



## CANADA CARIBBEAN DISASTER RISK MANAGEMENT FUND

# Island Snapshot

## Barbados



### 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 twelve (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

Barbados is the most easterly Caribbean island, and is located in the North Atlantic Ocean. The island, which has a land area of approximately 432 km<sup>2</sup>, is unlike other islands in the Lesser Antilles which are formed of volcanic rocks. Instead, 86% of Barbados is comprised of a karst landscape of deeply fractured and gullied limestone laid down in a series of terraces, deeply incised by numerous gullies and underlain by a complex underground cave system. The remaining 14% of the land area consists of sedimentary deposits (sands, shales and clays) found in the north-eastern Scotland District. Barbados is relatively flat with soft slopes in the central region, including the highest point, Mount Hillaby rising 336 m above sea level. The Barbadian climate is classified as dry sub-humid, with overall average temperatures ranging from 24°C to 28°C. There is a distinct dry season from December to May and a wet season from June to November. There are no permanent rivers in Barbados.

The most recent census in 2010 estimated Barbados' resident population at 277,821 (52% female and 48% male). Majority of the country's population is settled along the south-east, south and west coasts of the island. In 2015, most of the economic activity was driven by three industries: Real Estate (13.1% of gross domestic product (GDP)), Accommodation and Food Services (13.1% of GDP) and Wholesale and Retail Trade (9.8% of GDP).

Historically, the natural hazard threats to Barbados have been hurricanes, tropical storms, flooding, droughts, landslides, earthquakes, coastal erosion, and tsunamis. Although Barbados lies on the southern edge of the Atlantic hurricane belt and is therefore less likely to be hit directly by tropical cyclones, hurricanes and tropical storms with their associated effects (wind damage, inland flooding, storm surge, landslides, etc.) is of primary concern. It has been observed that Barbados is brushed by a tropical depression, tropical storm or hurricane every 3.07 years. The most devastating was Hurricane Janet in 1955, which killed approximately 35 people, destroyed 8,100 homes and left 20,000 homeless. More recently, in 2010 Tropical Storm Tomas resulted in damages to 1,200 homes; led to impassable roads; and disrupted electricity service to 75% to 80% of the island, as well as the water supply. It has been estimated that Tropical Storm Tomas left in its wake near US \$8.5 million in damages island-wide.

In addition, Barbados has experienced periods of drought (e.g. the 2009 to 2010 drought) and fresh water shortage is a present major concern. The active submarine volcano, Kick 'em Jenny, located 9 km northeast of Grenada and about 260 km southwest of Barbados also poses a threat of tsunamis. Of course, like other small island developing states (SIDS), Barbados 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 Barbados

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 Barbados, the CCDRMF has received sixteen (16) project applications. Of these, only four (4) community-based projects have been approved. These projects support disaster risk management through shelter renovation and improved shelter-in-place (water storage and rainwater harvesting), enhanced emergency communications, renewable energy, and capacity building. A brief overview of the completed and on-going projects can be found in the table below.



Figure 1: 400-gallon water tank and pump of a beneficiary of the MSSB project

Project	Organisation	Objective(s)	Project Period	GAC Contribution (CAD\$)	Total Project Cost (CAD\$)
<b>VHF Repeater Telecommunication Network</b>	Barbados Citizens Band Radio Association (BCBRA)	To increase emergency radio communications coverage across the island and enhance the resilience of the national emergency communications system by replacing an existing inefficient VHF repeater at Welchman Hall and establishing a new repeater at the BCBRA HQ in Bridgetown.	2009-2010	\$12,498.13	\$17,363.81
<b>Rainwater Harvesting to Enhance the Quality of Shelter-in-place for Persons with</b>	Multiple Sclerosis Society of Barbados (MSSB)	To ensure an uninterrupted supply of	2012-2016	\$62,456.00	\$62,969.00



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Project	Organisation	Objective(s)	Project Period	GAC Contribution (CAD\$)	Total Project Cost (CAD\$)
<b>Disabilities in the Event of a Disaster</b>		water to households <sup>4</sup> with persons with MS during and after an extreme hydro-meteorological event or disaster; and to enhance the resilience of shelter-in-place.			
<b>The Amateur Radio Society Alternative Energy for Powering Emergency Telecommunications</b>	Amateur Radio Society of Barbados (ARSB)	To install a Grid Connected and Stand Alone Solar Powered Alternative Energy System to increase efficiency and resilience of the ARSB emergency communications systems by providing uninterrupted power.	2013-2017	\$32,659.65	\$36,858.65
<b>Building Resilience in Communities (BRIC)</b>	Pinelands Creative Workshop (PCW)	To improve disaster risk management in the St. Michael South East constituency through enhanced communications, improved planning and the overall strengthening of its Satellite Emergency Operations Centre (SEOC).	2017-2018	\$97,460.00	\$141,163.00
				<b>\$205,073.78</b>	<b>\$258,354.46</b>

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<sup>4</sup> Thirty-two (32) households in the parishes of St. Joseph, St. John, St. Michael, St. Philip, St. Andrew, St. George, and Christ Church



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