PROJECT HIGHLIGHTS

Region: Latin America and Caribbean
Country: Various

Focus Area:
Risk Identification
Risk assessments (community-based, probabilistic modeling); risk mapping; information campaigns, public outreach, etc.

Planning for an Uncertain Future in the Eastern Caribbean

Regional Collaboration to Build Climate Resilience

Overview

The Earth and its patterns are becoming more and more unpredictable due to climate variability and the rapidly changing climate. Much evidence around the world proves this every day – through heavy rainfall events, persistent flooding, cyclonic events, storm surges and droughts. In Latin America and the Caribbean, the increasing pace of climate change will continue to have negative impacts on the people, environment and economies of the Eastern Caribbean islands. Rising sea levels, hurricanes, high winds, drought, torrential rains and landslides, combined with limited human and technical capacity, a finite natural resource base and fragile ecosystems, will increase the need to reduce inherent climate vulnerability in the region. Collectively, these hazards reduce the ability of the Eastern Caribbean governments and their people to not only protect the recent progress in economic growth and poverty reduction, but also to improve their potential for sustained development. Consequently, we must learn to adapt to a changing climate.

In response, the governments of the Eastern Caribbean island states are taking a regional approach to disaster risk management and climate change adaptation, led by Grenada and Saint Vincent and the Grenadines, under the Regional Disaster Vulnerability Reduction Program (RDVRP). The RDVRP is a means to address the climate-vulnerable countries through: (i) investments in core infrastructure (e.g., roads, bridges, water storage and sea defense projects); and (ii) risk analysis and data management systems, in order to improve decision making, building practices and other mechanisms to provide additional financing in the case of a national emergency.

Challenges

Because the island nations are burdened by debt resulting from having to rebuild after major natural disasters repeatedly, the national budgets of the Eastern Caribbean governments are often over-stretched. For example, in 2004, Hurricane Ivan caused damage estimates upwards of US$900 million in Grenada— the equivalent to 200 percent of the country's gross domestic product (GDP) in 2003; additionally, two-thirds of its housing stock was lost. One estimate predicts that if current trends continue, events like Hurricane Ivan will become more frequent and the region will lose an estimated US$350-870 million annually between 2015 and 2050 as a result of disaster events.*

The Eastern Caribbean governments also understand that they must face these challenges together. As former British colonies and members of the Organization of Eastern Caribbean States (OECS), they share a common language, currency, colonial history and economic union. Their political and institutional arrangements are similar, as are their geographical characteristics. They are also vulnerable to one another's external shocks. When one country is devastated by an extreme climatic event such as a hurricane or a drought, neighboring islands' economies are directly affected. This relationship provides the basis for a two-tiered approach to disaster vulnerability reduction, supporting measures in parallel, at both the national and regional levels.

Approach

To address these challenges and reduce vulnerability, the Eastern Caribbean governments are improving their understanding of risk to natural hazards, taking the appropriate measures and enhancing their monitoring and land-planning practices. To help mitigate the effects of future

Highlights

Promotes regional collaboration across governments, development agencies and communities to address resilience to climate change and natural hazards.

Creates regional communities of practice to improve data management practices and risk analyses to inform decision-making processes at national and sub-regional levels.

Emphasizes a core development approach that is led by respective ministries of finance.

Strengthens key infrastructure and building practices to increase climate resilience.

*Source: Burke, L. and Maidens, J. 2004. Reefs at Risk in the Caribbean. Washington, DC, World Resources Institute.

GFDRR
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hazards, they are also strengthening key national infrastructure, such as bridges, roads and sea walls. These investments will require large amounts of technical assistance and financing.

The World Bank's International Development Association (IDA), GFDRR and the Climate Investment Funds (CIF) are supporting these efforts by providing financial and technical assistance through the RDVRP, including a blend of concessional grants and credits from the global Pilot Program for Climate Resilience in which Dominica and Saint Lucia are also participating. The sub-regional approach aims to provide best practices and standards for data management and risk analysis, watershed management, flood mitigation, legislation, advocacy, coastal zone management, slope stabilization and climate resilient infrastructure. Additionally, this approach will benefit the entire Eastern Caribbean community by: (i) strengthening institutions and human capacity; and (ii) better integrating natural hazard and climate risk considerations into regional planning processes. By building upon ongoing collaborations and natural synergies of geography, economy, political history and institutional arrangements, the project is strengthening the region's collective resilience and creating a environment for knowledge-sharing across the region.

In 2011, the Government of Grenada hosted a data management workshop aimed at finding ways to standardize national and regional data management practices and methods to streamline data use to inform decision making. The participants created an online community of practice that includes geospatial practitioners, information technology specialists and regional development partners to address technical challenges in collecting, sharing and using data to reduce disaster risk. The Ministry of Transport and Works from the Government of Saint Vincent and the Grenadines also hosted the Eastern Caribbean Climate Resilient Workshop in 2012 to foster knowledge exchange among national, regional and international experts, including FM Global and the United States Army Corps of Engineers (USACE). The RDVRP sets the stage for technical engineering associations, improved policy frameworks and the development of regional design standards and climate resilient building practices that integrate solutions to manage an uncertain future.

Results

Investments of this holistic approach and size are yielding benefits of regional learning, climate resilience and disaster risk reduction for years to come. The RDVRP is improving the understanding of governments, private sector and communities as to where and how to build in an uncertain and changing climate. In addition to the RDVRP's tangible products, such as detailed hazard maps and risk analyses, RDVRP aims to increase collaboration and provide greater knowledge and awareness among government policy-makers, technical specialists and practitioners of climate and disaster risk management in order to make better informed decisions to tackle climate risks.

Partnership

The Program's financing is a combination of GFDRR and the World Bank's IDA credits and climate-financing supported by the CIF through the Pilot Program for Climate Resistance. The World Bank is also collaborating with the Inter-American Development Bank (IDB) at the regional level, through the Caribbean Region Pilot Program for Climate Resilience, which builds on existing initiatives in the region and will be implemented by regional development agencies. With support from regional agencies, the Caribbean Region Pilot Program for Resilience will provide a strategic framework to channel donor funding and foster regional partnerships. Dominica and Saint Lucia are also directly participating in these regional partnerships and plan to join the RDVRP in 2013.

Next Steps

Next steps include: (i) developing future knowledge exchanges that will aim to include all OECS countries and other Caribbean countries, in order to improve regional sharing and integrate expertise and standards; (ii) fostering sustainable data management in the Caribbean through open-source platforms; and (iii) supporting technical engineers from respective ministries to establish a regional community of practice to develop a process to create harmonized building codes and design standards.

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The governments in the Eastern Caribbean are working together to build resilience to climate change to make their countries safer for future generations.

"With improved information we can determine where settlements can go, we can determine how we need to improve our building codes, our building standards, our planning rules. If you can mitigate better, then you will have less of an impact if you have a disaster."

Elizabeth Charles-Sommer
Program Manager
National Reconstruction and Development Unit
Ministry of Finance
Government of Saint Lucia

Lessons Learned

Build upon ongoing activities and collaboration to strengthen regional understanding of climate resilience.

Use a core-development approach that is led by ministries of finance to mainstream disaster risk reduction into national long-term economic planning.

Data collection and information is essential to making informed decisions about investments in climate adaptation.

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