Challenges for Coastal Adaptation Planning in Negril, western Jamaica

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Abstract

Climate related activities such as hurricanes, floods and droughts are already inflicting millions of dollars' worth of damages to Caribbean economies. Special attention must be given to urban centres and low-lying coastal settlements that now account for the majority of the region's population, national capital and infrastructural investments. This research thus evaluates the challenges for adaptation planning in the coastal town of Negril, Jamaica, through a thorough examination of the proposed Negril Breakwater Project. The study adopts a qualitative research methodology. Results of this study suggests that there was limited stakeholder involvement in the planning process, major gaps in communication, and a chronic lack of will to participate in the adaptation planning. Additionally, adaptation measures are being strained by cognitive and other barriers such as a preference for the status quo, blame shifting, discounting of the future, and an unwillingness to invest in problems not experienced, in this case sea level rise.

Background

Jamaica's tourism industry is particularly vulnerable given the coastal location of many of the island's hotels and resort properties. The resort town of Negril presents a case in point, where there has been extensive shoreline erosion along its famous seven mile beach strip, over the past 20 years; a product of rapid infrastructural development, increased storm activity, and improper shoreline management. During the early 1900's Negril, located on the western tip of Jamaica, was a sparsely inhabited coastal fishing village separated from the rest of the island by a tract of wetland known as the Great Morass (Larsen, 2008). It was not until the early 1960's that efforts to develop Negril as a tourist centre began; starting with the construction of an all-weather surfaced highway linking Negril with Lucea and Montego Bay in 1959 (Lalor, 1980). Since then, Negril has expanded to become one of Jamaica's major resort towns. Under component one (1) of the "Enhancing the Resilience of the Agriculture Sector and Coastal Areas to Protect Livelihoods and Improve Food Security Project" by the Government of Jamaica the "Construction of Breakwater Structures Offshore Negril" sub-project was implemented to rehabilitate and protect Negril's coastal area. The intent was to construct and maintain 2 breakwater structures offshore the Long Bay area in Negril; dredging of the sea (capital dredging) and coastal reclamation.

References

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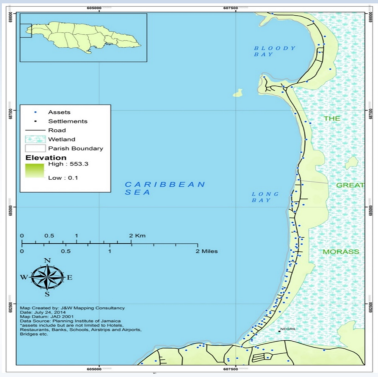
Larsen, C. (2008). Negril in the News: content analysis of a contested paradise. *Caribbean Geography*, 15(1), 35-58.

Pelling, M. (2011). *Adaptation to Climate Change: From resilience to transformation,* Routledge: London and New York.

Study Area



Methodology

This study adopts a qualitative research methodology. Investigations were done using critical discourse analysis, of arguments and ideas related to adaptation that have emerged from the popular media and from interviews with stakeholders. Data collection was divided into two phases.

PHASE 1

1.An institutional analysis of key state and non-state actors and agencies involved in the planning, development and implementation of hard and soft engineering adaptation solutions in Jamaica, with particular focus on the proposed Negril Breakwater Project.

2.A detailed desk review

3.A series of semi-formal interviews with representatives from key state and non-state agencies

PHASE 2

1.A pilot conducted amongst a subset of hotel owners and managers along the seven (7) mile beach Negril in August 2015.

2. A comprehensive field study was also conducted from August - September 2015 amongst 45 hotel owners and operators in Long Bay Negril, this represented about 80% of the hotel properties in Long Bay. Several fisher folk and water sport operators were also interviewed.

Analysis was also done by doing Critical Discourse Analysis of the research findings and the corpus of existing literature on behaviours towards climate change adaptation.

Challenges for Coastal Adaptation

Analysis of research findings suggests several systematic difficulties with the planning and implementation of the proposed Negril Breakwater Project as a hard engineering solution to rapid beach erosion as a result of rapid infrastructural development, suspected beach mining, destruction of the coral reefs and poor beach management techniques. Though all the stakeholders interviewed had acknowledged the problem of beach loss (see fig.1), there was also the emergence of several theories and some unsubstantiated claims about its regression. Subsequently many of these same stakeholders shared **a unified discomfort about the uncertainties of climate change risks and adaptation benefits** of the proposed breakwater. This is further exacerbated by the fact that the efficacy of truly novel adaptations remains untested (Pelling, 2011). Analysis revealed that, one or more of the following also led to speedbumps in the adaptation planning process: **Insufficient information dissemination** from government authorities to stakeholders in Negril; **Improper or insufficient communication channels** between both the various stakeholders in Negril and the government institutions responsible from planning and implementing the Breakwater Project; **Deeply rooted beliefs** in what the stakeholders conclude to be the cause for the beach loss, thus leaving little or no room to consider other alternatives such as sea level rise; **Miscommunication** amongst hoteliers; **A preference for the status quo**; **A lingering fear to undertake the unknown**- given that their livelyhoods and Negril's tourism industry is weighing on the success of the breakwater; **A lack of confidence** in the engineering and decision making skills of the consultants; **Lack of will to participate** by hoteliers; **The belief that they (some hoteliers) are unfairly treated** by government authorities because they are local hotel investors and only operate small and medium sized hotels.

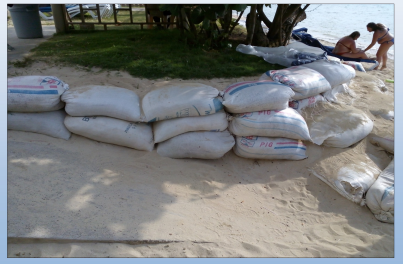


Fig 1. Sandbags being used stem rapid shoreline erosion on a section of the Negril shoreline Photograph provided by: Tashanna Walker