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

Judul karya ilmiah (artikel) : Operationalizing Resilience: A Content Analysis Of Flood Disaster Planning In Two Coastal Cities In Central Java, Indonesia

Jumlah Penulis : 5 penulis

Status Pengusul : Wiwandari Handayani, Micah R Fisher, **Iwan Rudiarto**, Jawoto Sih Setyono, Dolores Foley

Identitas Jurnal Ilmiah : a. Nama Jurnal : International Journal of Disaster Risk Reduction
b. Nomor ISSN : 2212-4209
c. Vol.,no.,bulan,tahun : Vol.35, April 2019, Pages 101073
d. Penerbit : Elsevier
e. DOI artikel (jika ada): 10.1016/j.ijdr.2019.101073
f. Alamat web jurnal : <https://www.sciencedirect.com/science/article/pii/S2212420918306125>
g. Terindeks di SJR Q1 0,964 (2019) dan SNIP 1,756 (2019)

Kategori Publikasi Jurnal Ilmiah (beri ✓ pada kategori yang tepat) : Jurnal Ilmiah Internasional /internasional bereputasi
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Prof. Dr.rer.nat. Imam Buchori, ST
NIP. 197011231995121001
Departemen PWK, FT. Undip

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Total = (100%)	40			37,0
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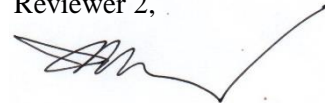
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- b. Substansi artikel berkaitan dengan aspek *Resilience* dimana data dibahas secara komprehensif untuk 2 kota (Tegal dan Semarang) dan sesuai dengan bidang penulis terutama dalam konteks perencanaan kota tangguh. Pembahasan dalam artikel melibatkan 22,5% pustaka dari total pustaka yang dipakai dan semuanya merupakan artikel jurnal.

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Semarang, 07-02-2020

Reviewer 2,



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NIP. 195407171982032001
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c. Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	11,0	11,0	11,0
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Total = (100%)	39,0	37,0	38,0
Nilai = (40% x 38 : 4)			3,8

Semarang, 09-03-2020

Reviewer 1,



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NIP. 197011231995121001
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Reviewer 2,



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International Journal of Disaster Risk Reduction
Volume 35, April 2019, Article number 101073

Operationalizing resilience: A content analysis of flood disaster planning in two coastal cities in Central Java, Indonesia (Article)

Handayani, W.^a  Fisher, M.R.^b  **Rudiarto, I.^a**  Sih Setyono, J.^a  Foley, D.^b 

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^bDepartment of Urban and Regional Planning, University of Hawaii, Manoa, 96822, United States

Abstract

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Global concern has sought to connect resilience with the field of disaster risk reduction, which was prominent in the Hyogo Framework for Action (2005–2015) and updated in the Sendai Framework for Disaster Risk Reduction (2015–2030). However, defining disaster risk reduction and resilience as policy goals geared towards reducing vulnerability and minimizing risk requires a closer examination. This research examines operationalization of resilience in programs and budgets of development plans in Indonesian cities. This paper investigates the documentation of planning policies in the Indonesian context, examining National to local level efforts. The research specifically analyzes case studies at two cities, Semarang and Tegal, and highlights how these sites have accommodated the term resilience to address flooding. The scope of the research focuses on flooding as it is the most commonly experienced hazard across Indonesia. Content analysis is applied to assess identified planning documents. The content analysis is further verified through focus group discussions among key stakeholders. Findings indicate that there are fourteen areas of plans/programs in terms of reduced exposure to hazards, lessened vulnerability of people and property, improved management of land and the environment, and improved preparedness to address flooding in the two selected cities. The elaboration of resilience-related programmes provides important lessons, namely that operationalizing resilience should be integrative and comprehensive, and require both short-term actionable initiative(s) and long-term transformative frameworks. © 2019

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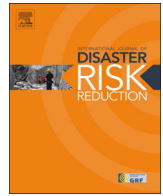
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Assessment of local adaptive capacities in the context of local politics after the 2016 Ecuadorian earthquake

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ARTICLE INFO

Keywords:

Ecuador
Earthquake
Recovery
Buen vivir
Adaptive capacities
Local politics

ABSTRACT

Focusing on four municipalities in two provinces (Manabí and Esmeraldas), this article discusses the comparative findings resulting from the first long-term assessment of the decelerated socioeconomic recovery process on the Ecuadorian coast after the earthquake of April 2016. To do so, we draw on the framework of collective adaptive capacities developed by Ross (2014), repeated field stays between 2017 and 2018, and aerial photographic documentation. By putting emphasis on both the national context of post-neoliberal Buen Vivir disaster management as well as the subtleties and vital role of local politics in the recovery process, we find serious ecological, institutional, infrastructural and economic shortcomings at the municipal level. By typically fostering disaster capitalism and securitization in favor of cantonal seats, and to the detriment of parishes, the recovery process revealed a tendency to deepen already existing vulnerabilities and inequalities in the region instead of mitigating them.

1. Introduction

Both prevention and recovery after the coastal earthquake of 7.8 M_w , which hit the Ecuadorian provinces of Manabí and Esmeraldas in April 2016, have received relatively little attention from the empirical social sciences thus far. Publications available comprise some conceptual and reflexive studies on Ecuadorian disaster management [1–3], construction [4–7], cost and risk estimation [8,9], as well as on the public policy dimensions of disaster and response management [10–12]. The present article addresses this void by focusing on the relevance of local politics and its subtleties on the one hand during the recovery process, as well as on their impact on local adaptive capacities, on the other [13,14]. Both of these topics are discussed within the context of assessing adaptive capacities ex-ante and ex-post regarding the hazards that led to this still ongoing disaster. Our work contributes to relevant anthropological and sociological analyses of disaster capitalism, carried out in Sri Lanka [15,16], Latin America [17] and Ecuador after the 2008 Tungurahua eruption [18,19]. In particular, we discuss the local conditions which have been potentially conducive, in terms of “facilitation” [20], to the expansion of “disaster capitalism” [21,22] and securitization, as it has been diagnosed for the Ecuadorian case with regard to displacement, tourism and agroindustry support [12].

As a general context, it is noteworthy that disaster politics in Ecuador today are embedded within a generally conflict-stricken and

highly polarized social environment. This process initiated in 2008 with the adoption of a new constitution under ex-President Rafael Correa. It paved the way for Buen Vivir, or “good living” politics framed as “post-neoliberal” [23,24], being part of the Leftist “pink tide” of self-styled progressive Latin American governments. This refers to the reversal of a decade-long decentralization strategy backed by peak prices for commodities, which lasted until 2015; in other words, a political system characterized by notions such as “hyperpresidentialism” [25], “commodity consensus” [26] and high modernist programs [27–29], particularly with regard to emblematic infrastructure projects. This model, aimed at strengthened state control and simultaneous pay-back through increased social spending and economic inclusion toward selected groups (typically aligned with the government), has been called “compensatory state” [25]. Overall, it gradually transformed into an authoritarian form of government which systematically undermined rule of law and human rights [30] while fostering the agroindustries (particularly, shrimp farming) and selected agrarian elites [31,32]. As a backdrop to our assessment of local capacities, we ask if under such circumstances progressive disaster risk management has been transformed, reshaped or adapted in some unprecedented way, and in light of this, discern the role, relevance and nature of local politics within such a scenario. In this context, we methodologically employ the perspective of adaptive capacities to analytically explain how recovery has resulted in the expansion of “disaster capitalism” [12,21,22,33,34]. In

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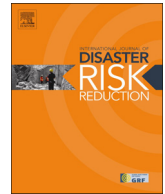
E-mail address: johannes.waldmuller@udla.edu.ec (J.M. Waldmueller).

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Heterogeneity of decision strategy in collective escape of human crowds: On identifying the optimum composition



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Multi-class behaviour
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Evacuation efficiency
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Optimal evacuation behaviour

ABSTRACT

Introduction: We raise the question of whether an escaping crowd can benefit from a mixture (or heterogeneity) of direction-choice-making strategies, and if so, how would an optimal composition of strategies be like.

Methods: We perform extensive computer simulation analyses and examine crowds of evacuees composed of two different behavioural classes in terms of their direction-choice strategies. We examine three possible strategies: (I) follow the majority (II) follow the minority without the possibility of decision update and (III) follow the minority with the possibility of decision update.

Findings: Results showed that the types of escape decision strategy and their composition in the crowd vastly impacted on the efficiency of the evacuation process. The numerical analyses showed the followings: (1) The highest degree of optimality was achieved from a homogenous crowd of minority followers with the possibility of decision update. (2) The magnitude of the detriment resulted from greater concentrations of the follow-the-majority strategy in the crowd was much larger than the benefit of having more of the follow-the-minority strategy. (3) The marginal benefit of increasing the concentration of the follow-the-minority strategy largely diminished once this strategy became dominant in the crowd. A substantial portion of this benefit was realised at about 50% concentration level. (4) The system's efficiency was more sensitive to the behavioural strategy when there was only a one-off chance of direction-choice making.

Applications: These findings have implications for evacuation management. They offer quantitative evidence on how training or modifying individuals' decision-making behaviour can potentially facilitate evacuation processes. They provide insight into ideal (or optimum) forms of behaviour.

1. Introduction

Identification of optimum type of behaviour is an important aspect of indoor evacuation research [13,55] that aims at reducing the likelihood of fatalities or injuries in emergencies by shortening the evacuation times [11,21,32]. The presence of individual differences (or what econometricians often refer to as taste heterogeneity [28]) has been acknowledged in many contexts of decision making [36]. It has been shown in various contexts of decision making that individuals' valuations of attributes when making choices can differ significantly from person to person [49]. Different people often demonstrate different priority on various attributes of alternatives when making choices and it is important from the modelling standpoint to represent this variation (or heterogeneity) of taste (or priorities) [12,27]. The context of evacuation behaviour has not been an exception and past research has shown that different individuals do display different

behaviour and choose different decision strategies during emergency collective escape scenarios [17,25,31,37,40,42].

The effect of heterogeneity in crowd dynamics can be considered from several angles. [5] investigated using numerical simulations how heterogeneity of pedestrian characteristics influences the efficiency of their flows. According to these authors, "not much is known about the way that (heterogeneity) affects the qualities of the flow and how important it is to the outcomes of microsimulation models" (p. 148). In their study, they considered heterogeneity in terms of individual size, free speed and manoeuvrability. The study of Lin [40] introduces the problem of heterogeneity from a perspective of walking ability by dividing the population into two groups of "powerful pedestrians" and "weak pedestrians". Shen et al. [48] formulated and simulated escape of human crowds from smoke-filled rooms in which pedestrians can have one of these two strategies: random-walking or walking along the wall. Their results showed that when the two strategies are mixed,

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