Jurnal Ilmu Komunikasi | Vol. 12, No.2, September 2024 Hal. 104-117

P-ISSN: 2252-665X | E-ISSN: 2176-1889

# SAFETY-TOURISM: SAFETY INFORMATION MANAGEMENT IN DISASTER TOURISM

Zein Mufarrih Muktaf<sup>1a</sup>, Ninis Agustini Damayani<sup>2</sup>, Herlina Agustin<sup>3</sup>, Nugroho Dwi Hananto<sup>4</sup>

<sup>1</sup>Universitas Muhammadiyah Yogyakarta, Department of Communication Science, Indonesia <sup>2</sup>Universitas Padjadjaran, Department of Information and Library Science, Indonesia <sup>3</sup>Universitas Padjadjaran, Department of Mass Communication Science, Indonesia <sup>4</sup>Badan Riset dan Inovasi Nasional (National Research and Innovation Agency), Indonesia

Email: zein@umy.ac.id

Diterima: 02 Juni 2024 Direvisi: 15 Juli 2024 Disetujui: 30 September 2024

#### Abstrak

Pada tahun 2018 telah terjadi tiga kali kecelakaan di Wisata Volcano Tour Gunung Merapi, Provinsi Yogyakarta, Indonesia. Pada saat itu wisata Gunung Merapi sebagai wisata berbasis masyarakat mengalami kendala dalam pengelolaan dan pengawasan standar keselamatan wisata dikarenakan jumlah komunitasnya yang banyak sehingga sulit untuk melakukan koordinasi. Sebagai wisata bencana dengan risiko tinggi, diperlukan pengelolaan wisata keselamatan yang baik, salah satunya adalah pengelolaan informasi keselamatan bagi wisatawan agar tujuan dari pemahaman wisata keselamatan dapat tercapai. Penelitian ini bertujuan untuk mengetahui bagaimana pengelolaan informasi keselamatan pada wisata Volcano Tour Gunung Merapi dan saat erupsi freatik pada tahun 2018. Metode penelitian yang digunakan adalah pendekatan studi kasus. Temuan penelitian ini adalah pertama, belajar dari fenomena Volcano Tour Gunung Merapi, keselamatan wisata menjadi hal yang krusial, khususnya pada wisata massal. Kondisi keselamatan menjadi penting karena wisata bencana memiliki risiko yang tinggi. Kedua, keselamatan wisata merupakan pengurangan risiko kecelakaan. Ketiga, mitigasi keselamatan wisata terbagi dalam dua perspektif yaitu struktural dan non-struktural. Pada non-struktural, penerapan informasi keselamatan dilakukan melalui dua cara yaitu praktik media dan literasi pengurangan risiko. Keempat, keselamatan wisata berkorelasi dengan infrastruktur yang mendukung akses keselamatan dan pentingnya sumber daya manusia yang andal dalam keselamatan wisata.

Kata kunci: Keselamatan wisata, Wisata bencana, Merapi Volcano Tour, Information management, mass tourism

#### Abstract

In 2018, there were three accidents during the Mt. Merapi Volcano Tour, Yogyakarta Province, Indonesia. Volcano Tour, as a community-based tourism, has difficulty in managing and supervising the tourism safety standard due to the high number of its community members, making it difficult to coordinate. As high-risk disaster tourism, good management of safety-tourism is necessary, one of which is the safety information management for tourists so the purpose of understanding safety-tourism is achieved. This research aimed to know how the safety information management was during the Volcano Tour and Phreatic Eruption in 2018. This research method used study case approach. The findings of this research are, first, learning from the Volcano Tour phenomenon, safety-tourism has become crucial in mass tourism. Safety condition is important because disaster tourism is high-risk. Second, safety-tourism is accident risk reduction tourism. Third, safety tourism mitigation is divided into two perspectives: structural and non-structural. In non-structural, the implementation of safety information is conducted in two ways: media practice and literacy risk reduction. Fourth, safety tourism is correlated with infrastructures that support safety access and the importance of reliable human resources in safety-tourism.

**Keywords**: Safety-Tourism, Disaster-Tourism, Merapi Volcano Tour, Information management, mass tourism

#### INTRODUCTION

In 2018, there were accidents during the *Volcano Tour*, Mount Merapi, Yogyakarta, Indonesia (Hanafi, 2018). The first accident happened on January 7, 2018 due to brake failure of the tour's vehicle and hit a bus. One passenger was thrown out of the vehicle. This accident was viral on social and mass media. The second accident happened on May 6, 2018 in which one passenger died and four injured.

These two accidents gained the attention of many. Indonesian Offroad Federation (IOF) spoke up regarding the condition of the tour vehicles which were all SUV. On the Facebook page of Info Cegatan Jogja (ICJ), a community communication forum of Yogyakarta, IOF provided many recommendations. ICJ is a discussion forum of Yogyakarta community, the placewhere the Volcano Tour is established in, followed by almost 100 thousand users from various social backgrounds. However, the condition did not get better due to various factors.

*Volcano Tour* is a tourism object in Sleman Regency, Yogyakarta Province, Indonesia. It is located in the southern part of Mount Merapi, around 7-8 km from the peak. According to Atlas Tropische van Nederland in 1938, Mount Merapi is located at 7 °32.5 ' South Latitude and 110 °26.5' East Longitude. The height of Mount Merapi is at 2914 above sea surface (Triyoga, 2010). Volcano Tour is at the southern part of Mount Merapi. Volcano Tour was established post Mount Merapi eruption in 2006. During the 2006 eruption, two rescue team members died in the bunker at Dusun Kali Adem (Muhammad, 2011). Before the eruption in 2006, Kali Adem was a natural tourism area. A large bunker was made for the tourists' safety in case an eruption occurs. At that time, two rescue team members, who were busy saving others, did not manage to escape the pyroclastic flow (Interview, Subagyo, 2017). The local people call Pyroclastic Flow as hot clouds or *wedus gembel*, which literally means sheep because the clouds look like the sheep's wool. Pyroclastic is a collapsing lava dome that forms clouds at high speed towards lower plains and high temperatures (Neri et al., 2003). Kali Adem Bunker is a dark tourism object. Dark tourism is a tourism that uses death artifacts as the attraction (Goatcher & Brunsden, 2011).

Uniquely, after the Mount Merapi Eruption in 2010, the disaster area became an attraction. Unlike the 2006 eruption, after the 2010 eruption, the road to Kali Adem area was heavily damaged. For the tourists to be able to reach Kali Adem, the local people, especially the 2010 eruption survivors, offers motorbike taxi service. The tourists were usually sympathetic towards those people, thus they sometimes gave them tips.

In the early days, Subagyo – the founder of *Volcano Tour* – called it as the tourism of "pity" because tourists came to see the post disaster condition and feel sympathetic for the victims. In fact, more and more people visited and the victims' income increased. The increasing income enables them to replace their taxi motorbike with better and more expensive trail motorbikes. Trail motorbikes can easily pass through the damaged roads due to the 2010 eruption.

Years later, many trail motorbikes are replaced with jeep. Jeep is how Indonesians call SUV. Jeep is not mentioned specifically for a certain type of SUV "Jeep", but it also applie for all other kinds of SUV, like Land Rover, Land Cruiser (Hardtop), Jimny, Jeep Willys, and so on (Interview, Purnomo, 2017).

On May 11, 2018 at 0.740 AM, Mount Merapi suddently released a big gust rom the crater, making the people to panic. BPPTKG (Center for Investigation

Technology Development of and Geological Disaster), a governmental agency for volcano research observation, through the Head of Mount Merapi Division Budi Santoso, mentioned it as a phreatic eruption. Phreatic eruption is a minor or small eruption. Phreatic eruption is gas, water and rocks that are fragmented. These rocks are then mixed and melted (Kaneshima et al., 1996). Not only once, one week later, on May 21, 2018, multiple eruptions happened in one day, which were at 01.25 AM, 09.38 AM and 17.50 PM. At 22.00 PM. BPPTKG announced level 2 alert status (BPPTKG, 2018).

After the phreatic eruption, *Volcano Tour* had a significant decrease in visitor number. According to Rizal (*Volcano Tour* Operator), the decrease can be seen from how many tourists rented their jeep. This decrease was due to the eruption news on mass media. Although BPPTKG said that the danger zone was 3 km from the peak and other zones were deemed to be safe, yet that information did not increase the number of visitors.

Indonesia is located on the ring of fire with a lot of volcanoes. Mount Agung Eruption, Bali in 2017 or the eruption of Sileri Crate at Mouny Dieng, Central Java on July 2, 2017 have made people realize the importance of safety-tourism. Not only on Mount Agung eruptions case that impacted Bali's tourism, the earthquake in Lombok Island on August 5, 2018 also affected the Lombok's tourism, especially in Gili Trawangan.

Lombok Earthquake became a political commodity because Indonesian Government was focused on Asian Games in Jakarta and Palembang. Opposition parties suppressed the government to declare Lombok Earthquake as a national disaster. The central government maintained its decision, believing that it was still handleable by the Provincial Government. The central government's

decision was considered as a political trick due to the tourism visit and Asian Games event at that time (Hafil, 2018). Declaring Lombok Earthquake as a national disaster would affect many aspects, such as the tourism visit, Indonesia's safety image, and Asian Games event.

As the country with the most active volcanoes, including the historical Lake Toba Eruption (70,000 years ago), Mount Krakatau (1883) and Mount Tambora (1815) as well as Indonesia's position in between of three tectonic plates: Eurasia, Paciic and Indo-Australia (BMKG, 2017), Indonesia becomes a country with high disaster risk. On the other side, Indonesia has natural sceneries that many countries do not have. The beauty of Indonesian nature made government realize the potentials and made tourism prority program (Muktaf & Santoso, 2018).

In disaster tourism (Muktaf, 2017), safety-tourism is an important discourse. Just like in any other disaster tourism attraction, *Volcano Tour* requires natural condition to make the tourism interesting. However, natural condition is accident-prone. This explains why many *Volcano Tour's* vehicles to have accidents.

Volcano Tour Jeep Taxi is incorporated in the tourism jeep tour vehicle organization called the Merapi Slope Tourism Jeep Association (AJWLM) Merapi Tourism Jeep Association. Volcano Tour relies on the eruption of Mount Merapi artifacts in 2010, such as Petilasan Mbah Maridjan - Investige of Mbah Maridjan, Kali Adem Bunker, Alien Stone - Client Stone, and the Remaining Hartaku Museum - residual treasure museum. Vehicle and Volcano Tour support each other. Including in safety, the two are interrelated, the image of a bad jeep tourist vehicle taxi will affect the image of the Volcano Tour as well.

It seems that the management of safety tourism is not well managed by the *Volcano Tour* community and Merapi jeep

tour taxi vehicles. Each taxi jeep community manages its own tourist information, not managed together. The fact is if bad conditions occur, negative information is more quickly spread, and the *Volcano Tour* does not quickly clarify. This is due to the lack of coordination of the *Volcano Tour* community in dealing with the crisis.

The question in this research is how tourism safety information was managed during the Jeep *Volcano Tour* accident and 2018 phreatic eruption. This research can become a discourse in tourism safety mitigation in the micro and macro context of tourism areas in Indonesia.

#### **Literature Review**

According to the World Tourism Organization (WTO), tourism is the activity of people who travel and settle in a place outside the usual environment, no more than one year, to spend time, business or other destinations. In this definition, tourism is still in the perspective of tourists; in definition, tourism is an integrated system that forms a business system called tourism. Weaver and Oppeman (Pitana & Diarta, 2009) said tourism is a number of phenomena of interaction between tourists, visitors, business, local government, lodging and local communities, in a tourist attraction.

Tourism is not only about tourists, but it is about the system. In the study of tourism communication, tourism is related with many elements, such as marketing communication, destination brands, tourism communication management, transportation communication, tourism communication. communication, online communication, public relations, and advertising (Bungin, 2015).

Tourism community is also called as the Tourism Awareness Group -Pokdarwis- is a community at the village level that has the task of managing tourism in the region. Communities are groups of people who occupy geographical areas that are involved in economic, political activities, and form social groups that have certain values and shared values (Rachmiatie, 2007). Volcano Tour is a community-based tourism (CBT).

In Indonesia, Community-based Tourism is commonly found in tourist villages. Tourism village is a village that lives independently with its potential, and its potential can be sold as a tourist attraction without involving investors (Hasbullah, 2015). *Volcano Tour* can be considered as a tourist village, but people do not call it a tourist village, because *Volcano Tour* is built across villages. There are 2 villages that manage this tour.

The Study on Safety and Security Tourism became an important discussion after the tragedy of the attack on the World Trade Center (WTC) on September 11, 2001. Safety and Security Tourism is the management in facing global crime and its impact on the country's image and tourism. book titled The Competitive Destinastion by J.R Brent Ritchie and Geoffrey I. Crouch (Ritchie & Crouch, 2003), discusses tourism security and safety. Nearly 10 years later, in 2012, the UN World Tourism Organization (UNWTO) and the World Travel and Tourism Council (WTTC) agreed that the issue of tourism security and safety became important (Tarlow, 2006). At a 2013 International Tourism Conference Thailand, tourism safety and security was chosen as a major theme at the conference.

The notion of tourism security and safety arises because of a country's low information management which has an impact on tourists' hesitation in coming to the country. The most dominant thing in the study of tourism safety and security is the importance of paying attention to security risks: how to minimize too high exposure - negative images - to the state, politics of the country or region, the people

in it, and also the environment around the tourist destination. The aim is to maintain a positive reputation of the tourism industry.

Tourism security focuses on the threats of crime, terrorism, war and riots. Initially the notion of security did not address health issues (the spread of viruses, bacteria and so on), and the issue of disasters (earthquakes, landslides, land shifts, eruptions, storms and typhoons), until later the idea of tourism safety emerged (Breda & Costa, 2006). Security and safety are the most important things in the tourism business. Peaceful tourism conditions are keys to the tourism business (Cavlek, 2006).

The practice of state politics in tourism safety and security is implemented through travel warnings and government policies. From the perspective communication, tourism safety and security is constructed by the mass media or personal media - social media. The image of tourism will greatly affect tourist perceptions on tourism safety and security (Irvine & Anderson, 2006). Prospective tourists certainly take into account the safety and security of tourism.

An example of the importance of image, according to Meethan (2001), is as follows: Bali, by most citizens of the world, is considered one of the most famous tourist attractions. In the aftermath of the Bali Bombing I case in 2002, and the Bali Bombing II in 2005, the level of Bali's visit remained crowded, but conversely, Indonesia was imaged as unsafe due to terrorism and various riots. Why? Because many people did not know that Bali is a part of Indonesia. The same thing happened in the other hemisphere, but reversed. In Greece, there is a tourist destination named Kos Island. The level of tourist visits was not much. The reason was because Kos Island was perceived as a part of Kosovo, an area in Eastern Europe where political conflicts and wars often occur. From this phenomenon, the image of tourism becomes very important.

Therefore the security and safety of tourism is divided into 2 perspectives. The first is tourism security and safety in a macro perspective: political perspective, state policy, mass media, image and perception. The second perspective is smaller tourism security and safety: safety and security in a micro perspective. Micro perspective focuses on governance of tourist areas.

Travel safety and security are discussed in disaster-tourism. Disaster tourism is examined by Demond Shondell Miller with his article entitled "Disaster **Tourism** and Disaster Landscape After Hurricane Katrina". Attarctions Miller sees disaster tourism as a vehicle to understand the impact of disasters through tourism (Miller, 2008). Disaster-tourism was also discussed by Potts (2006) (Miller, 2008)that a disaster tourism destination is an attraction to destruction, not an intention to help. Disaster tourism is a ritual to remind visitors not only of sorrow but also of life (Pezzullo, 2009).

The issue of safety and security in tourism globally is difficult to apply at the micro level, especially in disaster tourism (Kelman & Dodds, 2009). As a high risk tour of accidents and tourism conditions related to the disaster area, safety is important. The following are the differences in tourism safety and security in a macro and micro perspective.

Table 1. Tourism Safety and Security

Macro	Micro
State politics in tourism	Attitude and Ethics of Tourism
State policy in tourism	Accident risk-reduction in tourism area
Mass media in presenting tourism	Safety and security measures.
Tourism image	

Tourism perception in the region

Source: taken from various sources

Travel safety and security need to involve the role of information and communication. In the study information, Pearlson and Saunders (2010) explain how information is realized. Pearlson and Saunders link the relationship between data and information. Data are things that are specific, related to objective facts or observations that are independent. In the data, facts are positioned on a matter that has no meaning whatsoever but is easily understood, shared, stored and archived. Information is a selection of data whose purpose is to provide data to a person or group according to their needs and goals (Druker, 1998) (Pearlson & Saunders, 2010).

If Pearlson and Saunders (2010) explain how information is practiced as an information producer, then Wilson and his friends (Wilson et al., 2011) explain the recipients of information in the information literacy approach. As explained by Druker (Druker, 1998) (Pearlson & Saunders, 2010), information is related to the basic needs and objectives.

Information management is a form organizing, planning, controlling. demonstrating or publishing information (Paul et al., 2012). The challenge in information management is finding information needs, differentiating and publishing them according to the needs of audience. Therefore, information management becomes an important issue in tourism studies (AlAl HADOOD & Ali Mohamed BEN SALEH, 2021).

### RESEARCH METHOD

This research used a case study approach. The case study approach is the development of in-depth descriptions and

analysis of cases (Yin, 2006). The object of the study was the operator of Volcano Tour, especially in the area of Umbulharjo Village, Cangkringan Sub-District, Sleman, Yogyakarta. The research was conducted in January 2018 to August 2019.

Data collection was carried out observation participants, using on interview, and document collection approaches. Interviews are interactions in the form of exchanges, responsibilities, feelings, beliefs, motives, and information (Herdiansyah, 2013). Researchers conducted interviews with several tour operators on the Volcano Tour by random sampling. The study was limited to the jeep accident in January to the 2018 phreatic eruption. The accident had occurred in the previous year, but researchers only limited it to January and May 2018, the goal was to focus on one event. The phreatic eruption did not only occur in 2018. After the 2010 eruption, phreatic eruptions occurred in 2012, 2013 and 2014. Unlike the 2018 phreatic eruptions, phreatic eruptions that occurred in 2012, 2013 and 2014 occurred at night. While in phreatic 2018, most eruptions occured in the morning and afternoon during sunnv weather conditions. Phreatic eruption occurred in May 2018 to August 2018 with a total of 6 eruptions. Researchers limited the cases to the 2018 phreatic eruption.

## **RESULT AND DISCUSSION Coordination in Safety Standard**

coordination of The communication in the Volcano Tour organization in tourism safety is quite weak, this is due to several factors. First, large number of tourist ieep communities and relatively low intercommunity relations, this makes safety supervision of travel jeeps to not go well. According to the Chairman of the Merapi Slope Tourism Jeep Association (AJWL) Bambang Sugeng, there are 850 jeeps around Merapi with 29 communities. With that many jeeps, it is very difficult to monitor vehicle safety standards, not including other factors, including policy.

The jeep community is divided into 2 groups: the western and eastern regions. These two regions are bordered by a river called the Sungai Kuning (Yellow River). Western communities have a one-person rule that can have many jeeps. This policy opens up the opportunity for big investors to buy a lot of jeeps. A jeep can be owned by hiring a driver. According to the Eastern Travel Jeep community, the policy has an impact on vehicle safety, like the driver who was employed often did not know the condition of the car he was driving. The job of the driver is only to drive his car, not to take care of it. If damage occurs, the driver may not be aware of it. Some jeep accidents that occured on the Volcano Tour might be due to damage that was unrealized by the tour jeep drivers.

The second is the high maintenance costs of jeeps. Widodo (male, 26 years), a jeep driver from the Belantara community driving 1970 Wlangler, said that jeep car maintenance cost was quite high. On average, there is around once in 2 months for car parts replacement and other maintenance. This makes the condition of the jeep not always in good condition.

The third is professionalism. According to some jeep drivers, it is very difficult to build professional enthusiasm in tourist transportation services on the *Volcano Tour*. There are some communities that just want to make a profit but never pay attention to safety. For example: hiring a driver who is not yet proficient in driving when the demand for jeep drivers is high.

There are no formal rules to be a tourist jeep driver. There are jeep communities that are very flexible - no uniforms, no special conditions for being a car driver, but there are also communities that use uniforms, and rules of adept

driving in the difficult terrain of the *Volcano Tour*.

The January incident that killed one victim was enough to shock the tourist jeep driver on the *Volcano Tour*. All jeep drivers from all communities were involved in the rescue process to the hospital. The hospital costs were the savings from the jeep association and the jeep community that had the accident. Savings come from the contribution of members: Rp 100 thousand - \$ 6- per car/year for the association.

Western and Eastern Jeep communities have different policies. Eastern jeep community limits one person to only have one car to two cars. There is a special policy for jeep owners who give their yards or land assets to be a jeep base, which can have up to three jeeps (interview, Warsiyah owner of the MLCC tourism jeep community - Merapi Land Cruiser Community).

Western jeep communities are in areas that are not directly affected by the eruption of Mount Merapi in 2010 - not affected by pyroclastic flow and not a direct victim of the eruption disaster. Whereas, the Eastern Jeep community is dominated by people who were directly affected by the eruption of Mount Merapi in 2010 - due to pyroclastic flow. For the Eastern community, a policy that does not limit jeep ownership will have an impact on unfavorable business competition. Big investors will dominate more.

The *Volcano Tour* motorcycle taxi which turned into a tourist jeep is the idea of victims' communities in the reconstruction and rehabilitation of the economy after the 2010 Mount Merapi eruption disaster. The Western community is a tourism community that joined after the jeep's needs increased due to the development of the *Volcano Tour*.

The accidents in January and May 2018 made the Jeep *Volcano Tour* finally had to open a dialogue with the police and

the Sleman Regency Tourism Office, Yogyakarta. Although some communities have established relationships with the IOF (Indonesia Offroad Federation) by making minimum standards for safety, due to another accident, the police were involved in the process of making jeep rules of the Volcano Some communities Tour. protested over police interference because police should have punished communities that violate tourism safety, not to blame all communities.

To improve the safety of the Volcano Tour, the police made rules for all jeeps. All jeeps must comply with the car safety regulations in accordance with Indonesian law. However, this rule collided with the condition of some tourist jeeps. Many jeeps are old and have many modifications to keep it going. For example, for Willys Jeep, an American model that was popular in the era of World War II and the Vietnam War, was very far from the latest regulations in Indonesia. In Law No. 22 of 2009 concerning Road Traffic and Transport, and Minister of Transportation Regulation No. 33 of 2018 concerning Testing of Motorized Vehicle Types, a car must have a roof. For Willys, of course, it is already not as standard as in that regulation. Willys Jeep is a car without a roof, no door and some are left-steeredwhile Indonesia is right-steered. This does not include machines that are not original. Many cars's engines have been replaced, for example replaced with Toyota engines.

For Eastern jeep owners, cars that do not comply with the regulations can still escape sanctions because their cars have never passed through the country's official roads. The car is only used on village roads and in the area of KRB III (Disaster-Prone Areas III) In contrast to Western jeep tours that still use state roads. This reason finally makes negotiations more lenient. Disaster-Prone Areas III is an area that is often affected by hot clouds, lava flows, eruptions or rocks (incandescent), and

toxic gases. This area is only intended for volcanoes that often erupt. In this area, no housing and activities are allowed (Budiani & Nugraha, 2014).

The jeep community asked the Police for a solution on how to prevent the accident from happening again. Finally, the solution is to have each jeep to install frame and car standards such as the turn lights, headlights and brake lights, roof cover for open car, and the passenger shall use helmet. In addition, every Volcano Tour driver is facilitated with good driving practice in offroad conditions by the Sleman Regency Tourism Office.

## Communication Barrier between *Volcano Tour* and the Tourism Office

From the beginning, *Volcano Tour* and the Sleman Tourism Office did not reach an agreement. Regarding tourism, the Sleman Tourism Office does not interfere much. According to Fajar Radite, the Tourism Office only recognizes the jeep community in Kaliurang - West Region - because its permanent activities are not in Disaster-Prone Areas III (interviews, riders in the Merapi Jaya jeep community).

After the 2010 eruption, Volcano Tour area was de facto taken over by the local community. The Volcano Tour's retribution is for the community's income in the region. According to local residents, the Volcano Tour area is an area owned by residents that has been converted into a tourist attraction. In this condition, the Tourism Office does not dare to acknowledge the existence of Volcano Tour, because the Tourism Office must follow the rules for Disaster Prone Area III which prohibits permanent residential buildings. According to Kus Endarto, the staff of the Sleman Tourism Office said that this was the way the Tourism Office tried to comply with the law that in Disaster-Prone Areas III prohibited the existence of permanent buildings - In accordance with the Disaster Management Act No. 24 of 2007 and the Spatial Planning Law No. 26 of 2007, the KRB III area should not have permanent buildings.

If the Sleman Tourism Office Volcano Tour tourism supports the activities. Tourism Office the indirectly violate the law. Therefore, if you look at the information on tourist visits on the website of the Yogyakarta Provincial Tourism Office from 2012 to 2015, Volcano Tour is not included in the tourist attraction list in Yogyakarta Province. Although not written, Kus Endarto admitted that Volcano Tour was always included in the top 3 most popular tourist visits in Sleman before the Breksi Wall appeared, which is a community-based tourism object in the eastern region of Sleman Regency. Volcano Tour is not written in the Tourism Office. What is written is Kali Adem, which is a tourist attraction that is recognized by the Sleman Regency Tourism Office in the region. Kali Adem - before the 2006 eruption - was a natural tourist attraction, and was the entrance to the climb to the top of Mount Merapi from the South (Permana et al., 2017).

The worst relation between Volcano Tour and the Tourism Office is the emergence of the Republic of Indonesia Government Regulation Number 87 of 2016 concerning Illegal Levies. After the 2010 eruption, the retribution post for Kali Adem tourism was not active, because it was not functioning, then the retribution post was taken over by the residents. In 2017, the Sleman Tourism Service took a retribution post based on Government Regulation No. 87 of 2016. The conflict was resolved with an agreement that the postal retribution was still taken back to the Sleman Tourism Office, by dividing the profits of 40% for residents in the form of infrastructure development, and 60% for regional income (interview with Tugiyo, August 2018).

## Building the Safety Image of Volcano Tour

During the 2018 phreatic eruption, visitors of the Volcano Tour decreased dramatically. The fall in tourist visits greatly affects the Volcano Tour business. Although it has level 2 status - alert (on a scale of 1-4), and the government has said that Merapi is safe to visit outside the 3 km zone from the summit. However, the public perception regarding the terrifying eruption of Merapi has not changed - the trauma of the massive eruption of Merapi in 2010. Researchers observed that not many media belonging to the Volcano Tour community have the initiative to build a safe message about the Volcano Tour. There are only a few jeep community accounts that actively inspire photos of tourist attractions on the Volcano Tour, such as the Instragram accounts belonging to merapijeep\_86mjtc, and merapi\_jeepjaya, merapi.adventure, jeep\_wisata\_merapi\_jwm jeepmerapimilc. Information about the Volcano Tour is mostly supported by citizen journalism information accounts, such as Jogjaupdate, or merapinews, including those on Twitter and Instagram.

Whatever is done by tourists through their personal social media accounts, the reach is not significant. Efforts are still needed to be able to convey information on "safe" conditions that can reach the wider community.

In the case of an accident in the *Volcano Tour* area, there was no official *Volcano Tour* media that clarified the accident. Meanwhile, the bad news about the safety service on the Jeep *Volcano Tour* continues to spread out of control. Clarification was only answered by personal accounts that did not officially represent the *Volcano Tour*. This, of course, did not significantly affect the *Volcano Tour's* bad image after the accident.

During the phreatic period (May-August 2018), the promotion of *Volcano* 

Tour was supported by travel agencies through direct selling, by discounting prices for agencies that could bring tourists. Safe travel information is obtained from travel agents or tour guides. Meanwhile, education related to tourism safety by the Volcano Tour operators directly explained more about the attractions. For example: an explanation related to the guarantee of tourist safety in the event of an eruption. To guarantee them, the driver will explain how they are very prepared for the safety of the tour, for example, how the tour operators get information - such as through amateur radio that is directly connected to the official observer of Mount Merapi, and seismic radio waves that can be heard through their handtalky radio. Some drivers also explained that in the event of an eruption, Volcano Tour players have direct road access down quickly. The researchers noticed a rescue road that was just created after the 2018 phreatic eruption. The goal is to have an alternative road down for quick evacuation.

The communication network is an effort to ensure the safety of Jeep drivers and the Volcano Tour community to provide tourists with comfort and safety. However, it needs to be underlined that there is no information management on Volcano *Tour* in managing public perceptions of potential tourists. There needs to be a difference between managing perceptions about tourist safety before and when tourists are in the tourist area. If a prospective tourist already thinks that the tourist attraction is unsafe, then he/she will not be interested in visiting. Promotion of tourism safety on the Volcano Tour is considered quite important because of the natural and very dynamic characteristics of the tour.

## **Information-Based Tourism Safety Mitigation**

Volcano Tour has many challenges.
The most fundamental challenge is

coordination in agreeing on safety standards. As a tour that relies on natural attractions, *Volcano Tour* is also positioned as a mass tour. The advantage of mass tourism is the number of visits. Based on the tourism safety problems on the *Volcano Tour*, it is necessary to mitigate tourism safety.

Tourism safety mitigation can be made by reducing the risk of accidents in tourist areas. In the structural perspective, tourism safety can be focused in the form of infrastructure development to reduce accident risk. In the Volcano Tour, the structural perspective is related to safe car standards - safe car standards for safety, safe terrain and contours, system of first non-structural rescue signs. The perspective in safety mitigation is building an understanding of reducing the risk of tourism accidents on tourism actors and tourist visitors. For tourism actors, it is a form of responsibility for tourist safety, maintaining tourism safety conditions, and a quick response in the event of an accident.

The risk reduction understanding in tourism in a non-structural approach is built on information and communication management approach. It is divided into 2 approaches, namely normal conditions and emergency and post conditions (see Figure 1 and 2).

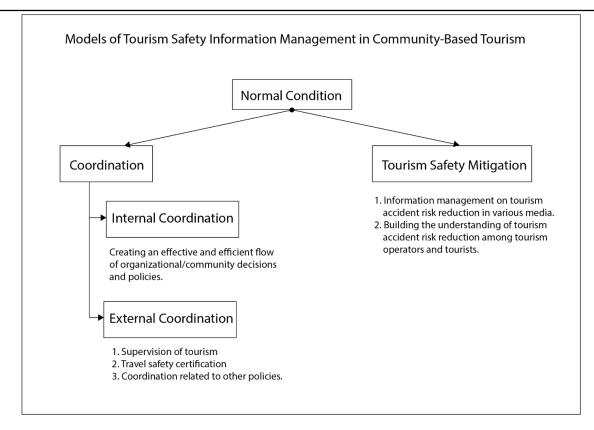


Figure 2 . Models of Tourism Safety Information Management in Community-Based Tourism under Normal Conditions.

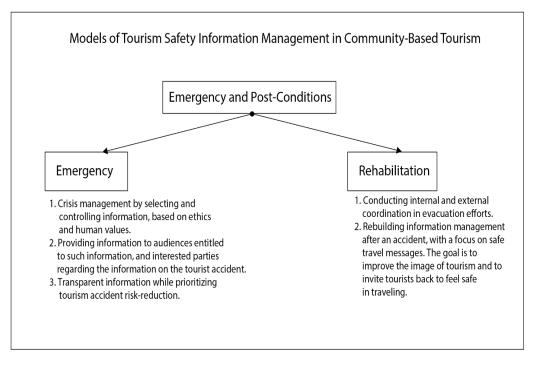


Figure 1. Models of Tourism Safety Information Management in Community-Based Tourism during Emergency and Post-Conditions.

Under normal conditions, internal and external communication and coordination are important. Internal coordination is very important to deal with emergencies that require quick decision making. Good and effective organizational conditions will speed up decision making in emergency handling.

External coordination is a form of relations with SAR (Rescue Agency), BPBD (Disaster Agency), Transportation Service, Tourism Office, Local Government, Police, and other agencies. External relations will speed up treatment, recovery and imaging.

In Tourism Safety Mitigation, tourism safety information management places more emphasis on tourism safety education. The practice is to create tourism safety information media for tourists and tour operators

In an emergency, tourism safety information management focuses on selecting tourist accident information based on ethical and human values. Controlling information so that it is not biased, and providing information to audiences who have the right to information, such as the police, journalists and other institutions. In the context of emergencies, management and information content continue to prioritize information messages based on accident risk reduction.

Rehabilitation is an effort to restore tourism conditions to normal. Rehabilitation involves internal and external coordination in restoring tourism conditions to normal. In addition, it is also a campaign strategy for safe tourism conditions with the aim of returning tourist visits to normal.

### **CONCLUSION**

Tourism safety is the main priority. Not only regarding a person's life, but it is also related to the sustainability of the tourism business. *Volcano Tour*, as a community-based tourism which involves

a lot of workers, is very vulnerable to a crisis and even bankruptcy if the tourism safety is not managed properly.

This article provides contributions to the study of tourism communication. First, learning from the Volcano Tour phenomenon, tourism safety is the main prority in mass tourism, especially in the type of disaster tourism that offers tourist attractions that are full of risks. Safe conditions are keys in the sustainability of the tourism business. Second, tourism safety is an action to reduce the risk of tourism accidents. Third, from the experience of the Volcano Tour accident, as a high-risk tour, mitigation of local safety is essential. Tourism safety mitigation is divided into two perspectives: structural and non-structural. In nonstructural perspective, the application of safety information can be cone in two ways: through media practices, through understanding tourism safety risk reduction to actors and tourists alike. Fourth, tourism safety is directly correlated with infrastructure that supports access to safety, and capable human resources.

### REFERENCES

HADOOD, A., & Ali Mohamed BEN SALEH, R. (2021). Thresold Effect of Information Technology Infrastructure on Tourism sector Development: Evidence from Top 10 African Destinations. *GeoJournal of Tourism and Geosites*, 39(4spl), 1336–1345. https://doi.org/10.30892/gtg.394spl03-776

Breda, Z., & Costa, C. (2006). Safety and Security Issues Affecting Inbound Tourism in the People's Republic China. In Z. Breda, C. Costa, Y. Masnfeld, & abraham Pizam (Eds.), *Tourism, Security and Safety* (p. 361). Elsevier Butterworth-Heinemann.

- Budiani, S. R., & Nugraha, I. (2014). Kesiapsiagaan Masyarakat Pascabanjir Lahar. In S. R. Ginarsih, U. Listyaningsih, & S. R. Budiani (Eds.), Aspek Sosial Banjir Lahar (pp. 107– 140). Gadjah Mada University Press.
- Bungin, B. (2015). *Komunikasi Pariwisata*. Prenada Group.
- Cavlek, N. (2006). Tour Operators and Destination Safety. In Y. Mansfeld & A. Pizam (Eds.), *Tourism, Securty, and Safety* (p. 361). Elsevier Butterworth-Heinemann.
- Goatcher, J., & Brunsden, V. (2011). Chernobyl and the Sublime Tourist. *Tourist Studies*, 11(2), 115–137. https://doi.org/DOI: 10.1177/1468797611424956
- Hafil, M. (2018, August 22). Asian Games dan Status Bencana Nasional Lombok. *Republika.Co.Id.* http://www.republika.co.id/berita/kolo m/fokus/18/08/21/pdsp5s318-asiangames-dan-status-bencana-nasional-lombok
- Hanafi, R. (2018, June 20). Tahun ini 3 Kecelakaan Jip Lava Tour Merapi Tewaskan 2 Wisatawan. *Detik*. http://news.detik.com/berita-jawatengah/d-4075157/tahun-ini-3kecelakaan-jip-lava-tour-merapitewaskan-2-wisatawan
- Hasbullah, A. (2015). Buku Pegangan Desa Wisata: Materi Bimbingan Teknis untuk Desa Wisata. Pustaka Zeedny.
- Herdiansyah, H. (2013). Wawancara, Observasi dan Focus Groups. Rajawali Press.
- Irvine, W., & Anderson, A. R. (2006). The Effect of Disaster on Peripheral Tourism PLaces and the Disaffection of

- Prospective Visitors. In Y. Mansfeld & A. Pizam (Eds.), *Tourism, Security and Safety* (p. 361). Elsevier Butterworth-Heinemann.
- Kaneshima, S., Kawakatsu, H., Matsubayashi, H., Sudo, Y., Tsutsui, T., Ohminato, T., Ito, H., Uhira, K., Yamasato, H., Oikawa, J., Takeo, M., & Iidaka, T. (1996). Mechanism of Phreatic Eruptions at Aso Volcano Inferred from Near-Field Broadband Seismic Observations. *Science*, *273*, 642–645. https://doi.org/10.1126/science.273.527 5.643
- Kelman, I., & Dodds, R. (2009). Developing a Code of Ethics for Disaster Tourism.

  International Journal of Mass Emergencies and Disaster, 27(3), 272–296.
- Miller, D. S. (2008). Disaster tourism and disaster landscape attractions after Hurricane Katrina: An autoethnographic journey. *International Journal of Culture, Tourism and Hospitality Research*. https://doi.org/10.1108/1750618081088 0692
- Muhammad, A. (2011). *Merapi* (Sandiantoro, Ed.). Portico.
- Muktaf, Z. M. (2017). Wisata Bencana: Sebuah Studi Kasus Lava Tour Gunung Merapi. *Jurnal Pariwisata*, 2. http://ejournal.bsi.ac.id/ejurnal/index.p hp/jp84
- Neri, A., Esposti Ongaro, T., Macedonio, G., & Gidaspow, D. (2003). Multiparticle simulation of collapsing volcanic columns and pyroclastic flow. *Journal of Geophysical Research: Solid Earth*. https://doi.org/10.1029/2001jb000508

- Paul, P. K., Sarangi, B. B., Chaterjee, D., & Chattri, R. (2012). Information Management: Emphasizing its Different Angles and View with Special Reference to Manpower Development Programme in India. *International Journal of Information Dissemination and Technology*, 2(2), 112–116.
- Pearlson, K. E., & Saunders, C. S. (2010).

  Managing and Using Information
  System: a Strategic Approach. Wiley.
- Permana, A. S., Setyowati, D. L., Slamet, A., & Juhadi. (2017). Panduan Pendidikan Kebencanaan Berbasis Petuah Merapi. Calpulis. https://books.google.co.id/books?id=e9 3cswEACAAJ&dq=panduan+pendidik an+kebencanaan&hl=id&sa=X&ved=0 ahUKEwiRm7Gxrc\_gAhUPVH0KHZt yCz4Q6AEIKTAA
- Pezzullo, P. C. (2009). Tourists and/as disasters: Rebuilding, remembering, and responsibility in New Orleans. *Tourist* Studies. https://doi.org/10.1177/1468797609360 591
- Pitana, I. G., & Diarta, I. K. S. (2009). *Pengantar Ilmu Pariwisata* (F. S. Suyantoro, Ed.). Penerbit Andi.
- Rachmiatie, A. (2007). *Radio Komunitas: Eskalasi Demokratisasi Komunikasi*.
  Simbiosa Rekatama Media.
- Ritchie, J. R. B., & Crouch, G. I. (2003). *The Competitive Destination*. CABI Publishing .
- Tarlow, P. E. (2006). A Social Theory of Terrorism and Tourism. In Y. Mansfeld & A. Pizam (Eds.), *Tourism, Security* and Safety (p. 361). Elsevier Butterworth-Heinemann.

- Triyoga, L. S. (2010). Merapi dan Orang Jawa: Persepsi dan Kepercayaannya. Grasindo Press.
- Wilson, Grizzle, Ramon, T., Kwame, A., & Chi-kim, C. (2011). *Media and Information Literacy*. UNESCO.
- Yin, R. K. (2006). *Studi Kasus, Desain dan Metode*. Rajawali Press.