

Can Disaster Adaptive Strategy Reduce Disaster Risks?: Lessons Learnt from Flood-Prone Area as Cases of 1913 and 2017 in Sri Lanka

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(a) Purpose of study or research hypothesis

The disaster prevention and mitigation technologies in developing countries are recognized to have positive impacts on reducing disaster risks; however, how can knowledge and resources which counter disasters that are inherent in the community, so-called disaster adaptation strategies, reduce disaster risks? This paper provides a qualitative analysis on this question through interviews and literature review, taking Sri Lanka as an example.

(b) Key issue(s) or problem(s) addressed

The high risk of flooding, cyclones, and landslides in Sri Lanka is attributed to the country's geographical location and vulnerability to flooding and landslides due to its developing social infrastructure and technologies. Although the country is vulnerable to flooding, the lack of government-led disaster countermeasures has led to an increasing trend of damage, resulting in poverty and human and material losses. Hence, local people are facing a challenge to take measures to reduce disaster risks by using local knowledge resources against disasters.

(c) Methodology or approach used

To grasp the actual situation and issues of the response and rehabilitation from the flood damage in Ratnapura district utilizing disaster adaptive strategy, the authors conducted interviews of the case of 2017 and a literature review of the case of 1913.

(d) Results or conclusions derived from the project

As for the reality of the response and reconstruction, in 2017, the response and reconstruction were done by utilizing religious, local, and kinship relations. While in 1913, the response and reconstruction were done by utilizing colonial buildings, actors, and traditional communities called "estate", which is unique to Sinhala society. The challenges of the response and recovery are, in 2017, the results were pointed out the timing of evacuation and the economic burden. In contrast, in 1913, the community survived on scarce material resources due to the colonial background.

(e) Implications of the project relevant to congress themes

Rather than trying to solve the problem of disaster risk reduction using only current technologies and systems, it is necessary to identify disaster adaptive strategy through the literature of the past, how the disaster prevention system worked in those days, and how it has changed over the years. The answer to "can disaster adaptive strategy reduce disaster risks?" is "not yet, but eventually".

Keywords: disaster adaptive strategy, religious, local and kinship relation, estate community, Sri Lanka