



## Resilient Housing and Affordability Assessments

### Context and Objectives

The housing sector in Caribbean nations is often the most financially affected sector in the aftermath of natural disasters, such as was the case when hurricanes Maria and Irma struck the region in 2017. The vulnerabilities of the housing sector are exacerbated by increasing urbanization, which has had a major impact in Caribbean land and housing markets. The availability of quality and affordable housing has not been able to meet the demand as more people move to urban centers looking for better opportunities. The limited availability of serviced land is another significant contributor to skyrocketing costs that price out households looking for affordable housing. As a result, these households end up living in low-quality structures to meet their housing needs, making them especially vulnerable to natural disasters. This situation has created a need for a comprehensive reform of regional housing policies

This project supports the governments of **Saint Vincent and the Grenadines**, the **Dominican Republic**, and **Saint Lucia** in undertaking such reforms through a better understanding of the links between urbanization, supply constraints, housing affordability, and the increasing vulnerability of the housing sector to natural disasters. The objective is to support each government to undertake an analysis to address the situation, and to design roadmaps for further steps based on those efforts.

### Main Activities

Activities carried out by the project are organized into the following three components, with some variability for each country:

- **Component 1: Rapid Housing Sector Assessment:** This component is developed on field and desk research and through consultations with housing sector stakeholders including the government and private sector actors such as developers, builders, rental housing organizations, civil society, and microfinancing institutions. This assessment aims to provide a detailed picture of the housing sector in all three countries by outlining the issues affecting housing and its current policies and programs. Policymakers will use this assessment to inform their decision-making when proposing new policies for the housing sector that integrate greater affordability and resilience.
- **Component 2: Housing Stock Resilience Analysis:** This component follows a methodology successfully applied in Guatemala, Indonesia, Saint Lucia, Mexico, and Colombia to produce information that can be used to inform home improvement policies and programs. This methodology includes the use of high-resolution drone imagery for high density population areas and the evaluation of building characteristics using machine-learning algorithms, resulting in new datasets that will be uploaded and made available to the client.
- **Component 3: Retrofit Strategy:** This component informs resilient home improvement policies and programs. Using the findings and data collected under Component 2, the retrofit strategy provides guidelines and identifies possible actions based on building typology or the level of informality. The strategy provides recommendations to engage stakeholders so that they are active participants in the resilient housing program.



## Results

The desk review for the **Dominican Republic** has been completed and discussed with 20 government officials of which half were women, during a workshop in February 2021 on communications related to housing programs and vulnerable beneficiaries. Desk reviews of available housing sector studies and information have started for **Saint Vincent and the Grenadines** and **Saint Lucia**.

In the **Dominican Republic**, as an input to the preparation of the *Rapid Housing Sector Assessment* which was completed, the government has requested support for the review of the draft *Housing Law* and proposed *National Housing Plan*, leading to the integration of resilient housing policy topics into the new administration’s housing agenda. Furthermore, two workshops were organized in October 2020 on international good practices related to housing legislation in order to strengthen the draft *Housing Law* of the Dominican Republic, which gathered 30 government counterparts, including 12 women. These workshops also led to the delivery of two knowledge products to the government, the first outlining recommendations to strengthen the draft *Housing Law* and the other serving as a checklist for the establishment of a *National Housing Plan* in the country.

Furthermore, the project also entails an analysis of housing stock resilience in the Caribbean. In **Saint Lucia**, imagery has been collected in the Castries, Dennery and Gros Islet areas to assess vulnerability to hurricanes and earthquakes. Through the use of drones, elevation products have been produced out of raw images. Rooftops and the derived building attributes have been defined, and the street view images collected in the three areas can be seen on the data platform *Mapillary*.<sup>1</sup>

## Partnerships and Coordination

Activities are discussed and coordinated with the EU delegation and implemented by the World Bank Urban and Disaster Risk Management Latin America and Caribbean team, in collaboration with relevant bodies of the governments of Saint Vincent and the Grenadines, Grenada, and Saint Lucia.

### Countries

Saint Vincent and the Grenadines, Grenada, Saint Lucia

### Caribbean Regional Resilience Building Facility component

Adaptation Facility for Leveraging Investments in Resilience in the Caribbean

### Amount approved

EUR 726,810 / \$800,000

### Duration

06/2020-02/2022

<sup>1</sup> The data can be accessed at: <https://bit.ly/3q0CF32>.