

# The Importance of Opinion Leader in Disaster Communication

## Case Study: Merapi Disaster in Umbulharjo Sleman Yogyakarta 2018

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### ABSTRACT

Mount Merapi is one of the active volcanoes in the world located in Sleman Regency, Yogyakarta. Mount Merapi erupts periodically. Potential hazards that can occur are the release of hot material when an eruption occurs along with volcanic ash, hot clouds and cold lava. The potential for large natural disasters needs to be managed appropriately so that there are not many victims who cause huge material and immaterial losses. The object of this research is the Head of Panggukrejo Hamlet who is an opinion leader in the communication of the eruption of Mount Merapi in 2018. The technique of determining sources or informants in this study is to use purposive sampling technique. The purpose of this research is to determine the importance of the role of opinion leaders in the communication of the eruption disaster in the Mount Merapi disaster in 2018. The method in this study used qualitative descriptive. The results showed that in the communication of the 2018 Mount Merapi eruption disaster, the role of opinion leaders was very important. This is especially seen in: a) informing the latest condition of Merapi, b) directly leading disaster management activities of Merapi through UMMC (Merapi Care Communities), c) coordinating and communicating with the government, especially BPBDs Sleman, d) conducting coordination and communication with religion figures (takmir mosque), namely Nur Iman Pangukrejo Mosque, Baiturahim Mosque and Al-Madina Cangkringan Mosque in Sleman Yogyakarta and community leaders, namely the Head of RT and the Head of RW as Padukuhan Pangukrejo Cangkringan Umbulharjo Sleman. Disaster communication carried out by the Opinion leader, which in this case the Hamlet Head, was very effective in helping the community to mitigate disasters independently, reducing community panic and minimizing the occurrence of both material loss and casualties due to the eruption of Mount Merapi in 2018.

**Keywords:** *Opinion Leader, Role, Disaster Communication, Eruption, Merapi, Yogyakarta Indonesia*

### 1. INTRODUCTION

Indonesia is located in a disaster-prone area with various types of natural disasters on a mild and medium scale that have a negative impact on the socio-economic life and the environment of its people. The level of vulnerability has become actual based on UNESCO's International Strategy for Reduction 2006-2009 World Disaster Reduction Campaign in 2005 [1], Indonesia ranks 7th in the world in terms of the level of damage and losses caused by natural disasters. According to data from BNPB, throughout 2019 there were 3,721 cases of natural disasters in Indonesia [2].

Mount Merapi is one of the most active volcanoes in the world in Sleman Yogyakarta. Mount Merapi erupts periodically. On May 11, 2018, Mount Merapi erupted again with a phreatic eruption type. The phreatic eruption that occurred at Mount Merapi was an eruption of gas or smoke and material that was triggered by gas pressure below the surface [3]. In 2018, the Merapi eruption had a different character in the 2006 and 2010 eruptions. Hanik Humaida as the head of the BPPTKG said that the Merapi eruptions in 2006 and 2010 had clear precursors of all monitoring data parameters, but the 2018 eruptions did not provide a clear precursor which was dominated by gas releases [4].



**Figure 1** Merapi Eruption on 2018th

Potential hazards that can occur are the release of hot materials when an eruption occurs along with volcanic ash, hot clouds and cold lava. Potential for such a huge natural disaster needs to be managed properly so that there will be less casualties that may lead to large numbers of material and immaterial losses. To minimize any possible losses, disaster communication activities are a must.

Disaster communication is needed in an emergency situation, because the essence of communication in that kind of situation is for the reduction of uncertainty. Communication disaster is communication carried out during the pre-disaster, disaster relief and post-disaster with a view to minimizing casualties and salvage possessions. In a pre-disaster situation, disaster communication functions to make the process of disaster mitigation successful, namely a series of efforts to reduce disaster risk and increase the ability to face disaster threats (Article 1 paragraph 6 PP No. 21 of 2008 concerning Disaster Management Implementation). Good disaster communication includes communicating messages about disasters to the public.

The problem that occurs today is the absence of comprehensive disaster communication management, especially by the Government to communities affected by natural disasters. In this case, the priority issues that must be done are related to KIKK, namely Communication, Information, Coordination and Cooperation. This is absolutely necessary because it requires fast, precise, and accurate updates of information [5]. Needs information on the location of the victim, the number of victims and the data collection needs of the victims is urgently needed to facilitate the clerk and volunteer time to help the victims [6], as in the field with the condition of panic, anxiety and fear so susceptible happen confusion of information and the distribution of aid uneven logistics causing slow disaster management. Based on the above background, the researcher wants to know the importance of the role of opinion leaders in the communication of the eruption disaster in the Mount Merapi disaster in 2018.

### **1.1. Disaster Communication**

First, confirm that you have the correct template for Disaster communication is hugely needed in a precarious

situation, because the essence of communication in such a situation is to reduce uncertainty. Disaster communication is communication carried out during pre-disaster, emergency response and post-disaster with the aim of minimizing casualties and saving property. In a pre-disaster situation, disaster communication functions to succeed in the disaster mitigation process, namely a series of efforts to reduce disaster risk and increase the ability to face disaster threats (Article 1 paragraph 6 PP No. 21 of 2008 concerning Disaster Management Implementation). Communication disaster that either includes communicating a message about the disaster to the public, government, media, and opinion leaders can decimate disaster risk, and may save more lives from the threats of hazards impact [7].

During and after a disaster, communication becomes an important thing that must be done, especially from the government to the community affected by the disaster. In this case, during and after a disaster the need for accurate information is needed by the public and private institutions that have concern for disaster victims. Communication in a disaster is not only needed in a disaster emergency, but also important during and before a disaster. It is said that communication is the best way for successful disaster mitigation, preparation, response, and situation recovery in times of disaster.

In this case, comprehensive disaster management is required. The modern disaster management process according to Coppola and Maloney [8] consists of 4 aspects, namely mitigation, preparedness, response, and recovery which are ideally carried out synergistically by each stakeholder, especially the government by optimizing existing communication tools. Effective disaster communication involves communication and information technology with internet technology to facilitate the handling of natural disasters in affected areas. At present, technological developments have made it easier for the public to access important information about disasters that will support the efficiency of disaster management [9]. One example of Asteria's research results shows the use of the Google API application, which is a logistical assistance management of information system that will provide distances, road routes, and locations of natural disaster posts so that assistance can arrive quickly and on target [9].

### **1.2. Foundations in Building Disaster Communication**

The ability to communicate disaster messages to the public, government, media and opinion leaders can reduce risks, save lives and the impact of disasters [7]. According to Haddow, G. D, and Kims there are 5 main bases in building effective disaster communication, namely:

- 1) Customer Focus, ie understand information required by the customer in this case the community and volunteers. A communication mechanism must be established to ensure that information is conveyed precisely and accurately.
- 2) Leadership Commitment, a leader who plays a role in emergency response must be committed to effective communication and be actively involved in the communication process.
- 3) Situational Awareness, effective communication based on controlled collection, analysis and dissemination of information related to disasters. Principles of effective communication such as transparency and trustworthiness are key.
- 4) The media partnerships, media such as television, letters to the newspaper, radio, and the other is a medium which is very important to accurately convey information to the public. Collaboration with the media concerns an understanding of the need for information.

Disaster Management must be supported by various approaches, both soft power and hard power to reduce the risk of disaster. The soft power approach is to prepare community preparedness through dissemination and provision of information about disasters, while hard power is an effort to deal with disasters with physical development such as building facilities and infrastructure [7].

### ***1.3. Opinion Leader in Community Based Disaster Communication***

The basic concept of community-based disaster management in Indonesia and as well in some countries is an effort to increase the capacity of communities to prepare for and cope with the result of a disaster. This is because the government has limited resources including human resources, funding, equipment and logistics. Because of that disaster management should be universality, involving all stakeholders, including government, private and public. All three of these components must be able to be equal actors, all must play a major role, not only play a role as well. The recovery from disaster can only be achieved through full participation of the affected communities.

The goal of community-based disaster management is to increase awareness and community preparedness, especially in prone areas to natural disasters; Strengthen the Ability of Communities to Cope with Disasters by Cooperating with Relevant Parties; developing disaster organization in accordance with local conditions; increase public knowledge about the education of the disaster; increase public awareness of the importance of maintaining the possibility of disaster caused by human activity. The importance of involving the community in disaster management because: Local communities know

their village and the local situation best and no outsider can understand the local opportunities and constraints as they do; thus, they need to be involved in identifying and resolving disaster vulnerability issues. Communities have a personal interest in avoiding disasters and are the main source of local resources; thus, they have the motivation and ability to carry out local activities. Communities are naturally very concerned with the local affairs on which their survival and well-being depend, so information should be generated in a manner and language that is understood by the community. Central level management and response programs often fail to assess the needs of vulnerable communities, undermine the potential of local resources and capacities, and may, in some cases, even increase people's vulnerability.

The important thing that must be done is that Community Based Disaster Management requires community participation. According Ali et.al. [10] Implementation of disaster management based community participation will lead:

- (1) Disaster risk reduction with communities in disaster-prone areas independently;
- (2) Avoid the emergence of new vulnerabilities and dependency society in disaster-prone areas;
- (3) Disaster risk management is an integral part of the development process and management of natural resources for the survival of life in disaster-prone areas;
- (4) Multi-sectoral approach, multidisciplinary and multicultural [10].

Opinion leaders are opinion leaders in a group / sub group. Leader are individuals who have a high intensity in a relationship of communication with individuals or other groups. Usually this individual is a source of information for individuals around him. Rogers and Shoemaker suggested that opinion leaders have an informal influence on other individuals to change attitudes and behaviour towards innovation. The more effective and intense the communication relationship that opinion leaders build in a communication network, the higher the level of communication network adoption towards a development innovation and behaviour change [11].

According to Nurudin, the characteristics of opinion leaders are as follows; 1) Higher formal education compared to members of the community or group; 2) Higher social status and economic status; 3) Be more innovative in accepting or adopting new ideas; 4) Higher media exposure; 5) Their ability to empathize is greater; 6) Their social participation is greater, or higher; and 7) More cosmopolitan [12]. In the communication of the 2018 Mount Merapi eruption disaster, opinion leaders conducted community-based disaster communication with the communities where they live.

## 2. METHOD

The research was conducted in Panggukrejo Village Cangkringan, Sleman Yogyakarta Regency. The reason for choosing this village is because this village is the closest residential area to Mount Merapi, about 7 Km. This research uses a qualitative approach. Qualitative research is a procedure that produces descriptive data in the form of written words, or people's behaviour or observed behaviour [13]. In accordance with the type of qualitative research and the required data sources, the data collection technique in case study research is to use data collection techniques such as in-depth interviews, focus group discussions (FGD) and document analysis (content analysis) [14]. Data collection techniques in this study researchers used several ways, namely:

### A. In-depth interview

Interview is the process of obtaining information for research purposes by way of question and answer face to face between the questioner with the answerer or respondent by using the interview guide. In-depth interview a meeting of two people to exchange information and ideas through question and answer so that they can construct meaning in a particular topic [15]. The research informants consisted the Leader of Pangukrejo Sub-District, Umbulharjo Monitoring Merapi Community (UMMC), and Regional Disaster Management Agency (BPBD) Sleman, DIY. In this study using two interview techniques, namely structured interviews (structured interviews) and unstructured interviews (unstructured interviews).

### B. Focus Group Discussion (FGD)

It is a research method which uses focus group discussions by selecting people who are considered to represent a number of different publics or populations. The implementation of the Focus Group Discussion (FGD) is by selecting key informants and inviting to discuss research issues, FGD participants have an equal position and there are no authority holders in the FGD group so that the discussion of the questions asked can take place freely and openly.

The data in this study will be analysed qualitatively. Qualitative research is a procedure that produces descriptive data in the form of written words, or oral people or observed behaviour [13]. Qualitative data analysis requires researchers to carry out activities simultaneously by collecting data, interpreting data and writing research reports [14].

The data obtained were analysed using an interactive analysis model [14]). Thus data analysis is not done separately from data collection, but is an activity carried out together. During data collection, researchers move interactively in 3 components of analysis, namely data reduction, data presentation and final conclusions / verification [13].

The interactive analysis model is an analysis model that consists of three components, namely data reduction, data presentation and conclusion drawing [16]. The components of the interactive analysis model can be explained as follows:

#### a). Data Reductions

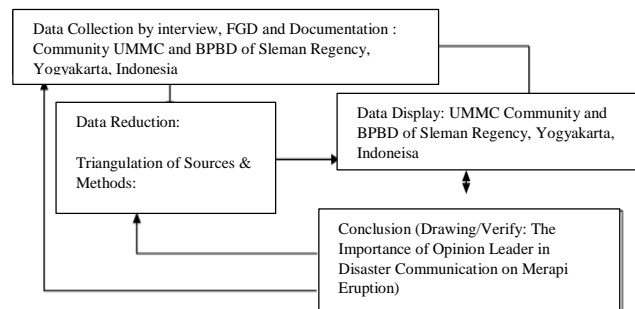
It is a process of selecting, focusing, simplifying and abstracting the raw data contained in the field notes relating to the important of opinion leader in disaster of Leader Pangukrejo and UMMC Community of communication disaster on Merapi Eruption. Document Review is the activity of collecting data by UMMC Community, Leader and People on Pangukrejo Sub-district, Regional Disaster Management Agency (BPBD) Sleman, DIY who related to the mitigation of the handling Eruption of Merapi, Sleman, Yogyakarta.

#### b). Data Display

It is a collection of information organizations that support research. In this case related to various types of matrices, figures, tables, schemes and tables related to the UMMC Community, Figures and Communities in Pangukrejo District, Regional Disaster Management Agency (BPBD) related to the Merapi Eruption, Sleman, DIY.

#### c). Conclusion Drawing

Is an organization of data that has been collected so that conclusions can be made regarding the Importance of opinion leader in Disaster Communication Eruption of Merapi, Sleman, DIY, Indonesia.



**Figure 2** Interactive Analysis Method Research of Importance of opinion leader in Disaster Communication Eruption of Merapi, Sleman, DIY, Indonesia

Currently, researchers compile field notes on various matters relating to the Importance of opinion leader in Disaster Communication Eruption of Merapi, Sleman. After that, the researchers began to make temporary conclusions, because the data collection process was still ongoing. Data collection and analysis go hand in hand so that the analysis process occurs interactively and the testing between components as a whole is cyclical and lasts quite a long time. By using this analysis technique, the conclusion regarding the

Importance of opinion leader in Disaster Communication Eruption of Merapi, Sleman, can be tested accurately.

The data reduction process was carried out by researchers by selecting, focusing and simplifying field notes obtained from data collection. The results of data reduction are then presented in the form of notes / narratives that allow conclusions to be made. The conclusions are strengthened continuously until the end of the study. Consolidation needs to be done by repeating data reduction activities, presenting data and revising conclusions that are deemed lacking.

### **3. RESULT**

#### ***3.1 The Importance of Opinion Leaders in Communication for the 2018 Merapi Eruption Disaster***

On May 11, 2018, Mount Merapi erupted again with a phreatic eruption type. The phreatic eruption that occurs at Mount Merapi is an eruption of gas or smoke and material that is triggered by gas pressure below the surface. At the time of the eruption of Mount Merapi in 2018, the role of the Hamlet Head who was an opinion leader in disaster communication had a central role. This is like in the following interview:

"At the time of the eruption of Mount Merapi in 2018, although the eruption was not as big as in 2010, I, as the Pangukrejo Hamlet, with friends of the UMMC disaster-care community always inform the community about the status of Merapi through the head of the RT, RW and also mosque leader (takmir) of the surrounding mosques and always coordinate with BPBD, BPTKG Sleman to find out the current status of Merapi and ask the community not to panic and to prepare themselves to evacuate either with the help of volunteers or independently. (Subagyo, Head of Pangukrejo Hamlet)

Based on the above interview, it can be seen that the Hamlet Head has a big role, especially in informing the community about the Merapi disaster. This is also reinforced by the results of interviews with the people of Dukuh Pangukrejo who are members of the UMMC community as follows:

"At the time of the eruption of Merapi, our Merapi care community joined in UMMC, which was directly led by Pak Dukuh, always monitored the status of Merapi, carried out disaster mitigation at the time of Merapi's alert status, was alert to alert status to urge people to prepare themselves to evacuate" (Riyanto, UMMC Community, Pangukrejo Sleman DIY).

This is also supported by a statement from the Sleman Regional Disaster Management Agency (BPBD) confirming the role of community leaders who have a strategic role in disaster management.

"At BPBD we have a Regional Disaster Management Regulation, there we have a Regulation that under BPBD we have BPBD Off Unitla at the village level. One of the members of the Off Unitla BPBD is community leaders such as Hamlet in several padukuha, including in Pangukerjo hamlet. Their role is our goal to be an integral part of BPBD Sleman, DIY. " (Asih Kushartati, S.TP, MT, Head of the Sleman Regional Disaster Management Agency (BPBD), DIY).

The results showed that the opinion leader, in this case the opinion leader of Hamlet head, had an important role in community-based disaster communication. The communication is carried out to the community through the heads of 6 RT and 4 RW in Padukuhan Pangurejo and in collaboration with mosques around Pangukrejo Hamlet, namely Nur Iman Pangukrejo Mosque, Baiturahim Mosque and Al-Madina Cangkringan Mosque Sleman Yogyakarta. The communication is carried out through direct communication through meetings of RT, RW and mosque takmirs as religious leaders.

This opinion leader was also supported by previous research by Nurjanah on research on the Mount Agung disaster communication in Bali that there were several stages carried out by the Bali Provincial Government in dealing with and resolving problems including Utilizing leader opinions. Through this structure, the Provincial Government of Bali was conducted several meetings with Adat village structure. Statements of the leader listened by the people were from a leader at the village. When drawn from this research, this is also in accordance with the implementation of opinion leaders on disaster communication in the UMMC community in dealing with the Merapi disaster, such as utilizing the opinion of the leader to prioritize the role of the Hamlet Head who has power as a leader and is able to move the Pangukrejo community to obey and participate in carrying out the appeal - an appeal conveyed by the Head of Dukuh Pangukrejo [17].

#### ***3.2 Communication Media for the 2018 Merapi Eruption Disaster***

In the process of delivering information and to gather the community regarding the communication of the 2018 Mount Merapi eruption, the Hamlet Head as an opinion leader uses a door-to-door approach, direct meetings, face to face and also works the same as the local mosque's Takmir by using loudspeakers (megaphone) to facilitate access to information quickly reaching the community.

The results showed that the implementation of communication for the 2018 Merapi eruption disaster in Pangukrejo Cangkringan Umbulharjo Sleman Yogyakarta which was conveyed by the Head of the Hamlet as Opinion Leader was considered effective so that it was able to influence public awareness to take disaster mitigation actions independently. This is evident

from the fact that the community has a level of awareness that they live in areas prone to eruption and when asked to evacuate the community obeys to carry out the appeal.

"We are greatly helped by the role of Pak Dukuh. When a disaster occurs there is Pak Dukuh, it is very easy for us to get information. And information from Hamlet Head and several community leaders really helped us because there was no need to cross-check properly or not. Because the information from them is definitely not a hoax and always provides correct information, so we trust Pak Dukuh's information more." (Sriyono, Pangukrejo Community, Sleman, DIY).

According to Wiryanto opinion leaders have the ability to formally influence the attitudes or real behavior of other individuals, through the desired ways and with a relatively intensive frequency [18]. The results of this study indicate that opinion leaders at Padukuhan Pangukrejo play an important role in influencing the attitudes and behaviour of individuals in society to be "aware" of the dangers of the eruption of Merapi, so that people must remain alert and remain calm and not panic in the face of the Merapi eruption.

According to Nurudin, the characteristics of opinion leaders are as follows; 1) Higher formal education compared to members of the community or group; 2) Higher social status and economic status; 3) Be more innovative in accepting or adopting new ideas; 4) Higher media exposure; 5) Their ability to empathize is greater; 6) Their social participation is greater, or higher; and 7) More cosmopolitan [12]. Intensive interaction of the Chief of Hamlet who is an indigenous citizen and not a migrant and active as chairman of Merapi UMMC care community who care about the safety of citizens is a fundamental and very important to build mutual trust and cooperation among the public of Pangukrejo. Thus, based on the principle of public trust, they are willing to accept requests from opinion leaders, in this case the Head of Hamlet. At the time of the Merapi alert status, to facilitate and speed up access to information to the public, information regarding the current condition of Merapi and requests to evacuate is conveyed through oral communication with the help of mosque loudspeakers (megaphone) . Thus, the disaster communication carried out by Hamlet Head as an opinion leader is very effective in reducing disaster risk. This is consistent with what was said by Haddow, Communications disaster that either can decimate disaster risk, and maybe save more lives from the impact of hazards [7].

#### 4. CONCLUSION

The results of this study indicate a large influence from opinion leaders in disaster communication. In this case it is the Hamlet Head who becomes a figure heard by the local community. The role of this opinion leader was able to influence the community to evacuate based

on trust because of the intensive interaction of Hamlet Head as a native, not a migrant, especially Hamlet Head as the head of the Merapi Disaster Care Community (UMMC) who concentrated on the safety of local residents. The results also show that in communication for the 2018 Mount Merapi eruption disaster, the role of opinion leaders is very important. This is especially evident in: a) informing about the current condition of Merapi, b) directly leading Merapi disaster management activities through the Merapi care community, namely UMMC, c) conducting coordination and communication with the government, especially BPBD of Sleman Regency, d) coordinating and communicating with religious leaders (mosque takmir), namely Nur Iman Pangukrejo Mosque, Baiturahim Mosque and Al-Madina Cangkringan Mosque in Sleman Yogyakarta and community leaders, namely the Head of RT and the Head of RW as Padukuhan Pangukrejo Cangkringan Umbulharjo Sleman. Disaster communication carried out by the Opinion leader, in this case the Hamlet Head, was very effective in helping the community carry out disaster mitigation independently, reducing community panic and minimizing both material loss and casualties due to the eruption of Mount Merapi in 2018.

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