



## CANADA CARIBBEAN DISASTER RISK MANAGEMENT FUND

# Island Snapshot

## Jamaica



### About the CCDRMF

The Canada Caribbean Disaster Risk Management Fund (CCDRMF) is one component of Global Affairs Canada's<sup>1</sup> (GAC) larger regional Caribbean Disaster Risk Management Program. The CCDRMF is a competitive fund which is designed to support community-driven projects that seek to enhance the resilience of communities and reduce risks from natural hazards (e.g. floods, droughts, tropical storms, hurricanes) and climate change.

Established in 2008 as a CAD \$3.0 M small grant facility, the CCDRMF finances projects ranging from CAD \$25,000 to CAD \$75,000, and up to CAD \$100,000 in exceptional cases. The targeted audience is community-based organisations, non-governmental organisations, civil-society organisations, and government agencies wishing to undertake community projects in the following beneficiary countries<sup>2</sup>: *Antigua and Barbuda, the Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, Montserrat, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago.*

For the purposes of the CCDRMF, a 'community' is defined as '*a group of people living in the same geographical area (such as a neighbourhood, district, city or town)*' or '*a group of people with similar interests (such as youth and women) or livelihoods (such as farmers or fishers)*'.

To date, the Fund has supported twenty-nine (29) community sub-projects totalling CAD \$1,770,517.11, of which twenty-three (23) are completed and six (6) are on-going. The Fund has also provisionally allocated CAD \$1,017,338.66<sup>3</sup> to eleven (11) projects that are under consideration for execution during the period 2017 to 2019.

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<sup>1</sup> Previously the Department of Foreign Affairs, Trade and Development (DFATD)

<sup>2</sup> In addition, one small community project was approved for the British Virgin Islands

<sup>3</sup> Subject to amendment



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## Island Overview

Jamaica is the third largest island in the Caribbean. It is an archipelago consisting of one large inhabited island with an approximate area of 10,990 km<sup>2</sup>, and over 60 small cays and islands, with some of the Pedro Cays being partially inhabited by fisher folk and others used for recreation, such as Lime Cay. Jamaica is of volcanic origin, and its topography consists of coastal plains, valleys and plateaus, and high interior mountain ranges which extend across the island from east to west. The Blue Mountain Peak, in the eastern section of the island, is the highest point at 2,256 m.

Jamaica has a tropical climate with an average annual temperature of 27 °C and average annual rainfall of 2,100 mm (note, regional variations are considerable). The island has two distinct wet seasons: April to June and September to November, with peaks in May and October. The drier months are January, February, March and July where rainfall is at its minimum. Jamaica is home to a rich diversity of flora and fauna, and is the fifth among islands of the world in terms of plant endemism. There are also more than 120 rivers which flow from the mountains to the coast.

The population as at 2014 was estimated at 2,723,246 (50.50% female, 49.50% male). While the Jamaican economy is described as mixed, it is heavily dependent on services, notably tourism and finance. According to 2015 estimates, services contributed 72.2% of gross domestic product (GDP), industry 21.2% of GDP, and agriculture 6.6% of GDP (CIA, 2016).

Jamaica is vulnerable to several natural hazards, with hurricanes and tropical storms, storm surges, floods, landslides and droughts being the most frequent recurring hazards with high potential impacts. Located in the Atlantic hurricane track, numerous tropical cyclones have made direct impact or have passed within close proximity (100 km) of the island. For example, in 1988 Hurricane Gilbert passed directly over Jamaica resulting in wide scale flooding and landslides, an estimated US \$4 billion in damages, 49 deaths, and 810,000 persons affected to become one of the most expensive natural disasters in Jamaica's history. In 2004, Hurricane Ivan left US \$580 million in damages, claimed 17 lives, and damaged 14% of the housing stock; while Hurricane Sandy in 2012, which moved from south to north on its path across eastern Jamaica, resulted in an estimated US \$55.96 million in damages and disrupted various essential services such as electricity, water and sanitation, transport and communication.

Jamaica's geologically young landforms with steep hillsides, coupled with changing land-use practices, make landslides and flooding priority hazards. Landslides account for most of the natural disasters that have occurred on the island during the last decade and continue to present risks to life and property – between 2007 and 2010 there were 44 landslide events recorded across the island. Flooding in Jamaica tend to occur with heavy rainfall events during the wet seasons or tropical cyclones.

Although there have been no major earthquakes since 1907, Jamaica is located within a seismically active plate boundary zone and is traversed by major faults which are often associated with seismic activity across the island (mostly in the eastern section). Of course, like other small island developing states (SIDS), Jamaica is also vulnerable to the impacts of climate change, including changes in temperature and precipitation, intensified hydro-meteorological events and associated hazards, and sea level rise.



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### CCDRMF Projects in Jamaica

The CCDRMF is a competitive small grant facility and between 2008 and 2015, there have been nine (9) Calls for Proposals. In total, the Fund received 212 project applications but only forty-three (43) projects, 20%, from thirteen (13) countries met the criteria and were deemed eligible for consideration.

From Jamaica, the CCDRMF has received forty-two (42) project applications. Of these, only five (5) community-based projects were approved. These projects support disaster risk management through improved emergency communication networks and early warning systems, shelter upgrades, flood mitigation, drought alleviation, and marine ecosystem restoration. A brief overview of the completed projects can be found in the table below.



Early warning system equipment, Panos Caribbean Project

Project	Organisation	Objective(s)	Project Period	GAC Contribution (CAD\$)	Total Project Cost (CAD\$)
<b>Telecommunications Infrastructure Strengthening Project for Emergency Communications and Early Warning Systems Efficacy</b>	Jamaica Amateur Radio Association (JARA)	To enhance the ability of communities <sup>4</sup> to prepare for, cope with, and recover from extreme climatic events by: <ol style="list-style-type: none"> <li>1. Upgrading five (5) existing repeater sites, and installing two (2) additional repeaters to strengthen the existing island-wide emergency communication network infrastructure.</li> <li>2. Offering reliable emergency radio service to relief agencies and residents living in vulnerable communities.</li> <li>3. Increasing the number of youth participating in</li> </ol>	2011-2014	\$37,446.33	\$45,963.40

<sup>4</sup> The seven (7) locations of the JARA Repeater Sites are: Catherine’s Peak, St. Andrew; Marley Hill, St. Catherine; Winchester, St. Thomas; Solomon’s Peak, St. Mary; Flower Hill, St. James; Spur Tree, Manchester; and Shafton, Westmoreland.



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		amateur and emergency radio communications.			
<b>Early Warning System for the Disabled in Portmore</b>	Panos Caribbean	To reduce the vulnerability of the disabled population in three communities <sup>5</sup> in the city of Portmore by addressing disaster preparedness, relocation and evacuation needs of physically challenged, deaf and blind persons through: 1) a pilot early warning system; 2) enhanced information sharing; and 3) improved disaster shelter infrastructure.	2012-2015	\$75,000.00	\$93,003.00
<b>The Mitigation of the Adverse Effects of the Extreme Hydro-metrological Events in the Jeffrey Town Community</b>	Jeffrey Town Farmers Association Ltd	To reduce vulnerability to drought and flooding through the implementation of eight (8) project sub-components: (a) Pump Installation; (b) Installation of Tanks for Rain Water Harvesting; (c) Training, Health and Sanitation; (d) Construction of Check Dams; (e) Tree Planting and Contouring; (f) Public Awareness Sessions; (g) Radio Programs; and (h) Construction of a website.	2013-2014	\$77,941.81	\$87,833.81
<b>Community Emergency Communications for Natural Disaster and Climate Change Adaptation in Jamaica</b>	Abacus for Communities (AfC)	To enhance emergency telecommunications across 10 communities <sup>6</sup> in Jamaica, leading to a reduction in the impact of natural and man-made disasters by: 1. Establishing a trained corps of volunteer emergency	2015-2016	\$80,661.00	\$176,568.30

<sup>5</sup> Gregory Park, Waterford, and Bridgeport, Portmore, St. Catherine.

<sup>6</sup> *Clarendon*: Rocky Point and Portland Cottage; *Portland*: Manchioneal and Skibo; *St. Ann*: Lime Hall; *St. Mary*: Annotto Bay, Jeffrey Town, and Port Maria; *St. Thomas*: John's Town and Trinityville.



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Project	Organisation	Objective(s)	Project Period	GAC Contribution (CAD\$)	Total Project Cost (CAD\$)
		telecommunications operators 2. Establishing a community emergency telecommunications system i.e. an Emergency Affiliated Radio Service (E.A.R.S) 3. Establishing a management system for E.A.R.S. volunteer teams			
<b>Portland Bight Protected Area Disaster Risk Reduction Project</b>	Caribbean Coastal Area Management Foundation	To reduce vulnerability and disaster risk in the low-income and rural coastal communities in the Portland Bight area; as well as enhance the livelihoods of the community through the protection and improvement of the environment (mangrove restoration and conservation).	2014-2016	\$15,780.00	\$23,534.00
				<b>\$286,829.14</b>	<b>\$426,902.51</b>

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