

Stories of Impact

*A series highlighting achievements
in disaster risk management*

Bringing Disaster Risk Management to Scale in the Eastern Caribbean



REGION: LATIN AMERICA
AND THE CARIBBEAN
FOCUS: RISK REDUCTION
COUNTRY: EASTERN CARIBBEAN ISLANDS



RESULTS:

- In 2009, a \$150,000 grant from GFDRR enabled the World Bank to galvanize over \$200 million in disaster risk reduction investments in the Eastern Caribbean such as coastal protection, strengthening of schools and health clinics, improved drainage systems, and slope stabilization.
- Increased capacity in using geospatial data management tools to improve disaster preparedness. In Dominica, for example, engineers from the Ministry of Public Works and Ports collect an amplified catalog of vulnerability data toward wind hazards during yearly emergency shelter assessments. This data is being digitized to be made available to other actors such as the Ministry of Education and local governments.
- A regional data management Community of Practice (CoP) was also established that allows these Eastern Caribbean island countries to share experiences in collecting and implementing data and managing data platforms for DRM purposes. This CoP now includes close to 200 data managers from over 10 countries in the Caribbean, including Guyana, Belize, and Jamaica, along with regional development agencies and global partners.

Islands in the Eastern Caribbean are highly vulnerable to natural disasters and climate related hazards. Over the past three decades, more than seven hurricanes have caused economic impacts in a number of these countries equivalent to or greater than 50% of GDP. Disasters play a significant role in stunting the economic growth and development goals of these countries.

For almost two decades, the World Bank's disaster-related engagement in the Eastern Caribbean focused on disaster recovery financing. Subsequently, from 2000 to 2009, this activity grew to encompass capacity building for emergency preparedness measures and the piloting of risk reduction investments in the Caribbean. A pivotal moment occurred in 2009 when a \$150,000 grant from the Global Facility for Disaster Reduction and Recovery (GFDRR) enabled the World Bank, in partnership with other development organizations, to establish a comprehensive program targeting disaster risk management (DRM) and resilience in the region. These islands have since taken major steps to enhance their capacity to mitigate the effects of natural disaster and climate risk.



GFDRR
Global Facility for Disaster Reduction and Recovery



WORLD BANK GROUP

CONTEXT

The small island states in the Eastern Caribbean are defined by their size, geographic location, isolation from markets, limited financial and natural resources, limited human capital and technical capacity, and high vulnerability to the adverse effects of natural hazards and climate change. Despite their size, the disaster risk profiles of these states are complex. A single disaster event could cause damages and losses that exceed the entire value of the country's annual economic activity. In 2004, for example, Hurricane Ivan hit Grenada causing catastrophic damages assessed at approximately 200% of the country's GDP.

APPROACH:

GFDRR facilitated an extensive analysis of the disaster-related needs and constraints in Dominica, Grenada, Saint Lucia and Saint Vincent and the Grenadines. This informed the World Bank's development of a comprehensive resilience approach that addressed regional shortcomings, strengthened local capacity, and facilitated behavior change through trainings in the area of utilizing risk information for decision making. This approach involved fostering partnerships with relevant entities in the region, like the Caribbean Development Bank (CDB), to build capacity and raise funding, reducing infrastructure vulnerability through streamlined projects including slope stabilization, improving transportation networks and drainage systems, developing coastal defences, and rehabilitating public infrastructure including bridges, schools, and emergency shelters.

The approach also improved community engagement by initiating collaborative solutions for DRM—in Saint Lucia, community residents worked with government technical teams to map detailed slope features so the cause of landslides could be scientifically confirmed. It also promoted regional knowledge sharing by establishing Communities of Practice and integrating data management training into national-level projects.

For example, with GFDRR support, the World Bank helped to form a regional CoP for engineers to support physical planning and construction in the Eastern Caribbean by producing hazard maps and promoting the enforcement of building codes. This CoP includes engineers from nine OECS countries and Belize and receives support from partners such as the CDB, University of the West Indies, and the US Army Corps of Engineers, among others.

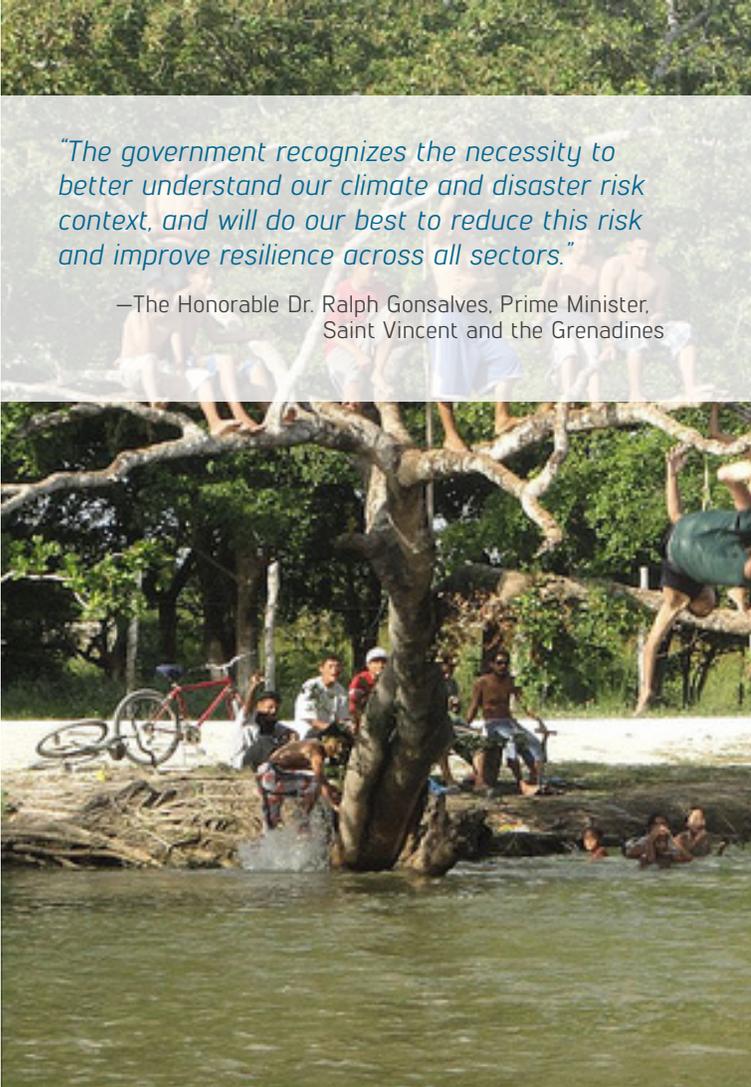
NEXT STEPS:

The Eastern Caribbean is adopting a forward-thinking approach to DRM by considering the interventions and policies needed to reduce risk by 50% within the next 15 years. Achieving this goal requires these countries to assess their infrastructure assets, disaster risk understanding, and technical capacity, as well as implement measures to address missing elements. The regional trainings to be conducted on the Management of Slope Stability in Communities methodology is one such measure. GFDRR and the World Bank helped to pilot this methodology in communities in Saint Lucia. Best practices and lessons learned from this project will now be shared with countries in the region by conducting data management trainings involving government officials, community-based volunteers, and the Red Cross.

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*ALL MONETARY VALUES IN USD



"The government recognizes the necessity to better understand our climate and disaster risk context, and will do our best to reduce this risk and improve resilience across all sectors."

—The Honorable Dr. Ralph Gonsalves, Prime Minister,
Saint Vincent and the Grenadines

LESSONS LEARNED:

In smaller countries with low capacity and limited resources, it is imperative to streamline financing and coordinate support from donors and development organizations. One factor revealed through country analysis was the institutional strain that numerous projects and financing from a variety of donors were having on governments. For government offices like Grenada with limited staff and resources, it was difficult to manage the requirements and implementation of individual projects. The team therefore focused on creating access to larger projects that offered increased financing with lower transaction costs and on developing government's capacity to implement these projects.

CoPs are an integral tool for building capacity and partnerships, as well as fostering regional collaboration. The CoPs facilitated knowledge exchange among the countries, providing a platform to share open-source technology tools on data management and best practices learned from infrastructure and engineering projects. In September 2014, for example, Chief Technical Officers and Senior Engineers from Ministries of Works in the Eastern Caribbean and Belize came together, along with regional consultants, the CDB, and the United States Army Corps of Engineers, to deliberate on measures to combat coastal and river embankment erosion and to discuss ways to share skilled human resources within the region going forward.