

CARIBBEAN REGIONAL RESILIENCE BUILDING FACILITY



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Resilient, Green, and Inclusive Flood Investment Baseline for the Georgetown Metropolitan Area

<u>Country</u> Guyana
<u>Caribbean Regional Resilience Building Facility Component</u> Adaptation Facility for Leveraging Investments in Resilience in the Caribbean
<u>Amount Approved</u> €482,700 / \$545,850
<u>Duration</u> 07/2020 – 02/2024

Context and Objectives

Guyana is exposed to multiple weather and climate change-related risks, especially flooding. The country’s coastal plains, where 90 percent of the population lives and which support agricultural areas vital to the country’s economy, are particularly vulnerable. Flood hazards in Georgetown result from rising sea levels, excessive rainfall, and inadequate drainage infrastructure. Due to its complex physical drainage system, the Georgetown metropolitan area was not included in previous flood-risk management studies, however, as the city is likely to continue expanding due to urban growth, authorities needed a cohesive strategy for flood risk reduction and spatial planning.

The objective of this grant was to provide support to the government in building climate and flood resilience in the

Georgetown metropolitan area. The issues included strengthening understanding of the urban drainage system and inter-linkages with the drainage system in Georgetown and the surrounding coastal zone, identifying bottlenecks and opportunities for improvement considering possible future urban expansion, and capacity building so that the Government is able to better manage flood risk and maintain the drainage system.

Main Activities

- Understanding and managing flood risk in the Georgetown Metropolitan Area.
- Technical support for developing a comprehensive study for a resilient, green, and inclusive Georgetown Metropolitan Area.

Results

The development of a technical baseline for understanding and managing flood risk included a new hydraulic model of the Georgetown metropolitan drainage area and its surroundings, supplemented by preliminary designs of drainage interventions to reduce flood risk. This contributed to an enhanced knowledge base for understanding the existing drainage and coastal defense system in Georgetown and its requirements for the future. In addition, the capacity of local government and stakeholders to deal with drainage investment prioritization was increased, with both developments benefitting the resilience against flood hazards of Guyana’s capital city.

Technical support informed an advisory report on resilient, green, and inclusive infrastructure planning for the Georgetown metropolitan area, with specific recommendations on flood risk management and land use. This was a capacity building activity that strengthened the authorities’ understanding of natural flood management solutions and their approach to planning, designing, and managing flood resilient

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infrastructure. Together, these activities have reduced vulnerability to flood risk as the city makes plans for its further development.

Partnerships and Coordination

The project was implemented in collaboration with the Ministry of Agriculture, the National Drainage and Irrigation Authority, the Ministry of Finance, the Ministry of Public Infrastructure and the Municipality of Georgetown. The World Bank coordinated its efforts with the EU Delegation in Guyana.