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## Developing Tourism Industry and Host Community Resilience through Crisis and Disaster Management Planning

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### Abstract

This paper aims at assessing the impact of crisis and disasters to the communities involved in tourism and the tourism industry, and at identifying gaps that should be addressed for better crisis and disaster management. The research employs interviews and focus group discussions (FGDs) as its data collection methods. Two disaster-prone destinations were chosen for this study, one in Yogyakarta Province and the other in Bali Province. It is revealed that tourism planning in disaster-prone destinations has not involved all parties whose roles are important in disaster mitigation. Proactive measures are still limited. Communication problems in tourism crises and disasters are also crucial to be reorganized.

**Keywords:** Resilience, Crisis, Disaster, Tourism, Planning

### Introduction

Tourism is among the top five export earners in Indonesia. International tourists' arrival to Indonesia reached 14.5 million in 2017 (Ministry of Tourism, 2018) and the government is targeting 20 million international tourists' arrival in 2019. Despite the positive growth, tourism is also a highly volatile industry, which is easily affected by safety and security issues such as wars and terrorism, health issues, and natural disasters. Indonesia is one of the world's most vulnerable countries to natural hazards namely earthquake, tsunami, flood, landslides, volcanic eruption, extreme weather condition, extreme sea waves, drought, and forest fire. In this context, tourists are more susceptible to hazards due to their lack of understanding and experience toward places they visit.

The decision to travel to a particular place is influenced by the image that people hold of a destination. Negative images can persist for many years and have an impact, which lasts for much

longer than the disaster or crisis. An approach for crisis and disaster management in tourism is thus needed to mitigate the impact of crisis and disaster, address negative destination images and communicates recovery actions and activities widely. This will improve communities and tourism industry resilience towards crisis and disasters. Resilience is the ability of a system to reduce the chances of a crisis occurring, mitigate the impacts, and recover its essential structures and functions quickly (COMCEC Coordination Office, 2017).

This paper aims at assessing the impact of crisis and disasters to the communities involved in tourism and the tourism industry in Indonesia. It is also aimed at identifying gaps that should be addressed for better crisis and disaster management, in particular by investigating if crisis and disaster management have been considered in planning making process in tourists' destinations.

This study is conducted in two areas in Indonesia, namely Yogyakarta Province and Bali Province. The two provinces were chosen based on the occurrence of disaster and crisis in tourists' destinations. Yogyakarta lies in proximity to one of the world's most active volcanoes, Merapi Volcano. The province was also hit by earthquake in 2006. Other disasters that have occurred in the province have also been identified by the Regional Agency for Disaster Mitigation of Yogyakarta as risks, such as floods, landslides and social disaster. On the other hand, Bali was chosen for this study due to its experience in dealing with the eruptions of Agung Volcano in 2017 and 2018, and in dealing with magnitude 7.0 earthquake and the aftershocks that hit the neighboring island of Lombok which severely affected the population and the tourism Industry in Lombok as well as having a lesser impact on Bali.

### ***The Conceptual Framework***

Currently, the tourism literature has little to offer governments as they prepare for the unexpected and cope with the impact of disasters (Prideaux and Cooper, 2003). Ritchie (2004) calls for the contribution of different research disciplines to address how a destination can recover from crisis, and mentions the discipline of communication and information systems management as one of those. It is recognized that there are some studies that concentrate on responses at the destination region, illustrating stages and strategies to promote resilience and recovery (Faulker, 2001; Ritchie, 2008). Faulkner (2001) developed a tourism disaster management framework, which consists of phases in disaster process, elements of the disaster management responses and principal ingredients of the disaster management strategies. Phases in disaster process according to him include pre-event, prodromal (when a disaster is imminent), emergency, intermediate, long term recovery and resolution. Using Faulkner (2001) model as a starting point, Ritchie (2004) developed a strategic management framework which consists on proactive planning and strategic formulation, strategic implementation that involves responsive organizational structure, and organizational learning and feedback to ensure continual refinement of crisis management strategies.

Faulkner and Vikulov (2001) explained that the failure of tourism to embrace the notion of disaster management planning is possibly due to two things: the lack of development of theoretical and conceptual foundations for analyzing tourism disaster events and developing disaster management plans, and second, there has been little systematic analysis of previous crisis events.

They also argued that failure to articulate any tourism disaster management plan with broader disaster planning in the location could have contributed to the low level of preparedness in the sector. In addition, Faulkner (2001) notes an increasing number of disasters and crisis, which affect the tourism industry, ranging from natural to human influenced incidents. Tourists are more dependent, less familiar with local hazards and the resources to help them avoid risk (Faulkner, 2001). Even if they are a repeat visitor, they have little knowledge of the place they are visiting, and have even less knowledge of how to react, where to go, who to talk to and what the emergency procedures are in a strange destination. Due to the interconnectivity of the world, crisis in one part of the world can have a significant impact on other parts of the world. This is called the social amplification of risks as said by Ichinosawa (2006). From negative events a pattern of tourist behavior has emerged suggesting that an increase in perceived risk associated with a destination is reciprocal to its demand (Floyd, Gibson, Pennington-Gray & Thapa, 2004).

Disaster reduction policies and measures need to be implemented, with a two-fold aims: to enable societies to be resilient to natural hazards while ensuring that development efforts do not increase the vulnerability to these hazards (U.N. Commission on Sustainable Development, 2001). Hazard mitigation includes measures ranging from structural engineering and building code standards to land use planning and property acquisition (Schwab 1998). However, hazard mitigation guidelines typically have not focused on or identified the unique needs of the tourism industry. Local resiliency with regard to disasters means that a locale is able to withstand an extreme natural event without suffering devastating losses, damage, diminished productivity, or quality of life and without a large amount of assistance from outside the community (Mileti, 1999).

## **Methodology**

This research uses mainly qualitative methods, employing data collection methods namely interviews and focus group discussions (FGDs). Qualitative method is used so as to capture expressive information not conveyed in quantitative data about beliefs, values, feelings, and motivations that underlie behaviors. Interview was carried out to government officials at the Ministry of Tourism, in this case the Head of Division for Tourism Crisis Management and her three Subdivision Heads, i.e. Subdivision for Crisis Monitoring; Facilitation and Crisis Handling; and Evaluation and Crisis Documentation. The interview questioned the responsibilities of the Division, rationale for its formation – which was only started in January 2018, its role in relation to the three stages in crisis management (pre-crisis, during crisis, and post crisis), its role in delivering information – as it is under the Bureau of Public Communication, and how the Division coordinates with other parties, for example the National Agency for Disaster Management and Regional Disaster Mitigation Agency.

Two FGDs were conducted, two of them in Yogyakarta and Bali, destinations which had experienced crisis and natural disasters which affected tourists. The FGD in Yogyakarta Province was conducted in Sleman Regency, where Merapi Volcano is situated and was participated by 15 people, including disaster mitigation expert from the Agency for the Assessment and Application of Technology (within the Central Government), Head of Sleman Regional Disaster Mitigation Agency, representatives of Sleman Regency Tourism Office and the neighboring Gunungkidul Regency

Tourism Office, representative of Merapi National Park, hotel association, Merapi Lava Tour association, representatives of tourism villages, village officials, and the researchers themselves.

On the other hand, the FGD in Bali Province was organized in Karangasem Regency, where Agung Volcano is situated and was participated by 21 people. Participants in the Bali FGD include the Head of Bali Province Tourism Office, Head of Karangasem Regency Tourism Office and several other officers from the office, Head of Karangasem Regional Disaster Mitigation Agency, officers from Regional Planning Agency, 1 Public Work Office, Transportation Office, Social Work Office, and from the tourism industry representatives of hotel association, tour and travel association, and ground handling company for international tour operators.

Both FGDs were carried out with similar patterns, started with researchers' team leader presentation to give an introduction about the research, followed by presentations from two main resource persons in each FGD, and continued with the main discussion involving every participant. The main resource persons in the Yogyakarta FGD were disaster mitigation expert from the Agency for the Assessment and Application of Technology and Head of Sleman Regional Disaster Mitigation Agency. These resource persons shared information on current disaster mitigation technologies and disaster management activities that have been implemented in Sleman, respectively. On the other hand, the main resource persons in the Bali FGD were the Head of Bali Province Tourism Office who also serves as the Chair Person of Bali Tourism Hospitality – a crisis management task force formed during the 2017 Agung Volcano Eruption and Head of Karangasem Regional Disaster Mitigation Agency. The two resource persons respectively shared their experience in assisting tourists in the event of disaster and in coordinating disaster management efforts in the locality. The researchers acted as moderators of the discussions, probing questions that seeks to identify the impacts of crisis disasters to the community and tourism industry, existing strategies to cope with tourism crisis and disasters according to stages as identified by Faulkner (2001), what measures are available in improving disaster awareness, and what roles do relevant organizations play in crisis and disaster management and how they communicate with each other.

## **Results and Discussions**

The research in Yogyakarta was carried out in Sleman Regency, whereas in Bali, it was conducted in Karangasem Regency. The last heavy eruptions of Merapi happened in October 2010, with hundreds of casualties, thousands were forced to evacuate and the tourism Industry also bearing the impacts. Some of the changes caused by the 2010 eruptions include land use land cover changes in areas located around 5 kilometers from the volcano peak. What were once residential areas or villages are now prohibited and villages have been relocated to farther safer areas. In addition, sign boards for evacuation route are placed across the area. As in Faulkner's (2001) framework of tourism disaster management, these facilities are important in prodromal stage in which signs of disaster are imminent. However, from observations and FGD participated by tourism stakeholders in Yogyakarta, it was revealed that there had yet to be an effort to educate visitors about hazards and their associated risks, especially in relation to visiting a volcano.

The changing landscapes of Merapi also bring new opportunity in the form “Merapi Lava Tour”, a new tourism activity in which visitors tour the rocky Merapi slope up to the boarder of livable area. Around 1500 people are involved in the lava tour operations and as locals convey lava tours are blessing that came out of the 2010 eruption. The operation of lava tour, nonetheless, is not free from safety concerns such as accidents. Hence, the association of jeep owners has made promise to the Sleman Regency Tourism Office to improve its safety standard.

From community representatives and village officials participating in the FGD, it was known the 2010 Merapi eruption had given the community knowledge and experience they did not have before. The danger of pyroclastic flow is now widely understood and there is less resistance to evacuate compare to incidents before 2010 eruption. Another lesson learned is not to evacuate toward the river that flow lahar. These knowledge and experience gathered by the community should be included in the knowledge management system for tourism crisis and disaster management as stated by Mistilis and Sheldon (2005).

In a pilot survey involving participants of the Yogyakarta FGD, many have been involved in disaster mitigation simulation. Measures to ensure safety, security, and mitigate hazards have been done by some hotels, as according to the representative of hotel association, although examples are mostly from bigger hotels. Some hotels in Yogyakarta have had the initiatives to invite Regional Disaster Mitigation Agency to give them briefing and workshops on disaster mitigation. This has also been the case of Karangasem Regency in Bali, where Agung Volcano is situated and where beach strips are lined with hotels and resorts, disaster mitigation disseminations by Karangasem Regional Disaster Mitigation Agency (BPBD Karangasem) are only held upon requests from hotel managers. Yet disaster mitigation dissemination that involves not only individual hotels but more at large toward the tourism industry, has not really been practiced. Thus, Ritchie’s (2004) and Faulkner’s (2001) suggestions on strategies for tourism disaster management in the pre-event stage have not been implemented.

In Karangasem, tourism industry representatives that were involved in the FGD echoed the need for more socialization of the disaster-prone area map issued by BPBD. Head of Karangasem Regional Disaster Mitigation Agency admitted that BPBD’s does not have enough budget to conduct dissemination to the tourism industry, albeit the destination’s identified risks for volcanic eruption, earthquake and even tsunami. This fact is in contradictory with Ritchie (2004) who emphasized on the ability of organizations to formulate strategic plan with regards to disaster anticipation and plan. It is in fact exemplifies Faulkner and Vikulov’s (2001) statement that failure to articulate any tourism disaster management plan with broader disaster planning in the location could have contributed to the low level of preparedness in the sector. The Regional Planning Agency that was present at the Bali FGD indicated that they would support the BPBD in soliciting more budget for disaster mitigation. At the time being, BPBD is still concentrating on assisting communities who are relocated from their villages located within 5 kilometers radius from the crater of Agung Volcano. Areas outside the 5 kilometers radius are considered safe and life including tourism resumes normally.

In Sleman, Yogyakarta as well as in Karangasem, Bali, amid the fact that tourism is a very important sector in the economy, disaster planning that is designed especially for tourism industry still needs to be improved. Moreover, according to an officer representing Office of Public Works and Public Housing who attended the Karangasem FGD, although spatial layout and regulations regarding buildings already exist, they have not been fully complied by the tourism industry, for instance in relation to the safe distance of buildings from the coastline.

From officials representing Sleman Regency Tourism Office it is also understood that tourism master plan has been developed for Sleman, however it has not intentionally incorporated inputs from Regional Disaster Mitigation Agency (BPBD). On the other hand, the 2017 Agung Volcano eruptions, which caused the closure of Bali International Airport for several days and foreign tourists stranded for days, had triggered the initiation of crisis management task force under the Bali Province Tourism Office. The task force, named Bali Tourism Hospitality (intentionally avoiding the word crisis or disaster so as not to cause panic – according to the Head of Bali Tourism Office), is not exactly planned in the first place and has been formed as a reactive action.

Tourism industry representatives coming from organizations such as hotels, travel bureau, and ground handlers, that were present at Karangasem FGD, said that in the event of disasters that affected tourists, communication between stakeholders (government agencies, tour operators, local and foreign tourists) has not run efficiently and effectively, especially during evacuation. It is also not always clear from which agency information can be obtained, thus causing much confusion. People then tend to believe in what are available on social media, despite the accuracy of the news.

The Head of Bali Tourism Office, who was one of the main resource persons at the Karangasem FGD, conveyed that Bali Tourism Hospitality (BTH) as a crisis management task force keep evolving overtime and finally define its specific role that is providing assistance for tourists who are affected by disaster. This statement is agreed by tourism industry representatives that were also present during the FGD, who said that BTH's role is evident in July 2018 Agung Volcano eruption and in helping the evacuation process of tourists affected by Lombok earthquake. In this case, BTH plays a very important role in the "during event" phase of a tourism disaster (Faulkner, 2001; Ritchie, 2004). Not only in distributing information, but also in moving stranded tourists to airports in the neighboring East Java Province across the Bali Strait or transporting tourists that have been evacuated from Lombok Province to their next destination within the Bali Province. An officer from Karangasem Regency Tourism Office suggested that task force such as BTH should also be developed at the regency and city level with the aim of being able to deal with the problems faced by tourists when disasters struck. The Division of Tourism Crisis Management in the Ministry of Tourism who are planning on a pilot project to set up 10 Regional Tourism Crisis Management Center in ten provinces stated that some of the good practices from BTH could be adopted in other provinces. Nevertheless, BTH still faces issues resulting from unsynchronized reactions in dealing with tourism disaster, some hotels for instance still impose cancelation fees for tourists who are not able to come or stay due to disaster, causing more distress in the tourists. Another important concern, according to BTH Chair Person, is defining who should be the coordinating agency in the time of airport closure, since each organization, namely airport management, airlines, and immigration have their own procedures which are not necessarily in line with each other.

### **Conclusions and recommendations**

This on-going research aims to assess the impact of crisis and disasters to the communities involved in tourism and the tourism industry and identify gaps that should be addressed for better crisis and disaster management. Natural disasters in the two research areas, especially Sleman Regency in Yogyakarta and Karangasem Regency in Bali have affected some communities in having to evacuate to safer areas. Some areas in both the slopes of the two volcanoes are even declared as closed areas. Tourism even though was affected when disaster happened, had now resumed to normal. The disasters however still triggered questions from international tour operators and potential tourists wanting to make sure about safety – in particular Bali's case which had been experiencing volcano eruptions these last two years and in more recent time, earthquakes. Hence, valid and quick information is especially important. From this research, it can be concluded that tourism planning in disaster-prone destinations has not involved all parties whose roles are paramount in disaster mitigation. Although measures to ensure safety, security, and mitigate hazards have been done by some hotels, and some sign boards for evacuation route are placed, there has yet to be an effort to educate visitors about hazards and their associated risks. Moreover, there is still few evidence of disaster mitigation dissemination that involves tourism industry at large, and not only done sporadically by individual hotels and sites. Tourism industry and host community's resilience toward disasters can be improved through education, handling procedures, and evacuation drills.

This research also found that there are still issues in delivering valid and quick information when tourism crisis and disaster occur. Information management is important at every stage of the crisis and disaster (before, during and after or during recovery) and is crucial to be reorganized, especially when dealing with foreign tourists and international tour operators.

One of the relevant agencies whose role needs to be strengthened in the pre-event stage of the tourism disaster management framework, is the Regional Disaster Mitigation Agency (BPBD) who should work more closely with the tourism sector in disaster mitigation. It is recommended that cost constraints in realizing BPBD's role as a leading agency in tourism disaster mitigation be addressed by conducting collective dissemination for the tourism industry with cost sharing practice. This way, disaster mitigation strategies will not only be installed in 4 and 5 star hotels but also simple lodgings. In addition, every disaster-prone tourist's destination should consider forming tourism crisis management center dedicated to assist tourists and provide valid information in a speedy manner.

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