

Title:

**Assessing Alternative Resiliency Strategies in Under-resourced Coastal Communities in Belize Impacted by Climate Change and Vulnerable to Environmental Risk.**

Sub-theme:

Green Space:

- Climate Change Resilience for Vulnerable groups in urban communities
- Localized Planning for Urban Resilience

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**Abstract:**

Communities in Belize and the Caribbean often lack the financial and institutional capacity to address the impacts of climate change. Belize, a low-lying coastal nation, is at risk of rising sea levels, hurricanes and floods set against the backdrop of rapid economic, social and physical changes in communities. This study investigates alternative resiliency strategies for Dangriga, Belize. The authors assess the feasibility of resiliency strategies, including the use of land value capture mechanisms to locally finance the strategies. This assessment is premised on the following assumptions:

- A resiliency strategy may have beneficial design or technical attributes, but will not be viable in under-resourced communities if local government does not have the institutional capacity, available statutory policy instruments or resources to implement a given strategy. The research team identifies the extent to which Dangriga and other communities have the resources and institutional capacity to implement these strategies.
- Land policy instruments, particularly land value capture, could augment the capacity of local government to implement resiliency strategies, especially in cases where lack of fiscal resources and institutional weaknesses limit the ability of communities to adapt and become resilient. The research team considers the hypothetical feasibility of financing and implementing these strategies through land policy, including land value capture in Dangriga and the implications of this in other communities in Belize.

The authors formulate an outline of a framework for investment decisions that considers a range of 'green', 'gray' and non-structural resiliency strategies for use by municipal governments in Belize and considers how this framework can be integrated into land use planning and management, including the use of potential land policy instruments. As an output of this study, the authors recommend resiliency strategies for Dangriga demonstrating an approach to land use planning and climate adaptation that might be tested in other municipalities in Belize.