124.89	3,000,000.00	6.00	100.00	
iLap Categor	y Sequence No: 2	Current Expend	iture Category: GO, CW, NC	CS, CS, TR & OP	· Part B	
7,000,000.00		2,251,648.05	7,000,000.00	100.00	100.00	
iLap Categor	y Sequence No: 3	Current Expend	iture Category: Emerg.Rec 8	& Recons.Subp	- Part C	
	0.00	0.00	0.00	0.01	100.00	
iLap Categor	y Sequence No: 4	Current Expend	iture Category: GO, CW, NC	CS, CS, TR & OP	· Part D	
2,000,000.00		1,925,736.14	2,000,000.00	40.00	100.00	
Total	12,000,000.00	4,732,509.08	12,000,000.00			
Expected Dis	bursements (in US	\$)				
Fiscal Year		Annual	Cumulativ	e		
2014		0.00	0.00			
2015		1,000,000.00	1,000,000	0.00		
2016		3,500,000.00	4,500,000	4,500,000.00		
2017		2,500,000.00	7,000,000	7,000,000.00		
2018		10,000,000.00	0 17,000,00	00.00		
2019		5,000,000.00	22,000,00	22,000,000.00		
2020		8,000,000.00	30,000,00	30,000,000.00		
2021		15,000,000.00	0 45,000,00	45,000,000.00		
		20,000,000.00	0 65,000,00	65,000,000.00		
2022		20,000,000.00				
2022 2023		18,300,000.00	0 83,300,00	00.00		



ADDITIONAL FINANCING TO THE DISASTER VULNERABILITY REDUCTION PROJECT FOR DOMINICA (P174242)

2025	0.00	83,300,000.00
2026	0.00	83,300,000.00
2027	0.00	83,300,000.00

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Latest ISR Rating	Current Rating
Political and Governance	Moderate	 Moderate
Macroeconomic	Moderate	Moderate
Sector Strategies and Policies	Moderate	Moderate
Technical Design of Project or Program	Moderate	Moderate
Institutional Capacity for Implementation and Sustainability	Moderate	Moderate
Fiduciary	Substantial	Moderate
Environment and Social	Substantial	Substantial
Stakeholders	Substantial	Moderate
Other	Substantial	Moderate
Overall	Moderate	 Moderate

LEGAL COVENANTS – ADDITIONAL FINANCING TO THE DISASTER VULNERABILITY REDUCTION PROJECT FOR DOMINICA (P174242)

Sections and Description

No information available

Conditions



VIII. RESULTS FRAMEWORK AND MONITORING

Results Framework

COUNTRY: Dominica

ADDITIONAL FINANCING TO THE DISASTER VULNERABILITY REDUCTION PROJECT FOR DOMINICA

Project Development Objective(s)

The objective of the Project is to reduce vulnerability to natural hazards and climate change impacts in Dominica through: (i) investment in resilient infrastructure, and (ii) improved hazard data collection and monitoring systems.

Project Development Objective Indicators by Objectives/ Outcomes

Indicator Name PBC Baseline	Baseline		Intermediate Targets							End Target		
			1	2	3	4	5	6	7	8	9	
Reduce vulnerability	to na	tural hazards	and CC imp	acts through resi	lient infrastruc	ture investmer	ıt					
Direct project beneficiaries (Number)		0.00	0.00	1,000.00	6,000.00	19,690.00	30,000.00	40,000.00	50,000.00	60,000.00	71,860.00	71,860.00
Female beneficiaries (Percentage)		0.00	0.00	49.00	49.00	49.00	49.00	49.00	49.00	49.00	49.00	49.00
Indigenous Beneficiaries (Number)		0.00	0.00	0.00	0.00	20.00	45.00	500.00	1,000.00	1,500.00	2,145.00	2,145.00
Number of households with access to improved water distribution and supply in		0.00	0.00	0.00	0.00	0.00	1,500.00	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00



Indicator Name	Baseline	Intermediate Targets									End Targe	
			1	2	3	4	5	6	7	8	9	
project area (Number)												
Percentage of East Coast Roads with a condition rating of good/excellent that is resilient to climate events (Percentage)		30.00	30.00	30.00	30.00	35.00	35.00	60.00	75.00	85.00	100.00	100.00

Reduce vulnerability to natural hazards and CC impacts through data collection/monitoring systems (Action: This Objective has been Revised)

Number of relevant agencies enabled to make climate risk informed decision- making to reduce vulerability to climate change (Number)	0.00	0.00	5.00	8.00	8.00	10.00	10.00	10.00	10.00	10.00
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Intermediate Results Indicators by Components

Indicator Name	PBC	Baseline	Intermediate Targets								End Target	
			1	2	3	4	5	6	7	8	9	
Prevention and Adap	revention and Adaptation Investments											
Roads rehabilitated, Non-rural (Kilometers)		0.00	0.00	0.00	0.00	0.00	2.00	15.00	30.00	40.00	43.00	43.00
Increased water storage capacity in		0.00	0.00	0.00	0.00	0.00	1,100,000.00	1,600,000.00	1,600,000.00	1,600,000.00	1,600,000.00	1,600,000.00



Indicator Name	PBC	Baseline		Intermediate Targets								
			1	2	3	4	5	6	7	8	9	
project areas (Liter)												
Capacity Building and	d Data	Development	t, Hazard Ri	sk Managemen	t and Evaluati	on						
Number of Government officials trained in spatial data management and data analysis under the Project (Number)		0.00	0.00	10.00	15.00	22.00	25.00	28.00	30.00	30.00	30.00	30.00
Number of Government ministries/agencies connected to a spatial data sharing platform (Number)		0.00	3.00	6.00	8.00	8.00	10.00	10.00	10.00	10.00	10.00	10.00
LiDAR mapping of the entire country completed (Yes/No)		No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
Natural Disaster Res	ponse	Investments										
Operations Manual for this component prepared to facilitate disbursement in the event of an emergency (Yes/No)		No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes



DISASTER VULN. REDUCTION APL FOR DOMINICA (P174242)

	Monitoring &	Evaluation Pla	n: PDO Indicator	S	
Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Direct project beneficiaries	Direct beneficiaries are people or groups who directly derive benefits from an intervention (i.e., children who benefit from an immunization program; families that have a new piped water connection). Please note that this indicator requires supplemental information. Supplemental Value: Female beneficiaries (percentage). Based on the assessment and definition of direct project beneficiaries, specify what proportion of the direct project beneficiaries are female. This indicator is calculated as a percentage.	PCU; National Statistics Bureau	Semi-annual Project Progress Reports		Semi-Annual
Female beneficiaries	Based on the assessment and definition of direct project beneficiaries, specify what percentage of the beneficiaries are female.	PCU	National Statistics Bureau		Semi-annual
Indigenous Beneficiaries	Based on the assessment	PCU;	Semi Annual		Semi-Annual



	and definition of direct project beneficiaries, specify what percentage of the beneficiaries are indigenous.	Ministry of Carib Affairs	Progress Reports	
Number of households with access to improved water distribution and supply in project area	Measure of an increased and reliable water supply within project areas and enhanced capacity for water storage This indicator aligns with PPCR Core Indicator 5: "Number of people supported by the PPCR to cope with effects of climate change."	PCU; Dominica Water and Sewerage Authority; Ministry of Lands, Housing, Settlements & Water Resource Managemen t	Semi-annual Project Progress Reports	Semi-Annual
Percentage of East Coast Roads with a condition rating of good/excellent that is resilient to climate events	Measure of decrease in road vulnerability due to climate hazards, landslips, flooding and other natural disaster events	PCU; MoPW	Semi-annual Project Progress Reports; MoPW Supervision Reports	
Number of relevant agencies enabled to make climate risk informed decision- making to reduce vulerability to climate change	Measurements of increased Government/agency capacity to understand, capture, and manage climate data as well as utilize hazard information	PCU; Ministry of Public Works	Semi-annual Project Progress Reports	Semi-Annual



for improved decision	
making and engineering	
analysis. Agencies will	
include MoPW, MoE,	
Planning, DOWASCO, and	
ODM This indicator aligns	
with PPCR Core Indicator 2:	
"Evidence of strengthened	
government capacity and	
coordination mechanism to	
mainstream climate	
resilience"	

Monitoring & Evaluation Plan: Intermediate Results Indicators									
Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection				
Roads rehabilitated, Non-rural	Kilometers of all non-rural roads reopened to motorized traffic, rehabilitated, or upgraded under the project. Non- rural roads are roads functionally classified in various countries as Trunk or Primary, Secondary or Link roads, or sometimes Tertiary roads. Typically, non-rural roads connect urban centers/towns/settlements	PCU; Ministry of Public Works, Energy and Ports; Dominica Water and Sewerage Authority; Ministry of Lands, Housing, Settlement	Semi-annual Project Progress Reports; MoPW Supervision Reports		Semi-Annual				



	of more than 5,000 inhabitants to each other or to higher classes of road, market towns and urban centers. Urban roads are included in non-rural roads.	s & Water Resource Manageme nt		
Increased water storage capacity in project areas	Measurement of the volume of water storage capacity in Project areas	PCU; Dominica Water and Sewerage Authority; Ministry of Lands, Housing, Settlement s & Water Resource Manageme nt	Semi-annual Project Progress Reports; MoPW and DOWASCO Supervision Reports	Semi-Annual
Number of Government officials trained in spatial data management and data analysis under the Project	Measurement of increased national capacity to capture, manage and analyze hazard and climate risk data This indicator aligns with PPCR Core Indicators 2: "Evidence of strengthened government capacity and coordination mechanism to mainstream climate resilience"	PCU; Physical Planning Departmen t	Semi-annual Project Progress Reports; Inventory report of instrumentati on/software installed	Semi-Annual
Number of Government ministries/agencies connected to a spatial	Measurement of increased national capacity to	PCU; Physical	Semi-annual Project	Semi-Annual



data sharing platform	capture and manage hazard and climate risk data This indicator aligns with PPCR CoreIndicator 2: "Evidence of strengthened government capacity and coordination mechanism to mainstream climate resilience"	Planning Departmen t; ICT	Progress Reports	
LiDAR mapping of the entire country completed	Measure of the successful completion of a high resolution topographic and bathymetric LiDAR model to support data management and analysis systems under the project This indicator aligns with PPCR core indicator 2 "Evidence of strengthened government capacity and coordination mechanism to mainstream climate resilience"	PCU; Ministry of Agriculture and Forestry; Ministry of Public Works	Semi-annual Project Progress Reports	Semi-Annual
Operations Manual for this component prepared to facilitate disbursement in the event of an emergency	Measure of the Government's preparation plan in the event of an emergency including a list of vetted contractors, critical importsand priced supplies	PCU; Ministry of Finance; ODM	Semi-annual Project Progress Reports	Semi-Annual



