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HASIL PENILAIAN SEJAWAT SEBIDANG ATAU *PEER REVIEW*
KARYA ILMIAH : JURNAL ILMIAH

Judul Jurnal Ilmiah (Artikel)	:	Developing sustainable arrangements for "proactive" disaster risk financing in Java, Indonesia		
Jumlah Penulis	:	6 orang (Robby Soetanto, Ferry Hermawan, Alistair Milne, **Jati Utamo Dwi Hatmoko**, Sholihin As'ad, Chusu He)		
Status Pengusul	:	Penulis ke-4		
Identitas Jurnal Ilmiah	:	a. Nama Jurnal	:	International Journal of Disaster Resilience in the Built Environment
		b. Nomor ISSN	:	ISSN: 1759-5908
		c. Vol, No., Bln Thn	:	Vol. 11, No. 3 (2020) hal. 1-17
		d. Penerbit	:	Emerald Publishing Limited
		e. DOI artikel (jika ada)	:	http://dx.doi.org/10.1108/IJDRBE-01-2020-0006
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Semarang, Maret 2022
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Pembahasan hasil penelitian diuraikan dengan rinci dan mendalam. Pembahasan ditunjang dengan usulan framework adaptasi dari beberapa penelitian terdahulu untuk menjelaskan dan digunakan sebagai acuan dalam proses perubahan behaviour dalam adopsi asuransi untuk risiko bencana sesuai kontek penelitian.

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Penelitian menggunakan pendekatan 'stakeholder engagement activities' dengan analisa tematik dilakukan melalui analisa transkripsi rekaman pada saat interview, FGD dan workshop dengan bantuan software analisa kualitatif Atlas

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Jurnal terbit regular 5 kali per tahun sejak 2010 dengan editorial board dan kontributor penulis berasal dari berbagai negara, dan terindeks di Scopus (SJR: 0.252, Q3).
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Developing sustainable arrangements for "proactive" disaster risk financing in Java, Indonesia

Soetanto, Robby[a] ; Hermawan, Ferry[b] ; Milne, Alistair[c] ; Hatmoko, Jati Utomo Dwi[b] ; As'ad, Sholihin[d] ; He, Chusu[e]

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Abstract

Purpose: Recent years saw a paradigm shift from ex post (reactive) to ex ante (proactive) approaches (e.g. insurance) to disaster risk financing for building resilience of communities in developing countries. To facilitate adoption, the approaches should be adapted so that they can be technically feasible and culturally desirable to the local context. This paper aims to report an exploratory study to elaborate the existing arrangements to deal with the impacts of disaster and the potential to shift to a more proactive disaster risk financing in Indonesia. Design/methodology/approach: A series of stakeholder engagement activities in Semarang and Solo, Indonesia was conducted to ascertain the existing arrangements for disaster risk financing at local government level, the challenges/barriers to the adoption of insurance, education and policies to facilitate the transformation from reactive to proactive process. Thematic analysis was applied to transcribed conversations during interviews, focus groups and workshops. Identification of emerging issues/themes was also guided by the researchers' notes during the events, and facilitated by qualitative analysis software, Atlas Ti®. This was complemented by an analysis of regulations and documents provided by the local stakeholders. Findings: The local governments heavily rely on contingency fund, which is not enough and often significantly delayed to fund recovery and reconstruction of public infrastructure. The use of insurance is limited in both public and private sectors, particularly in the majority of low-income communities. Various barriers and challenges were identified under several categories, namely, institutional, cultural, affordability, lack of awareness and knowledge, insurance arrangement process and lack of trust. The findings also suggest that improving insurance education should involve multiple stakeholders, and both formal and informal routes should be pursued. Originality/value: The research fills the gap of knowledge in disaster risk financing in the context of developing countries, specifically in local governments and communities in Indonesia. The findings may be replicable for other developing countries with low adoption of ex ante financial instruments for dealing with the impacts of disaster. © 2020, Robby Soetanto, Ferry Hermawan, Alistair Milne, Jati Utomo Dwi Hatmoko, Sholihin As'ad and Chusu He.

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Community; Developing countries; Disaster risk financing; Financial instruments; Flooding; Insurance

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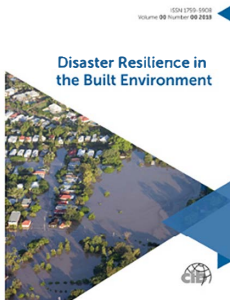

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Robby Soetanto, Ferry Hermawan, Alistair Milne, Jati Utomo Dwi Hatmoko, Sholihin As'ad, Chusu He

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Flood resilience in Malaysian cities: a case study of two towns in Johor state

Tej Kumar Karki
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Received 24 June 2019
Revised 25 October 2019
12 November 2019
17 November 2019
Accepted 19 November 2019

Abstract

Purpose – This paper has carried out a case study of two flood-prone towns in Johor state, Malaysia, to understand how resilient the residents and local authorities were in dealing with the flood disasters in terms of their ability to anticipate, mobilize institutional resources, adapt and respond.

Design/methodology/approach – This research conducted semi-structured interviews with flood-affected residents, flood disaster managers and planners, and assessed land use regulations and institutional strengths to answer the research question.

Findings – The results showed that the residents' anticipatory capacity to flood risks was weak and both the human and institutional resources were insufficient in coping with and responding to urban flooding.

Research limitations/implications – This research has not carried out questionnaire survey of large number of residents. It is based on semi-structured interview of ten residents in two Malaysian cities.

Practical implications – The insights drawn from this research would help develop flood-resilient policies for Malaysian cities. The global communities exposed to flood disasters too benefit from the Malaysia's minute but crucial human and institutional experiences in urban flooding.

Social implications – Being resilient to all these small but important flood concerns has huge potential to reduce vulnerability and disaster risks and protect the lives and properties of flood affected urban residents.

Originality/value – The research focus in Malaysia is less on flood resilience and more on flood modeling and hydrology analysis. In this sense, this research is new because it talks more on flood vulnerability and resilience issues at the community level and gives a perspective on current Malaysian town's state of flood resilience culture and practices.

Keywords Urban flooding resilience, Climate-change uncertainty, Vulnerability, Institutional resilience, Individual resilience, Disaster risk reduction, Flood disaster reduction, Climate change

Paper type Research paper

Introduction

Floods account for about 90 per cent of the natural disaster-related damages in Malaysia (Pradhan, 2009). It affects 4.9 million people every year (Mohit and Sellu, 2013), with average annual property damage worth US$100 million (Pradhan, 2009). In recent years, the flood incidents in Malaysia are on the rise (Aliagha *et al.*, 2014). Often, the heavy rain and flooding show up suddenly by defying all the official flood forecasts (Chan, 2012). Scholars argue that when climate uncertainty defies the flood forecasts, one needs to raise the flood resilience of people and local government to save people's lives and property. However, in Malaysia, the research focus is less on flood resilience and more on flood modeling and hydrological

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Risk of natural hazards and the coping capacity of the South African community in Auckland

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Abstract

Purpose – The risks of natural hazards such as flooding, earthquakes, tsunami, landslides, tornado, coastal erosion and volcano are apparent in Auckland because of its vulnerability to multiple risks. The coping capacity of individuals serves as a precursor to the adaptation to inherent challenges. The purpose of this paper was to examine the coping capacity of the South African community in Auckland to a disaster event.

Design/methodology/approach – This study gathered information from both primary and secondary sources. Interviews and survey were the main sources of primary data. The research used parametric and non-parametric statistical tools for quantitative data analysis, and the general inductive process and a three-step coding process to analyse qualitative data. The research findings are discussed in line with existing studies.

Findings – The results indicated that the aggregate coping capacity of the community was above average on the scale of 1-5 with communication and economic domains having the highest and least capacities, respectively. An improvement in disaster response activities and economic ability among the vulnerable population should be considered in future policy to enhance coping capacity.

Research limitations/implications – The study was limited to the time of the investigation. The practical coping capacity of the community during challenges will be determined. This study excludes the roles of institutions and the natural environment in coping capacity because the unit of analysis was the individual members of the community.

Originality/value – The research is a pioneer study on the coping capacity of the South African community in Auckland.

Keywords Coping capacity, South Africa, Social, Economic, Communication, Information, Disaster, Community

Paper type Research paper

1. Introduction

It is argued that "development", urbanisation, global change and vulnerability are causal factors in disasters caused by natural hazards (United Nations Development Programme.

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Proposed evacuation safety index (ESI) for school buildings

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Abstract

Purpose – Schools are vulnerable to strong-magnitude earthquakes. The purpose of this study is to develop a seismic evacuation safety index (ESI) to assess school's safety as a function of the following parameters: means of egress, disaster preparedness and disaster response. Moreover, the study aims to simulate and study an evacuation model to estimate evacuation time for a realistic understanding of the evacuation processes.

Design/methodology/approach – The paper used a semi-quantitative risk assessment method in developing the ESI. This was used to evaluate schools and classify them according to their level of evacuation safety. To estimate the evacuation time of each school, cellular automata theory and static floor field were used.

Findings – The paper provides primary school stakeholders important parameters that they should consider in preparing pre-disaster plans to ensure safe evacuation of school children.

Research limitations/implications – ESI focuses only on the means of egress, disaster preparedness and disaster response as the contributing factors. The structural conditions of each school building and assessment of non-structural elements are not considered.

Practical implications – The ESI and the evacuation model can be used as a basis for evacuation planning and decision-making. This can help building owners and administrators in strengthening their disaster risk management plan by enforcing mitigating measures.

Originality/value – ESI is an original idea and fills the gap regarding the safe evacuation of school children especially during a major seismic event.

Keywords Evacuation safety, Disaster risk reduction and management, Disaster preparedness, Disaster response

Paper type Research paper

1. Introduction

The Philippines is exposed to various kinds of natural hazards by virtue of its geographic location. With regard to the country's seismicity, it is similar to Japan because it straddles along the Circum-Pacific Belt or the Pacific Ring of Fire. In recent years, the country has been experiencing several intense earthquakes with a magnitude of 6.0 and above. Unfortunately, unlike strong typhoons and other natural hazards, we do not have a prior knowledge of when and where an earthquake strikes. In this regard, our school children, faculty and staff are at risk during strong seismic events. The education of our children or the function of the school can also be disrupted.

In October 2013, an M7.2 earthquake hit Bohol Island that caused significant damage to 600 schools [see Figure 1(b)]. This earthquake was one of the strongest in Philippine history. The damage was widespread; it affected houses, bridges, schools, roads, highways, public and private buildings, flood control structures, seaports, airports and hospitals (Garciano and Taclibon, 2013). On July 2017, 10 schools were destroyed, while 10 others were partially damaged [see Figure 1(b)] because of an M6.5 earthquake that struck Leyte Island. Surigao Del Norte was hit by an M6.7 earthquake on February 2017. A total of 47 school facilities [see Figure 1(c)] were affected by the earthquake which sustained both structural and

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