

Grande Riviere, Trinidad and Tobago: The Vulnerability of a Coastal Community to Sea-level Rise

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The community of Grande Riviere in Trinidad and Tobago was the subject of a multidisciplinary study that employed a combination of geomatics, i.e., the use of field surveys and Geographic Information Systems (GIS), and socio-economic data to evaluate the susceptibility of the community to floods and storm surges due to sea-level rise. An examination was made of the level of risk that the critical facilities and properties in the community could face in the future by using projections of sea-level rise presented via spatial GIS models. Micro-data on socio-economic characteristics of the community was collected through a face-to-face administered questionnaire. The results of this study may have important policy implications since policy- and decision makers will have to act to reduce and/or eliminate risk of exposure of specific areas of the community by implementing adaptation or mitigation measures and directing development away from future high-risk areas.

Key Words: Caribbean, Trinidad and Tobago, Sea-Level Rise, Geographic Information Systems