Building Resilient Caribbean Small-Island Developing States through Community-Based Disaster Risk Perceptions

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The Caribbean is vulnerable to multiple natural hazards, including tropical cyclones, floods, volcanic and seismic activity, droughts and bush fires. The first component of building resilience to disasters is the process of disaster risk assessment, identifying the most vulnerable communities and their unique challenges. Thongs & Griffith approach disaster risk at the community level in this study, using qualitative data to compose risk assessment. This study uses the Caribbean Risk Information Tool (CRIT), a tool developed for risk assessment using community-based experiences and perceptions. This tool is tested in its potential for use in a Caribbean context, through a trial in the Sangre Grande community of Trinidad and Tobago.

The results showed that the community is a valuable source of information regarding disaster risk, vulnerability and resilience. These results additionally confirm the value of using qualitative data in risk assessment, as has been done elsewhere. The hazard profile produced by the tool identified major potential hazards as well as the areas most susceptible to those events. It also aided in showing the inadequate components of current mitigation strategies, indicating areas where more work is needed. This tailoring of disaster management plans has been noted in prior work.

The study proves the usefulness of CRIT as a tool in disaster risk assessment, particularly in the data-scarce Caribbean region. Additionally, the results indicate the validity of community based, bottom-up methods in managing disaster risk that more effectively identifies the unique challenges faces in communities.
