

Article

Post-Disaster Relocation of Urban Coastal Communities in the Philippines

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ABSTRACT

This paper examines the super typhoon Haiyan disaster as a case study that demonstrates the full complexity of multidimensional challenges, vulnerabilities, and adaptation needs of urban coastal communities at high risk of future impacts. Anchored on the Coastal Relocation Potential framework developed by Bukvic, Smith, and Zhang (2015), this qualitative research gathered data using a combination of desk research and field works in three urban coastal villages of Tacloban highly devastated by Haiyan. Results showed that residents in urban coastal communities consider the following factors in deciding to relocate or not: a) household level socio-economic factors, b) psychosocial and physical impacts, c) post-disaster recovery concerns, and d) relocation assistance support needs. The study argues that policy-makers need proper planning, participatory consultation and great consideration to the socio-economic impacts it will cause to coastal dwellers, majority of which is urban-poor families.

ABSTRAK

Tulisan ini membahas studi kasus Angin Topan Haiyan sebagai bencana yang memiliki kompleksitas dalam hal tantangan multidimensi, kerentanan, dan kebutuhan adaptasi dari masyarakat pesisir perkotaan dengan risiko tinggi terhadap dampak bencana di masa yang akan datang. Penelitian kualitatif dilakukan dengan mengacu pada Kerangka Potensi Relokasi Pesisir yang dikembangkan oleh Bukvic, Smith, dan Zhang (2015). Adapun metode pengumpulan data diperoleh melalui kajian pustaka dan survei lapangan di tiga desa pesisir Tacloban yang merupakan daerah terdampak parah akibat Angin Topan Haiyan. Hasil penelitian menunjukkan bahwa masyarakat di wilayah pesisir perkotaan mempertimbangkan beberapa faktor dalam pengambilan keputusan pindah atau tidak pasca-bencana, diantaranya: a) faktor sosial-ekonomi dalam skala rumah tangga, b) dampak fisik dan psikososial, c) fokus pemulihan pasca-bencana, dan d) dukungan bantuan untuk kebutuhan relokasi. Studi ini mengusulkan bahwa para pembuat kebijakan perlu melakukan perencanaan yang tepat, konsultasi partisipatif, serta sangat perlu mempertimbangkan dampak sosial-ekonomi bagi penduduk pesisir yang sebagian besar merupakan keluarga miskin perkotaan.

Introduction

The sustainable future of some rural and urban coastal communities has been seriously challenged by disasters induced by natural hazards. Studies have demonstrated that coastal communities are increasingly at risk from various effects of the rapidly changing climate,¹ such as more intense hurricanes/ typhoons² and sea-level rise.³ These conditions result to the voluntary or forceful relocation of coastal communities. However, relocating communities is a difficult and complex process where disadvantaged populations with informal land tenure are often the ones who are forced to relocate, pushing them further into poverty. Host communities experience increased job competition and additional strain on public and social services as a result of accommodating newcomers often leading to disputes.⁴ Given these, displaced people and host communities are most likely faced with negative socio-economic consequences in both the short-term and long-term,⁵ hence, experts suggest to avoid community relocation as much as possible.^{6, 7, 8}

However, relocation from coastal areas is frequently considered after large-scale natural events like super typhoons, tsunamis and storm surges that may result to devastating damage both to life and property. In this context, relocation of people from coastal communities is deemed

as protective measure or strategy to prevent damage to life and property in times of large-scale disasters.^{9, 10} The purpose of this study is to identify and explore the reasons of urban coastal residents in staying in their residences despite the risk from natural hazards such as typhoon and storm surge, as well as the reasons that may influence them to relocate. The ultimate goal of the study is to provide empirically-based suggestions to concerned policymakers, national and regional government agencies, and local government units implementing or planning to implement policies related to urban coastal relocation. This study also aims to provide basis for researchers and scholars to conduct other related inquiries that would amplify and widen the scope of the study.

Research Method

Using a qualitative research design, specifically case study as a method, the data were gathered through a combination of desk research and fieldwork utilizing household survey, key informant interviews and focus group discussions. The data were analyzed using thematic analysis.

The author used a qualitative research design, specifically case study, because this research is interested in understanding and identifying the various factors that influence peoples' decision to relocate from high-risk areas, specifically in urban coastal communities. A case study may be understood as an intensive study of a single or few cases where the purpose is, or at least in part, to shed light on a larger class of cases.¹¹ Gerring¹² defined cases as "a spatially delimited phenomenon (a unit) observed at a single point in time or over some period of time. It comprises the type

¹ Bukvic, Smith, and Zhang, "Evaluating drivers of coastal relocation in Hurricane Sandy affected communities", 215.

² Elsner, Kossin, and Jagger, "The increasing intensity of the strongest tropical cyclones", 92.

³ Karl, Melillo, and Peterson, "Global climate change impacts in the United States".

⁴ Correa, Ramirez, and Sanahuja, *Populations at Risk of Disasters*, 54.

⁵ Badri, Asgary, Eftekhari, and Levy, "Post-disaster resettlement, development and change", 460.

⁶ Scudder, "A sociological framework", 152.

⁷ Jha, *Safer Homes, Stronger Communities*, 53.

⁸ Iuchi and Maly, "Residential Relocation Processes", 222.

⁹ Kim and Olshansky, "building back better", 290.

¹⁰ Iuchi and Maly, "Residential Relocation Processes", 222.

¹¹ Gerring, *Case Study Research*, 17.

¹² Gerring, *Case Study Research*, 20.

of phenomenon that an inference attempts to explain". The strengths of case study research lies on its ability to "generate high conceptual validity; strong procedures for fostering new hypotheses; their value as useful means to closely examine the hypothesized role of causal mechanisms in the context of individual cases; and their capacity for addressing causal complexity".¹³

Household surveys, semi-structured key informant interviews (KIIs) and focus group discussions (FGDs) were utilized in collecting the data for this research. A verbal consent was obtained from all respondents signifying their voluntary participation in the study. According to Vanderstoep and Johnston,¹⁴ techniques such as interviews and focus groups allow research participants to give very detailed and specific answers. The first set of data was obtained from in-depth, key informant interviews with selected officials of the identified barangay/village local government units. A *focus group discussion* (FGD) is a good way to gather together people from similar backgrounds or experiences to *discuss* a specific topic of interest. These included the selected officers' length of being in office, length of stay in the barangay, experiences in the early months after the Haiyan disaster and their inputs on the various factors that affect their communities' decision in staying or relocating from their urban coastal communities. The FGDs were conducted inside the barangay halls or open and well-ventilated spaces such as the basketball courts and community churches. The focused group discussions (FGD) were conducted with at least six (6) residents and community leaders from the aforementioned barangays- a total of 18

from the three barangays. The second set of data was obtained by interviewing key informants such as the local chief executive of the village, councilors or community leaders. The third set of data was obtained from surveys of household heads who were randomly selected by the researcher. Ten households were randomly selected in every village which means that there are a total of 30 household heads involved in the survey. The survey instrument was pre-tested and modified during a mock data-gathering done before the proper fieldwork. These data are crucial in understanding whether the data obtained from the barangays are parallel or not. The information was used to verify and to see the similarities and conflicts from the data obtained from the different respondents of this study.

The author utilized the principle of thematic analysis. Qualitative research requires understanding and collecting diverse aspects and data, and thematic analysis employs a wide range of analytical techniques to generate findings and put them into context as well as identify common themes in the texts provided for analysis.¹⁵ It is a systematic, rigorous approach to analyzing documents obtained or generated in the course of research and is a descriptive presentation of qualitative data.¹⁶ Qualitative data may take the form of interview transcripts collected from research participants or other identified texts that reflect experientially on the topic of study. It is used to analyze classifications and present themes (patterns) that relate to the data and illustrates the data in great detail and deals with diverse subjects via interpretations.¹⁷ It provides a systematic element to data analysis and allows the

¹³ George and Bennett, *Case Studies and Theory Development in the Social Sciences*, 205.

¹⁴ Vanderstoep and Johnston, *Blending Qualitative and Quantitative Approaches*, 17.

¹⁵ Alhojailan, *Thematic Analysis*, 40.

¹⁶ King and Brooks, *Thematic Analysis in Organizational Research*, 222.

¹⁷ Boyatzis, *thematic analysis and code development*, 105.

researcher to associate an analysis of the frequency of a theme with one of the whole content. This will confer accuracy and intricacy and enhance the research's whole meaning as well as give an opportunity to understand the potential of any issue more widely.¹⁸ Lastly, thematic analysis is a comprehensive process where researchers are able to identify numerous cross-references between the data and the research's evolving themes¹⁹ by providing flexibility for approaching research patterns in two ways, i.e. inductive and deductive.^{20, 21, 22}

The research was conducted in the coastal villages of Aslum (No. 60), Anibong (No. 68), and San Jose (No. 88) in Tacloban City, Eastern Visayas (Figure 2) from October 2018- March 2019. All of which were heavily damaged by the storm surge brought about by Haiyan in 2013.

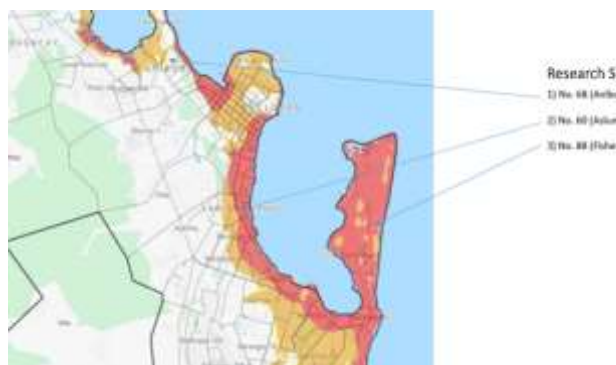


Figure 1: Haiyan-affected urban coastal communities and selected research sites

The author adapted the conceptual framework of urban coastal relocation

developed by Bukvic, Smith, and Zhang²³ who postulated that people's decision in relocating from coastal communities is affected by various factors ranging from the individual household level socio-economic indicators to other disaster-related stressors like psychosocial and physical impacts, post-disaster recovery concerns, and relocation assistance support needs (Figure 1). Disasters like Haiyan offer a unique window of opportunity to for the reexamination of community capacity to withstand episodic and chronic hazards, for the adjustment of government and non-government policy and planning frameworks to better match and adapt from the risks, and for the effective development of land use planning to reposition facilities, assets and peoples away from various risks. The results presented herein provide varying preferences and concerns that drive consideration to relocate among disaster-affected communities and as such provide a stronger support for this adaptation strategy.



Figure 2: Conceptual framework of urban coastal relocation by Bukvic, Smith, and Zhang (2015)

¹⁸ Marks and Yardley, "Research methods", 200.

¹⁹ Hayes, "Doing qualitative analysis", 147.

²⁰ Frith and Gleeson, "Clothing and Embodiment", 40.

²¹ Niece, *Exploring the influence of small vessel security strategy*, 15.

²² Halldorson, *An exploration of tajfels*, 10.

²³ Bukvic, Smith, and Zhang, "Evaluating drivers of coastal relocation in Hurricane Sandy affected communities", 215.

Region VIII (Eastern Visayas), which includes Tacloban City is historically one of the poorest in the country; in 2012, it ranked 3rd as the poorest.²⁴ Poverty levels in this area were exacerbated when majority of the poor living along the coast without legal land titles lost all of their assets to the storm surge. The poverty rate increased from 41.2% to 55.7% a year after ST Haiyan making Eastern Visayas region as the poorest.^{25, 26}

Results and Discussion

Individual household socio-economic indicators

The research participants and informants sited their ease of access to basic social and economic services as one serious consideration in staying in their homes despite knowing the risks from hazards. The villages under study have easy access to churches, schools, markets, hotels, pharmacies, bakeshops, meat shops, pawnshops, fast food chains, funeral homes and cemeteries. Living in these barangays means that residents have easy and cheap access to food, education, health and faith-based institutions vital to their daily living.

Psychosocial and physical impacts

Research participants and informants expressed serious discomfort and concern in relocating from their place of birth where many memories have been created. They have been staying in the aforementioned urban coastal communities since birth and with an average length of stay ranges from 6-50 years. People who reside in a place for a long period of time tend to attach

themselves in the kind of environment they are used to.

Relocating would also mean that they would be away from their families and other relatives. Filipinos are often engaged in an extended family set up and this affects the respondents' decision of relocating from risky urban coastal communities. Within the villages, it was evident that families have common surnames indicating that the residents are connected in one way or another. Moreover, being near from the houses of their kin provide them a sense of security and protection.

Attachment to a place has different influences to different behaviors²⁷ and the components of place attachment, place dependence and place identity, are correlated with environmentally responsible behavior²⁸ and advocacy related to the environment.²⁹ In the case of the Haiyan-affected urban coastal communities, vacating and leaving the homes where they grow is a difficult task. Kinship and strong relations to their social networks are deemed to be important in their day-to-day living. This sense of belongingness is deemed to be difficult or challenging to establish with strange neighbors in the relocation sites. People who have been forcedly uprooted have been shown to develop health problems as their place identity and attachment bonds have been severed.³⁰ Forced relocation could also have consequences for the towns that these people leave behind. Residents were found to be nearly twice as likely to belong to local clubs and organizations; leaving could have a

²⁴ NSCB, *Full Year Official Poverty Statistics*, 12.

²⁵ The World Bank, *Recovery and Reconstruction Planning*, 17.

²⁶ Gabieta, "Poverty worsens in Eastern Visayas NEDA."

²⁷ Ramkissoon, Smith, & Weiler, "Testing the dimensionality of place attachment", 560.

²⁸ Vaske and Kobrin, "Place attachment", 119.

²⁹ Brown and Raymond, "The relationship between place attachment and landscape". 105.

³⁰ Fullilove, "Psychiatric implications of displacement", 1520."

negative impact on the community life in the towns they leave behind.³¹

Post-disaster recovery concerns

Respondents fear living in uncertainty in the relocation sites. They are uncertain and afraid of the living condition that they will have in relocation sites especially when it comes to livelihood opportunities, electricity and water supplies and other basic social services. Participants continually wait for the assistance of the government in terms of the distribution of permanent houses but as long as the aid of the government is not yet realized, the people will still live in houses they rebuilt after the typhoon. Aside from the government's shelter assistance at New Kawayan, there were also non-governmental organizations who offered housing projects like the Urban Poor and Catholic Relief Services (CRS). However, participants are not guaranteed in availing these various housing projects.

Relocation assistance support needs

The research informants and participants shared that if ever the government would offer them permanent shelter or financial assistance, all of the participants preferred to choose permanent shelter. The respondents are informal settlers and have no legal claim of tenure in their residence despite living there for a long time and being given a shelter which they will legally own is considered a big help.

Provision of cheap transportation, livelihood opportunities, water and electricity supplies as well as access to good quality education and health care, are what the respondents highlighted that would influence them to relocate from risky urban coastal areas. They also wanted to be

relocated not far from the city center for convenience.

Provision of sufficient cash assistance would also help them in starting a new life in the relocation sites, and hence, would be a major consideration in relocating. Relocation entails moving properties and assets and these don't come cheap. Despite the provision of trucks that would transport their properties, the provision of cash assistance would help them pay various fees while looking for job opportunities in or nearby the relocation sites.

Conclusion

This paper explores factors that may affect perceptions and consideration of relocation as a response strategy to contemporary coastal hazards in urban communities. More specifically, it presents results from surveys, focus group discussions, and key informant interviews exposed to a major disaster more than five years ago. The analyses evaluate a broad range of contextual coastal factors as possible drivers of relocation decision-making.

Relocating communities is a difficult and complex process where disadvantaged populations with informal land tenure are often the ones who are forced to relocate, pushing them further into poverty. The study argues that despite the good objective of the NBZ policy, implementers need proper planning, participatory consultation and great consideration to the socio-economic impacts it will cause to the dwellers, majority of which is urban-poor families.

Studies on the significance and usefulness of preventive relocation which is relocation as part of the reconstruction process to prepare for future disasters is gaining relevance (see Correa, 2011). This paper contributes to this type of research, specifically on the context of the Haiyan disaster. For example, three months after

³¹ Anton & Lawrence, "Home is where the heart is". 459.

the Indian Ocean Tsunami in 2004, the Indonesia government developed a recovery master plan that included a land-use plan with a 3-km coastal setback zone to regulate development.³² Despite the Indonesian government's adoption of this plan through Presidential Regulation No. 30 of 2005 (*Peraturan Presiden Republik Indonesia Nomor 30 Tahun 2005*), resistance from the locals and insufficient coordination among and between key stakeholders, including national and local government units, residents, local and international non-government organizations (NGOs), and communities resulted to coastal residents building and rebuilding back in place. In the same case, in tsunami-affected parts of Sri Lanka, a presidential decree (PD) created a buffer zone with a maximum setback of 300 meters and people living in these buffer zones are to be relocated in donor-funded houses.³³ However, tourism industry developments permitted in the buffer zone were seen as unfair to former residents and effectively undermined the relocation efforts. Studies related to the 2004 Indian Ocean Tsunami report that resettlement in most cases had a negative impact on livelihoods, access to food, education, and on social cohesion.³⁴ In a similar case, the government of Japan pursued rebuilding with strict land-use controls of coastal land after the Great East Japan Earthquake and Tsunami in 2011 and applied centralized top-down processes.³⁵ In all these studies, including the current research, the concept of rebuilding better is emphasized, yet transforming the concept into practice is extremely challenging because the recovery process itself often exacerbates various existing pre-disaster

problems.^{36, 37, 38, 39} Issues that arise include haphazard development, poor land management, and sub-standard infrastructure as a result of urbanization pressures, and these form additional vulnerabilities to natural hazards.^{40,41} Furthermore, inequitable financial, social, political, and participatory opportunities of disaster-affected populations aggravate pre-existing poverty and inequality.^{42, 43, 44}

The author strongly agrees with Iuchi and Maly⁴⁵ that it is difficult to relocate communities because it disrupts peoples' lives, financially burdens them, and erodes social networks. Because disadvantaged populations with informal land tenure are often the ones who are forced to relocate, they push further into poverty. Policymakers and project implementers need to acknowledge that having a permanent and stable shelter or housing is an integral part of living with dignity. For some of the most vulnerable people — people with mental illness, chronic health conditions, histories of trauma, and other struggles — a home helps them to get adequate treatment and start on the path toward recovery.⁴⁶ The government should implement policies on supportive housing because permanent supportive housing is successful in facilitating housing stability

³² Republic of Indonesia., *Master Plan for the Rehabilitation and Reconstruction*, 14.

³³ Muggah, *Relocation Failures in Sri Lanka*, 250.

³⁴ Barenstein and Wickramagamage, "Post-Tsunami Resettlement in Sri Lanka", 2.

³⁵ Iuchi, Maly, and Johnson, "Three years after a mega-disaster", 40.

³⁶ Wisner, Blaikie, Cannon, and Davis, "Natural Hazards, People's Vulnerability and Disasters", 15.

³⁷ Pyles, L. (2007). "Locating social work", 329.

³⁸ Iuchi, "Planning resettlement after disasters", 420.

³⁹ Iuchi and Maly, "*Residential Relocation Processes*", 220.

⁴⁰ Dickson, Baker, Hoornweg, and Tiwari, *Urban Risk Assessments*, 20

⁴¹ Esnard and Sapat, *Displaced by Disaster*, 18.

⁴² Bolin and Stanford, "The Northridge earthquake", 29.

⁴³ Kamel and Loukaitou-Sideris, "Residential assistance and recovery", 554.

⁴⁴ Wisner, Blaikie, Cannon, and Davis, *Natural Hazards, People's Vulnerability and Disasters*, 52.

⁴⁵ Iuchi and Maly, "*Residential Relocation Processes*", 223.

⁴⁶ Dohler, Bailey, Rice, and Katch, "Supportive housing helps vulnerable people."

for many families experiencing long-term homelessness and may lead to other positive outcomes, including family reunification.⁴⁷

⁴⁷ Corporation for Supportive Housing and National Center on Family Homelessness, “The Role of Permanent Supportive Housing in Addressing Family Homelessness”, 3.

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BIOGRAPHY

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