

Canada

CANADA CARIBBEAN DISASTER
RISK MANAGEMENT FUND



Snapshot Document
St. Vincent & The Grenadines

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



St. Vincent & The Grenadines
National Flag

Island Overview

Saint Vincent and the Grenadines is an archipelago comprised of the main island, Saint Vincent (344 km²), and a chain of over 30 islands and cays. Only seven of the Grenadine Islands are inhabited: Bequia, Mustique, Canouan, Union Island, Mayreau, Palm Island and Petit St. Vincent. Mustique, Palm Island and Petit St. Vincent are either privately owned or are leased by the State to private companies.

St Vincent is a mountainous, volcanic island with 40 rivers and tributaries that drain to the narrow coastal belt. The Grenadines are less rugged and low-lying, with the highest point being Mount Taboi on Union Island (304 m). The country experiences a humid tropical climate with a marked dry season and rainy season. Rainfall distribution is quite reliable on the mainland, but significantly lower in the Grenadines.

The main natural hazards include hurricanes and tropical storms, floods, landslides, earthquakes, volcanic eruptions, and drought. Hurricane Janet in 1955 is responsible for the single largest number of people killed in such events, 122 persons. Hurricane Tomas in 2010 was recorded as the country's most costly hazard event with damages of EC \$130 million, 2 persons injured and about 6,100 affected. The low-lying Grenadines are especially exposed to associated storm surge and wave hazards. Floods are the most frequent hazard, especially on the

mainland. For instance, the flood of December 24, 2013 affected over 50% of the population and resulted in 9 deaths and damages of EC \$291.4 million (15% of GDP).

Landslides, particularly on the larger islands, are a significant hazard that increases during the seasonal rains. In 2008, heavy rains caused over 25 landslides and resulted in 1 death. The Grenadines are more susceptible to drought, as there are no rivers and rain water harvesting is their main source of fresh water.

The country is exposed to low-to-moderate seismic risk. La Soufrière last erupted in 1979 causing tremendous damage to the agricultural sector. The active underwater volcano Kick 'em Jenny in the southern Grenadines poses a significant tsunami risk.

Of course, like other small island developing states (SIDS), Saint Vincent and the Grenadines 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.

CCDRM Fund Projects in St. Vincent & The Grenadines

The CCDRMF has received thirteen (13) project applications from St. Vincent and the Grenadines. Of these, two (2) community-based projects were approved and successfully implemented. These projects support disaster risk management through improved emergency communication and drought adaptation.

Rainbow Radio League

The network of radio operators in the Rainbow Radio League provide the National Emergency Operations Centre with information from affected areas to inform decisions and plan effective response strategies during disasters. Prior to this project, reliability of communications for an extended period following any disaster was non-existent because radios already placed in vulnerable communities did not have a reliable means of re-charging batteries if electricity was disrupted. The project equipped nine vulnerable, rural communities across the multi-island state with independent emergency communications equipment and renewable energy (RE) systems (wind and solar), thus enabling a reliable flow of information to/from these communities. They have also increased coverage with an improved antenna and RE at the repeater site as well as better antennas at existing stations. The antennas now allow communication with Dominica, Martinique, St. Lucia, Grenada and Barbados. Twenty (20) VHF/UHF handheld transceivers have significantly enhanced the ability to get information directly from affected areas to other critical agencies in the quickest possible time in the aftermath of any disruptive event, especially when phone lines are damaged or out of service.

Whilst the project was being implemented, the elements that had already been installed were well tested by Hurricane Tomas. Having been put to the test under extreme conditions, all retrofitted stations remained on air during and after the storm, when there was no electricity island wide. Unfortunately, three of the wind turbines were damaged, but the RE equipment installed in the remote village of Fancy proved its value. The village was without phones, electricity or water for 4 days following 'Tomas', and operator Elna Michael was the only voice from Fancy letting the rest of the world know what had occurred in that village, thanks to the RE equipment installed just months earlier. When no other buildings had electricity, the Fancy Government School, which serves as an emergency shelter, and houses the project's emergency communications equipment, was the only building with functioning lights and HF/SSB radio. Fortunately the antennas withstood the strong winds during 'Tomas'



Project

Green Energy
Retrofit Project

Organisation

**Rainbow Radio
League Inc. (RRL)**

Objectives

To provide wider VHF radio coverage to other parts of our multi-island state ; and to make that service more reliable by using 'green energy' (renewable energy) sources to power this radio network.

Project Period
2010

GAC Contribution
\$67,475.00

Total Project Cost
\$73,732.00

Union Island Environmental Attackers

Union Island has no running rivers and low levels of rainfall, so residents only means of accessing clean water is through wells, water catchments (only three available on island) and purchase of water from mainland St. Vincent. Climate change is making this vulnerable situation worse with sea level rise threatening groundwater supplies because of salt-water intrusion and more intense periods of drought. The lack of access to freshwater during drought conditions increased the risk of water-borne illnesses and other public health issues when accessing alternative means. The project has increased water storage capacity on the island by 100,000 gallons, by installing 100 water tanks in the most vulnerable households for rainwater harvesting. The necessary bases were constructed and plumbing completed as well as training provided on water conservation and water treatment. One of the beneficiaries of the project, Mr Egbert Adams, stated that he was glad to see this

project, "it certainly adds more water storage to my home and I am hoping that another project like this is done so that more persons on the Island can benefit". The successful installation of the water tanks and the increased access to freshwater have motivated the residents to embark on similar initiatives and brought much greater awareness on the island to water management issues and the work of the organisation.



<h3>Project</h3> <p>Increasing Water Storage Capacity on Union Island: Adapting to the Effects of Drought.</p>	<h3>Organisation</h3> <p>Union Island Environmental Attackers</p>	<h3>Objectives</h3> <p>To increase people's water storage capacity by using the method of rain water harvesting.</p>
<h3>Project Period</h3> <p>2012-2013</p>	<h3>GAC Contribution</h3> <p>\$76,786.00</p>	<h3>Total Project Cost</h3> <p>\$121,356.67</p>



References

Government of St. Vincent and the Grenadines. (2014, January 16). Rapid Damage and Loss Assessment (DaLA), December 24-25, 2013 Floods.

NEMO. (2014). Disaster Risk Reduction Country Profile: Saint Vincent and the Grenadines, 2014. National Emergency Management Organisation.

World Bank. (2010). St. Vincent and the Grenadines - Disaster Risk Management in Latin America and the Caribbean Region: GFDRR Country Notes.

Address: High Commission of Canada in Barbados
Bishop's Court Hill, St. Michael, P.O. Box 404,
Bridgetown, Barbados BB11113

PBX: 246-629-3550