

Canada

**CANADA CARIBBEAN DISASTER
RISK MANAGEMENT FUND**



Snapshot Document
Dominica

About The CCDRMF

The Canada Caribbean Disaster Risk Management Fund (CCDRMF) is one component of Global Affairs Canada's larger regional Caribbean Disaster Risk Management Program. The CCDRMF is a competitive fund designed to support community-driven projects that 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 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 target audience is community-based organisations, non-governmental organisations, civil-society organisations, and government agencies wishing to undertake community projects in the following beneficiary countries¹ : 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)'.

Between 2008 and 2015, there have been nine (9) Calls for Proposals and in total, the Fund received 212 project applications. Only forty-three (43) projects, 20%, from thirteen (13) countries, met the criteria and were eligible for consideration.

Following a rigorous development process, the Fund has supported thirty-four (34) sub-projects in 11 countries valued at just over CAD\$2.2M. The projects have strengthened disaster risk management through improved emergency communication systems, shelter retrofits and safer building practices, flood mitigation and land stabilisation, water storage, food security and climate-smart agriculture, and mangrove restoration.

¹In addition, one small community project was approved for the British Virgin Islands



Island Overview

The volcanic island of Dominica (754 km²) is the most mountainous and rugged island in the Lesser Antilles and home to two of the region's highest peaks: Morne Diablotins (1,447 m) and Morne Trois Pitons (1,394 m). Dominica's landscape is covered with multiple layers of virgin rainforest, and has one of the highest drainage densities in the world with some 365 rivers flowing in deep, narrow valleys over short distances to the sea. With its lush and varied flora and fauna (over 1,000 species), Dominica has earned the title "The Nature Island of the Caribbean".

Dominica's tropical marine climate averages annual temperatures of 26 °C to 27 °C in coastal areas, decreasing to 19 °C to 21 °C in mountainous areas. There are two distinct seasons: a dry season from January to May and a wet season from June to December.

Dominica is vulnerable to numerous meteorological and geophysical hazards. The most common and historically significant are tropical storms and hurricanes. In 2015, Tropical Storm Erika passed over the island producing extraordinarily high rainfall that resulted in intense and rapid flooding. There was severe infrastructural damage, primarily related to transportation, housing and agriculture; with the worst damage occurring in the south and south-eastern parts of the island. Then in September 2017, Hurricane Maria, the tenth most intense storm on

record, caused catastrophic damage across the island. It was the first Category 5 on record to make landfall in Dominica and is considered to be the worst natural hazard-induced disaster on record for the country. Dominica's agriculture sector was devastated, with 100% loss of crops and substantial death of livestock. Also, about 90% of structures reported damages, of which 62% of houses were heavily damaged and 15% destroyed (Swiss Re Institute, 2018; UNDP, 2017). Maria caused 31 direct deaths in Dominica, with 34 missing persons (Pasch, Penny, & Berg, 2019).

Dominica has nine (9) potentially active volcanoes, and is therefore affected by volcanic, geothermal and seismic activity. An estimated 90% of the population lives within 5 km of a live volcano. Other hazards include drought, floods, landslides, bush fires, storm surges, coastal erosion and tsunamis. Of course, like other small island developing states (SIDS), Dominica is vulnerable to the impacts of climate change, including changes in temperature and precipitation, intensified hydro-meteorological events and associated hazards, and sea level rise.

CCDRM Fund Projects in Dominica

The CCDRMF has received twenty-three (23) project applications from Dominica. Of these, three (3) community-based projects were approved and successfully implemented. These projects support disaster risk management through shelter upgrades and the introduction of renewable energy technology.

Project Shelter- Enhancing Disaster Risk Management in the Riviere Cyrique/ Morne Jaune Community

The community of Riviere Cyrique / Morne Jaune is frequently impacted by hurricanes, rainstorms and landslides. The 592 residents could not plan completely for these events due to the lack of a secure community building for use as a disaster shelter. With the assistance of the CCDRMF Project, the village council partnered with community organizations, government agencies and the US Peace Corps, to renovate an existing, but abandoned community building to provide a safe, secure site for about 50 people, including 14 vulnerable members in the event of a disaster.

The primary works needed were: the replacement of the roof and windows; electrical and plumbing works; a refurbished floor; and general clean up of the building and site. The facility also offers space for meetings, workshops and community events.

Disaster awareness has been increased through two Disaster/First Aid Workshops, attended by 20 youth and 19 adults. The community disaster committees have also become more active. An estimated 5% of the 592 residents in the community were involved in disaster training prior to the shelter project and now close to 30% have increased awareness and/or involvement. New, updated manuals have been printed and sections distributed to the disaster committee members along with a resource library.



Project	Organisation	Objectives
Project Shelter – Enhancing Disaster Risk Management in the Riviere Cyrique/Morne Jaune Community.	Morne Jaune/Riviere Cyrique Village Council	To provide the Morne Jaune/Riviere Cyrique community with a secure building facility that functions as a multi-purpose community hurricane shelter.
Project Period 2009-2010	GAC Contribution \$42,892.00	Total Project Cost \$46,933.00

Shelter Storage and Equipment and Renewable Energy Technology

Some time after the building was renovated, the Riviere Cyrique and Morne Jaune village council were successful in receiving a second grant for additional works on the shelter, as the shelter had no storage facility for water and emergency supplies, and no back-up power supply.

The second project was able to make the shelter more functional by installing water tanks, a standby generator and photovoltaic system, a storage loft for emergency supplies, kitchen cabinets and male and female showers. Sick and elderly persons using the shelter will now be able to store their medication in the refrigerator and a new fence protects the building from community sporting activities.



Project

Shelter Storage and Equipment and Renewable Energy Technology (RET)

Organisation

Morne Jaune/Riviere Cyrique Village Council

Objectives

To reduce the level of hurricane-related risk to which children, women, men, the elderly and the disabled are exposed when using the Riviere Cyrique hurricane shelter by installing: water storage capacity, shower facilities, uninterrupted photo-voltaic electricity supply, secure emergency supplies storage and refrigeration.

Project Period
2013-2014

GAC Contribution
\$27,417.00

Total Project Cost
\$30,899.00

Establishment of a Community Emergency Operations Centre (EOC) in Capuchin and a Communication System to link Capuchin and other West Coast Communities to the National EOCs (Main and Alternative)

Hurricane Lenny in 1999, the earthquake of 2004, Hurricane Dean in 2007 and Hurricane Maria in 2017 impacted the remote, northern community of Capuchin and on each occasion communication systems failed. The village is also on the path of the Waitukubuli National Trail, frequently used by hikers with reported incidents of persons getting lost, but due to poor cellular coverage, the villagers support of search and rescue operations are hindered. This over-reliance by residents on cell phones during such events, as

well as emergencies, often leave the community isolated with little communication on approaching events, such as hurricanes.

This project, under the guidance of the Office of Disaster Management, is strengthening the communications network from the Capuchin community centre along the west coast of Dominica, through Bioche/Dublanc to the Emergency Operations Centre at Jimmit. A conventional HF/VHF/UHF emergency radio system with the requisite repeater system is being installed and will dovetail into existing systems, as well as the planned radio emergency system for island wide communication. About 30 individuals are being trained in radio communication and equipment maintenance. In addition, water storage and back-up power is being provided at shelters in Capuchin and Bioche/Dublanc.



Project	Organisation	Objectives
Establishment of a Community Emergency Operations Centre (EOC) in Capuchin and a Communication System to link Capuchin and other West Coast Communities to the National EOCs (Main and Alternative)	Office of Disaster Management	To lessen the high levels of exposure of families in Capuchin and northern Dominica to hurricanes, strong winds and accompanying landslides due to a lack of access to information on impending hazard impacts.
Project Period 2018-2019	GAC Contribution \$78,469.00	Total Project Cost \$90,071.00



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