

**PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE**

Report No.: PIDA18623

Project Name	Jamaica Disaster Vulnerability Reduction Project (P146965)
Region	LATIN AMERICA AND CARIBBEAN
Country	Jamaica
Sector(s)	General public administration sector (30%), Rural and Inter-Urban Roads and Highways (30%), Flood protection (40%)
Theme(s)	Natural disaster management (60%), Climate change (40%)
Lending Instrument	Investment Project Financing
Project ID	P146965
Borrower(s)	Ministry of Finance and Planning
Implementing Agency	Jamaica Social Investment Fund
Environmental Category	B-Partial Assessment
Date PID Prepared/Updated	17-Nov-2015
Date PID Approved/Disclosed	23-Nov-2015
Estimated Date of Appraisal Completion	30-Oct-2015
Estimated Date of Board Approval	10-Feb-2016
Appraisal Review Decision (from Decision Note)	(a) The meeting authorized appraisal and negotiations to move ahead. (b) The team and the Country Management Unit would make a strong effort to reach agreement with the Government in order to appraise and negotiate as quickly as possible in coordination with the upcoming Development Policy Loan. Bank Management would recognize the trade-offs associated with the fast-tracked approach. (c) The Results Framework will be further discussed with the Government and finalized during appraisal. (d) At negotiations, the team would highlight the fiscal space issues and align these with the prepared 18-month Procurement Plan. (e) The team would continue to work with the Government to develop the needed TORs and bidding packages in advance of board approval.

I. Project Context

Country Context

Jamaica, the largest English speaking country in the Caribbean with a population of 2.95 million (2015) and a gross national income per capita of US\$5,289 (2015), is a small island state that has been stuck in a cycle of low growth, high public debt and serious social challenges. For the past 30 years real per capita Gross Domestic Product (GDP) increased at an average of just one percent per

annum, making Jamaica one of the slowest growing economies in the world. Jamaica is also among the most indebted countries in the world with a public debt-to-GDP ratio at about 140 percent at end-March 2014. The country's progress on poverty reduction and shared prosperity has been hampered in the recent past due largely to economic shocks that were amplified by structural weaknesses in the economy. Nevertheless Jamaica made significant progress in poverty reduction during the early part of the past decade. Between 1997 and 2007 the poverty rate fell from 19.9 to 9.9 percent, and while overall inequality remains relatively low compared to the rest of the region, people at the bottom 40 percent of the income distribution have suffered more than the average household in recent years. Nonetheless, erosions of these earlier gains in poverty reduction have been registered with rising inequality and poverty sharply increasing to 17.6 percent in 2010.

In the current environment of fiscal restrictions, Jamaica faces several important challenges to reverse the recent surge in poverty levels and ultimately eradicate extreme poverty and boost shared prosperity. Committed to restoring growth and building an inclusive prosperous country, the Government of Jamaica (GoJ) prepared and garnered local and international support for a comprehensive program of fiscal adjustment and structural reforms. In May 2013, the GoJ put in place a package of strong macro-economic and financial sector regulatory reforms to tighten fiscal policy and achieve increased local tax revenues, with support from an International Monetary Fund (IMF) US\$932 million Extended Fund Facility (EFF) for the period of April 2013 to March 2017. The World Bank and the Inter-American Development Bank respectively indicated support of US \$510 million to Jamaica for the same period. Together, the three multilateral organizations are supporting a set of ambitious structural reforms designed to stabilize the economy, reduce public debt, and create the conditions for growth and resilience. The GoJ continues to demonstrate a clear commitment to reforms and showed that overall policy implementation under the program is strong.

Despite a mild recovery since 2013, growth prospects remain fragile. The Jamaican economy grew by 0.9 percent in 2013/14, and is projected to grow by 1.1 percent in 2014/15. The sectors that have contributed to this spike in economic performance are agriculture, forestry & fisheries, manufacturing and construction, though a drought in 2014 hampered agricultural growth, reducing initial growth projections for 2014. These three sectors are also the most vulnerable industries to natural disasters in the Caribbean; the threat of natural catastrophic risk is particularly significant in Jamaica as national assets remain highly exposed, jeopardizing efforts of promoting economic upturn.

Sectoral and institutional Context

Adverse natural events in Jamaica regularly impact livelihoods, destroy infrastructure and disrupt the provision of essential services. The primary risks are linked to natural hazards including hurricanes, floods, droughts, earthquakes, storm surges, and landslides. High exposure to hazards can be attributed to the country's geographical location on the Atlantic Hurricane Belt, and geophysical orientation with low-lying coastal zones and mountainous topography. The Jamaican territory is also crossed by five major fault lines, noting in particular the Plantain Garden Fault Zone that triggered the 2010 Haitian earthquake. The dense network of fault lines is mostly oriented in the eastern region of the island, where over 50 percent of the country's population resides. Hurricane risk is also appreciable as approximately 82 percent of Jamaica's population lives within five kilometers of the coast, which exacerbates the relative vulnerability of residents, major infrastructure and the housing stock. The coastal zone contains an estimated 75 percent of productive industries and service sectors and is responsible for contributing an estimated 90 percent

to the country's GDP. The Kingston Metropolitan Area (KMA) has a population of 0.9 million people (2011) and is located on the coast and in the most active fault zone. Furthermore the majority of the country's government functions, commercial districts, and trade and industry are located in the KMA, underscoring the relative concentration of the country's exposure to disasters.

Jamaica is one of the most at risk countries in the world with high percentages of GDP and population at risk to two or more hazards . For the past 25 years in particular, the impact of disasters on Jamaica's GDP has greatly increased. Between 1990 and 2000, damages from disasters in Jamaica cost 12.6 percent of GDP. This only worsens, as recorded disasters between 2001 and 2010 were tripled compared to any other decade. During this period there were 10 major events with far-reaching impacts affecting approximately two million people and causing nearly US\$1.21 billion (2010) in damages. Hurricane Ivan in 2004 alone resulted in over US\$351 million (2010) in damages; an amount equivalent to eight percent of the GDP. From a sectoral perspective, infrastructure bore the highest economic impact at 45 percent of the overall costs, largely in the transportation sub-sector (roads and bridges). Although less frequent, seismic hazards also pose severe risk to Jamaica's economic performance. Scientists predict Jamaica has high likelihood of being impacted by a 7.0-7.5 magnitude earthquake . An extreme earthquake or tropical storm event in Jamaica could produce losses estimated between US\$7-10 billion.

Climate change models project that Jamaica could be impacted by an increased frequency of adverse natural events as a result of heightened surface temperatures and global sea level rise. The Intergovernmental Panel on Climate Change (IPCC) suggests that Jamaica will undergo a warming and drying trend and endure more frequent heat waves and droughts, rainfalls and hurricanes with increased intensity, and heightened storm surge. The impact of sea level rise and intensified storm surges in Latin America and the Caribbean will be highest in Jamaica – noting a rise in sea level of between 30-35cm between 2008 and 2058 . About 50 percent of the country's economic assets, including commercial and industrial facilities and tourism infrastructure are located on the coast contributing to 90 percent of the GDP, and additionally, over two million people reside in coastal areas. The fastest growing urban centers, Old Harbour and Portmore, would be severely impacted by sea level rise, and Jamaica would also lose the protection of its harbors and the Norman Manley International Airport would be completely inundated. Furthermore, the inundation risk in Jamaica from storm surges could affect 37 percent of the coastal wetlands. There are 827 communities in Jamaica, of which 32 percent are flood-prone. Climate change investments will have to be spatially disbursed to meet the risks associated with the locations of these communities. The effects will only worsen with the projected effects of climate change in Jamaica.

Natural disasters represent a significant contingent liability for Jamaica comparable to others such as commodity price fluctuations and exchange rate volatility. Using simulated data from the Caribbean Catastrophe Risk Insurance Facility (CCRIF) as of August 2013, the fiscal cost (e.g. explicit public sector liabilities) of natural disasters in Jamaica is estimated at approximately US \$120 million for hurricanes (wind), US\$62 million for floods and US\$42 million for earthquakes on average per year (Average Annual Loss – AAL). The probable maximum loss for a 100-year hurricane (i.e. 0.01 percent likelihood of occurring in any given year) could be in the region of 20 percent of GDP . The losses resulting from natural hazards are correlated to the high exposure of the country's assets. The total exposure value of infrastructure assets in Jamaica is calculated at approximately US\$18 billion in 2014 ; this accounts for urban construction, rural construction, and national infrastructure. The latter, represented in the GoJ's portfolio, has an exposure value of US \$3.3 billion, underscoring the public sector's vulnerability to the impacts of natural hazards. To drill

down geographically, the Kingston, St. Andrew and St. Catherine region, which houses over 40 percent of the population, has as a risk exposure (physical, economic and human) of US\$10.1 billion.

The GoJ has developed national strategies and policies to promote more resilient development planning. These include the Disaster Preparedness and Emergency Management Act (1993), the National Disaster Plan (1997), the Natural Hazard-Risk Reduction Policy (2005), and the Draft Building Code Bill (2013). Jamaica adopted the recommendations of the strategic objectives and priority actions of the “Hyogo Framework for Action” (HFA). The HFA offers guiding principles, priorities for action, and practical means for achieving disaster resilience for vulnerable communities. The climate and disaster risk reduction sections of the country’s National Development Plan “Vision 2030” (2009-2030) is modeled with goals and objectives outlined in the HFA. Vision 2030 identifies Hazard Risk Reduction and Adaptation to Climate Change as a national outcome to improve mitigation and response while decreasing risk vulnerabilities in Jamaica on a national scale. In 2012, Jamaica renewed a National Adaptation Planning Process that addresses climate change impacts as national development priorities. This facilitated the creation of a new Ministry of Water, Land, Environment, and Climate Change (MWLECC), and has created the Climate Change Advisory Committee and the Climate Change Department within the Ministry. The GoJ has also established a National Disaster Fund to finance some emergency response and rehabilitation activities after a disaster, which complements their participation in the Caribbean Catastrophic Risk Insurance Facility (CCRIF).

The GoJ is actively working to reduce Jamaica’s vulnerability to disasters through a number of initiatives. Jamaica is one of six Caribbean countries participating in the Strategic Program for Climate Resilience under the Pilot Program for Climate Resilience (PPCR). The program provides support for integrating climate risk and resilience into national planning. Supported by the World Bank and the Inter-American Development Bank (IDB), the PPCR is engaging with Jamaica under four projects; (i) Mainstreaming Climate Change Adaptation in Local Sectoral and National Plans, and Implement Integrated Adaptation Strategies in targeted River Basin Planning and Management (support by IDB), (ii) Financing Mechanisms for Sustained Adaptation Initiatives by the public and private sectors; and community-based Organizations (support by IDB), (iii) Knowledge Management (support by IDB), and (iv) Improving Climate Data and Information Management Project (supported by the IBRD).

Relationship to CAS

The proposed operation is fully aligned with the Bank’s strategic engagement with Jamaica. The Project supports the disaster risk management objectives highlighted in the Country Partnership Strategy (CPS) for Jamaica FY2014-2017 (Report No. 85158-JM, discussed by the Executive Directors on April 29, 2014). In the CPS FY2014-2017, which aims to support Jamaica in laying the foundations for sustainable inclusive growth, the Jamaica Disaster Vulnerability Reduction Project (DVRP) falls under Outcome 6 of the Sustainability Pillar, Increased Resilience to Climate Change and Natural Disasters.

II. Proposed Development Objectives

The Project Development Objective is to enhance Jamaica’s resilience to disaster and climate risk.

III. Project Description

Component Name

Component 1: Technical Assistance for Improved Disaster and Climate Resilience

Comments (optional)

This includes improving the generation and collection of targeted hazard and risk information, its analysis and use in monitoring systems and decision making. In order to improve the ability of government officials to generate and use hazard and risk information for decision-making and policy development.

Component Name

Component 2: Risk Reduction

Comments (optional)

This includes the retrofitting or constructing key assets given that the infrastructure sector is one of the most severely impacted after a major disaster event. To reduce Jamaica's physical vulnerability to adverse natural events, this component will finance structural mitigation measures.

Component Name

Component 3: Contingent Emergency Response

Comments (optional)

The proposed operation will include a contingent 'zero component', which in the event of a disaster caused by a natural hazard would enable the government to quickly reallocate project funds to disaster response and recovery purposes under streamlined procedures.

Component Name

Component 4: Project Administration

Comments (optional)

This component will finance costs associated with program management, including project-related audits, monitoring, mid-term review and end-of-project impact evaluation, equipment and training to strengthen the Project Implementation Unit (PIU), as well as individual consultants and operating costs.

IV. Financing (in USD Million)

Total Project Cost:	30.00	Total Bank Financing:	30.00
Financing Gap:	0.00		
For Loans/Credits/Others			Amount
Borrower			0.00
International Bank for Reconstruction and Development			30.00
Total			30.00

V. Implementation

The Government of Jamaica has the overall responsibility for project management and coordination through the Planning Institute of Jamaica (PIOJ) and the Jamaica Social Investment Fund (JSIF). A Project Steering Committee (PSC) will be established and co-chaired by the Director of External Cooperation Management Division of the PIOJ and the Managing Director of the JSIF. Membership will include high-level representatives from concerned ministries and associated technical agencies. The PSC will oversee the project, provide overall policy guidance, and facilitate broad

communication and coordination across the GoJ.

The PIOJ serves as the statutory body within the Ministry of Finance and Planning (MoF) with a high level of experience coordinating and implementing Bank projects. The PIOJ is responsible for preparing and executing the National Development Plan ‘Vision 2030’ and is the focal point for the Pilot Project for Climate Resilience (PPCR) and Phase 2 of the Strategic Program for Climate Resilience (SPCR). Therefore, collaboration with the JSIF will help ensure proper establishment and implementation of the World Bank’s program for resilience in Jamaica.

As project implementing entity, the JSIF is responsible agency for overall project coordination and execution. The JSIF was established in 1996 as a limited liability company to reduce poverty and help create an environment for sustainable development, the JSIF has recognized executing capacity for projects spanning multiple sectors, including disaster risk management and emergency response, and its institutional capacity relating to procurement, safeguards and financial management.

The JSIF is well positioned to undertake implementation of the proposed project as it possesses valuable knowledge relating to the implementation of numerous Bank financed projects. In particular, the JSIF is currently executing the Integrated Community Development Project (ICDP, P146460) and the Rural Economic Development Initiative (REDI, P105122) financed by the World Bank and the GoJ. Similarly, the JSIF has been involved in the project design of the Caribbean Catastrophic Risk Insurance Initiative Fund (CCRIF, P108058), whereby it was responsible for overall procurement of international and national consulting services to support an in depth assessment of the viability of pooling natural disaster risks in the Caribbean. In addition, the JSIF previously implemented the Hurricane Dean Emergency Recovery Loan (P109575) where disaster risk reduction was enhanced through the design of infrastructure as well as the training developed. The approaches and tools, which came out of the Emergency Recovery Loan, continue to be utilized in all JSIF’s projects.

Along with the JSIF and the PIOJ, there are multiple stakeholders associated with the proposed operation that will contribute to project coordination and implementation. These include: the Ministry of Local Government and Community Development (MLGCD), the Ministry of Transport, Works and Housing (MTWH), the Ministry of Finance and Planning (MoF), the University of Technology (UTECH), the Human Employment and Resource Training Trust/ National Training Agency (HEART/ NTA), the National Environment Planning Agency (NEPA), the Ministry of Education (MoE), the Ministry of Water, Land, Environment and Climate Change (MWLECC), and the Ministry of Labour and Social Security (MLSS).

VI. Safeguard Policies (including public consultation)

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

Projects in Disputed Areas OP/BP 7.60		x
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Comments (optional)

VII. Contact point

World Bank

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Borrower/Client/Recipient

Name: Ministry of Finance and Planning
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VIII. For more information contact:

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