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GRENADA

Enabling climate-resilient infrastructure in Grenada

AT A GLANCE

Country: Grenada

Risks: Multi-Hazard

With the support of the Canada-Caribbean Resilience Facility (CRF) and the Caribbean Regional Resilience Building Facility (CRRBF), Grenada is making progress to ensure the climate resilience of critical infrastructure.

St. George's, Granada. Photo: ©Orietta Gaspari.

Grenada, like its neighbors in the Caribbean, faces escalating threats from climate change, such as more frequent hurricanes, rising sea levels, coastal erosion, and drought. The risk is compounded by weaknesses in infrastructure, particularly in urban areas. Accordingly, the government of Grenada recognizes that there is a crucial need to construct climate-resilient infrastructure proven to effectively mitigate storm and climate-related damages. Two GFDRR-administered initiatives, the Canada-Caribbean Resilience Facility (CRF) and the EU-funded Caribbean Regional Resilience Building Facility (CRRBF), are actively supporting these efforts in Grenada.

The CRF Program has been key to ensuring the resilience of infrastructure investments in Grenada. For instance, with support from CRF, World Bank teams have provided technical assistance to the Government of Grenada to accelerate the implementation and completion of investments included under the World Bank-financed Regional Disaster Vulnerability Reduction Project (RDVRP). A civil engineer, financed by the CRF, provided hands-on training to a team of engineers from the government of Grenada on bridge assessment and design. Featuring customized guidance and materials, the training covered various topics such as the inspection of bridges

across the island, the prediction of responses to floods, and the design of remedial works. As a result, technical and operational assistance under the CRF advanced the conclusion of infrastructure works under the RDVRP, contributed to procurement procedures, and supported national agencies in charge of implementation. This work has helped ensure the quality of infrastructure funded by the RDVRP.

The CRF also facilitated the Grenada Resilience Improvement Project (GRIP), another World Bank-financed disaster risk management project. This project is focused on critical road and coastal protection infrastructure interventions and technical assistance to reduce landslide risk, strengthen the resilience of cultural heritage buildings, and establish a road assessment management system to bolster the operation and maintenance of critical road infrastructure. The CRF has recruited technical specialists (bridge engineer, coastal engineer, geotechnical specialist, hydraulic expert, road engineer, and a senior in-country operations officer) who provided direct support to the government in the development and implementation of the GRIP. This included the provision of recommendations for infrastructure design and building the capacity within government to put those recommendations into action.

Meanwhile, under the CRRBF, there has been a significant focus on enhancing disaster risk management and reducing vulnerabilities through support from the Improving Urban Resilience of Coastal Cities in the Caribbean through Resilient Infrastructure and Urban Planning Project and the Caribbean Disaster Risk Financing Technical Assistance Program, both financed by the World Bank. For example, a technical team conducted a virtual workshop aimed at strengthening Grenada's national asset management systems by sharing the experiences and challenges faced by neighboring governments, allowing experts to learn from each other through participative sessions. By providing up-to-date information on the location, classification and condition of public assets, these systems enable better monitoring of these assets, including critical infrastructure. This, in turn, enables officials to better manage disaster and climate risks to those assets.

Targeted capacity building efforts such as those supported by CRRBF and CRF are critical to enabling the systems that oversee the planning, construction, and operation of climate-resilient infrastructure in Grenada. In this way, both the CRRBF and CRF have contributed to the long-term resilience of the island nation and helped safeguard its sustainable development.

Police station in Carriacú, Granada. Photo: ©Nandani Bridgla.

HIGHLIGHTED RESULTS

- **CRF technical support significantly elevated the expertise of public sector engineers. They now possess a deeper understanding of design requirements for major construction projects and retrofitting works. The engineers demonstrate enhanced skills in on-site inspections, analysis of technical issues, and development of structural design calculations.**
- **Collaboration across departments improved understanding of the importance of information sharing and management in ensuring the mitigation of climate and disaster risks to critical infrastructure. For instance, a road assessment management system was established that supported the operation and maintenance of critical road infrastructure.**