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Report No: PAD2806

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED CREDIT

IN THE AMOUNT OF
SDR 7 MILLION
(US$10 MILLION EQUIVALENT)

AND A

PROPOSED GRANT

FROM THE IDA CRISIS RESPONSE WINDOW

IN THE AMOUNT OF
SDR 20.8 MILLION
(US$30 MILLION EQUIVALENT)

TO THE

COMMONWEALTH OF DOMINICA

FOR A

HOUSING RECOVERY PROJECT

March 31, 2018

Social, Urban, Rural And Resilience Global Practice
Latin America And Caribbean Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective Feb 28, 2018)

Currency Unit =	
EC$2.7 =	US$1
US$1.446 =	SDR 1

FISCAL YEAR
January 1 - December 31

Regional Vice President:	Jorge Familiar
Country Director:	Tahseen Sayed Khan
Senior Global Practice Director:	Ede Jorge Ijjasz-Vasquez
Practice Manager:	Ming Zhang
Task Team Leaders:	Yohannes Yemane Kesete, Nicholas James Callender

ABBREVIATIONS AND ACRONYMS

BDA	Building Damage Assessment
B/C	Benefit-Cost
CERC	Contingency Emergency Response Component
CPA	Country Poverty Assessment
CREAD	Climate Resilience Executive Agency of Dominica
CRW	Crisis Response Window
DCO	Development Control Officer
DRM	Disaster Risk Management
DVRP	Disaster Vulnerability Reduction Project
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
EU	European Union
FM	Financial Management
FMA	Financial Management Assessment
FPIC	Free, Prior-Informed Consent
GCLS	Grievance and Complaints Logging System
GDP	Gross Domestic Product
GFDRR	Global Facility for Disaster Reduction and Recovery
GoCD	Government of the Commonwealth of Dominica
GRS	Grievance Redress Service
HTF	Housing Task Force
ICT	Information and Communication Technology
IFMIS	Integrated Financial Management Information System
IFR	Interim Financial Report
IMF	International Monetary Fund
IST	Implementation Support Team
MIS	Management Information System
MoF	Ministry of Finance
MoH	Ministry of Housing, Lands and Water Resource Management
NGO	Nongovernmental Organization
OECS	Organization of Eastern Caribbean States
PIU	Project Implementation Unit
PDNA	Post-Disaster Needs Assessment
PDO	Project Development Objective
PPCR	Pilot Program for Climate Resilience
PPD	Physical Planning Division
PPSD	Project Procurement Strategy for Development
SORT	Systemic Operational Risk-Rating Tool
SPCR	Strategic Program for Climate Resilience
TAC	Technical Assistance Center
UNDP	United Nations Development Programme
VNA	Vulnerability Needs Assessment

BASIC INFORMATION

Is this a regionally tagged project?	Country(ies)	Financing Instrument
No		Investment Project Financing

[✓] Situations of Urgent Need of Assistance or Capacity Constraints

[ ] Financial Intermediaries

[ ] Series of Projects

Approval Date	Closing Date	Environmental Assessment Category
13-Apr-2018	29-Dec-2023	B - Partial Assessment

Bank/IFC Collaboration
No

Proposed Development Objective(s)

The Project Development Objectives (PDOs) are to contribute both to the recovery of housing for households affected by Hurricane Maria and to improve the application of resilient building practices in the housing sector

Components

Component Name	Cost (US$, millions)
Support for Housing Recovery Systems and Capacity Building	3.50
Support for Reconstruction of Houses	33.50
Project Management and Coordination	3.00

Organizations

Borrower :	Ministry of Finance
Implementing Agency :	Ministry of Housing, Lands and Water Resource Management

Safeguards Deferral

Will the review of safeguards be deferred?

[✓] Yes [ ] No

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	40.00
Total Financing	40.00
Financing Gap	0.00

DETAILS

International Development Association (IDA)	40.00
IDA Credit	10.00
IDA Grant	30.00

Expected Disbursements (in US$, millions)

Fiscal Year	2018	2019	2020	2021	2022	2023
Annual	0.10	10.00	15.00	8.00	4.00	2.90
Cumulative	0.10	10.10	25.10	33.10	37.10	40.00

INSTITUTIONAL DATA

Practice Area (Lead)

Social, Urban, Rural and Resilience Global Practice

Contributing Practice Areas

Climate Change and Disaster Screening

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

Gender Tag

Does the project plan to undertake any of the following?

a. Analysis to identify Project-relevant gaps between males and females, especially in light of country gaps identified through SCD and CPF

Yes

b. Specific action(s) to address the gender gaps identified in (a) and/or to improve women or men's empowerment

Yes

c. Include Indicators in results framework to monitor outcomes from actions identified in (b)

Yes

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	High
2. Macroeconomic	High
3. Sector Strategies and Policies	Moderate
4. Technical Design of Project or Program	Moderate
5. Institutional Capacity for Implementation and Sustainability	High
6. Fiduciary	Substantial
7. Environment and Social	Substantial
8. Stakeholders	Substantial
9. Other	High
10. Overall	High

COMPLIANCE

Policy

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

[ ] Yes [✓] No

Does the project require any waivers of Bank policies?

[✓] Yes [ ] No

Have these been approved by Bank management?

[✓] Yes [ ] No

Is approval for any policy waiver sought from the Board?

[✓] Yes [ ] No

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

Legal Covenants

Sections and Description

The Recipient shall establish a Project Implementation Unit no later than two months after the Effective Date and maintain throughout Project implementation
(Schedule 2, Section I.A.1 of the Financing Agreement)

Sections and Description
The Recipient shall operate and maintain an Oversight Committee with representatives from Ministry of Housing in charge of the overall strategic guidance and oversight of the Project.
(Schedule 2, Section I.A.2.(a) of the Financing Agreement)

Sections and Description
The Recipient shall establish no later than three months after the Effective Date the Implementation Support Team and maintain throughout Project implementation.
(Schedule 2, Section I.A.2.(b) of the Financing Agreement)

Sections and Description
The Recipient shall provide Housing Grants to Eligible Homeowners in accordance with eligibility criteria and procedures satisfactory to the Association and as outlined in the Financial Agreement
(Schedule 2, Section I.C.1, 2. 3 of the Financing Agreement)

Sections and Description
The Recipient shall ensure that the terms of reference for any consultancy in respect of any activity under Part 1 of the Project shall: (a) duly incorporate, in the opinion of the Association, the requirements of the applicable Safeguards Policies then in force; and (b) require that the advice conveyed through such technical assistance comply, in the opinion of the Association, with the requirement of the applicable Safeguards Policies then in force.
(Schedule 2, Section I.D.4 of the Financing Agreement)

Sections and Description
The Recipient shall not later than three months after the Effective Date furnish to the Bank a final version of the Procurement Plan and the PPSD, satisfactory to the Bank.
(Schedule 2, Section IV.3 of the Financing Agreement)

Conditions

Type	Description
Effectiveness	Project Operations Manual: The Recipient has prepared and adopted the Project Operations Manual in form and substance satisfactory to the Association. (Article IV, 4.01.(a))
Effectiveness	Draft Safeguard Documents: the draft Safeguard Documents have been prepared and furnished in form and substance satisfactory to the Association. (Article IV, 4.01.(b))

Type	Description
Disbursement	No withdrawal shall be made for payments under Category (2), for, until and unless: (i) the Association has received satisfactory evidence that the Recipient has adopted the Safeguard Documents in form and substance satisfactory to the Association; (ii) the first list of Eligible Homeowners has been published by the Recipient in form and substance satisfactory to the Association; and (iii) the Association has satisfactory evidence that the Recipient has signed at least one Memorandum of Understanding in form and substance satisfactory to the Association. (Schedule 2, Section III, B.2)

PROJECT TEAM

Bank Staff

Name	Role	Specialization	Unit
Yohannes Yemane Kesete	Team Leader(ADM Responsible)	Disaster Risk Management	GSU10
Nicholas James Callender	Team Leader	Disaster Risk Management	GSU10
Leonel Jose Estrada Martinez	Procurement Specialist(ADM Responsible)	Procurement	GGOPL
Eduardo Franca De Souza	Financial Management Specialist	Financial Management	GGOLF
Asha M. Williams	Team Member	Social Protection	GSP04
Gibwa A. Kajubi	Social Safeguards Specialist	Social Development	GSU04
Isabella Micali Drossos	Counsel	Lawyer	LEGLE
Jun Erik Rentschler	Team Member	Economist	GFDRR
Kristal Michael Ann Peters	Team Member	Architect	GSU10
Kristina Wienhoefer	Team Member	Disaster Risk Management	GSU10
Marc S. Forni	Team Member	Disaster Risk Management	GSUGL
Michael Fedak	Team Member	Information Systems	GSU10
Monica Augustina Cristina Moldovan	Team Member	Housing Policy	GTD08
Priscilla Mary Phelps	Team Member	Housing Policy	GSU08
Sara Gey Feria	Team Member	Program Management	GSU10

Stephane Hallegatte	Team Member	Economist	GFDRR
Sumati Rajput	Team Member	Disaster Risk Management	GFDRR
Tatiana Cristina O. de Abreu Souza	Team Member	Disbursement	WFALA
William D. O. Paterson	Team Member	Civil Engineer	GSU10
Ximena Rosio Herbas Ramirez	Environmental Safeguards Specialist	Environment	GEN04

Extended Team

Name	Title	Organization	Location

DOMINICA
HOUSING RECOVERY PROJECT

TABLE OF CONTENTS

I. STRATEGIC CONTEXT

A. Country Context

1. **The Commonwealth of Dominica is a small upper-middle-income country in the Caribbean Sea, with a population of 73,543.**[1] With a gross domestic product (GDP) of US$581.48 million,[2] Dominica's economy depends predominantly on agriculture and tourism. Poverty remains a pervasive development issue, with a poverty headcount of 28.8 percent at the time of the last Country Poverty Assessment (CPA) conducted in 2009.[3] Dominica is affected by fiscal sustainability challenges, with public debt levels as high as over 82.7 percent of GDP,[4] because of the country's exposure to natural disasters and external shocks.

2. **Dominica is particularly vulnerable to natural disasters from meteorological and geophysical events.** Due to its location within the Atlantic hurricane belt, high-intensity weather events such as high winds, excess rainfall, and hurricanes, continue to have 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 to reducing infrastructure vulnerability to natural disasters and climate change. The steep topographic conditions and rugged interior mean that human settlements and physical development are concentrated along narrow coastal areas (particularly in the south and west), with almost 62 percent of the island's population living along the coast.

3. **Recurrent meteorological events have significantly affected the country's economic and fiscal stability as well as the population's socioeconomic well-being**. Average annual losses from weather-related events between 1996 and 2015 are estimated at 7.9 percent of GDP, making Dominica the second most affected country globally in terms of average GDP loss during this time. Tropical Storm Erika (2015) severely damaged the country's transportation, housing, and agriculture sectors, with losses of about 90 percent of Dominica's GDP.[5] Fiscal losses arising from these events and the ongoing challenges of climate change, threaten to set back hard-earned development gains and restrain economic growth. As a result, the Government of the Commonwealth of Dominica (GoCD) has made disaster risk management and climate change adaptation its utmost priorities.

Situation of Urgent Need of Assistance

4. **On September 18, 2017, Hurricane Maria hit the island of Dominica with catastrophic effect.** Hurricane Maria made landfall as a Category 5 storm (Saffir-Simpson scale), with sustained winds of 170 mph. As the storm passed over the center of the island, Dominica was exposed to extraordinary winds for more than three hours, accompanied by intense rainfall, which triggered flash floods and landslides. Hurricane Maria was one of the most rapidly intensifying storms in recent memory, strengthening from a

[1] World Bank, World Development Indicators. Statistics are for 2016 (latest available).
[2] Dominica | Drupal. https://www.gfdrr.org/dominica.
[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 (IMF) World Economic Outlook and World Bank staff calculations. Public sector debt includes estimated commitments under the Petrocaribe arrangement with Venezuela.
[5] Dominica | Drupal. *https://www.gfdrr.org/dominica*.

Category 2 to Category 5 hurricane in less than 12 hours. According to official sources, 30 persons lost their lives and 34 persons were declared missing.[6] The Prime Minister declared a state of emergency on September 20, 2017.

5. **A Post-Disaster Needs Assessment (PDNA) led by the World Bank in collaboration with the United Nations, the Eastern Caribbean Central Bank, the Caribbean Development Bank, and the European Union (EU) estimated total damages at US$931 million and losses at US$382 million, amounting to 226 percent of 2016 GDP.** The identified needs for reconstruction and resilience interventions to 'build back better' amount to US$1.37 billion. The storm affected 90 percent of the housing stock, with more than 4,500 houses destroyed and over 20,000 partially damaged. The sector sustained US$354 million in damages and US$28.5 million in losses, and the PDNA identified US$519.7 million in recovery needs.

6. **The immediate impact on poverty, livelihood, and output is likely to be severe.** An estimated US$35.1 million in income and 3.1 million workdays are estimated to be lost because of the disaster. Consequently, there is likely to be a 25 percent reduction in overall consumption and an increase in Dominica's poverty headcount from 28.8 percent to 42.8 percent, if no mitigation interventions are implemented. Given the scale of the disaster, the Government's regular safety nets for vulnerable populations will need to be expanded to help restore pre-disaster livelihood levels.

7. **The Housing Recovery Project builds off World Bank immediate response activities and post-disaster support.** Following Hurricane Maria, the Contingency Emergency Response Component (CERC) of the ongoing World Bank-supported US$38 million Disaster Vulnerability Reduction Project (DVRP)[7] was triggered, channeling US$7 million to cash transfer programs to provide immediate support to commercial and small farmers. The Housing Recovery Project complements the role of partners in addressing the first phase of housing recovery (see section IV D for details). It also leverages the Bank's global experiences in post-disaster housing reconstruction in Haiti, Nepal, the Philippines, Tonga, and Indonesia as well as post-hurricane emergency recovery loans in small island states.

8. **This Project is part of an overall development partner initiative to support medium and long-term recovery in Dominica.** Based on the urgent need for assistance, the operation meets the requirements of the World Bank Operations Manual, as stated on paragraph 12 of Bank Policy on Investment Project Financing on "Projects in Situations of Urgent Need of Assistance or Capacity Constraints". This Housing Recovery Project is part of a broader World Bank recovery portfolio, comprised of an Emergency Agricultural Livelihoods and Climate Resilience Project (P166328) and an Additional Financing to the Disaster Vulnerability Reduction Project (P166540)[8]. The World Bank's investments in housing, agriculture, and infrastructure were informed by the outcomes of the PDNA led by the World Bank. This overall program of support complements and aligns with other development partner initiatives and fills critical gaps.

[6] Information as of November 8, 2017.
[7] Dominica is currently implementing the World Bank-financed Third Phase Disaster Vulnerability Reduction Project (DVRP) (P129992), which is designed to invest in resilient infrastructure and improve hazard data collection and monitoring systems to reduce vulnerability to natural hazards and climate change impacts.
[8] Scheduled to be approved in FY19.

Policy Waiver

9. **In light of Dominica's situation of urgent need following Hurricane Maria, this Project document seeks the approval of Executive Directors to provide IDA resources from the CRW (SDR 20.8 million, US$30 million equivalent) for this Project in the form of all grants, rather than on Dominica's current IDA terms.** Dominica is only eligible for credits in FY18 under its regular allocation and under any CRW allocation[9]. The provision of financing in the form of grants through the CRW for this Project is appropriate, as the provision of credits would further heighten Dominica's risk of debt distress at a time of urgent need, following estimated damages and losses of 226 percent of GDP.

B. Sectoral and Institutional Context

10. **The quality, quantity and adequacy of housing to meet demand remains a challenge, compounded by a complex topography and scattered small settlements**. The pre-Maria demand for new and replacement housing, for all income groups, is estimated to average 400 units a year, of which less than 35 percent is met. Issues including land availability, integrated planning, institutional capacities, construction costs and access to finance all contribute to this gap. Main housing typologies include wooden and concrete structures and a combination of both. Wood and galvanized sheeting are most common for roofing. There is no evidence of confined masonry. Poor wall-to-roof connection is widespread and requires special attention and mitigation solutions.

11. **The Government has been actively involved in supporting housing development over the years.** The 'Housing Revolution' was initiated around 2006 and by 2014 had provided EC$53 million (US$19 million) in grants to various initiatives. Program interventions have included the Squatter Regularization Program, a special mortgage facility administered by the Government Housing Loans Board and the Agricultural Industrial and Development Bank, the Housing Renovation and Sanitation Program, and the construction of low-income housing. However, housing recovery needs from Hurricane Maria go well beyond the scope of these programs and the capacity of the agencies. The Project has been designed to be a broader platform that the Government could expand and build on with external or national resources.

Rationale for Bank Involvement and Recovery Strategy

12. **The GoCD will lead the overall housing recovery effort nationally, guided by a housing reconstruction strategy that aims to coordinate efforts in the sector and standardize approaches to recovery.** This strategy will be implemented by the Ministry of Housing, Lands, and Water Resource Management (MoH) in conjunction with the National Housing Task Force (HTF), which is the national body overseeing the recovery of the sector. The World Bank will support the GoCD in further developing this policy and strategy. The building damage assessment (BDA) indicates that out of the estimated 24,300 houses surveyed, approximately 13,500 need minor to moderate repairs. On the other hand, about 10,800 require complete reconstruction or rebuilding of the entire roof structure. A Vulnerability Needs Assessment (VNA) prepared following the storm highlighted that over 1,100 single mothers with uninsured houses had their homes either destroyed or severely damaged. The MoH's plan is to coordinate

[9] Under the CRW's implementation framework for IDA18, the terms of assistance for CRW financing are identical to those under which regular IDA assistance is provided to a particular country.

repair and reconstruction activities at the district and community level. This approach will be supported by Technical Assistance Centers (TACs), which will operate under the Ministry of Planning. The Government has allocated funding for housing repairs and is receiving support from nongovernmental organizations (NGOs) and bilateral agencies. The Government also aspires to carry out major reconstruction projects, including the construction of 1,000 housing units in new sites.

13. **The Housing Recovery Project looks to improve the resilience of the housing stock, encourage resilient building practices, and provide support to vulnerable households.** The project seeks to build a platform that could be used for reconstruction or replacement of damaged homes throughout the country regardless of the source of funding. Specifically, it seeks to address deficiencies in planning processes and impediments to the uptake of resilient building practices in the country. Much of the housing in Dominica does not meet Building Code requirements. Previous initiatives by the Government to support the sector were focused on limited housing construction and not on ensuring uptake of resilient building practices, enforcing building standards and influencing construction practices in the country. The project looks to improve planning procedures and approvals and make resilient construction approaches accessible to the wider population through TACs. By focusing on the setup of the overall delivery mechanism, the project ensures that all activities are scalable so that other donors could easily adopt or contribute to the program. The World Bank is helping the Government to explore funding to fill financing gaps.

C. Higher Level Objectives to which the Project Contributes

14. **Dominica has taken significant steps to strengthen climate change adaptation and mitigation as well as disaster risk management.** The country is part of the Pilot Program for Climate Resilience (PPCR), a targeted program of the Climate Investment Fund. Under the PPCR, Dominica has developed the Low Carbon Climate Resilient Development Strategy, including the Strategic Program for Climate Resilience (SPCR),[10] a five-year strategy to build resilience to climate change impacts and set itself on a climate resilient development path. The National Disaster Plan,[11] which includes policy guidance on prevention, mitigation, and response was developed in 1988 and revised in 2006. These legislative and policy efforts are complemented by the National Climate Change Adaptation Policy (2002) and the Disaster Preparedness Plan for the Agriculture Sector (2006).

15. **Challenges in managing natural disaster and climate change risks, however, remain high.** There is an urgent need to strengthen the institutional capacity to better respond to natural disaster emergencies. There is a lack of actionable and well-integrated information on hazards, vulnerabilities, and risks, which is compounded by poor planning and design of urban infrastructure. Further, limited capacity to deal with these issues within the country makes addressing these challenges even more complicated.

16. **The project focuses on building resilience to increase capacity in the housing sector to manage risks from natural hazards and climate change.** It is aligned with the World Bank Group's FY2015-19 OECS Regional Partnership Strategy (RPS)[12] and will contribute to Outcome 9 of the resilience area of engagement under the RPS, which seeks to increase country capacity to manage natural hazards.

[10] Government of Dominica. Dominica Strategic Plan for Climate-Resilience (SPCR) 2012–2017. https://www.climateinvestmentfunds.org/sites/default/files/meeting-documents/dominica_spcr_final_october2012_0.pdf.
[11] The National Emergency Planning Organization. 2001. 'National Disaster Plan.' 2001. http://odm.gov.dm/images/docs/national_disaster_plan.pdf.
[12] Document ID No. P085474 discussed by the Board on November 13, 2014.

Specifically, the project will contribute to risk reduction efforts through a combination of resilience investments and institutional capacity building in the housing sector. The Project has been screened for Climate Co-Benefits which served to inform the narrative and design of the Project.

17. **The project will contribute to the World Bank's twin goals of ending extreme poverty and boosting shared prosperity.** It will target the most needy and vulnerable households[13] whose homes have been destroyed. It will provide technical advice and subsidies to homeowners, empowering them to build back better, managing quality in building details, materials, and construction. The project will also provide a subsidy for resilient starter houses to 1,700 beneficiaries who have lost their homes and are classified as being the most in need based on vulnerability and demographic criteria. Such housing will be built to withstand future events of similar intensity to ensure that the most vulnerable are not trapped in a poverty cycle because of recurrent disasters.

II. PROJECT DEVELOPMENT OBJECTIVES

A. PDO

18. The Project Development Objectives (PDOs) are to contribute both to the recovery of housing for households affected by Hurricane Maria and to improve the application of resilient building practices in the housing sector.

B. Project Beneficiaries

19. The project is expected to benefit approximately 12,000 households (32,400 persons, of whom 15,500 are women) through a package of technical services for resilient rebuilding of houses, including access to building assessments and general engineering advisory services. These make up approximately 50 percent of the households which experienced some level of damage. Of these, approximately 1,700 households (of which 35 percent are expected to be female-headed) will receive financial support in the form of a subsidy from the project toward a starter house.

C. PDO-Level Results Indicators

20. Progress in the achievement of the PDO will be measured through the following three indicators: (i) direct project beneficiaries, (ii) number of households with resilient housing recovered using Project subsidies, and (iii) number of households that accessed general advisory service from TAC and benefit from streamlined permitting process. All three indicators have been disaggregated by gender.

III. PROJECT DESCRIPTION

A. Project Components

[13] According to the PDNA, women represent 39 percent of the heads of households in Dominica.

21. The project comprises three components, as described below. Annex 1 provides a more detailed project description.

22. **Component 1: Support for Housing Recovery Systems and Capacity Building (US$3.5 million)**. This component will set up systems to manage, expedite, and monitor the housing recovery program and will build capacity and a sustainable framework for development planning in the housing sector. It comprises three subcomponents.

23. *Subcomponent 1.1: Development Planning Support to Technical Assistance Centers and the Project at the Local Level (US$2.7 million*). This sub-component will support the establishment and operation of TACs to support Dominica's housing recovery program and would provide technical advisory services to homeowners on demand, facilitate processing of planning and building controls, conduct building assessments, and facilitate technical training on the application of resilient building practices. The purposes of the TACs are to guide and encourage resilient practices in construction and to strengthen planning control capacity at a local level. The project will provide support to expand the staffing and the number of centers and sustain operation through the project implementation period.

24. *Subcomponent 1.2: Development of Management Information Systems, to Support Planning and Monitoring Processes in Project Agencies (US$0.6 million)*. Management information and monitoring systems, including a registry database, will be developed under the project to support the housing recovery program and the physical planning process. The systems will provide support to MoH and Ministry of Planning and will be implemented in conjunction with the Information and Communication Technology (ICT) Unit for ongoing technical support and operation.

25. *Subcomponent 1.3: Technical Design of a New Physical Development Planning Office (US$0.2 million)*. This sub-component will finance the preparation of detailed design of a new building for the Physical Development Planning Office.

26. **Component 2: Support for Reconstruction of Houses (US$33.5 million)**. This component will provide subsidies in the form of small grants for owner-driven reconstruction or replacement of houses that were classified as 'destroyed.' Eligible homeowners would use the grant and their own resources, if necessary, to undertake the rebuilding works to a design of their choice.

27. *Subcomponent 2.1: Support for Reconstruction of Houses (US$31.45 million)*. This sub-component will provide Housing Grants to eligible homeowners for reconstruction or replacement of housing damaged by Hurricane Maria. A subsidy up to a US$18,500 (approximately EC$50,000) fixed grant will be provided to around 1,700 homeowners for either reconstruction or replacement of the building in place. Eligible homeowners will select the scope and approach to reconstruction and fund the activity with the support of the fixed grant (beneficiary selection considerations can be found in Annex 1). The grant will be conditional on the construction having a valid building permit, certified Physical Planning Division (PPD) inspections, and a completion certificate verifying that the building complies with the applicable Building Code and Guidelines. The grant would be disbursed to the homeowner's banking institution in tranches, aligned with major stages of completion, for payment to the contractor.

28. *Subcomponent 2.2: Design and Supervision of House Reconstruction (US$2.05 million*). This sub-component will provide design and supervision services for the reconstruction works for eligible

beneficiaries, including *inter alia*, those needed for the construction to meet building guideline requirements for resilience to Category 5 storm events and applicable environmental, social, and health and safety safeguards requirements.

Component 3: Project Management and Coordination (US$3 million)

29. This component will finance the establishment and operation of the PIU under MoH to serve as the unit responsible for the overall implementation and coordination of the project activities, as well as the setting up of the IST to be established within MoF (see annex 2 for detailed implementation arrangements). The overall implementation responsibilities of the project will rest with the PIU within MoH. The overall safeguards advisory and fiduciary (procurement and FM) responsibilities of the project will rest within the PIU, which will benefit from close, hands-on procurement support from the shared services of the IST, in support of post-Maria recovery efforts.

30. The Project will finance (a) incremental dedicated staff for the establishment and operations of the IST (to be shared with other projects, in proportions to be determined) and for the PIU; (b) the hiring of other technical experts needed for project preparation and implementation; (c) the preparation of environmental and social safeguards studies and instruments including development of communication strategy and complaints, feedback and grievance system; (d) the carrying out of the fiduciary aspects of the project including audits; (e) the provision of training and workshops; (f) the financing of the necessary goods, equipment, and operating costs; and (g) the implementation of safeguards instruments.

B. Project Cost and Financing

31. The project will be financed through Investment Project Financing (IPF) over a period of five years. The total project cost of US$40 million (see table below), will be financed through an IDA credit (US$10 million) and an IDA Crisis Response Window grant (US$30 million).

Project Component	IDA		Project Cost
	CRW Grant	***IDA Credit***	
Component 1: Support for Housing Recovery Systems and Capacity Building	3.5	0	3.5
Component 2: Support for Reconstruction of Houses	23.5	10.0	33.5
Component 3: Project Management and Coordination	3.0	0	3.0
Total Costs	30.0	10.0	40.0

C. Lessons Learned and Reflected in the Project Design

32. The project design reflects lessons learned in recent World Bank housing reconstruction projects with respect to information management, beneficiary selection, communications, coordination and technical support.

33. **Experience in housing reconstruction projects demonstrates that Government-led coordination is crucial.** Effective Government coordination has been accomplished by various means in recovery contexts: through sector tables (Haiti), via multi-donor trust funds (Indonesia, Nepal), through national clusters that continue to operate throughout reconstruction (the Philippines) and through stakeholder councils (Nepal). The GoCD will be supported by the project to augment capacity to manage national interagency coordination.

34. **Without targeted assistance, low-income households will recover slowly.** In coastal communities in southwest Bangladesh following Cyclone Aila, 76 percent of households in unreinforced traditional homes reported structural damage, far above the 47 percent for those in houses built using updated building practices and materials.[14] In the Philippines, data showed the disproportionate effect of Typhoon Yolanda on the poor, especially those in informal settlements. This correlation is also reflected in the BDA in Dominica. As a result, Component 2 is designed to replace destroyed small to medium size houses and will select beneficiaries using several eligibility and vulnerability criteria.

35. **Monitoring is essential for ensuring transparency and efficiency in housing recovery programs.** In Indonesia, the World Bank funded the Community Settlement Reconstruction and Rehabilitation Project, using a community-based approach to reconstruction that included a variety of monitoring and transparency measures, such as online access to community accounts and homeowner profiles that were updated each time a house inspection occurred. Subcomponent 1.2 supports the development of management information systems to support planning and monitoring

36. **A strong and effective public communications campaign is key to successful implementation.** After the 2015 Nepal Earthquake, all modes of mass communication were used to generate awareness about the housing program, including mobilizing local people who went house to house with pamphlets to explain the program. In Haiti, an NGO was hired to work with local leaders to ensure that culturally sensitive approaches were used for communications about the project. The project will finance a communication campaign that will use various modes of communication to reach both potential beneficiaries and the wider public to explain the Government's strategy, the support available, and the means for grievance redressal in a culturally sensitive manner.

37. **Core houses (starter homes) support the normal incremental housing construction process**. The World Bank has financed many successful core house programs, in Pakistan, Indonesia, and Nepal. Core house designs will be either vertically or horizontally expandable. Training on safe construction practices and core house expansion was provided by the program for builders and homeowners.

38. **To encourage safe reconstruction, subsidies must be supported by technical assistance.** Technical assistance to households is a standard component in World Bank housing recovery projects, while being delivered in various ways. The Project will (i) employ community outreach workers based in the TACs, (ii) work through local committees, (iii) maximize the use of social communications, and (iv) coordinate whenever possible with NGOs and bilateral agencies whose projects include community mobilization.

[14] Unbreakable: https://openknowledge.worldbank.org/handle/10986/25335.

IV. IMPLEMENTATION

A. Institutional and Implementation Arrangements

39. **MOH has overall responsibility for the implementation of this Project.** At the highest level, an HTF will provide strategic oversight and ensure policy coordination. It is chaired by the Cabinet Secretary and includes members from MoH, MoP, Lands and Surveys Division, and the Office of the Prime Minister. An IST housed within the Ministry of Finance (MoF) will provide close implementation support to all the PIUs of all World Bank-funded projects, as a shared service, in the areas of procurement, safeguards, and fiduciary aspects. It will be staffed with two international procurement specialists, a financial management manager, safeguards specialists, and a portfolio manager.

40. **A PIU based in MoH will be responsible for the implementation of the Project and will work closely with MoP.** The PIU will be responsible for procurement, contract management, FM, safeguards, technical coordination, and other activities, that will be outlined in the Project Operations Manual (POM). A grievance redress system will be developed and implemented by the PIU.

41. **On March 9, 2018 the Government established the Climate Resilience Execution Agency of Dominica (CREAD) that will help rebuild Dominica as the first climate resilient nation**. The mission of the agency is to coordinate all reconstruction work to avoid duplication, maximize economies of scale, spot and fill critical gaps and ensure all reconstruction activities are focused on a single Climate Resilient Recovery Plan developed by Dominica and its partners. The current implementation arrangements using PIUs and the IST for all three World Bank-financed projects have been designed to be flexible and in harmony with the CREAD objectives, while mobilizing a combination of national and international staff to advance implementation while the CREAD recruitment and operationalization is being finalized. The IST support will be cost shared across the World Bank portfolio of investment programs and will work closely with CREAD on the coordination of reconstruction efforts.

42. **TACs will serve as a decentralized extension of the Physical Planning Department** dispersed geographically across districts to improve community outreach and provision of technical advice, guide construction practices, and strengthen development control capacity. The technical advisory section of the TAC will be staffed with technical professionals (engineers/architects) funded by the project, and the development control section will be staffed with a Development Control Officer (DCO) from the PPD and building inspectors funded by the project. The PIU and the TACs will monitor, verify, and validate processes for beneficiary selection where applicable and in oversight of work at a community level.

43. **MoH will manage the housing subsidy and reconstruction process.** Support and implementation for rebuilding homes will follow an owner-driven approach. The project will include clear beneficiary selection criteria to manage the high demand for housing support; see Annex 1.

B. Results Monitoring and Evaluation

44. **As outlined in the implementation arrangements, results M&E will be managed by the PIU, with high-level oversight by the HTF**. M&E will be carried out on the basis of the indicators and milestones developed in the Results Framework (see Section VII). Project monitoring will occur as a periodic function

and will include process reviews, reporting of outputs and maintenance of progressive records. The MIS will house the data used in the generation of periodic reports and updating of indicator results. Other reports would be generated through the MIS to support supervision of overall physical and financial implementation progress, quality certification at various stages of construction, review of disbursements, and monitor program rollout and efficacy. Associated costs for data collection and M&E are included in the project budget.

C. Sustainability

45. **The sustainability of the project** is promoted through institutionalizing TAC operations within the Government structure and promoting community participation and engagement during planning, implementation, and beneficiary selection. The TACs will support the strengthening of government systems for enforcement, compliance with building regulations and will support technical training programs, all of which would contribute to the resilience of the housing stock. All homeowners have access to TACs for technical advice and guidance for the adoption of sustainable building practices. The project will also support improved design standards, development of an MIS to facilitate tracking of support and coordination across all housing sector programs, and other in-country housing interventions to augment capacity within MoH.

D. Role of Partners

46. **Relief and humanitarian organizations are currently providing support for immediate housing needs as a first phase of housing recovery.** The United Nations Development Programme (UNDP), the International Organization for Migration, the International Federation of the Red Cross, Samaritan's Purse, Is There Not A Cause, Caritas, Catholic Relief Services, All Hands and Hearts, Emergency Architects, IsraAid, Caribbean Disaster Emergency Management Agency, and the United Nations Children's Fund are largely focused on roof repairs and replacements on structures that have sustained minor to moderate damage. Collectively, these partners have pledged to repair/replace the roofs of 4,800 houses and construct 485 new starter homes. Coupled with the Government's initiatives, this donor support will realize approximately 1,500 new homes, which amounts to one-third of the total need for new houses.

47. **The World Bank is complementing the support provided by these development partners by contributing strategically to the housing sector and addressing critical gaps.** Other agencies, including relief and humanitarian groups and the Government through its bulk material supply initiative, have provided support for minor repairs as well as temporary and transitional shelter, and owners can conduct (and in many cases already have conducted) minor repairs. The project, by focusing on rebuilding of destroyed homes, both fills a need gap and supports the resilience of the housing stock against a Category 5 storm standard. Rebuilding presents both technical and financial challenges to private homeowners as it pertains to a need for professional design, quality workmanship, and certification of key structural elements, all of which will be provided through this Project. The Government has partnered with the UNDP and Engineers without Borders to provide resilient construction training to persons employed in the construction sector; the project is aligned with these initiatives as it will provide training programs through the project-supported TACs. Lastly, given the capacity limitations of the industry in Dominica and strong competition for materials and labor due to the scale of the rebuilding task, this Project will support

the mobilization of the regional industry by pre-qualifying regional contractors to accelerate the reconstruction program.

V. KEY RISKS

A. Overall Risk Rating and Explanation of Key Risks

48. **The overall risk to achieving the PDO is rated as High** because of high risks associated with political and governance, macroeconomic environment, institutional capacity for implementation and sustainability and climate change and extreme weather risk. Risks and mitigation measures relating to risk categories rated high and substantial are discussed in the following paragraphs.

49. **Political and governance.** This risk is rated high, considering the urgency to provide housing to people as quickly as possible and potential challenges of expediated targeting and processing of beneficiaries. As mitigation measures, the project will: (i) closely monitor project progress through an MIS to ensure transparency and accountability, (ii) set and strictly apply clear eligibility criteria; (ii) publicly disclose information on the call for applications and selected beneficiaries.

50. **Macroeconomic.** Risk is High due to fiscal stress incurred as a result of substantial damages and losses arising from natural disasters such as Hurricane Maria. This could worsen the fiscal balance to deficits up to 13 percent of GDP in FY2018/19 and, thus, undermine the Government's capacity to allocate the resources needed for the project. These risks will be partly mitigated by the allocation of resources for contingencies and by incurring most project expenditures in U.S. dollars.

51. **Institutional capacity for implementation and sustainability.** Despite previous experience in implementing World Bank-financed projects, a risk exists due to the limited management and fiduciary capacity within the relevant line ministries and lack of Management Information Systems to manage housing recovery. The PIU and TACs will play a key role in building the technical and project management capacity of line ministries and relevant implementing partners. Further, the Project will provide the necessary implementation support by bringing experts to the IST through international recruitment process. The Implementation Support Plan includes adequate resources to support project implementation.

52. **Fiduciary.** This is due to the identified institutional weakness and lack of staffing of the implementing agency (MoH) to undertake the fiduciary (procurement and FM) functions. To mitigate the risk, it is proposed that experienced international experts in procurement and FM will be provided to the project by the IST within the MoF.

53. **Environment and Social.** Natural disaster-prone site conditions pose a risk. This will be mitigated by structural and non-structural hazard mitigation measures. If mitigation is not feasible, households will be directed to Government settlement programs. The Project will provide technical advice to the Ministry of Planning and the Resettlement Committee on good practices as per Bank Policy.

54. **Stakeholders.** Inadequate consultations with vulnerable groups including Indigenous Peoples, women and other marginalized groups may lead to their low participation in project activities. Ineffective

mechanisms for beneficiary targeting and information dissemination may lead to exclusion of marginalized groups from project benefits. These risks will be mitigated through a clear and transparent selection process, robust information communication campaign, and an agile Complaints, Grievances and Feedback System.

55. **Climate Change and Extreme Weather Events.** The project has been screened for climate and disaster risk. Dominica and the project locations, are 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 housing. The project-financed reconstruction of houses will be based on appropriate housing standards to ensure resilience against hurricane and seismic risks. The project will also invest in building the technical capacity of the Government to ensure compliance with resilient building standards and improve building practices.

VI. APPRAISAL SUMMARY

A. Economic and Financial (if applicable) Analysis

56. **Expected Development Impact.** In the short-term this project will support beneficiaries to return to their homes and restore their livelihoods. The project is designed to deliver housing meeting revised building guidelines to assure compliance with approved standards. The project will thus contribute to building a more resilient economy and to avoiding a repetition of the significant damages and losses due to natural disasters.

57. **This economic analysis provides estimates of the costs and benefits associated with Component 2 of the project, under which subsidies are provided to assist the reconstruction of damaged or destroyed housing.** Component 2 constitutes 84 percent of the total financing. In the period from 1917 to 2017, Dominica was directly hit by 35 tropical storms or hurricanes. Based on this historic track record, the associated return periods were computed and the probability of a storm type being exceeded in any given year was computed as the inverse of the return period. The benefit is computed as the value of having a rehabilitated and intact house. Overall, the analysis shows that supporting the reconstruction of starter houses in Dominica is economically sound with a benefit-cost (B/C) ratio of 1.93. The benefits estimated are conservative, as the benefit of having housing beyond the value of the house itself (such as security, health, ability to earn income, and amenities) are omitted in this analysis. Moreover, given the frequency and intensity of storms, there is a strong case for reconstructing houses to a higher building standard as climate change is expected to further increase storm intensities. See annex 5 for more details.

B. Technical

58. **The project builds on the decentralized technical advisory framework outlined by the Government to increase the effective uptake of resilient building practices.** Through the provision of additional technical advisers, the project helps make technical advice on resilient designs and practices more accessible to private homeowners. It provides building assessments on demand for all households, which will encourage informed decisions on rebuilding as well as on sourcing of materials and building support. Through the provision of electronic systems and additional inspectors, the project aims to

improve the responsiveness of the PPD to site inspections and permit processing, and to improve compliance with the new Building Guidelines. These aspects are expected to extend the indirect reach of the project to 5 or more times the number of direct beneficiaries.

59. The technical standards to be applied under the project are based on a revised version of the Guide to Dominica's Housing Standards (2018)[15] which are applicable to seismic and Category 5 storm events. These have been deemed appropriate in technical reviews by the Organisation of Eastern Caribbean States (OECS) and other partner agencies but will be further validated by the TAC consultant under the project. The standards will be applied by the contractors and the design and supervision consultants to all rebuilds receiving direct support under the project. Achievement of the standards will be evaluated and monitored by the TAC consultant.

60. **The susceptibility of specific housing sites to geotechnical and hydrological risks** will be appraised during the building assessments to be conducted by the TACs and remediation, where feasible, will be designed by the project housing technical support consultant. An unacceptable level of residual risk after site remediation would render a housing site ineligible for project assistance. Compliance will be evaluated and monitored by the TAC consultant.

C. Financial Management

61. **A simplified Financial Management Assessment (FMA) was carried out to evaluate the adequacy of FM arrangements in MoF and MoH related to the implementation of the Project**. MoF and MoH, where project FM activities will take place, have been determined to have adequate financial management arrangements in place that can provide with reasonable assurance, accurate and timely information on the use of Project funds subject to the incorporation of mitigation measures noted below.

62. **Challenges related to FM are**: (i) fiduciary staff within the MoH lack knowledge of the World Bank's FM requirements; (ii) project design requires appropriate FM arrangements and systems which are not currently in place; and (iii) lack of available capable staff to implement an emergency operation and monitor the project activities.

63. **To mitigate the above noted challenges, the following measures have been agreed**:

- GoCD will hire an FM Manager at the IST (MoF) with knowledge of and experience in all GoCD finance systems, with seniority in financial procedures (budget, accounting and reporting), and with the skills to rapidly support project implementation. An FM Specialist will be hired locally for the PIU and will work closely with the FM Manager. The roles and responsibilities of staff and ministries will be clearly defined, including identification of key controls that will be strengthened and adapted to take into account the design of the project. These arrangements will be reflected in the POM.

- MIS will be developed for inputs and other supports to be provided by the project and will be integrated with the GoCD's Integrated Financial Management Information System (IFMS). The reporting arrangements will be confirmed and will ensure that the budget line modification of the SmartStream or applicable information systems will enable the input of information, and generation

[15] Under GoCD approval processes as of February 2018.

of all financial reports.

D. Procurement

64. **Procurement under the project will be conducted in accordance with the World Bank's 'Procurement Regulations for IPF Borrowers' (July 2016, revised in November 2017)** and with particular reference to the 'Bank Guidance: Procurement in Situations of Urgent Need of Assistance or Capacity Constraints' (July 22, 2016). The project is subject to the World Bank's Anti-Corruption Guidelines, dated October 15, 2006, revised in January 2011, and as of July 1, 2016.

65. **A Procurement Assessment was carried out to evaluate the adequacy of existing procurement arrangements for project implementation.** The assessment identified the following specific procurement risks and challenges**:** (i) absence of dedicated procurement staff in the implementing agency, the MoH; (ii) lack of viable procurement implementation arrangements in MoH; (iii) MoH's lack of previous experience with World Bank-funded projects; and (iv) limited experience of MoH in preparing technical inputs for procurement packages, such as terms of reference and technical specifications, as well as lack of experience in evaluating bids and proposals.

66. **The following actions will be taken to address the procurement capacity challenges**:

(a) MoF will urgently engage the services of qualified Procurement Specialists to staff the proposed IST.
(b) A Procurement Officer will be engaged at the PIU to provide the necessary capacity to implement the procurement function, with close support from the IST.
(c) Institutional arrangements will be well defined, including clear roles and responsibilities between MoF, MoH, and the PIU.
(d) External consultants will be engaged by the PIU to develop terms of reference and technical specifications, as well as to provide support during bid evaluations.
(e) Procurement arrangements will be included in the Project Operational Manual.

67. Further details on procurement are provided in Annex 2.

E. Social (including Safeguards)

68. The Project is being prepared according to Paragraph 12 of the of the Bank Policy on Investment Project Financing, which allows for deferral of environmental and safeguards requirements from Project preparation stage to Project Implementation stage. The Bank has prepared, in accordance with its policies, the Safeguards Action Plan, a project-level safeguards planning document that provides a time-bound plan setting forth the steps for the preparation of the relevant safeguards instruments by GoCD to ensure compliance with the safeguards requirements. The Safeguards Action Plan is guided by the dual objective of ensuring that there is a roadmap for safeguards compliance during project implementation and providing clear guidance to the client on the types of actions and instruments required to facilitate speedy implementation of emergency services.

69. **Land acquisition and resettlement.** No physical relocation and/or land acquisition will be undertaken under this project. The project will (i) avoid household displacement following the reconstruction of housing where informal lease arrangements were in place, and (ii) ensure that owners have a say in the reconstruction process, in cases where owners were not the house occupants. About 80 percent of land in Dominica is titled and therefore it should be possible to identify the owners of land with title and/or lease agreements. Unsafe site conditions will be mitigated; if this is not feasible, the household will be directed to alternative government programs. Guidance will be provided in the Environmental and Social Management Framework (ESMF) for the screening checklist which will be made available by the PIU to the officers in the TACs to ensure that no resettlement occurs. The Bank's Involuntary Resettlement Operational Policy (OP 4.12) is triggered to address cases where there is economic displacement; in such cases, a simple Abbreviated Resettlement Action Plan (ARAP) will be prepared to compensate for lost crops or other assets. The Government, through alternative processes, will take the lead in providing solutions to households that will need to be relocated in communities that have been identified as disaster prone.

70. Operational policy on Indigenous Peoples (OP 4.10) is triggered, because the project is nationwide and activities will be undertaken in the Kalinago Territory where there are groups that meet the criteria of OP 4.10. The project will develop an Indigenous Peoples Plan (IPP) to ensure that residents of Kalinago Territory are made aware of the project, the selection criteria, and how to participate in the project, through free, prior informed consultation consistent with their customs, choices and preferences. Consultations with the Kalinago will be coordinated with the other Bank-financed projects to avoid consultation fatigue.

71. **Safeguards Instruments.** An ESMF will be prepared and will include: (i) a screening methodology to identify relevant environmental and social issues and risks related to environment (OP/BP4.01, Environmental Assessment), Physical and Cultural Resources (OP/BP 4.11), Indigenous Peoples (OP/BP 4.10) and Involuntary Resettlement (OP/BP 4.12); (ii) a template for site specific Environmental and Social Management Plans (ESMPs); and (iii) a template to prepare site specific ARAPS. A simple IPP will be prepared and will be disseminated through the Information Communication Campaign (ICC) to ensure that the Kalinago Territory communities are aware of how project investments are to be carried out in the Kalinago Territory and to ensure free, prior informed consultation.

72. **Disadvantaged and Vulnerable Groups.** Safeguards instruments will take into consideration the risks for and impacts on disadvantaged or vulnerable individuals or groups who by virtue of, for example, their age, gender, ethnicity, physical, mental or other disability, social, civic or health status, economic status or other factors maybe more likely to be adversely affected or limited in being able to benefit from the project. Rural poverty continues to represent a major challenge, with 75 percent of the poor living in rural areas. Poverty rates are similar among men (28.8 percent) and women (28.9 percent). The indigenous Carib (*Kalinago*) people that represent 5 percent of the total population have a particularly high incidence of poverty at 49.8 percent (approximately 1,600 individuals). A Vulnerability Needs Assessment (VNA) prepared following the storm highlighted that over 1,100 single mothers with uninsured houses had their homes either totally destroyed or severely damaged.

73. **Gender.** Dominica has made significant strides toward social inclusion and gender equality, particularly in education and leadership. However, significant gaps remain in completing gender inclusion. Poor, vulnerable, and marginalized groups often bear the brunt of disaster impacts, and women

have experienced hardship from Hurricane Maria. Annex 1 provides details of the gender analysis, including challenges identified and specific actions outlined to address the particular needs of women and those identified as particularly vulnerable under the Project.

74. **Project Level Grievance Redress System (GRS)**. A grievance redress system with clear guidelines on applications and appeals will be developed to address all grievances, and the procedures will be outlined in the POM. The GRS will be consistent with the other Bank financed projects to ensure a common approach to intake, recording, feedback routes and resolution timeline, to provide for a fair and speedy process of appeals if there is disagreement. One of the main roles of the social safeguards specialist in the IST will be to ensure that the principles and procedures of the GRMs are consistent across all projects.

75. **Citizen engagement.** The project's communication and outreach strategy will be the key tool for citizen engagement, with emphasis on early outreach to key stakeholder groups before start-up activities and through ongoing communications around the selection of beneficiaries in a transparent manner. The strategy will include specific engagement with the *Kalinago* community through their council.

76. **Labor Influx.** Construction of civil works for which the required labor force and associated goods and services cannot be fully supplied locally can lead to labor influx. Arriving workers have a need for housing, food supply, merchandize, transport, health care, entertainment, and social interaction. The ESMF to be developed for the Project will determine such impacts including Gender Based Violence and any related mitigation actions.

F. Environment (including Safeguards)

77. Environmental impacts of the project are related to Component 2 (Support for Reconstruction of Houses). The civil works will be small-scale, site-specific, temporary, reversible, and limited to the reconstruction or replacement of destroyed houses and will take place in different locations. Negative impacts can be mitigated through the application of good construction and management practices, with close supervision from the works contractor(s) and supervision consultant. Moderate to minor environmental risks relate to local extraction of construction material (sand, gravel, and clay) that may increase vulnerability to landslides and soil erosion. Small-scale construction works have minor risks related to health and safety.

78. Given the project's focus on reconstructing houses in their original locations, no impacts on natural habitats are expected and no significant conversion or degradation of critical natural habitats or forests will occur. While no significant impacts are expected on physical cultural resources, the Physical Cultural Resources (OP/BP 4.11) has been triggered as a precaution and the project will include a 'chance find' procedure in all works contracts. All activities financed by the project will comply with safeguards requirements, including those covered under retroactive financing.

79. The project is rated environmental Category B and triggers Environmental Assessment (OP/BP 4.01), Physical Cultural Resources (OP/BP 4.11) and Pest Management (OP 4.09). Annex 5 includes the Safeguards Action Plan that provides a road map for preparation of safeguards instruments to ensure identification and management of environmental issues and risks relating to project implementation.

G. World Bank Grievance Redress

80. 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 to the World Bank's 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.

VII. RESULTS FRAMEWORK AND MONITORING

Results Framework
COUNTRY : Dominica
Housing Recovery Project

Project Development Objectives

The Project Development Objectives (PDOs) are to contribute both to the recovery of housing for households affected by Hurricane Maria and to improve the application of resilient building practices in the housing sector

Project Development Objective Indicators

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Name: Direct project beneficiaries		Number	0.00	32400.00	Semi-Annual	Project's progress report (based on TAC progress reports)	PIU/Min Planning / Min Housing
% Female		Percentage	0.00	48.00			
Description: Direct beneficiaries are people or groups who directly derive benefits from the Project including a subsidy or utilizing services from the TACs. Assumes 2.7 people per household per latest census data							
Name: Number of households with resilient housing recovered using		Number	0.00	1700.00	Semi-annual	Project's progress report (based on TAC progress reports and PPD database)	PIU/Ministry of Planning / Ministry of Housing

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
project subsidies							
Number of female-headed households (primary beneficiaries)		Percentage	0.00	35.00			
Description: This indicator is defined as the number of households that received project subsidies and have a completion certificate for resilient housing reconstruction. It is meant to track progress made to increase stock of houses built to resilient standards. Target is 100% of households receiving a subsidy.							
Name: Number of households that accessed general advice service from TAC and benefit from streamlined permitting process		Number	0.00	12000.00	Semi-Annual	Project's progress report (based on TAC progress reports and PPD database)	PIU/Ministry of Planning / Ministry of Housing
Number of female-headed households (primary beneficiaries)		Percentage	0.00	35.00			
Description: This indicator measures the number of households that accessed general advice service from TAC and benefit from streamlined permitting process. It also denotes level of public awareness of project activities.							

Intermediate Results Indicators

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Name: Number of on demand building assessments performed by TAC		Number	0.00	1700.00	Semi-Annual	Project's progress report (based on TAC progress reports)	PIU/Min Planning / Min Housing
Description: This indicator measures the uptake of TAC's building assessment services.							
Name: Number of building permits issued		Number	0.00	1700.00	Semi-Annual	Project's progress report (based on TAC progress reports and PPD database)	PIU/Ministry of Planning / Ministry of Housing
Description: This indicator measures uptake of TAC's building permitting streamlining services							
Name: Number of subsidies disbursed		Number	0.00	5100.00	Semi-annual	Project's progress report	PIU/Min Planning / Min Housing
Description: This indicator measures progress made on tranche disbursement to beneficiaries (3 tranches per household)							

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Name: Design of Central Planning Office		Yes/No	N	Y	Semi-annual	Project's progress report (based on TAC progress reports and PPD database)	PIU/Ministry of Planning / Ministry of Housing
Description: Design of central office for Physical Planning, Lands & Survey, Housing Div							
Name: Share of grievance cases resolved within 6 weeks of submission		Percentage	0.00	100.00	Semi-annual	Project's progress report (based on TAC progress reports and PPD database)	PIU/Ministry of Planning / Ministry of Housing
Description: This indicator measures the efficiency of the Government in addressing the registered complaints.							
Name: Number of communication campaigns delivered to affected communities and general public		Number	0.00	7.00	Semi-annual	Project Progress Report	PIU/ Min Planning / Min Housing/ Min Social Services
Description: This indicator measures the roll-out of communication campaigns related to resilient building practices and project activities which will be identified in the Communication Strategy. There will a minimum of three campaigns in the first year to ensure effective communication, and at least one campaign a year in the subsequent years							

Target Values

Project Development Objective Indicators

Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	End Target
Direct project beneficiaries	0.00	2700.00	10800.00	10800.00	5400.00	2700.00	32400.00
% Female	0.00						48.00
Number of households with resilient housing recovered using project subsidies	0.00	100.00	600.00	600.00	300.00	100.00	1700.00
Number of female-headed households (primary beneficiaries)	0.00						35.00
Number of households that accessed general advice service from TAC and benefit from streamlined permitting process	0.00	1000.00	4000.00	4000.00	2000.00	1000.00	12000.00
Number of female-headed households (primary beneficiaries)	0.00						35.00

Intermediate Results Indicators

Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	End Target
Number of on demand building assessments performed by TAC	0.00	400.00	650.00	650.00	0.00	0.00	1700.00

Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	End Target
Number of building permits issued	0.00	300.00	650.00	650.00	100.00	0.00	1700.00
Number of subsidies disbursed	0.00	300.00	1800.00	1800.00	900.00	300.00	5100.00
Design of Central Planning Office	N	N	N	Y	Y	Y	Y
Share of grievance cases resolved within 6 weeks of submission	0.00	60.00	75.00	100.00	100.00	100.00	100.00
Number of communication campaigns delivered to affected communities and general public	0.00	3.00	2.00	1.00	1.00	1.00	7.00

ANNEX 1: DETAILED PROJECT DESCRIPTION

COUNTRY : Dominica
Dominica Housing Recovery Project

Component 1: Support for Housing Recovery Systems and Capacity Building (US$3.5 million)

1. This component provides capacity support: implementation of the housing recovery program as well as improving the application of resilient building practices in the housing sector.

Subcomponent 1.1: Development Planning Support to *Technical Assistance Centers and the Project at the Local Level (US$2.7 million)*

2. The purposes of the TACs are to guide and encourage resilient practices in construction and to strengthen planning control capacity at a local level. The project will provide support to expand the staffing and the number of centers and sustain operation through the project implementation period. The TACs will have dual functions, that is, technical advisory services and building controls, and will maintain a reasonable separation between the proactive and regulatory roles. The TACs could also support the PIU in the collection of demographic information required for administering eligibility under the project. The TACs will provide

(a) Free technical advisory services to homeowners on demand;

(b) Facilitation for the processing of planning and building controls by the PPD for all applicable housing works;

(c) Direct support to the project for conducting building assessments and for collecting demographic data for project beneficiaries; and

(d) Facilitation for technical training on the application of resilient building practices.

3. The project will extend the TAC's capacity by providing additional staff, equipment, and operational support for the duration of the project, as follows:

(a) **Technical advisers.** Up to seven professional staff (or up to 200 person-months equivalent in part-time services) to provide technical advisory services in the TACs, with engineering or architectural qualifications and experience in the building sector. They would perform initial building assessments for the project beneficiaries and provide the services mentioned above to homeowners on demand.

(b) **Technicians.** Up to 7 technical support staff (or up to 200 person-months equivalent) to undertake field survey, technical drafting, and reporting activities in support of the technical advisers. These positions could include trainees and technicians with basic technical qualifications or experience.

(c) **Inspectors.** Up to 7 inspectors (or up to 200 person-months equivalent) to support the DCO of PPD in performing site and building inspections and preparing compliance reports.

(d) **Equipment and operating expenses.** Supporting equipment and furniture for communications, field work, related transport costs, and reporting.

(e) **Technical audit of the housing recovery program.** The firm may also be tasked with undertaking technical audits of a sample of building works that have been performed without project support, to assess the level of uptake of the new building standards across the broader housing recovery program.

Subcomponent 1.2: Development of Management Information Systems, to Support Planning and Monitoring Processes in Project Agencies (US$0.6 million)

4. Management information and monitoring systems will be developed under the project to support the housing recovery program and the physical planning process. The systems will provide support to MoH and MoP and will be implemented in conjunction with the ICT Unit for ongoing technical support and operation.

(a) **MoH.** Management systems will be developed to facilitate (i) a registry of households and homeowners, including demographic and personal identification data, aligned, among others, with other relevant databases for social support, vulnerability assessment, and government services; (ii) administration of beneficiaries eligible for support under the project; (iii) M&E of project activities, outputs, and results; (iv) project and MoH communication strategies; and (v) project FM and reporting. The project will seek to increase the capacity of the PPD through implementing electronic systems for, first, managing development approvals and integrating the existing databases and processes and, second, extending the capabilities of the PPD in monitoring development and in enforcing the various codes under their mandate. This system will include (i) management of land-use information necessary for implementing the national plans, (ii) an intake system and registry of development applications, (iii) compliance monitoring system for enforcing building and land-use regulations, (iv) database of subdivision applications, and (v) registry of certified construction professionals.

(b) **Equipment, operating costs, and technical training support.** The project will support the procurement of ICT software and hardware, as well as operating costs and technical support associated with these systems during the project and needed for system continuity following project completion.

Subcomponent 1.3: Technical design of a new Physical Development Planning Office (US$0.2 million)

5. In line with objectives to coordinate and streamline customer services relating to physical and development planning, the Ministry of Planning has been considering plans for a new office building to house the Physical Planning Division, the Lands and Survey Division, and the Housing Division together to provide planning-related services in one common location. The landmark PPD building was completely destroyed by the hurricane and the PPD is operating from temporary space. A preliminary architectural

design is available for a new building to be constructed on the same site, with about 16,000 sq. ft floor area and 'green' building features. The project would fund detailed design of the building, incorporating resilience to multiple hazards, in preparation for construction under other funding.

Component 2. Support for Reconstruction of Houses

Subcomponent 2.1: Support for Reconstruction of Houses (US$31.45 million)

6. This subcomponent will provide subsidies in the form of grants for owner-driven reconstruction or replacement of houses that were classified as 'destroyed'. Eligible homeowners would use the grant, and their own resources if desired, to undertake the rebuilding works to a design of their choice, as described below.

7. For eligible homeowners with a house classified as 'Destroyed', a subsidy up to a fixed grant of US$18,500 (approximately EC$50,000) will be provided for a total of about 1,700 homes. The typical works are complete rebuilding or replacement of the building. Eligible homeowners will select the scope and approach to reconstruction and fund the whole process, with the support of the fixed grant. Full design and supervision services will be available free of charge to the eligible homeowners through a consultant firm, procured by the project under Subcomponent 2.2. They will have access to a panel of builders and suppliers prequalified by the project. The grant will be conditional on the construction having a valid building permit, certified PPD inspections, and a completion certificate verifying that the building complies with the applicable Building Code and Guidelines. The grant would be disbursed to the homeowner's banking institution in tranches, aligned with the major stages of completion, for on-payment to the contractor. Overall supervision of the rebuilding works, including verification of completion, will be undertaken by the supervision services firm under Subcomponent 2.2, whether or not the eligible owner uses the firm for design services.

8. Building permissions and enforcement of code would be performed by a PPD DCO, with support for site inspections through the technical staff in the local TAC.

Subcomponent 2.2: Design and Supervision of House Reconstruction (US$2.05 million)

9. Technical assistance for the design and supervision of rebuilding works under Component 2 will be provided through consulting services, as described below.

10. A consulting firm will provide design and supervision services for the reconstruction works of the eligible beneficiaries under Subcomponent 2.1, which will be implemented at locations dispersed across the country. The works involve the full rebuilding of the house structure with the scope and costs varying with the size of unit selected by the homeowner. The firm will provide, to each eligible homeowner (i) a customized design, scope of works, and cost estimate in compliance with requirements of the Building Guidelines for resilience to Category 5 storm events; (ii) technical supervision of site works and building works to ensure that the contractor follows sound construction practices and complies with applicable environmental and social safeguards; (iii) assurance that the contractor has obtained the requisite compliance certifications at various stages of work; and (iv) certification of satisfactory completion following the completion of works at each site.

Component 3: Project Management and Coordination (US$3 million)

11. This component will finance the establishment and operation of the PIU under MoH to serve as the unit responsible for the overall implementation and coordination of the project activities, as well as the setting up of the IST to be established within MoF (see annex 2 for detailed implementation arrangements). The overall implementation responsibilities of the project will rest with the PIU within MoH. The overall safeguards advisory and fiduciary (procurement and FM) responsibilities of the project will rest within the PIU, which will benefit from close, hands-on procurement support from the shared services of the IST, in support of post-Maria recovery efforts.

12. The Project will finance (a) incremental dedicated staff for the establishment and operations of the IST (to be shared with other projects, in proportions to be determined) and for the PIU; (b) the hiring of other technical experts needed for project preparation and implementation; (c) the preparation of environmental and social safeguards studies and instruments including development of communication strategy and complaints, feedback and grievance system; (d) the carrying out of the fiduciary aspects of the project including audits; (e) the provision of training and workshops; (f) the financing of the necessary goods, equipment, and operating costs; and (g) the implementation of safeguards instruments.

Considerations in Project Design and Rationale for Design Selection

13. The impact of the disaster on private housing stock has been appraised in a detailed BDA of about 24,300 private, commercial, and public buildings, conducted in December 2017 by MoH with the support of the UNDP and other partner agencies. This dataset was considered representative as a basis for project identification and appraisal, with the caveat that substantive quality assurance and data cleansing had not been performed when the data were received from the UNDP in January 2018.

14. The dataset shows that 18 percent (4,503 houses) and 26 percent (6,284) of private houses sustained total and major damage, respectively, requiring rebuilding and full roof replacement. A further 29 percent (6,996 houses) sustained minor damage requiring minor roof and other repairs and 27 percent (6,514 houses) sustained only minimal or superficial damage, see table 1.1. Medium-size houses (500 to 1,200 sq. ft) dominate the housing stock with 9,825 units and of these, 40 percent sustained major or total damage, as shown in figure 1.1. However, small house units (less than 500 sq. ft), which comprise 31 percent of the stock (7,525 units), sustained a higher level of major or total damage, affecting 62 percent of that group. Although only a small percentage of large houses were totally destroyed, 30 percent sustained major roof damage.

Table 1.1. Distribution of Level of Damage and House Size for Private Houses and Home/Business Units

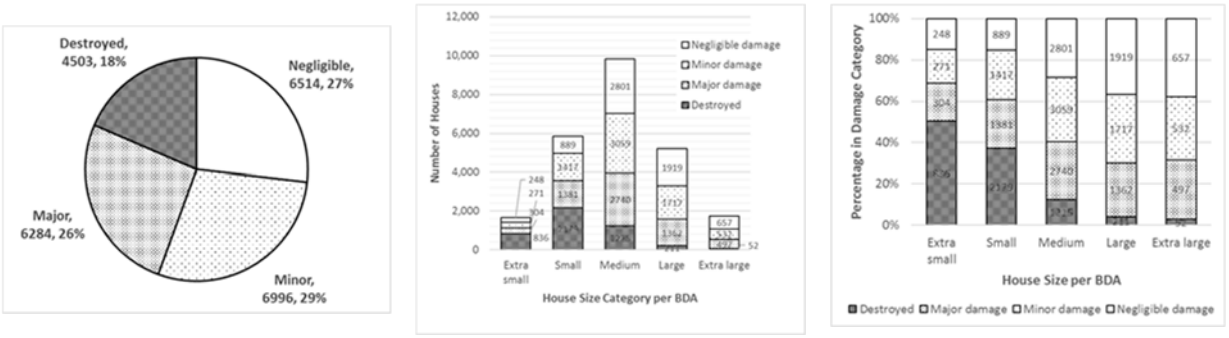
Size - Footprint	Footprint Area, sq ft	Destroyed	Major Damage	Minor Damage	Negligible Damage	Subtotals
Extra small	<200	836	304	271	248	1,659
Small	200 < 500	2,179	1,381	1,417	889	5,866
Medium	500 < 1,200	1,225	2,740	3,059	2,801	9,825
Large	1,200 < 2,500	211	1,362	1,717	1,919	5,209
Extra large	>2,500	52	497	532	657	1,738
Subtotals		4,503	6,284	6,996	6,514	24,297

Source: BDA database, MoH, and UNDP, January 2018.

Note: Damage classification, per BDA: 'Destroyed' = Substantial damage to 50 percent or more of the structure, requiring full rebuilding. 'Major' = Damage to more than 30 percent of the roof rafters and up to 50 percent of the structure, requiring full roof replacement and strengthening. 'Minor' = Damage to less than 30 percent of roof rafters and nonstructural elements, requiring roof and other minor repairs. 'Minimal' or negligible = Superficial, nonstructural damage.

15. **Insurance penetration varied significantly.** Of the destroyed houses, only 2 percent were insured; whereas for all other damage categories, 15–20 percent were insured.[16] In terms of geographic distribution, Castle Bruce and Grand Bay sustained the highest proportion of severe damage (60–70 percent major or total damage) while other districts sustained 37–47 percent major or total damage. Although substantial infrastructure damage was caused by flooding and heavy debris flows in the rivers, the distribution of damage to housing was fairly similar across risk and non-risk areas. From a high-level analysis, it is estimated that 25–30 percent of houses could be located in flooding or landslide-risk areas, with little variation across house sizes and in the incidence of levels of damage. The project will conduct a more detailed analysis of site conditions to ensure safe construction.

Figure 1.1. Distributions of Damage and House Size for Private housing



Source: Project analysis of BDA data, UNDP-MoH, January 2018.

16. The prevailing mode of failure was loss of roofing, which was predominantly galvanized corrugated iron sheeting (gci) on timber rafters. The review by building professionals indicated several key weaknesses, including use of nails instead of screws, undersize purlins and/or rafters, inadequate strapping to the building structure or lack of a ring-beam, and inadequate or lack of reinforcement in the supporting walls. Hip-type roof structures performed better than gable-type roofs. While concrete masonry structures performed reasonably well, the building assessments revealed significant construction weaknesses, such as inadequate reinforcement, which would be vulnerable in seismic events.

Options Analyzed in Program Design

17. **Analysis to define scope of support.** Initial analysis focused attention on the houses that sustained total or major damage, requiring full roof replacement or full rebuilding, which comprised nearly

[16] The BDA data represent the declaration of insurance during the survey; however, the insurance status was either unknown or undeclared in 30 percent to 50 percent of each category.

10,878 units, or 44 percent of the total private housing stock. This analysis was undertaken for three reasons:

(a) Major repairs and reconstruction works provide the greatest opportunity for raising the resilience of housing to the Category 5 storm standard of the new Building Guidelines and for encouraging the uptake of improved building practices in the industry.

(b) Major repairs and rebuilding present both technical and financial challenges to private homeowners, namely a need for professional design, quality workmanship, and certification for key structural elements, as well as higher costs.

(c) With meagre industry capacity and strong competition for materials and trades due to the scale of the rebuilding task, some concentration of delivery capacity which mobilizes the regional industry is needed to accelerate the reconstruction program.

18. Within the resource envelope available to the project, the project conducted analysis to support affected households through either of two streams, that is, major repairs and reconstruction, or a focus solely on the reconstruction needs. The analysis considered the role of other agencies, including development, relief, and humanitarian groups, and the Government in repairing roofs as well as individual owner's initiatives to repair their own roof as follows:

(a) **Focus on repairs and rebuilding, combining owner-driven and agency-driven approaches.** The first model has a combination of an owner-driven approach providing tiered subsidy support for major repairs (full roof replacement) and rebuilding through an agency-driven approach of direct supply of core 'starter' houses through a central contractor. This model could support about 2,400 households.

(b) **Focus on reconstruction, either agency-driven or owner-driven.** Support is focused solely on reconstructing destroyed houses. This model could either provide 'starter' homes through a construction company (agency-driven) or provide a flat subsidy amount (pitched at the minimum cost of a basic starter home) (owner-driven). The model could support from 1,250 households (if agency-driven) to 1,700 households (if owner-driven).

Project Design Option Selected

19. The model finally adopted for the project is the owner-driven version of the second model, comprising a single component with a US$18,500 (approximately EC$50,000) subsidy ceiling for rebuilding about 1,700 totally damaged houses. The subsidy amount is based on the minimum cost of building a basic resilient 'starter house of 300 sq. ft floor area. Beneficiaries would have the option of purchasing a turnkey starter house from the market or of arranging construction to a design of their choosing. The main reasons for this selection included a priority for reconstruction over major repairs in terms of both beneficiary impact, priority for the role of the World Bank's financing, and a simplified and more focused implementation that would allow quicker delivery. While an agency-driven approach might mitigate capacity problems in the local industry, an owner-driven approach mobilizes households to take an active role in the rebuilding.

Targeting of Support

20. The total number of destroyed homes was 4,503: of these, 70–75 percent are expected to be located in areas with low flood or landslide risks. With a funding allocation of US$31.45 million for works, the project could provide subsidies of up to US$18,500 for about 1,700 affected households, covering up to 56 percent of all destroyed houses in low-risk areas or 82 percent of small destroyed houses in low-risk areas.

21. The proposed eligibility for direct support for reconstruction is based on eligibility criteria to establish technical viability of household rebuilding; categorical targeting of those most in need; and validation of the process. The proposed eligibility criteria are detailed below and will be further detailed in the Project Operational Manual.

22. Advisory support through technical assistance and guidance on implementation will be made available to all other households, as well as capacity building for the building industry, to encourage sound building practices to resilient standards.

Design of Institutional and Program Support

23. **Encouraging the use of resilient building practices and compliance with building standards.** Following previous disasters in the region and Dominica, especially Hurricane David and Tropical Storm Erika, efforts have been made to improve building practices and to update the building guidelines. Analysis of the failures after Hurricane Maria, however, show that many deficiencies in building details, materials and construction quality, and some aspects of structural type all played substantial roles in the amount of damage sustained by residential structures under a Category 5 storm. The deficiencies appear to have persisted for various reasons, including lack of awareness in the industry of resilient building techniques; lack of suitable materials supply; higher costs; low usage of skilled trades, professional design, or supervision; and a lack of enforcement.

24. **Following the disaster, several initiatives have begun to address these issues.** The Building Guidelines, which provides practical, concise guidance on building techniques, have been revised to meet Category 5 storm and current seismic requirements in line with OECS regional code guidelines and are pending GoCD approval.[17] A revision of the Building Code (1996) is also in process. Several training courses and consultation workshops have been conducted involving industry, professional, financial, government, and humanitarian agency stakeholders. The detailed BDA survey of residential, commercial, and public buildings, which was conducted in December 2017 by MoH in conjunction with the UNDP, provides a valuable database of residential and other buildings which needs to be transferred to a formal MIS in the GoCD to support the functions of MoH and MoP. The Housing Strategy of MoH is proposing a number of technical reconstruction teams attached to district centers to assist homeowners in house repairs, and the MoP has begun to establish a series of TACs[18] as a means of decentralized community outreach, providing convenient access to technical advice and expediting the building controls process—these two initiatives may need to be coordinated or rationalized.

[17] The Building Guidelines are pending GoCD approval as of February 2018. The revisions respond to reviews by building professionals.
[18] Cabinet approval of the proposal is expected in February 2018.

25. **Physical planning controls and capacity.** The PPD, through the Physical Planning Act, is tasked with regulating land use and Building Codes in Dominica. Approvals of post-Maria construction will put a serious strain on the capacity of the PPD. Records since 2000 indicate that about 400 building permits are issued annually, 85–90 percent of which are for housing, but initiation of housing is much lower: including informal starts, it is estimated that initiation of actual housing has averaged about 150 units per year with a value of about EC$44 million.[19] Additionally, enforcement of code requirements through site inspections is inadequate. Increasing the rate of permit processing by the PPD tenfold, to about 4,000 per year to support the recovery program, would require a major transformation of the PPD's consenting process and information systems. Furthermore, the demand for site inspections (about 3 per major repair or 9 per new building) would rise to over 20,000 per year, well beyond PPD capacity. Currently, the PPD undertakes their planning control mandate using a mix of paper-based and digital systems. Subdivision approvals as well as implementation of the National Land Use and Physical Development Plans are largely managed through digital databases equipped with geographic information system (GIS), which include some natural hazard information. Development approvals, including the review of architectural/engineering plans, are carried out entirely on paper—however, the paper records of completed applications were stored in a vault which was destroyed by Hurricane Maria.

26. The project addresses the capacity gaps in planning controls and compliance in four ways: (a) streamlining the building permit application and approval processes with electronic systems, (b) streamlining the site inspection and compliance evaluation processes with field and office electronic systems, (c) providing technical advisers to support permit applications and inspectors to expedite site inspections, and (d) shifting much of the technical responsibility for ensuring compliance with required building standards upstream to field supervision consultants employed under the project. The project will also support the GoCD in a longer-term plan for improving the coordination between services relating to development and physical planning, lands, and housing by advancing the design of a new building that would co-locate the relevant services.

[19] Estimates from Building and Contractors Association of Dominica, January 2018.

Beneficiary Selection

27. **The Project was designed to provide support to a significant number of people whose homes were totally destroyed by Hurricane Maria.** The estimate of 1,700 number of households to be supported through Project subsidies is a subset of the 4,503 completely destroyed houses, particularly in areas safe for on-site rebuilding,[20] identified by the BDA. Applicants not covered by the Project will be referred to other housing services and support provided by the Government and other agencies, such as the International Organization for Migration (IOM) and International Federation of Red Cross (IFRC). Given the limitations in Project resources, eligibility criteria and prioritization have been clearly defined in the Project documentation and outlined in Tables 1.2, 1.3, and 1.4. The 1,700 beneficiaries would be selected from this pool based on (i) the application of eligibility criteria, (ii) categorical prioritization focused on identifying the most vulnerable among potential beneficiaries, using variables closely correlated to poverty and vulnerability; and (iii) verifying these through consultations. The number of the eligible persons targeted can be scaled-up based on additional resources made available to the Government through bi-lateral, multi-lateral or national sources of funds.

28. **The Project will first apply clear eligibility criteria to manage the high demand for housing support.** To be considered an eligible household, the following criteria must be met: (i) be within the boundaries of established house size; (ii) house must be primary residence and occupant in the home at the time of disaster; (iii) house must have been fully destroyed; (iv) house must be in a low hazard risk area, which will be assessed by the TAC; (v) house must be uninsured; (vi) homeowner must not have received other reconstruction or structural restoration support through another donor or program. This information would be sourced from the Building Damage Assessment (BDA) database and validated by an on-site inspection and application received from homeowner.

29. **Following application of the eligibility criteria described above, potential beneficiaries will be prioritized on the basis of categorical ranking to ensure targeting of the neediest households based on poverty and vulnerability.** This prioritization will ensure targeting of the most vulnerable, given the current limitations in resources, and should there be oversubscription of potentially eligible households. The categorical criteria for prioritization include a sequence of filters based on socioeconomic and demographic criteria, including households still in shelters;[21] Public Assistance beneficiary households[22]; and heads of households that are single parent with children, disabled, or elderly. This categorical and demographic information would be based on data from, among others, Ministry of Social Services public assistance beneficiary database; shelter occupant information; community associations and the Vulnerability Needs Assessment (VNA). These criteria have been informed through focus group consultations with affected households and in discussions with the Government.

[20] It is estimated that 25–30 percent of houses could be located in flooding or landslide-risk areas, with little variation across house sizes and in the incidence of levels of damage. The Project will conduct a more detailed analysis of site conditions to ensure safe construction.

[21] Estimated to be 114 households as of January 27, 2018. (*IOM Displacement Tracking Matrix, Hurricane Maria Response, Round Four*).

[22] Public Assistance is Dominica's principal cash safety net program for poor households. A Social Protection Assessment completed in 2017 found the program to be well-targeted to the indigent. The VNA database revealed an estimated 506 Public Assistance beneficiary households among completely destroyed and uninsured houses,

30. **Consultations and validation will follow to ensure transparent and verified targeting of the selected beneficiaries**. An independent verification of the beneficiary list will be undertaken by local committees, comprised of religious groups, NGOs or civil society entity to identify any inaccuracies or discrepancies, and serve as an interface between the beneficiaries and the Government. The beneficiary list would be made publicly available as a final point of confirmation and validation. Table 1.3 outlines the possible prioritization attributes that will be completed by project effectiveness and detailed in the Project Operations Manual.

31. **A clear communications strategy and campaigns will help ensure public understanding of the targeting process, while a Grievance and Complaints Logging System (GCLS) will provide an avenue for complaints and appeals related to eligibility**. A strong communications strategy and communications campaigns will be developed to inform potential beneficiaries of the eligibility determination process, and which households are targeted for support. The communications campaigns will also inform the public and applicants of the GLCS and how they can file complaints, should they not agree with an assessment or their eligibility status.

32. **The eligibility criteria and targeting process developed have been developed to ensure technical viability of household rebuilding; effective targeting of those most in need given that recent poverty data for the country are limited; and validation of the process.** The first step of applying eligibility criteria ensures that houses to be rebuilt under the Project are in safe locations and that set standards for home occupancy and absence of alternative sources of income to support reconstruction (based on absence of insurance and other housing support) are established. The second step of applying categorical prioritization using demographic or household variables is a viable and sound option for Dominica, where the last poverty survey was conducted in 2009; and where significant levels of informality in the labor market make verification of income for a large share of households difficult. The CPA revealed that a significant share of the poor were children and youth, many of whom were born to single mothers, making this category of households an established sub-group with high correlation to poverty. Demographic criteria also prioritize households with limited physical capacity to carry out repairs on their own (for instance, elderly and disabled). Additionally, based on focus groups with communities during Project preparation, public support for supporting certain categories of people (persons in shelters, elderly, disabled etc.) may receive wide endorsement from the public in a context where most people need support, but resources are limited to provide everyone with financial assistance. The final step of ensuring review of beneficiary lists and publishing before finalization of lists, will add transparency and accountability to the process.

Table 1.2. Step 1: Application of Eligibility Criteria[23]

Attributes	Eligibility Criteria
House size	Extra small and small or including medium
Damage Level	Completely destroyed (as per the BDA)
Location	Low hazard risk area
Occupancy	Applicant was occupant in the home at the time of the disaster
Insurance coverage	Home is uninsured
Prior support	Applicant has not received other direct reconstruction/structural restoration support through another donor or program

[23] All these steps will be finalized before Project Effectiveness

Table 1.3. Step 2: Categorical Prioritization Among Eligible Households

Attributes	Possible Prioritization Criteria
Pervasive Displacement	Household is still living in a shelter
Poverty Status	Household is a recipient of the Public Assistance Program
Demographic Vulnerability	Single parent household with children Disabled head of household Elderly head of household

Table 1.4. Step 3: Verification and Validation

Verification	Local inter-sector committee verifies list
Validation	Final list is published for transparency and feedback

Gender

33. Dominica has made significant strides toward social inclusion and gender equality, particularly in education and leadership; however, significant gaps remain in gender inclusion. Women represent 48.9 percent of the population and head 39 percent of households. Women perform significantly better in secondary schools, however they still experience higher levels of unemployment; according to the last CPA, female unemployment stood at 17.6 percent, while male unemployment was at 11.1 percent. There is a high incidence of both girls and boys dropping out of secondary school.

34. Women in Dominica have experienced particular hardship as a result of Hurricane Maria. In the housing sector many women, particularly elderly women heads of households, did not have housing insurance. Over 1,100 single mothers with uninsured houses had their homes either totally destroyed or severely damaged. Specific actions are being prepared to address the particular needs of women and those identified as particularly vulnerable. Table 2.2 highlights the key challenges for gender inclusion and actions to address them under the project. Indicators to address M&E of the specific challenges and actions taken are also included in the table.

Table 2.2: Challenges and Actions for Gender Inclusion.

Challenge	Action	Indicators (Baseline – Target)
Women are overrepresented among persons in shelters and represent a significant share among uninsured homes that were either totally destroyed or severely damaged.	Single mothers will be prioritized among applicant households as part of the basis for categorical targeting, in combination with other vulnerability criteria such as lack of insurance and house size.	Number of households with resilient housing recovered using project subsidies (1,700), of which 35percent are female headed households Direct project beneficiaries (32,400), of which are female (48 percent)
Households headed by women may be less equipped to manage home reconstruction and repair needs due to their high unemployment levels, employment in traditional sectors, and increased burdens on their time to carry out unpaid care work.	TACs under the project will be a valuable resource to female-headed households, and will provide technical assistance and guidance, and assist with supervision of reconstruction works under the project. Women will be included in the design and construction process from the beginning.	Number of households that accessed general advice service from TAC and benefit from streamlined permitting process. (of which 35 percent are female headed households)

ANNEX 2: IMPLEMENTATION ARRANGEMENTS

COUNTRY : Dominica
Dominica Housing Recovery Project

Project Institutional and Implementation Arrangements

Coordination Arrangements (under Component 3)

1. **MoH has the overall responsibility for implementation of the Project.** At the highest level, a Housing Task Force (HTF) will provide strategic oversight to the project and ensure policy coordination. The HTF is chaired by the Cabinet Secretary and includes members from MoH, MoP, Lands and Surveys Division, and the Office of the Prime Minister. The HTF will play a key role in ensuring information flow between the different line ministries and agencies.

2. **A PIU responsible for the implementation of the Project will be established under MoH and will work closely with the MoP**. The PIU will be staffed with seconded government officials and/or local hires for key project positions. The PIU will comprise fiduciary, safeguards, and technical professional staff and will be responsible for the procurement, contract management, FM, safeguards, technical coordination and other activities for the project, under procedures which will be defined in detail in the Project Operations Manual. Specifically, the PIU will house at least the following key positions: project coordinator, M&E/communication officer, project engineer, environmental safeguards specialist, and social safeguards/community engagement specialist. PIU members will be employed on a full-time basis throughout the project implementation period and in line with the project needs and requirements. A grievance redress system with clear guidelines about applications and appeals will be developed and monitored by the PIU.

3. **An Implementation Support Team (IST) will support the implementation of the three World Bank-funded post-Hurricane Maria emergency projects and will be housed within MoF.** The IST will serve as a shared resource for these World Bank-funded projects and will provide specialist procurement, safeguards and fiduciary support to the respective PIUs. The IST will be staffed with two International procurement specialists, an FM manager, safeguards specialists and a portfolio manager. The International Procurement Staff within the IST will manage and be responsible for procurement processes related to all works, goods, and consulting and non-consulting services under the Project, with support from the PIU staff. The Portfolio Manager will be responsible for providing policy guidance, coordination, and oversight of project activities, as well as broader functions in overseeing the reconstruction process. The PIUs will coordinate and work closely with the IST, drawing on the resources and expertise housed there as needed. The IST will also mentor and train PIU staff to build capacity within the ministries, which aligns with the GoCD directive of strengthening in-house capacity for project implementation and execution.

Implementation of Technical Assistance (under Component 1)

4. **TACs.** The PIU will work closely with and coordinate with the TACs that report to the PPD in MoP, specifically the chief physical planner. The TACs will serve as a decentralized extension of the PPD

dispersed geographically across districts to improve community outreach, to provide technical guidance on construction practices and to strengthen development control capacity. The TACs will have a dual function of technical advisory services and planning control functions, which include monitoring the compliance with Building Codes and processing permits. The project will support the TACs by providing technical and professional staff for the advisory function, inspector staff to support the planning control function, and certain operating costs through a consulting firm. Table 2.1 summarizes roles and responsibilities of TAC centers and the targeting of project support.

Table 2. 1: Roles and Responsibilities of TAC Centers and Targeting of Project Support

Damage Category (BDA/BA)	Damage and Repair Description	BDA Baseline (S/M/L)*	TAC Technical Advisers			PPD DCO and TAC Inspectors		Project Support			
								Subsidy	Eligible	Funding	
		No.	GA	BA	PP	BP	BI	US$	Household	Comp	US$, millions
All	Technical assistance									1	3.5
Negligible	Minor house repairs	6,514	X			W	—	—	—	—	—
Minor	Roof repairs and house repairs	1,688 3,059 2,249	X	X	X	F	X	—	—	—	—
Major	Full roof replacement and strengthening	1,685 2,740 1,859	X	X	—	P	X	—	—	—	—
Destroyed	Full rebuilding or replacement	3,015 1,225 263	X	X	—	P	X	US$18,500	1,700	2.1 2.2	31.45 2.05

Note:

* Private houses, size by footprint area: S = Small, <500 sq. ft (46 m^2); M = Medium, <1,200 sq. ft (111 m^2); L = Large, >1,200 sq. ft (111 m^2).

TAC assistance (on demand): GA = General Advice; BA = Formal Building Assessment; PP = Preparation of Initial Estimate; BP = Building Permit Process; W = Waiver; F = Fast-Track; P = Full Permit Process through PPD; BI = Building Inspection

5. **Start-up phase of TACs.** To provide immediate support to establishment of the TACs and implementation of MoH housing recovery program, it is planned to provide a number of technical advisors as individual consultants through separate funding to assist the MoP and the TACs, until the TAC support consultant firm is mobilized under the project. The individual advisers would assist the MoP with developing the operational procedures, staffing plans, and communication strategy of the TACs, and by providing direct technical advice to homeowners on a case-by-case basis.

6. **Operational phase of TACs.** The TAC support consulting firm, engaged under the project, will be responsible for administering and managing the project support to the TACs and for ensuring successful performance and outcomes of the TAC activity. The firm will be responsible for, among others, (a) coordination with the PPD through the Chief Physical Planner and DCO's and MoP to ensure smooth and effective performance of the TACs; (b) providing two lead advisers to coordinate and manage the TAC

assistance program; (c) recruiting and administering staff for the technical advisory services, including technical advisers with professional qualifications (engineers, architects, and so on), technical assistants (for example, graduates, interns, and technicians), and site inspectors to work with the DCO (*Note*: this includes absorbing staff from the TAC start-up team, as appropriate); and (d) administering TAC operating equipment and expenses, including transport, field, and office expenses. The respective functions and duties will be as follows:

(a) **Technical advisers.** (i) Coordinate and manage the TAC assistance program; (ii) develop and update the operational procedures, staffing plans, and communication strategy of the TACs; and (iii) undertake a sample quality assessment of the overall housing program to monitor uptake of the building standards.

(b) **Technicians.** (i) Provide general technical advice to homeowners regarding the Building Guidelines, assessment services, planning requirements, building techniques and materials, and a building suppliers registry and (ii) undertake a structural building assessment on request from a homeowner, determine the house damage category applicable under the project, produce a preliminary scope of work and cost estimate for minor repairs.

(c) **DCO.** Under the direction of the CPP, the DCO in each TAC will (i) facilitate full planning submissions by homeowners and make initial review and recommendations on them to the CPP; (ii) receive and process fast-track approvals for minor jobs directly in the TAC, and copy the results to the CPP; (iii) coordinate and undertake site inspections to assess/certify compliance of building works with codes/guidelines, on request by the building owner's representative and with the assistance of inspector staff; and (iv) use PPD management systems to maintain complete records of planning submissions and approvals, site compliance reports and certifications, and building register.

(d) **Inspectors.** Provide support to DCOs in conducting site inspections, data entry, and report preparation as required.

7. The TAC technical advisers will assist the PIU to monitor, verify, and validate processes for beneficiary selection where applicable

Implementation of Housing Works (under Component 2)

8. **MoH will manage the housing subsidy and reconstruction process, through the PIU.** Subcomponent 2.1 will be implemented through an owner-driven approach for rebuilding or replacement of destroyed houses through providing a fixed subsidy in the form of a grant to eligible homeowners. The owner/beneficiary will manage the rebuilding of their own home with technical assistance, technical support and financial assistance. Payment of subsidies will be channeled through local commercial banks to facilitate tranche disbursements to the owner and building suppliers at streamlined intervals for permitting, compliance and inspection processes.

9. **Identification of eligible beneficiaries.** The PIU will assist MoH with identifying potential beneficiaries and preparing and validating a list of eligible beneficiaries to be supported by the project. The PIU, using information in the BDA database, will make preliminary identification of houses categorized

as 'destroyed' and arrange for formal structural building assessment to be conducted by the technical adviser of the local TAC. For houses validated as 'destroyed' and assessed as requiring full reconstruction or replacement, the PIU will proceed to assess and validate the other demographic criteria for the affected household as defined in annex 1. On the basis of this information, the PIU will compile a list of eligible homeowners and priority information. Through a validation process, the list of prioritized eligible homeowners will be used to produce a list of confirmed project beneficiaries who will receive subsidy support.

10. **Preparation of Works Plan.** Confirmed beneficiaries will receive technical assistance by the consulting firm under subcomponent 2.2 for site investigation, consultation on design options, and preparation of a detailed Works Plan and cost estimate. The design advice will include options for construction of a typical core 'starter' house in either prefabricated or built-in-place form, and for customized design.

11. **Engagement of building supplier.** Based on the chosen Works Plan, the beneficiary will select and engage a building supplier, from a panel of pre-qualified firms. The signing of a contract between the beneficiary and the supplier will be subject to confirmation by the PIU (including confirmation by the supplier of work schedule and materials supply) and confirmation of the financial arrangements with the beneficiary's banking institution.

12. **Execution and supervision of works.** The selected supplier is expected to implement the works in accordance with the Works Plan and Schedule and to obtain site inspections and certification of compliance at requisite stages of the works from the DCO of PPD, through the local TAC. The consulting firm will provide general technical supervision of the works, ensuring compliance with the building guidelines and social and environmental safeguards and reporting monitoring information on physical progress to the PIU. The consulting firm will be responsible for providing a certificate of satisfactory completion of works to the beneficiary, the beneficiary's banking institution, and the PIU.

13. **Financial and payment arrangements.** The subsidy amount for a project beneficiary would be paid by the PIU to the beneficiary's banking institution, the first on acquiring of construction permit, and the second half way through construction and the third on submission of a certificate of satisfactory completion. A framework memorandum of understanding with the banking institutions participating in this subcomponent would ensure a basis for prompt payment to building suppliers on presentation of satisfactory invoices and certification of work.

Financial Management

14. **FM Framework**: The fiduciary design is relatively complex given the low FM capacity in Dominica which is further exacerbated by the poor overall conditions in the country after Hurricane Maria. Project implementation will rely on GoCD IFMIS systems and execution will rest within MoH. Funds will be released by MoF to MoH accounting head on Smart Stream. Funds flow arrangements will be centralized under the responsibility of MoF, which will request the withdrawal of the funds, and transfer to MoH. Payment requests will be generated by the PIU, and Treasury will prepare and process payments for the list of selected suppliers/beneficiaries. The process will be managed by the PIU, through the MIS while also accounting and reporting back to MoF.

15. **Staffing:** Currently, there is no FM staff in place at the MOF with knowledge of financial systems and procedures (budgeting, accounting, internal controls, and reporting) to manage and oversee project FM. The IST under MoF will hire a FM Manager who has the necessary knowledge of all GoCD finance systems and procedures (budget, accounting and reporting), are familiar with applicable World Bank FM requirements. Fiduciary responsibilities include: (i) coordinating and supervising all payments for project activities; (ii) submitting disbursement requests and documentation of expenditures to the World Bank; (iii) preparing and submitting project interim unaudited financial reports (IFRs) to the World Bank; (iv) preparing and providing all financial documentation and project reports requested by external auditors and World Bank staff; and (v) preparing, updating, and ensuring that all project executors follow the POM.

16. **Budgeting, Accounting and FM Systems:** The Chart of Accounts (COA) provides the framework for identifying, aggregating, and reporting financial transactions for planning, resource allocation, management control, accounting, and evaluation purposes. The project will use International Public-Sector Accounting Standards (IPSAS), and will be cash basis. The COA is an integral component of the Government accounting system, and together with the budgetary system, provides the basis for accountability and good governance of results to be achieved with the resources and authorities provided. The budget cycle includes planning and implementation of all government activities. All project budgeting and accounting transactions will run through GoCD's accounting system.

17. The GoCD uses the Integrated Financial Management System (*Smartstream*) which forms the basis of the national classification system and provides information for multiple uses both internal (within Ministries) and external (outside Ministries). The Chart of Accounts is in accordance to international best practices, having the proper expenditure commitment procedures and classification. All payments will follow the official commitment, verification, and payment routine. All project costs are properly recorded in the country's integrated financial management system.

18. Smartstream will be complemented by a Management Information System (MIS) that the project will establish to ensure full management, control, and reporting of the use of funds. The MIS would be used for monitoring and evaluation, financial management, and will particularly help to track the investment support provided by the projects. The MIS will be integrated with Smartstream and financial data will need to be periodically and reconciled between the two systems.

19. **Project Financial Reporting:** The Financial Management Manager at the IST, with the support of the FM Specialist at the PIU, will ensure the timely production of interim financial reports (IFRs). These IFRs will be produced from the MIS and *SmartStream* and will consolidate the project's financial data for all components and be submitted within 45 days after the end of each quarter. The format and content of the quarterly IFRs will be provided in the related project Disbursement Letter.

20. **Project External Auditing:** Annual project financial statements will be audited by the Office of the Director of Audit (ODA), the Supreme Audit Institution of Dominica. The external audit will be conducted under Terms of Reference acceptable to the Bank. The annual audited financial statements will be due to the Bank within six months after the close of each fiscal year.

21. **Project Funds Flow and Disbursement Arrangements**: The proposed funds flow and disbursement arrangements will be streamlined to facilitate execution, avoid unnecessary incremental

operational arrangements, and rely as much as possible on existing FM systems and arrangements.

- The primary Bank disbursement method will be Advances. MoF will be the designated account holder and will process requests for funds (submitted by MoH) and will send the Withdrawal Application to Bank together with Records that account for advances from the Bank.
- The Bank will advance funds to the Designated Account (DA).
- Funds will be released by MoF to MoH Accounting Head.
- The Treasury will prepare payments to the list of vendors/suppliers.
- Disbursement Mechanism for Component 2. The PIU will advance funds in installments to the respective bank accounts (either to the escrow account or directly to the home owner). On receipt of documentation on the use of the first installment, together with physical progress (Output based), the second installment would be disbursed.
- The PIU will prepare and submit a financial report of disbursements to the Ministry of Finance (MoF).
- MoF and PIU consolidates and all financial information and generate the IFRs.

Disbursement

22. Disbursement of Project funds will be processed in accordance with Bank procedures as stipulated in the Disbursement and Financial Information Letter (DFIL), and the Disbursement Guidelines for Investment Project Financing, dated February 2017. The following disbursement methods will be available: Advance, Reimbursement, Direct Payment and Special Commitment as defined in the Disbursement and Financial Information Letter, being the Direct Payment the mandatory payment method under contracts for goods, works, non-consulting services and consulting services procured or selected through international open or limited competition or Direct Selection, as set out in the procurement plan.

23. Advances to MOF will be based on semiannual forecast of expenditures provided in the IFRs to a segregated Designated Account denominated in US Dollar (US$) and held at National Bank of Dominica. Funds would be transferred periodically from the DA to a Project Account, which would be denominated in local currency. The Project will report on the use of the advances through quarterly IFRs showing the actual expenditures incurred by component and subcomponent.

24. Disbursements to Component 2.1 for housing reconstruction will be recorded as housing grants as the amounts are transferred from banking institutions to the eligible beneficiaries for the subprojects, in accordance with the financial management and disbursement procedures to be established in the Project Operations Manual and the Memorandum of Understanding to be signed with the banking institutions.

25. The minimum application size for reimbursement withdrawal applications will be US$ 500,000 equivalent. The documentation of the use of advances and reimbursement requests will be through IFRs, specified in the Disbursement and Financial Information Letter.

26. Retroactive Financing will be allowed up to an equivalent amount of SDR 4 million equivalent to cover payments made under the for project eligible expenditures up to twelve months prior to the date of signing of the Financing Agreement, except for the housing grants.

Procurement

27. **Procurement under the project will be conducted in accordance with the World Bank's 'Procurement Regulations for IPF Borrowers' (July 2016, revised November 2017) and with particular reference to the 'Bank Guidance: Procurement in Situations of Urgent Need of Assistance or Capacity Constraints' (July 22, 2016)**. The project is subject to the World Bank's Anticorruption Guidelines, dated October 15, 2006, revised in January 2011, and as of July 1, 2016.

28. **Procurement Assessment.** Procurement is legislated under the Public Procurement and Contract Administration Act 11 of 2012. In MoH, procurement is conducted in a decentralized manner (undertaken by various staff of the ministry) and mainly based on shopping or direct contracting procedures. Above a certain threshold, MoH is required to obtain the approval and official clearance from the Ministry of Finance. A Procurement Assessment was carried out to evaluate the adequacy of existing procurement arrangements relating to the implementation of the project. The assessment found that currently MoH (the implementing agency) does not have dedicated procurement staff and does not have viable arrangements to implement project procurement. It has no substantive previous experience to implement World Bank or other international donor-funded projects.

Proposed Procurement Arrangements for the Project

29. **Proposed Procurement Arrangements.** The project will establish centralized high-level procurement capacity in an IST within MoF to serve as a shared, expert service to the PIUs for all Bank-financed post- Hurricane Maria emergency projects. The IST will be staffed with two international procurement specialists, who will manage procurement related to all works, goods, and consulting and non-consulting services under the project, with support from the PIU staff. The costs of this unit would be supported by the Housing, Agriculture, and DVRP projects.

30. The project will also engage a Procurement Officer in the PIU for implementation and technical functions for specific project tasks, with close implementation support from the shared procurement function in IST. The Procurement Officer in MoH PIU will serve as a key liaison between the PIU and IST on procurement matters.

31. The two dedicated procurement specialists in the IST will need to be highly qualified and have previous experience with international donor-funded projects and knowledge of the World Bank Group Procurement Regulations, so that they can support rapid project implementation and ensure adherence to the World Bank's Procurement Regulations. Based on the assessment and previous experience, it is considered unlikely that candidates meeting this profile will be available in the country. Therefore, the

selection of these consultants will be undertaken through an Open Market Approach, ensuring wide advertisement of the positions including in procurement-specialized publications.

32. The IST procurement staff need to work in close collaboration and dialogue with the technical staff of the PIU. The technical inputs such as terms of reference and technical specifications necessary for the procurement packages will be prepared at the PIU level. As the relevant experience may be inadequate at the PIU level, the project will engage external consultants to provide support for developing terms of reference and technical specifications and for supporting the evaluation of bids and proposals.

33. **Procurement Plan and PPSD**. As per Procurement Regulations paragraph 4.3, the PIU will prepare a high-level, simplified Project Procurement Strategy for Development (PPSD) that is consistent with the World Bank's Core Procurement Principles. A combined simplified PPSD for the three emergency projects is being drafted with the support of the World Bank. The PPSD will inform the preparation of the initial Procurement Plan, acceptable to the Bank.

34. **Procurement under the Project**. Under Sub-component 1.1, a consulting services firm will be selected under Open International Market Approach and Quality- and Cost-Based Selection. While the procurement of the firm takes place, individual consultants may be engaged on a short-term basis to staff the initial TACs. Under Sub-component 1.2, procurement will be conducted through an Open International Market Approach for the selection of a firm to provide 'Supply and Install IT Services', using either a 'Request for Bids' or 'Request for Proposals' method, depending on the complexity and specifics of the required system. Sub-component 1.3 would finance the procurement of a consulting services firm, for detailed design using the Qualifications-Based Selection method as per paragraph 7.12 of the Procurement Regulations.

35. Under Sub-component 2.1 a panel of building contractors will be pre-qualified, based on a set of qualification criteria addressing the needs of the project and undertaken by the client. To understand and evaluate the available market for this pre-qualification, a Request for Information will be issued within the region. Procurement procedures under Sub-component 2.1 will be detailed in the Project Operations Manual, including the form to be used for the Request for Quotations Selection and the Standard Contractual Agreement acceptable to the World Bank. Before project effectiveness, a Request for Information will be issued in order to assess the market and to confirm the viability of the proposed procurement arrangement.

36. Under sub-component 2.2, a consultant firm would be engaged to provide design and supervision services for house rebuilding or replacement works. The consulting firm would be selected through an Open International Market Approach and the use of Quality- and Cost-Based Selection procedures.

37. **Procurement risk management.** Procurement risks identified by the assessment will be mitigated by ensuring that the following actions are implemented:

(a) Engagement of two highly qualified and specialized procurement specialists to staff the proposed IST, on an urgent basis.

(b) Engagement of the PIU Procurement Officer.

(c) Ensuring the preparation of, and consensus on, various inter-institutional agreements that define the respective roles and responsibilities of the project agencies relating to procurement, including MoF, MoH, MoP, ICT Unit, and IST, to ensure timely implementation of the Procurement Plan.

(d) Engagement of external consultants to support the implementing agency in developing terms of reference and technical specifications and to support the team during the evaluation of bids.

(e) Updating of the procurement arrangements in the Project Operational Manual that are acceptable to the World Bank, with a clear definition of the roles and processes applicable to the project.

38. The Bank's Procurement Specialist assigned to this project will monitor the procurement risk during implementation and will support, train, and guide the client's procurement team assigned to the project. The procurement performance will be monitored during implementation supervision, and additional measures may be recommended if deemed necessary.

ANNEX 3: IMPLEMENTATION SUPPORT PLAN

COUNTRY : Dominica
Dominica Housing Recovery Project

Strategy and Approach for Implementation Support

1. **The Implementation Support Plan has been developed considering important situational factors.** These include (a) the emergency nature of the project; (b) project focus on housing, which is critical for restoring livelihoods of the people of Dominica; (c) lessons learned from similar operations; (d) planned implementation schedule; and (e) risks and needs as summarized in SORT.

2. **Implementation support will be provided by the World Bank (to the extent possible, regionally based), consisting of staff with relevant competencies in operations, procurement, FM, and safeguards.** The World Bank will undertake periodic field missions throughout the project's implementation, as required. Experience under previous emergency operations has shown that, given the challenging nature of such projects, specific World Bank responsibilities require higher than normal supervision and support requirements including the transfer of knowledge that the World Bank has gained over the past decade in similar operations.

Implementation Support Plan and Resource Requirements

3. **The World Bank's procurement, FM, and environmental and social safeguards specialists will provide timely and effective support.** In addition to carrying out an annual ex post review of procurement that falls below the prior review thresholds, the procurement specialist will provide routine hands-on support to the procurement agencies on an as-needed basis. The FM specialist will review all FM reports and audits and take necessary follow-up actions according to World Bank procedures, working closely with the PIU and implementation agencies. Semiannual inputs from the environmental and social safeguards specialists will be required throughout the project, and both formal implementation support missions and routine field visits will ensure that all required mitigation measures are implemented in accordance with the World Bank safeguards policies. The project will also conduct comprehensive fiduciary assessment of implementing partners to reduce fiduciary risks. The procurement, FM, and safeguards specialists will also help identify capacity building needs to strengthen fiduciary and safeguards capacity.

4. The following Implementation Support Plan reflects the preliminary estimates of the skill requirements, timing, and resource requirements over the life of the project. Keeping in mind the need to maintain flexibility over project activities from year to year, the plan will be reviewed annually to ensure that it continues to meet the implementation support needs of the project.

Table 2.2. Dominica Housing Recovery Implementation Support Plan

Year	Focus	Skills Needed	Trips/Resources	Partner Role	Comments
Year 1	• Project launch • Initialization of project components • FM systems functioning effectively • Procurement practices following World Bank norms • Environmental and Social Management Plan (ESMP) in place	• Team lead FM, Procurement, safeguards specialists engineer, housing sector specialists, DRM, and M&E specialists	5/18 Resource needs: US$40,000 8/18 Resource needs: US$40,000 11/18 Resource needs: US$40,000 Routine support: US$20,000	• Fully staffed PIU to operationalize project components Contract project management, other local support firms as needed • Prepare comprehensive project progress and results monitoring reports in advance of each mission • Update implementation and procurement plans routinely • Organize field visits • Ensure program alignment with ongoing and pipeline projects of the World Bank and other partners	• Task team to support smooth start-up following effectiveness • Ensure safeguard arrangements are built into implementation plans • Review implementation, commitment, and disbursement status • Provide support to monitor progress of activities, in-depth technical review of implementation; make adjustments to implementation plan if needed
Year 2	• Monitor implementation of project activities FM, procurement, and safeguards	• Team lead FM, procurement, safeguards specialists engineer, housing sector specialists, DRM, and M&E specialists	2/19 Resource needs: US$40,000 6/19 Resource needs: US$40,000 10/19 Resource needs: US$40,000	• Prepare comprehensive project progress and results monitoring reports in advance of each mission • Update implementation and	• Review implementation, commitment, and disbursement status • Ensure safeguards arrangements are built into implementation plans

Year	Focus	Skills Needed	Trips/Resources	Partner Role	Comments
			Routine support: US$20,000	procurement plans routinely • Organize field visits • Ensure program alignment with ongoing and pipeline projects of the World Bank and other partners	• Provide support to monitor progress of activities, in-depth technical review of implementation; make adjustments to implementation plan if needed
Year 3	• Monitor implementation of project activities • midterm review FM, procurement, and safeguards	• Team lead FM, procurement, safeguards specialists engineer, housing sector specialists, DRM, and M&E specialists	2/20 Resource needs: US$40,000 6/19 Resource needs: US$60,000 (midterm review) Routine support: US$20,000	• Prepare comprehensive project progress and results monitoring reports in advance of each mission • Update implementation and procurement plans routinely • Organize field visits Ensure program alignment with ongoing and pipeline projects of the World Bank and other partners	• Review implementation, commitment, and disbursement status • Ensure safeguards arrangements are built into implementation plans • Provide support to monitor progress of activities, in-depth technical review of implementation; make adjustments to the implementation plan if needed • Conduct midterm review after 18 months
Year 4	• Monitor implementation of project activities • FM, procurement, safeguards planning for final evaluation and	• Team lead FM, procurement, safeguards specialists engineer, housing sector specialists, DRM, and	3/21 Resource needs: US$40,000 9/21 Resource needs: US$50,000	• Prepare comprehensive project progress and results monitoring reports in advance of each mission	• Review implementation, commitment, and disbursement status • Ensure safeguards arrangements are built into

Year	Focus	Skills Needed	Trips/Resources	Partner Role	Comments
	Implementation Completion and Results Report • Project withdrawal and closure	M&E specialists	Routine support: US$20,000	• Update implementation and procurement plans routinely • Organize field visits • Ensure program alignment with ongoing and pipeline projects of the World Bank and other partners • Project closure	implementation plans • Provide support to monitor progress of activities, in-depth technical review of implementation; make adjustments to implementation plan if needed
Year 5	• Monitor implementation of project activities • FM, procurement, safeguards planning for final evaluation and Implementation Completion and Results Report Project withdrawal and closure	• Team lead FM, procurement, safeguards specialists engineer, housing sector specialists, DRM, and M&E specialists	3/21 Resource needs: US$40,000 9/21 Resource needs: US$50,000 Routine support: US$20,000	• Prepare comprehensive project progress and results monitoring reports in advance of each mission • Update implementation and procurement plans routinely • Organize field visits • Ensure program alignment with ongoing and pipeline projects of the World Bank and other partners Project closure	• Review implementation, commitment, and disbursement status • Ensure safeguards arrangements are built into implementation plans • Provide support to monitor progress of activities, in-depth technical review of implementation; make adjustments to implementation plan if needed

ANNEX 4: ECONOMIC ANALYSIS

1. **Summary.** This economic analysis provides estimates of the costs and benefits associated with the Housing Recovery Project for Dominica. It focuses on Component 2, under which subsidies are provided to assist the reconstruction of destroyed housing. Overall, the analysis shows that supporting the reconstruction of houses in Dominica is economically sound. This is especially the case if the financial support provided under the program is critical to enable poor households to recover. Moreover, given the frequency and intensity of storms, there is a strong case for reconstructing houses to a higher building standard as climate change is expected to further increase storm intensities.

2. **Expected development impact.** The Project Development Objectives are to contribute both to the recovery of housing for disaster-affected households and to improving the application of resilient building practices in the housing sector. The project is expected to benefit approximately 12,000 households (32,400 persons, of whom 15,500 are women) who will be assisted through a package of technical services for resilient rebuilding of houses, including access to building assessments and general engineering advisory services. These make up approximately 50 percent of households that experienced some level of damage. Of these, approximately 1,700 households will receive financial support in the form of a subsidy from the project toward a starter house.

3. In the short-term this project will support beneficiaries to return to their homes and jobs, and restore their livelihoods. In addition, in line with the principle of 'building back better', this project is designed to deliver housing reconstruction at a resilience level that is able to withstand similar extreme events in the future. This will help to strengthen the resilience of beneficiaries in the medium to long term, especially in the face of intensifying hurricane seasons due to climate change. More broadly, through its technical assistance component and the demonstration effect of resilient building standards, this project will contribute indirectly to making overall reconstruction efforts (beyond this project) more resilient. By strengthening resilience to future hurricanes, this project will contribute to building a more resilient economy and avoiding a repetition of the damages due to Hurricane Maria that reversed years of development progress.

4. **Rationale for public sector involvement.** The scale and extent of the destruction caused by Hurricane Maria means that the damages – and hence the need for reconstruction financing – is substantial relative to income. The damages are estimated to amount to 226 percent of GDP, with 90 percent of Dominica's housing stock being affected. Given the immediate financial constraints in the aftermath of the disaster including in the private sector, this is a critical time for ensuring that reconstruction is conducted in a way that reflects Dominica's exposure to natural hazards, and reduces its vulnerabilities.

5. The economic analysis highlights that the construction cost of even the most basic 'starter' house is double the average income per capita. In the absence of public sector involvement, there is a risk that credit constraints will lead to make-shift, temporary, and vulnerable solutions instead of resilient reconstruction of houses. Moreover, given the scale of reconstruction needs, the private construction sector in Dominica has been unable to meet the demand for both construction workers and materials.

This created the need for the government to intervene with a bulk purchase of materials to support reconstruction efforts.

6. In addition, there is a strong rationale for incorporating the lessons learnt from this disaster into the more general policy and planning frameworks of Dominica. Coherent approaches are needed to better integrate risk management principles into development strategies, reflect the need for climate resilience in regulations, and build the necessary risk management capacity. For this purpose, public sector involvement in the housing reconstruction and wider recovery process will be essential.

7. **The World Bank's added value.** The World Bank is in a unique position to provide best-practice guidance on key issues such as effective disaster recovery, building standards, risk management, and capacity building of relevant actors in the public and private sectors. The Bank´s recent experiences in resilient post-disaster recovery, in particular in housing reconstruction, are of particular relevance to this operation. In addition to financing, the World Bank is in the position to provide technical and strategic knowledge transfer through the participation of technical specialists throughout project implementation and evaluation. With a wide range of sectoral expertise, the World Bank is in a position to design projects in complex environments – for instance, by accounting for evolving climate risks, improving the targeting of beneficiaries, and applying resilient building norms. In addition, the World Bank has extensive experience in supporting governments to integrate risk management principles into broader policy planning, and thus to strengthen institutional frameworks for disaster preparedness.

8. **Parameters used in economic analysis.** Table 4.1. summarizes the key economic and project parameters used in this analysis. Table 4.2. summarizes the storm risks specific to Dominica. In the period from 1917 to 2017, Dominica was directly hit by 35 tropical storms or hurricanes.[24] Based on this historic track record, the associated return periods are computed as

$$\mathrm{RP} = \frac{t+1}{s},$$

where t is the time frame (1917–2017) for which data is available, and s is the number of event occurrences in this period (for example, number of hurricanes of Category 1 or worse). In addition, the probability of a storm type being exceeded in any given year can be computed as the inverse of the return period.

Table 4.1. Economic and Project Parameters (US$)

Income per capita (2016)	7,144
Value of average house[a]	35,720
Value of 'starter' house[b]	32,879
Reconstruction subsidy	18,500
Cost of constructing an average house	2,000
Cost of constructing a 'starter' house	18,500
Number of beneficiary households	1,700

Note: a. This is estimated as 30 percent of income per capita (a standard estimate for the rent share of income)

[24] This is an estimate based on http://www.hurricanecity.com/city/dominica.htm and https://en.wikipedia.org/wiki/List_of_Category_5_Atlantic_hurricanes.

Table 4.2. Historic Storm Occurrences and Estimate Return Periods and Probabilities

Number of tropical storms in Dominica (direct hits, 1917–2017)	22
Number of hurricanes (Category 1–4, direct hits, 1917–2017)	12
Number of hurricanes (Category 5, direct hits, 1917–2017)	1
Return period 'tropical storm'	2.91
Return period 'hurricane Category 1–4'	7.85
Return period 'hurricane Category 5'	102.00
Probability of a tropical storm in a given year	0.21
Probability of a Category 1–4 hurricane in a given year	0.12
Probability of a Category 5 hurricane in a given year	0.01
Probability 'TS or worse' in a given year	0.34

9. **Costs and benefits of reconstruction subsidies.** This project component supports households with the reconstruction of their destroyed houses by subsidizing the reconstruction costs. Beneficiary households receive a subsidy of US$18,500, which corresponds to the construction cost of a basic 'starter' house. Households with additional means (savings or credit) can choose to construct higher value ('standard') houses at a construction cost of US$22,000. The benefits of reconstructing these houses can be approximated by the 'value of having a rehabilitated and intact house' or, in other words, the value of a house. For this analysis, the house value estimate in table 4.1 is used. The benefit of the subsidy scheme can then be approximated as the overall value of restored houses, multiplied by the number of beneficiaries.

10. There is some uncertainty regarding the respective shares of 'starter' and standard houses that beneficiaries will choose to construct. Hence, this analysis computes B/C ratios for the full range of possible outcomes (that is, 0 percent to 100 percent of beneficiaries will opt for the more expensive housing type, at a cost of US$22,000, that is, US$3,500 more than the subsidy). The estimates show that benefits exceed the project costs, even if private reconstruction costs are accounted for (B/C ratios between 1.62 and 1.78). The reason for this is that the value of housing typically significantly exceeds the cost of (reconstruction. It should be noted that in practice the benefit of having housing extends beyond the value of the house itself and includes other factors such as security, health, ability to earn income, and amenities. However, these benefits are omitted in this analysis, which implies that the benefits estimated here are a conservative estimate.

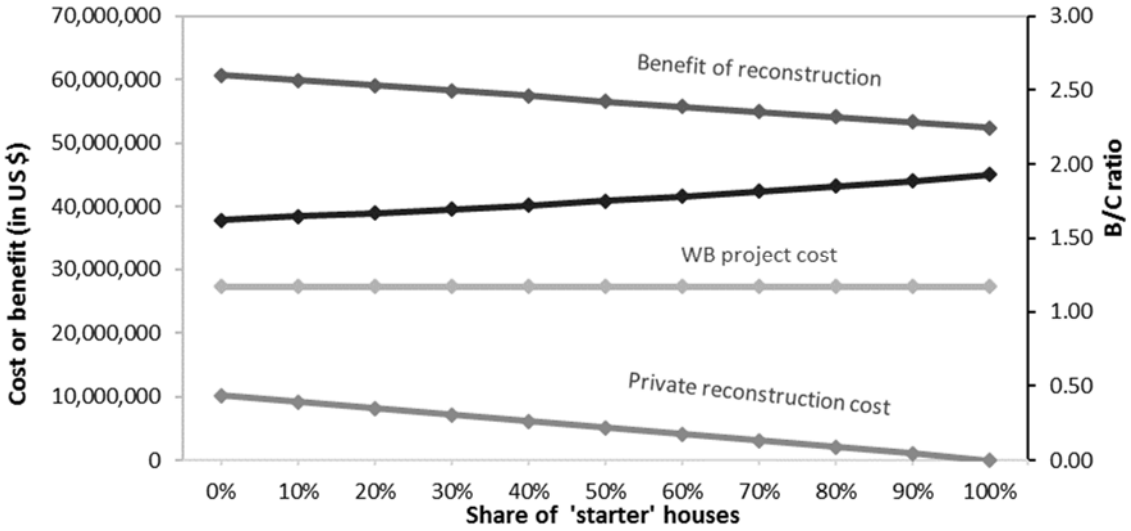
Table 4.3. Estimated Benefits and Costs of Reconstructing 1,700 beneficiaries' houses

Share of starter houses	**0%**	**50%**	**100%**	Construction cost US$18,500
Share of standard houses	100%	50%	0%	Construction cost US$22,000
Benefit of reconstruction	US$60,724,000	US$58,308,841	US$55,893,682	Restauration value of damaged and destroyed houses[a]
World Bank-financed project cost	U$31,450,000	US$31,450,000	US$ 31,450,000	Subsidy payments times number of beneficiaries

Private reconstruction cost	US$5,950,000	US$2,975,000	US$0	Remaining reconstruction costs borne by households[b]
B/C ratio	1.62	1.69	1.78	B/C ratio

Note: a. Note that this number assumes that reconstruction would not take place or would be delayed significantly, without the subsidy payments.
b. The full reconstruction cost for rebuilding a standard house is considered to be US$22,000. Beneficiaries of the subsidy will see these reconstruction costs be reduced by the amount of the subsidy, but the remaining costs (US$3,500) are borne privately by the household.

Figure 4.1. Estimated Benefits and Costs of Reconstructing 1,700 Beneficiaries' Houses for the Full Range of Possible 'Starter' Shares



11. **Benefits of reconstructing houses with higher building standards.** When reconstructing destroyed or severely damaged houses, 'building back better' is an important consideration. This means improving the resilience of houses, so that they are more able to withstand similar events in the future. The level of built resilience will determine whether the houses reconstructed under this housing reconstruction project will be able to withstand tropical storms or even hurricanes. Historic storm records for Dominica show that such storms have been frequent in the past and are likely to occur again. By multiplying the potential damage (proxied by the damage caused by the 2017 hurricane season, or fractions thereof for smaller events) with the probability of occurrence, the benefit of different levels of building standards can be computed. These benefits reflect the expected avoided loss.

12. Three levels of resilience are considered for this analysis:

- **'Cat-5'** refers to a building standard of the reconstructed house that can withstand a Category 5 hurricane (and any lower intensity event). This is the protection level proposed under this project.

- **'Cat-4'** refers to a building standard of the reconstructed house that can withstand a Category 4 hurricane (and any lower intensity event).

- **'TS'** refers to a resilience level at which the reconstructed house that can withstand a tropical storm, but not Category 1–5 hurricanes.

- **'Minimal'** refers to a minimal level of built resilience at which even a tropical storm causes severe damages.

13. The B/C analysis is conducted for the scenario in which 50 percent of beneficiaries opt for the 'starter' type house. The analysis shows that for the 1,700 beneficiaries of the project the benefit (expected avoided damage) is significantly larger for strong resilience (protection level Cat-5 and Cat-4). The B/C ratio is the smallest when the protection level is 'minimal' and increases for higher protection levels. Moreover, the expected annual loss is 0 if houses are built to cope with even the strongest storm but substantial if resilience is low.

Table 4.4. Expected Avoided Damages and Annual Losses Associated with Different Protection Levels[a]

	Protection level			
	Cat-5	**Cat-4**	**TS**	**minimal**
Benefit (avoided damage) [b]	US$11,204,444	US$10,632,789	US$7,202,857	n.a.
Expected annual loss[c]	US$0	US$571,655	US$6,402,539	US$13,605,396
Savings from reconstructing at lower protection level[d]	n.a.	US$3,442,500	US$5,163,750	US$6,885,000
Total reconstruction costs (World Bank + private)	US$34,425,000	US$30,982,500	US$29,261,250	US$27,540,000
B/C ratio	1.69	1.86	1.77	1.62

Note: a. This analysis uses storm probabilities computed based on historic data (1917–2017).
b. Benefits are the value of avoiding the 2017 losses incurred by the beneficiaries of this component. This is computed as the combined damage incurred by the beneficiaries of this program in 2017, multiplied by the probability that a storm occurs against which the house is sufficiently protected. The respective probabilities from table 4.2 are used.
c. This is computed as the 2017 loss, multiplied by the probability that the protection level is exceeded (table 4.2).
d. Rebuilding to a lower standard may require cheaper and fewer materials and labor. If reconstruction builds to a protection level of Cat-5, then reducing protection to Cat-4 (or TS) is assumed to reduce construction costs by 10 percent (or 15 percent).

14. **The probability of extreme events is likely to increase due to climate change.** Table 4.4 suggests that B/C ratios are similar, for instance, for protection levels Cat-5 and Cat-4. The reason for this is the historically very infrequent occurrence of extreme events; for instance, a Category 5 hurricane has only occurred once during 1917 to 2017. Hence the occurrence probability of a Category 5 hurricane is only 1 percent. In fact, the probability of a Cat-5 storm would be 0 percent if computed based on 1917–2016 data. However, the impacts of climate change mean that the intensity of storms is likely to increase in the future, hence increasing the occurrence probability of extreme events relative to lower intensity events. As storm probabilities change, this is bound to affect the B/C ratios in this analysis.

15. To illustrate the effect of increasing storm probabilities, table 4.5 presents a counter-factual B/C calculation which assumes increased probabilities for extreme events. Here, the updated probabilities are assumed to be 3 percent for Category 5 hurricanes (instead of 1 percent) and 15 percent for Category 1 to 4 hurricanes (instead of 12 percent). The overall probability of a storm event ('tropical storm or worse') remains at 34 percent. The updated B/C ratios in table 5.5 illustrate that increasing probabilities of extreme events would reduce the B/C ratios of lower protection levels. For instance, the Cat-5 protection level has a higher B/C ratio than 'tropical storms', which reverses the result in table 4.4.

16. Overall, this highlights that the project design should not solely be determined based on historic data but be robust to changes in the likelihood of extreme events due to climate change. Moreover, it should be noted that in practice there is bound to be a compliance shortfall, that is, the targeted protection level is unlikely to be implemented perfectly in all houses. Compliance shortfalls and risk aversion to human losses are some of the reasons not considered in this analysis, but that would justify decision makers opting for protection levels above the one recommended by the B/C ratios.

Table 4. 5. Expected Avoided Damages and Annual Losses Associated with Different Protection Levels under Higher Probabilities of Future Extreme Events

	Protection Level			
	Cat-5	**Cat-4**	**TS**	**Minimal**
Benefit (avoided damage)[a]	US$16,752,930	US$13,871,788	US$6,901,023	n.a.
Expected annual loss[b]	US$0	US$4,047,320	US$13,318,425	US$20,219,448
Savings from reconstructing at lower protection level[c]	n.a.	US$3,442,500	US$5,163,750	US$6,885,000
Total reconstruction costs (WB + private)	US$34,425,000	US$30,982,500	US$29,261,250	US$27,540,000
B/C ratio	1.69	1.75	1.54	1.38

Note: a. Benefits are the value of avoiding the 2017 losses incurred by the beneficiaries of this component. This is computed as the combined damage incurred by the beneficiaries of this program in 2017, multiplied by the probability that a storm occurs against which the house is sufficiently protected. The respective probabilities from table 4.2 are used.
b. This is computed as the 2017 loss, multiplied by the probability that the protection level is exceeded (table 4.2).
c. Rebuilding to a lower standard may require cheaper and fewer materials and labor. If reconstruction builds to a protection level of Cat-5, then reducing protection to Cat-4 (or TS) is assumed to reduce construction costs by 10 percent (or 15 percent).

ANNEX 5: SAFEGUARDS ACTION PLAN

1. The Dominica Housing Recovery Project is being prepared and implemented according to Paragraph 12 of the World Bank's Policy on Investment Project Financing, which allows for certain exceptions to the investment project financing policy requirements, including deferral of safeguards requirements, if the Bank deems the recipient to be in urgent need of assistance because of a disaster or conflict. The exception allowing for deferral of environmental and social requirements was granted for this Project and the Bank has prepared, in accordance with its policies, the Safeguards Action Plan, a project-level safeguards planning document that provides a time-bound plan setting forth the steps and the sequential planning and coordination for project activities and the preparation of the relevant safeguards instruments by GoCD to ensure compliance with the safeguards requirements. The Safeguards Action Plan is guided by the dual objective of ensuring that there is a roadmap for safeguards compliance during project implementation and providing clear guidance to the client on the types of actions and instruments required to facilitate speedy implementation of emergency services.

Project Locations and Some Salient Social and Environmental Characteristics

2. Dominica is a mountainous island with a rugged landscape that creates significant engineering challenges to reducing infrastructure vulnerability to natural disasters and climate change. The country has a population of approximately 72,000 people and a land area of approximately 750 km2. Due to its rich biodiversity, about 60 percent of the land is classified as a World Heritage site by UNESCO. Dominica's human settlements and physical development are concentrated along narrow coastal areas (particularly in the south and west); almost 62 percent of the island's population live along the coast. The project will seek to replace or reconstruct damaged houses throughout the country.

Possible Social and Environmental Impacts and Risks

3. **Environmental Impacts**. The following are commonly known impacts associated with the activities of construction and rehabilitation of small civil works: (i) increased level of dust, noise, and vibration; (ii) pollution risks related to the removal and disposal of debris/demolition materials which could potentially lead to water/air pollution; (iii) health and safety risks due to construction/reconstruction activities.

4. Another set of project activities involve assistance to Technical Assistance Centers (TACs) to support development planning and the Project at the local level; development of management Information systems, including a registry database, support for planning and monitoring processes in Project agencies, and the technical design of a new Physical Development Planning Office. These activities do not have direct adverse environmental or social impacts; however, they should integrate environmental and social objectives and principles as an integral part of the planning process.

5. There are also positive impacts with the concept of 'build back better' and disaster risk reduction through the adoption of new and resilient engineering technologies for constructing homes.

6. **Social Impacts.** The project will result in positive benefits to beneficiaries, including poor, women, and indigenous peoples,[25] in the form of housing subsidy. Negative impacts could result from: inadequate consultations with vulnerable groups - including indigenous peoples, women, and other marginalized groups - leading to their low participation in project activities; and ineffective mechanisms for benefit targeting and information dissemination leading to the exclusion of marginalized groups from project benefits, including housing.

7. **Land Tenure and Relocation.** Issues related to land and tenancy that could affect the outcomes of the project have been researched, taking into consideration the legal framework, government policy, and actual practices. The principal concerns fall into two categories: ensuring security of tenure for those with informal leasing arrangements and handling cases where people are in unsafe site conditions.

8. The desired outcomes related to security of tenure are (a) avoiding household displacement following the reconstruction of housing where informal lease arrangements were in place and (b) ensuring that owners have a say in the reconstruction process, in cases where owners were not the house occupant. Positive outcomes in the case of unsafe site conditions are that either (a) site hazards are mitigated or (b) if relocation is necessary, the household is directed to alternative Government programs.

9. Dominica has carried out a series of land-related reforms over several decades. This has included efforts to provide more broad-based land ownership and improve land administration. As part of this effort, the Government, the World Bank, and the EU financed the successful Land Tenure Administration Reform Program during 2007–2011. Dominica uses the Torrens system of land registration, under which the state guarantees registered titles. Dominica is unique in that as many as 80 percent of residents have either a registered title, a registered deed, or an unregistered deed; that is, they can provide evidence of their land ownership. In addition, squatting on private land is relatively uncommon; most squatting occurs on public land and the Government actively regularizes squatters or works to prevent squatting from occurring. The period of adverse possession on unregistered land is also relatively short (12 years). The Government encourages all land owners to acquire a title or, at a minimum, to register their deed. A motivation on the owner's side with respect to titling is that it allows the land to be used as collateral for borrowing.

10. The Registrar General has expressed support for the Housing Recovery Project to include a requirement that beneficiaries provide evidence of ownership, as long as it also provides technical assistance to any occupant not able to do so. Requiring beneficiaries to prove ownership will allow the Government to gauge the extent of the problem of titles lost during the hurricane (in these cases, a process called ‘reconstruction of title’ can be carried out) and encourage regularization.

11. Messages regarding the benefits of registering (or reconstructing) a title and procedures for securing a first title would be included in the project’s social communication activity. Technical assistance will be provided through the TACs to assist any beneficiaries who encounter problems. Where the occupant is not the owner, owners would be contacted and requested to allow continued occupancy of the reconstructed house as described in the Project Operations Manual. Additional problems with

[25] There are communities in the Kalinago Territory who meet the World Bank criteria of OP 4.10 - Indigenous Peoples.

ensuring tenure security can be identified and monitored through the TAC information system and addressed, if necessary, as the project progresses.

12. **Avoiding Physical Relocation.** The Project includes an assessment process to ensure that beneficiaries' housing sites are safe for repair and reconstruction. The preference will be to mitigate any site hazards identified using project or home owner resources. In those cases where public works are required to mitigate the site or relocation is the only option, the government will assume responsibility. Dominica put in place a resettlement process in 2015 following Hurricane Erika, at which time it formed a resettlement committee and drafted a resettlement policy. It engaged contractors to build housing for those being resettled on land provided by government, but not all households have yet been safely resettled. Taking this experience as the starting point, the project will provide technical advice to MoP and the Resettlement Committees on good practice approaches for housing recovery for consideration for this separate Government-led process.

13. **OP 4.12 - Involuntary Resettlement is triggered for the project.** No physical displacement is envisaged under the project; however, the project investments could have unintended impacts (for example, should a new core house be sited in a different location on the same site for safety reasons and/or economic displacement or if a new core house is to be built on different footprint on the same site, which could affect crops or another asset). While these situations are expected to be very few, if at all, the Environmental and Social Impact Assessment will include a screening checklist to ensure that no physical displacement occurs and avoid economic displacement and/or compensate should it become necessary. ARAPs will be prepared in the case of the latter.

14. **OP 4.10 - Indigenous Peoples.** This policy will be triggered as there are communities that meet the World Bank criteria for the Indigenous Peoples Policy. The project, through its Information and Communication Campaign, will develop a Stakeholder Engagement Plan to include specific consultations with the Kalinago community to ensure that they are informed about the project and its potential impacts and how they can participate as it is demand driven. Initial consultations were held with this community in February 2018, for the Government to learn about the impact of Hurricane Maria on their housing needs. These consultations will be coordinated for all Bank financed post-hurricane Maria projects.

15. **Consultation and disclosure.** The ICC will be the main vehicle for citizen engagement and will provide the public information on the project, eligibility criteria for housing subsidy, and implementation requirements. Safeguards documents will be prepared by the Government, cleared by the Bank, and disclosed as early as possible before the start of civil works.

16. **Grievance Redress Mechanism**. The project will establish a GRM to receive complaints and grievances related to project activities and provide the public with an avenue to provide feedback on the reconstruction activities supported by the project. The GRM will include clear mechanisms for receiving and recording complaints and grievances, as well as general feedback from the public. Grievance review committees, distributed geographically, will also be established to review grievances related to eligibility. Possible membership of the grievance committees will include civil society or religious leaders, community leaders, and at least one technical staff from MoH and/or Ministry of Social Services (depending on the nature of the grievance, as this may require further investigations into structural issues or detailed vulnerability review). The Committee could also

receive complaints through the TACs, as they are easily accessible to the community. As the primary implementing agency, the PIU in MoH will have administrative responsibility for the GRM, including transmitting background data on grievances to grievance review committees; facilitating site visits where necessary; and recording grievance decisions and sharing with complainants and appellants. Complaints made through the GRM will be investigated by MoH technical staff and, where accusations of criminal activity are made, referred to authorities for investigation. The work of the GRM will be supported by an electronic monitoring database to record complaints and grievances and report on their resolution.

17. **Consideration of Alternatives.** No meaningful alternative consideration is anticipated through the current project approach as the houses will be reconstructed or rebuilt in the same locations taking into consideration sound environmental practices and avoidance of landslide land prone areas.

Safeguards Instruments, Mitigation Process, and Implementation Schedule

18. An Environmental and Social Management Framework will be prepared to guide the identification of possible social and environmental issues; develop mechanisms to comply with the relevant GoCD and World Bank's policy requirements; lay out the approach and procedures that are relevant during the planning and implementation to mitigate the potential environmental and social impacts of the proposed investments; and describe the institutional and implementation arrangements, the monitoring mechanisms, and the capacity-building needs for effective implementation of the ESMF.

19. **Accordingly, the ESMF will consist of the following:**

(a) **Screening methodology** for all types of proposed civil works (housing activities) to identify relevant environmental and social issues and risks, as well as environmental enhancement opportunities for each civil works activity, and to determine relevant national requirements related to environmental, health, and safety management, as well as the applicability of the World Bank's Operational Policies on Environmental Assessment (OP/BP 4.01), Physical Cultural Resources (OP/BP 4.11), Pest Management (OP/BP 4.09), Indigenous Peoples (OP/BP 4.10), and Involuntary Resettlement (OP/BP 4.12).

(b) **A template for site-specific** ESMPs to be completed and customized for each house based on the results of site screening to specify the siting, design, demolition/land clearing, and construction management requirements for construction of houses and other physical activities.

(c) **Procedures, roles, and responsibilities for carrying out and approving site screening templates and site-specific ESMPs** ensuring that the siting, designs, plans, specifications, and implementation plans reflect the environmental screening outcomes and ESMP requirements and are compliant with applicable World Bank safeguard policies and also meet relevant policies/acts, strategies/rules and regulations of the GoCD.

(d) **Generic safeguard supervision/monitoring form developed for housing and rehabilitation works to record compliance with the ESMP**. The form will be administered by the PIU with support of the TACs.

(e) A template to prepare site-specific ARAPS to be completed and implemented before construction based on the results of site screening, to identify if there are negative impacts on livelihoods and if so avoid them and/or mitigate them through compensation.

(f) A Rapid Social Assessment will be prepared based on recent documents reviews and consultations[26] to inform an information and communication strategy to ensure that the Kalinago Territory communities are aware of how project investments are to be carried out in the Kalinago Territory and to ensure FPIC on any project-related activity in line with their existing land tenure system and their customs, choices, and preferences.

20. Cost of safeguards. The cost for the safeguards preparation and implementation process is estimated at 0.5 percent of the cost of the construction component, this cost will be confirmed by the specific PIUs, who will prepare the detailed cost allocation for safeguard implementation that includes preparation of safeguard instruments, implementation of mitigation measures and monitoring and supervision.

Environmental and Social Action Plan

No.	Action	Responsibility	Due Date
ESMF			
(1)	Preparation of the draft ESMF	MoF, MoP, MoH	By project effectiveness
	Disclosure of the draft ESMF on the Government web pages of Housing and Planning and the WB's InfoShop	MoP, MoH	Two months after project Effectiveness
	Consultations on the draft ESMF	MoP, MoH	To be completed over a period of 15 days following public disclosure of the draft ESMF
	Preparation of the final ESMF (incorporating comments from the disclosure)	MoP	Two weeks after consultations
	Public disclosure of the final ESMF on the government webpage of Housing and Planning and the WB's InfoShop	MoP	One month after consultations
	Environmental and social specialists at the PIU provide orientation and training to TACs	MoP, MoH	Three months after project effectiveness
	Environmental and social awareness information and dissemination to recipients of the grants (groups to be identified)	MoH	Need to be determined during project implementation

[26] An Indigenous People's Plan was prepared in 2017, to support the OECS Small and Medium Enterprise Partial Credit Guarantee Scheme designed and supported by the World Bank. An Indigenous People's Plan was prepared and disclosed in March 2014, for the Dominica DVRP currently being implemented and supported by the World Bank.

No.	Action	Responsibility	Due Date
Indigenous Peoples Plan (IPP)			
	Undertake consultations and Rapid Social Assessment as part of the information, education, and communication strategy to include members of the Kalinago Territory	MoH and PIU	By project effectiveness
	Disclosure of the draft IPP on the Government web pages of Housing and Planning and the World Bank's InfoShop	MoP, MoH	Two months after project Effectiveness
Abbreviated RAPS when required			
	ARAPs, needs to be finalized and implemented before the start of civil works. All compensation for must be paid prior the start of works.	PIU	When the need arises
ESMP for retroactive financing			
	Any works contract subject to retroactive financing (under Component 2) requires a finalized and published ESMP before the commencement of works. The ESMP should be sent to the World Bank for review and should be disclosed in-country.	PIU	Before commencement of works
Grievance Redress Mechanism			
	Prepare a Grievance Redress Mechanism**,** send it to the Bank for review and approval, disclose it and incorporate it in the Project Operations Manual	MoP, MoH	By Project effectiveness

Annex 6: Map of the Commonwealth of Dominica