

Assessing Vulnerabilities to Climate Change in Trinidad and Tobago Using a Rapid Vulnerability Assessment

Evaluación de vulnerabilidades al cambio climático en Trinidad y Tobago mediante una evaluación rápida de vulnerabilidad

Évaluation des vulnérabilités au changement climatique à Trinité-et-Tobago à l'aide d'une évaluation rapide de la vulnérabilité

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EXTENDED ABSTRACT

In recent times, the impacts of climate change can be undeniably seen across the globe. These impacts can be devastating not only ecologically but socially as well (Sowman and Raemakers 2018); particularly to those who reside in coastal communities and depend on the sea and other related natural resources for their livelihoods. The nexus between climate change and poverty is an understudied concept in the Caribbean and therefore this study is significant in addressing this pressing issue (Charles et al 2019). The major objectives of the research are to understand the triggers that affect household vulnerability and equally important, understand and explore the mitigation and adaptation strategies that these households can use to combat the impacts of climate change.

To accomplish this, a Rapid Vulnerability Assessment (RVA) was undertaken in the coastal community of Orange Valley in the central region of Trinidad. This site was chosen due to its proximity to the sea, the known fishing activities that take place there, and that the site has been investigated previously for different research purposes. There are many conceptualizations of RVAs but the one employed was more participatory in nature to illustrate a 'ground-up' approach. The RVA was conducted through workshops and focus groups to obtain information to assess vulnerability based on the Sustainable Livelihood Framework. The focus groups catered for as many voices as possible, for example, a focus group was conducted with solely women to obtain gender sensitive information that had a big impact on the results of the study. A workshop was also conducted for children in the pre-teen age group where concepts of climate change were introduced to them and their subsequent feedback was insightful and could inform policy initiatives catered for the youth at some time in the future.

The preliminary results stemming from the study, as noted earlier, were indeed insightful. Participants hitherto to the start of the study had a fair idea about the basics of climate change and its potential impacts it can have on their community. It was confirmed that fishing plays a major role in most villagers' livelihoods and that in the past few years, this activity is becoming less viable due to fish migration – which may be influenced by climate change; as well as other economic and security factors. Interesting adaptation strategies were also obtained from the study, such as villagers reclaiming land around the jetty to preserve this structure from rising sea levels, and the practice of freezing fish stocks for periods of low fish catch in order to sustain their daily nutritional needs inter alia. The concept of poverty was also explored in this study. Whilst absolute poverty does not seem to exist, there are instances of relative poverty as well as instances of transient poverty.

The community, by accounts of the villagers, is vulnerable to external shocks and trends as well as to climatic events that have occurred in the past and possible climatic events in the future. Education is a major tool to reduce vulnerability in the community because quite a few school-aged children dropout of school and enter the fishing industry and that's the only skill that they acquire. In the future, the viability of the fishing industry is unknown and thus young men and women need to be exposed to as much educational opportunities as possible in order to diversify their livelihoods. Another recommendation would be to boost the capacity of the community's village council so that they can better advocate their issues to the relevant authorities to bring greater redress to their community.

These findings and recommendations can play a pivotal role in reducing vulnerability in the Orange Valley community and in addition can be used as a reference for assessing vulnerability in other coastal communities in small island developing states.

KEYWORDS: estuarine soundscape, anthropogenic noise, larval fish, orientation behavior, acoustic cue

LITERATURE CITED

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