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# THE ELEMENTS OF ASSET-BASED APPROACH IN THE FLOOD RECOVERY PROCESS

Siti Mariyam Abd Razak<sup>1\*</sup>, Maimunah Sapri<sup>2</sup>, Ibrahim Sipan<sup>3</sup>, Nurul Hana Adi Maimun<sup>4</sup>

- Faculty of Built Environment and Surveying, Universiti Teknologi Malaysia, Malaysia Email: sitimariyamabdrazak@gmail.com
- Centre for Real Estate Studies, Institute for Smart Infrastructure and Innovative Construction, Faculty of Built Environment and Surveying, Universiti Teknologi Malaysia, Malaysia Email: maimunahsapri@utm.my
- <sup>3</sup> Centre for Real Estate Studies, Institute for Smart Infrastructure and Innovative Construction, Faculty of Built Environment and Surveying, Universiti Teknologi Malaysia, Malaysia Email: ibrahimsipan@utm.my
- Centre for Real Estate Studies, Institute for Smart Infrastructure and Innovative Construction, Faculty of Built Environment and Surveying, Universiti Teknologi Malaysia, Malaysia Email: nurulhana@utm.my
- \* Corresponding Author

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#### **Abstract:**

In the event of recovery after the flood disasters, public order and welfare are of key importance for the institutions. Hence, community involvement via an asset-based approach is paramount to ensure that the holistic recovery of the community can be achieved. Through an asset-based approach, the vulnerability of the community can be diminished by concentrating on the strength and capability of the community to steer away from the disaster's impacts once it occurs, without being dependent only on government assistance. It is essential to not only focus on the tangible assets of the community but also their intangible assets to assist the community and the institutions in facing the disaster's impacts. Thus, the purpose of this paper is to investigate the elements of the asset-based approach that may assist institutions in the recovery process of flood-affected areas, with a focus on three districts in three Malaysian states. These states are Kuala Krai (Kelantan), Kemaman (Terengganu) and Kuantan (Pahang). The data is collected through a focus group discussion with the agencies involved in the recovery process of the victims by utilizing the Nominal Group Technique (NGT). The data collected is later analysed by using content analysis through Nvivo software. Four themes emerge from the data analysis highlighting the importance of community assets and their involvement in the process. Four essential elements identified in the study to assist the institutions in the process are resources,



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methods, functions, and evaluation. These elements are crucial to the development of the institutional framework that may help the victims' recovery process.

#### **Keywords:**

Asset-Based Approach, Post Disaster Recovery, Tangible Asset, Intangible Asset, Flood Disaster

#### Introduction

Natural disasters, such as floods that occur annually in Malaysia, act as constant reminders for the communities to be engaged in the disaster recovery process to enhance their resilience in tackling the issue. Tosh et al. (2014) stated that when a disaster strikes, communities depend on the government to adapt to the new situation and assist in mitigating the disaster's adverse effects, including safeguarding critical facilities, securing supply chains, and ensuring population wellbeing. Thus, increasing their vulnerabilities towards the disaster, especially those with lower income.

UNISDR (2015) stated that to respond quickly and to "develop more" in terms of regeneration and restoration, disaster recovery planning must be addressed as one of the main priorities to be handled at all levels of community, local, federal, and even global. As such, The Sendai Framework for Disaster Risk Reduction 2015–2030-pointed post-disaster recovery acts as one of the main elements that need to be planned as stated in order to "Build Back Better." Post-disaster recovery is described as an action or series of acts done with the goal of rebuilding or enhancing the living conditions of the impacted population to pre-disaster levels while mediating and preparing appropriate disaster risk reduction measures.

The asset-based approach is a technique that encourages the institution to involve the community because it emphasizes the community's value in determining its needs through the utilization of its tangible and intangible assets after a catastrophe to make a full recovery from the aftermath of the disaster (Freitag et al., 2014). Furthermore, many difficulties and ambiguity arise in the wake of disasters. While it may be challenging to draw the community in the effort but community engagement through post-disaster recovery may foster optimism, trust, and faith in the government and inwardly affect their resilience towards the disaster.

The traditional approach to the asset-based approach emphasizes the needs and shortcomings of the communities rather than their strength, resources, and assets to boost resistance (Renkly and Bertolini, 2018). On the other hand, an asset-oriented lens sees assets and threats as equally critical and underlines those elements which increase community resilience (Tracey et al., 2017). Hitherto, Morgan and Ziglio (2007) introduce an asset model for integrating asset-based approaches for public health. This paves the way for an asset-based approach to be implemented into disaster management as it accentuates the identification, classification, and mobilization of the assets to assist in the post-disaster recovery, in contrast with the traditional approach that focused more on the vulnerabilities of the community (Renkly and Bertolini, 2018).



Hence, the paper aims to discuss the elements in an asset-based approach that may assist the institutions in the post-disaster recovery process. The following segment will present the literature review, research methodology of the study, emergence themes, and the findings of the study.

#### **Literature Review**

Flood is regarded as one of Malaysia's most severe environmental hazards. According to Shaluf (2006), it is an occurrence that disrupts the daily operations of the community and posed a threat to the climate, people, and assets. Floods threaten an area of over 32,984.7 square kilometers per year which affects around 5.67 million people in Malaysia. In conjunction, DID (2003) stated in the 1980s, the disaster's physical damage was estimated to be worth RM100 million, but by the 1990s, it had risen to RM915 million. Flood risk exposure has increased due to a variety of aspects. Unplanned urbanization, rapid development, environmental deprivation, and climate change are among them. These events exacerbated and increased the regularity of flash floods, especially in urban areas.

#### National Security Council (NSC) Directive No. 20

Declared on 11th May 1997, the key tool and strategy used to coordinate and control disasters on land were NSC Directive No. 20. The goals of this strategy were to provide a comprehensive emergency response system that could support various agencies participating in the act at all phases of disaster management, both before, throughout, and after the disaster, by deciding and assigning specific duties and responsibilities to the agencies involved. The policy's goals are divided into seven objectives.

- ➤ Decrease fatalities and property loss
- > Keep the tragedy under control.
- ➤ Coordination of recovery and reconstruction efforts
- ➤ Defining emergency response policies based on the severity of the disaster
- ➤ Ecological preservation
- > Rebuild the community
- ➤ Establishment of a system to assess the relevant agencies' responsibilities and functions in the disaster's management.

To achieve these objectives, three levels of management are designed at the district, state, and federal levels, namely the District Disaster Management and Relief Committee, the State Disaster Management and Relief Committee, and the National Disaster Management and Relief Committee.

The National Disaster Management Agency (NADMA) is currently in charge of disaster management in Malaysia. NADMA was established under the Prime Minister's Department in October 2015. NADMA serves as a new focal point for crisis management in Malaysia, merging the Disaster Management Division of National Security Council (NSC), Special Malaysia Disaster Assistance and Rescue Agency (SMART), and the Post Flood Recovery Unity of the Prime Minister's Department.



#### Asset-Based Approach

According to the literature, the asset-based approach has been used on several concepts and theories; however, the core concept behind the applications is the ability of the assets to be used as the medium to reduce risks.

It is due to the fact that this approach urges the community to use their own ability and assets to help the institutions and others rather than being dependent on others to recover. This approach aims to raise the community's awareness of their own strength and opportunities to assist others during the bitter moments, whether with tangible or intangible assets that they owned. With the understanding and knowledge on how they can mobilize their assets through the institution's assistance, they will be able to recover faster and become more resilient against the impacts of the disaster.

Several studies have been carried out on asset-based approaches, and the basis of this technique is ideally presented. According to GCPH (2012), "The asset-based approach encourages communities to mitigate the implications of a catastrophe by helping them determine and develop the kinds of assets that can change their lives even after a disaster has hit them." It suggests how to leverage their assets constructively.

Although this approach concentrates on competencies, talents, and assets within the community, deficiencies are not overlooked in any ecosystem or subsystem. The emphasis on the critical assets in a system is addressed and confronted (Ebersohn and Eloff, 2003). According to Friedli (2012), by their nature, assets-based approaches are about strengths and durability or what allows individuals and populations to live, adapt and thrive regardless of harsh environments.

The asset-based methodology is discussed for a considerable time with proof from literature. It was first initiated in the 1990s by research activities in the field of community building by Kretzmann and McKnight. They called into question the traditional approach to tackle rural issues (which means relying on utility providers and agency funds) and noted that collective assets should be used as foundations that can Save them out of desperation through the effects of natural disasters. At the first stage, the approach focused on tangible assets within the community (Ebersohn & Eloff, 2006). They thought it would be better for people to survive a crisis with tangible assets as it will make them less vulnerable to a catastrophe due to the liquidity of the assets and their ability to provide a sense of belonging. However, after some period, studies have argued that only the recovery of physical assets is insufficient for a holistic recovery to happen. Intangible assets in the forms of skill, talents, and experience of the community are equally important to help the community to recover and creates stable, strong communities that can confront any difficulty they can afford.

#### **Research Methodology**

This study employed a qualitative case study design to provide clear perspectives of the post-disaster recovery process within the organizations involved in Malaysia based on National Security Council Directive No. 20. The institutions involved are National Disaster Management Agency (NADMA), National Security Council (NSC), Social Welfare Department, Malaysian Public Works Department, State Secretary, and District Officers. These agencies are selected based on their engagement and contribution in the post-recovery works



based on the management levels of disasters in NSC Directive No. 20 and based on the advice by NADMA. As the study aims to investigate the flood-affected areas after the devastating floods of 2014, three districts in three states are selected as the case studies. These states are Kuala Krai (Kelantan), Kemaman (Terengganu) and Kuantan (Pahang). They are chosen based on the relatively high impact that they received from the disaster. One of the areas that indicate the high impact received by these states is their number of evacuees. Borneo Post (2014) conveyed that the most evacuees were from Kelantan with an estimation of 20,468 to 24,765 victims, while Terengganu stated a total number of 21,606 people and followed by Pahang, which is 10,285 people.

A focus group discussion is held based on the scopes of the study with the relevant agencies involved in the post-recovery process identified in those three districts. It is done to gather data from a large number of participants at the same time. As said by Onwuegbuie et al. (2009), as a focus group discussion taking place in a more comfortable setting, the participant will be able to engage, share and discuss their ideas, thoughts, and perception of the events in a more casual way to ensure the seamless transmission of the topic's concept. This approach, according to Wilkinson (2004), is used to collect qualitative data from a group of people in an unstructured context, with an emphasis on particular topics or problems. Besides, among the advantages includes being inexpensive, fast, promoting a sense of belonging within the group, increasing their ability to think and share within the group, and being more effective (Krueger and Casey, 2000).

The invitation to join in the discussion was forwarded to the agencies mentioned via fax and email. They are required to nominate the name of the officers that will attend the discussion if they were interested with a requirement that the officers listed are involved in the management of the flood disaster in 2014 and 2015 or possess experience in the management of flood disasters or the recovery of the flood disaster. Besides, the nominated officers must also own the expertise or knowledge in the tangible and intangible asset recovery after the disaster, such as initial recovery, evacuation process, or title issuance. Twenty-eight letters were fax and email to four federal agencies, fifteen state agencies, and nine district agencies, as stated below. Twenty-one participants participated in the discussion. The discussion is conducted by using Nominal Group Technique (NGT) which comprises Four primary steps - silent generation, round-robin, party debate, and vote (ranking or rating). In the meantime, their response to the issue discussed is documented. The transcript was later analyzed and coded by using content analysis through Nvivo software. For each transcript, a memo was composed to interpret the details and illustrate emerging themes. The coding results were reviewed after analyzing the notes in order to determine the study's themes.

**Table 1: Invited Agencies for the Focus Group Discussion** 

Level	Agencies
Federal	1. National Disaster Management Agency (NADMA)
	2. National Security Council
	3. Public Works Department
	4. Social Welfare Department
State	1. State Secretary of Kelantan, Terengganu, and Pahang
	2. National Security Council for state of Kelantan, Terengganu, and Pahang
	3. Public Works Department for state of Kelantan, Terengganu, and Pahang

- 4. Social Welfare Department for state of Kelantan, Terengganu, and Pahang
- 5. Civil Defense Department for state of Kelantan, Terengganu, and Pahang

#### District

- 1. District Officers of Kuala Krai, Kemaman, and Kuantan
- 2. Public Works Department for the district of Kuala Krai, Kemaman, and Kuantan
- 3. Social Welfare Department district of the district of Kuala Krai, Kemaman, and Kuantan

### Silent Generation

• At the start of the FGD, 5 10 minutes will be offered to participants to quietly discuss or document their ideas in answer to a question asked.

### Round Robin

• The facilitator will invite the participants to share their ideas in round robin fashion (one or more response per person for each time). The answer will be recorded in the flip chart. Clarification in response to questions is encouraged.

## Group Discussion

 Participants are invited to explain and clarify the ideas. All ideas need to be discussed to ensure understanding from all members of the groups.
Participants can remove, include or change ideas and create thematic groupings based on their understanding of the issues.



• Participants are required to vote in terms of providing ranking and rating tothe ideas that should be prioritized based on the questions.

Figure 1: Key Stages of Nominal Group Techniques

#### **Discussions**

There are four essential elements of the asset-based approach that may assist the organization in the post-disaster recovery process derived from the discussion. They are resources, methods, functions, and evaluations.

#### Resources

Resources are critical in an asset-based approach because it recognizes the capacity of the community's financial, social, and physical assets to help them in times of need. It is to ensure that there is the minimum dependency on the government agency alone during and after the disaster. For instance, the flood crisis, especially in 2014, has forced the whole country to pause and re-examine its ability to cope with disaster as well as during the recovery period. With an approach in which the community is trained and organized in the recovery works by using the skills, knowledge, and experience that they have, the community will become a "resource" rather than merely a victim during the disaster. Figure 2 shows four types of resources within the community that will assist in the recovery process.

Community's contribution refers to the skills, knowledge, experience, and physical assets of the community that they can use to assist the recovery process. According to the discussion, recovery starts as early as when the disaster occurs. Hence, to hasten the recovery process, it is essential for the community to be ready to contribute the skills, knowledge, and even their physical assets as boats or cooking skills to perform some tasks in helping the community in a dire period. Aside from that, their ability to anticipate the incidence of a flood event may be a plus in assisting the government in providing early warning services to the community so that harm to the community is minimized. Associations mean communities of people who volunteer to do something helpful and optimistic for their community. They emphasized the principle of voluntary work, a spirit of the community, and an individual organization as the defense of the community from governmental assistance. They believed that this would ensure a holistic recovery and eliminate and decrease dependence on others' help.

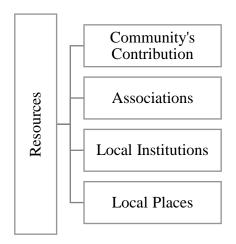


Figure 2: Four Resources within the Community

Meanwhile, local institutions refer to the government body that acts as a primary shield for the community to deal, enforce, and monitor the post-recovery process in the affected state. The essence of an institution focused on the community is it serves as a platform for community wellbeing and seeks to be constructive rather than directive. The goal of the local institutions is to construct the damage control and evaluation report for post-disaster recovery and organizing the supports and decision-making to ensure the community is able to take refuge during and after the disaster.

Local places refer to small, local, curbed areas that people relate to as their shared place, such as neighborhood, village, town, etc. Local places provide an ideal threshold within which These resources can be brought into the right relationship with each other to become connected and mobilized.

#### Methods

The second element noted from the discussions with the respondent is the method for the assets to be used productively in assisting the institutions during the recovery process. First, it needs to start with the mindset and willingness of the community themselves to help others, whether it is on their own or groups of people without any help from the local institutions or NGOs. Second, they need to look at a bigger picture as to what they can do with a bit of assistance



from the government, and finally, once they determine what are the tangible and intangible assets that they can contribute and how they can mobilize the assets, they need to decide the assistance that they need in order for the smoothen the process. During the focus group discussion, the role of the institutions and agencies and how NGOs such as MERCY can be of help during the recovery process are discussed. The cooperation with these NGOs is seen as an opportunity as they could provide financial assistance to the victims, relief materials, human resources, medical aid, and so forth.

#### **Functions**

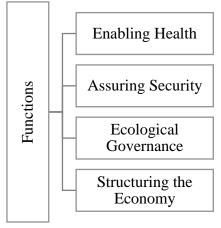
The aim of the asset's identification and mobilization during the disaster recovery process is to ensure the functions of the community can be accomplished. There are four functions identified in the study, as shown in Figure 3.

First, efforts to strengthen the health of the community are essential to build resilience as a healthy population is regarded as better to withstand and recover from the disaster's aftermath. Furthermore, stronger, and more inextricably connected communities are better adapted to face distress or avoid damage in a catastrophe. This includes having plans evacuations, safe shelters for flood victims with basic amenities such as space, clean water supply, electricity, self-cleaning facilities, and always safe to use by Department of Social Welfare at each of the affected areas.

Second, it is crucial for the community to feel safe and secure during a disaster. Coordinating and leading the community to plan in case of the worst and how they can use their assets will be helpful for them to be prepared when disasters occur and prevent panic within the community.

Third, ecological governance needs to be one thing to be considered in minimizing the vulnerability of the affected area. It is because by understanding the ecosystem's dynamics and coping mechanism as well as its response to coastal hazards, the institutions will be able to plan how the vulnerability of the coastal area can be diminished. Moreover, the initiatives taken could also mitigate the scale of the disaster.

Fourth, the community needs to be educated on how to build a resilient economy by being less dependent on only assistance from the government to recover, such as by creating their own brand and income through local mini-mart or using their skills such as batik canting to sell their artworks. These will help the local community to grow and become less vulnerable to the aftereffects of the disaster.



**Figure 3: Four Function of the Community** 

#### **Evaluations**

The fourth element in the asset-based approach is the evaluation of the asset-based approach process during the post-disaster recovery. It is to measure whether the primary goals of the approach to hasten the recovery process through the community's efforts are reached. There are three guiding principles in the approach evaluations. They are maximization of exchange the resources, maximation of associational interaction, and maximation of community participation. Maximation of exchange of resources implies that the more people contribute to their community wellbeing, the healthier, safer, and more resilient the community will be. At the same time, the maximation of associational interaction indicates that communities (local people and institutions) need to work together hand in hand to recover faster. In contrast, maximation of the community participation checks whether the association within the community are coming together to talk about what they can do as a team and taking appropriate measures.

#### Conclusion

In conclusion, the paper discusses the elements of the asset-based approach that considered to be helpful by the institutions in the flood recovery process. Through the data analyzed, there are four themes that emerged as how the asset-based approach can be utilized to assist in the recovery process of the community. They are resources of the community, methods, functions, and evaluations. However, although there is an abundance of assets owned by the community to assist in the process, however, it cannot be done by only the community on their own. They need to be included, monitored, and guided in the process by the institutions to ensure systematic and efficient ways of assets mobilization can be carried out. Furthermore, the current policy on disaster management used in Malaysia also focuses on the top-down approach instead of the bottom-up approach in handling the disaster. Hence, it is recommended that future research need to be carried out on how these communities can be fully engaged during the process with the institutions to hand in hand hasten the recovery process.

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