

A “360-DEGREE” APPROACH TO CARIBBEAN RESILIENCE

Building holistic disaster and climate resilience

AT A GLANCE

Country: Caribbean

Risks: Multi-hazard

GFDRR Areas of Engagement: Promoting open access to risk information; Deepening engagements in resilience to climate change.

Comprehensive studies have been developed on a range of interconnected policy areas which will inform efforts to build climate and disaster resilience in the Caribbean.

CONTEXT

Small island developing states (SIDS) in the Caribbean have been working together to develop innovative policies in several seemingly distinct yet interconnected policy areas to maximize the region's potential for building resilience to disaster and climate hazards. This collaborative approach is crucial for any effective resilience strategy in the region to take hold and sustain itself to respond to new and emerging hazards. Thereby, sectors as varied as healthcare, education, transportation, infrastructure, and construction each have crucial roles to play in this endeavor that could profoundly increase the region's capacity to prepare for and respond to disaster risks. However, activities have often been occurring in sector silos, and information and data gaps have prevented policymakers from establishing a framework that could be used to provide guidance throughout the region.

Efforts to address this have been undertaken through analytical work developed in partnership with the European Union (EU), in the frame of the Caribbean Regional Resilience Building Facility, managed by the Global Facility for Disaster Reduction and Recovery. Developing such a comprehensive approach is crucial in a region where the small size of countries means that a significant proportion of people, businesses, and infrastructure is affected by disasters, and where economic activities are concentrated in sectors that are particularly vulnerable to hazards like tourism, manufacturing, agriculture and fisheries.



APPROACH

The importance of having a reliable, up-to-date, and easily accessible knowledge repository at the disposal of stakeholders and the public cannot be overstated. For this reason, the work that was carried out in the scope of the *Revisiting Resilience in the Caribbean: a 360-degree approach* project has filled key information and data gaps that prevented the design and implementation of an easily accessible framework and relevant indicators to measure cross-sectoral progress towards resilience. The question of how to quantify levels of resilience was also addressed by this project, which developed a methodology to evaluate the effectiveness of resilience measures.

The first step in establishing this knowledge repository has been the publication of a series of sectoral notes, each focusing on a specific sector and presenting a picture as to what resilience looks like for each. A total of 18 sectoral notes were prepared, addressing themes including sea level rise, transport infrastructure, water supply and sanitation, education, health systems, the private and financial sector, building regulations, urban planning, dependence on tourism, and social protection. These notes were developed in consultation with regional experts and organizations including the Caribbean Disaster Emergency Management Agency (CDEMA).

Some of the information collected in the course of this exercise came in the form of geospatial data, including datasets on coastal flooding, sea level rise, infrastructure layers, and multi-hazard exposure. These datasets were handed over to CDEMA to be shared on the Caribbean Risk Information System (CRIS), a virtual platform that hosts data and information relevant for disaster risk management and makes it available to stakeholders from across the region.

Activities focused on how to measure the resilience of the analyzed sectors to natural hazards. Indicators that were identified by this process were included in a common framework based on a previous World Bank flagship report on building resilience titled [Adaptation Principles](#). This framework proposes six guiding principles for implementing resilience strategies that were tailored to the Caribbean context and applied to each country in the region.

The sectoral notes formed the groundwork of a World Bank flagship report *360 Degree Resilience: A Guide to Prepare the Caribbean for a New Generation of Shocks* that was launched in November 2021 which reviews impacts of past losses from natural and economic shocks in the Caribbean on multiple economic sectors including tourism and agriculture. Its conclusions underline that natural hazards have a high impact on poverty and human capital and finds that despite the heavy damages incurred by Caribbean countries, mechanisms in place already help these countries bounce back from disaster shocks.

"We are delighted to have the launch of this extremely timely and pertinent report because it touches upon the topics that are discussed and that trouble the region every day."

—**Malgorzata Wasilewska**, Head of the EU Delegation to Barbados, Eastern Caribbean States, the OECS, and CARICOM/CARIFORUM, at the launch event for the 360-Degree Resilience Flagship Report, November 17, 2021.

"What is very well reflected in the report is that it states that countries in the region are really not prepared for the challenges posed by climate change and it also very importantly highlights the lack of fiscal space, which is why the regional collaboration around the issue of resource mobilization and representation to ensure that this mobilization is adequate and timely."

—**Elizabeth Riley**, Executive Director of the Caribbean Disaster and Emergency Management Agency (CDEMA) at the launch event for the 360-Degree Resilience Flagship Report, November 17, 2021.

"In terms of generating jobs and creating ways forward for youth in the future and in terms of resilience, we have to start at the foundation, and [...] the COVID-19 pandemic has highlighted the importance of integrating information and communications technology within education systems."

—**Aria Laidlow**, Climate change youth activist and lecturer, at the launch event for the 360-Degree Resilience Flagship Report, November 17, 2021.

"An important recommendation of the report is an increased efficiency of resources, to achieve significant gains in terms of climate change."

—**Lilia Burunciuc**, World Bank Country Director for Caribbean countries at the launch event for the 360-Degree Resilience Flagship Report, November 17, 2021.

HIGHLIGHTED RESULTS

- **Putting Cross-Cutting Resilience into Action:** The flagship report titled [360 Degree Resilience: A Guide to Prepare the Caribbean for a New Generation of Shocks](#) was finalized and launched during a roundtable discussion on [November 17, 2021](#) involving the EU, World Bank, CDEMA, the Caribbean Tourism Organization, Caribbean Community (CARICOM), and a youth activist and lecturer. This report includes a risk and cross-sectoral resilience profile for each country, detailing current vulnerabilities and risks, an evaluation of the current state of resilience, and recommendations for strengthening resilience.
- **18 Sector-Specific Deep Dives into Resilience:** Thanks to the [newly published sectoral notes](#), Caribbean stakeholders are benefitting from increased knowledge on sectors of importance for climate resilience including tourism, infrastructure resilience, transport infrastructure, education, urban planning and nature-based solutions.
- **A "Traffic-Light" System of Indicators:** This innovative indicator system evaluates the state of resilience across sectors and topics to provide a baseline against which progress can be measured. This framework will greatly help DRM decision-makers determine which areas to prioritize investments in, providing a harmonized reference system for the region.

Lessons Learned

- Through this work, new opportunities were uncovered to carry out promising analytical work that would add considerable value to the study. Opportunities that were unforeseen during the project's initial implementation provided researchers with a wealth of additional information to further enrich the sectoral notes. Maintaining a degree of flexibility when possible can lead to beneficial outcomes for the project's result.
- Coordination with CDEMA ensured that the findings from the sectoral notes were made available through the CRIS platform, a well-established tool for regional geo-spatial experts.