

Community Based Disaster Communication Through UMMC (Study Case of UMMC as the Communicator of Mount Merapi Disaster Communications Year 2010)

1st* Adhianty Nurjanah
Communication Science
Universitas Muhammadiyah
Yogyakarta
 Yogyakarta, Indonesia
 adhianty@umy.ac.id

2nd Aswad Ishak
Communication Science
Universitas Muhammadiyah
Yogyakarta
 Yogyakarta, Indonesia
 ishak@umy.ac.id

3rd Sakir
Government Science
Universitas Muhammadiyah
Yogyakarta
 Yogyakarta, Indonesia
 mas.sakir@gmail.com

Abstract— Merapi is the most active volcano in Indonesia located in most regions of Yogyakarta and Central Java. In this age of information exposure, communities have the very right to have access towards correct and non-discriminatory information including the ones concerning any disasters occur in the area. Therefore, the role of Governmental Public Relations in delivering the functions of communication and information in time of disaster becomes essential. The disaster communication is conducted Disaster communication conducted by UMMC (Umbul Harjo Monitoring Merapi Community) young volunteer. This research use qualitative descriptive study by describing and analyzing existing data based on the theory of Community and disaster communication. The role of the UMMC community as a dominant communicator in disaster communication is to assist the government in handling disaster communication to the Community of Pankrejo, Umbul Harjo. This is supported because of the closeness and trust of the local community in information sources. Stages conducted by UMMC are mitigation, Preparedness, Response, and Recovery. Therefore, the communication model that is community based is considered more responsive and being paid attention to in time of disasters. In disasters, what matters most in effective disaster response actions is the credibility of the information or in other words, how much the information can be trusted.

Keywords— *Communications, Disaster, Community, UMMC, Merapi, Yogyakarta*

I. INTRODUCTION

Merapi is the most active volcano in Indonesia located in most regions of Yogyakarta and Central Java, mountain with an altitude of 2,968 meters it includes 16 mountain railway world in the project Decade Volcanoes, thus according to the United States Geological Survey (USGS) [1]. Disaster communication during and after a disaster happens becomes an important thing that must be done especially from the government to affected communities.

Law Number 24 Year 2007 concerning Disaster Management brought a paradigm shift in disaster management from responding to disaster situations to disaster risk reduction and prevention. With this change, disaster management is an activity that began since the disaster did not

occur until the reconstruction phase after the disaster. According to Article Law on Disaster Management, government responsibilities concerning the conduction of disaster management include:

- disaster risk reduction and integration of disaster risk reduction with development programs;
- community protection from the effects of disasters;
- guaranteeing the fulfilment of the rights of people and refugees affected by disasters fairly and in accordance with minimum service standards;
- recovery from disaster impacts;
- the allocation of disaster management budget in the Budget.

Therefore, based on the Law, in the face of a disaster, it is necessary to have good disaster management; this is done to treat disaster risk as a priority. When natural disasters occur, effective disaster communication involving communication and information technology must be carried out especially from the government to the affected communities. In this case the prioritization issues that must be done are related to Communication, Information, Coordination and Cooperation later abbreviated as KIKK. This is absolutely necessary because it requires a fast, precise, and accurate update of information [2]. This prioritization is essential because disaster communication needs quick, precise and accurate update of information. Aside from being crucial in providing accurate information accurate information about disaster, KIKK is also capable in shaping public empathy as well as encouraging the communities to survive in dealing with any problems emerging from the natural disaster.

In this case, at the time of occurrence and post-disaster the need for accurate information is needed by the community and private institutions that have concern for disaster victims. Communication in disasters is not only needed in disaster emergency conditions, but is also important at the time and pre-disaster. As said that communication is the best way to succeed in disaster mitigation, preparation, response, and recovery of a situation during a disaster. The ability to

communicate messages about disasters to the public, government, media and opinion leaders can reduce risk, save lives and the impact of disasters [3]. According to Breakwell [4], the main reason for communicating risks prior, during and after the natural disasters is to initiate and carry out direct protective measures.

According to Coppola and Maloney [5], that modern disaster management comprehensively includes four functional components, namely:

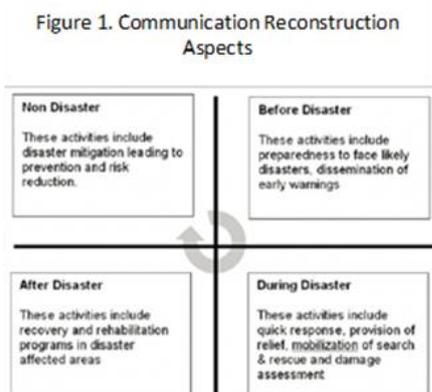
- Mitigation which includes the reduction or elimination of hazard risk components,
- Preparedness, which includes preparing communities at risk from disasters or preparing communities to be able to help people in disaster events with a variety of tools / equipment to improve their ability to survive and minimize financial risks and other risks.
- Response includes actions taken to reduce or eliminate the impact of disasters, and
- Recovery, including repairing, reconstructing or recovering what has been damaged / lost as part of a disaster. These four important aspects in disaster management are things that must be done to reduce the greatest risk from the disaster.

Communication aspect in disaster management plays an important role. In the disaster management cycle aspects of communication are also needed [6].

Before a disaster occurred the communication aspects are related to providing accurate information, coordination and aspects of cooperation, especially to people who are vulnerable to disaster events. The activities that can be carried out are prevention and risk reduction activities such as preparedness to face likely disaster, dissemination of early warnings.

When disaster strikes, communication, information, collaboration and coordination are the keys to success in disaster management. The various activities that can be carried out are quick response, provision of relief, mobilization of search & rescue, and damage assessment.

In post disaster situation the communication aspect is also needed during the reconstruction and recovery after the disaster situation. This is as illustrated in the following chart:



Source : Shaw, Srinivas, Sharma, 2009: 57

When natural disaster takes place, the government ought to deliver effective disaster communication involving communication and information technology towards the affected communities. In this case, priority issues to address are related to Communication, Information, Coordination and Cooperation; later abbreviated as KIKK.

This prioritization is essential because disaster communication needs quick, precise and accurate update of information. Aside from being crucial in providing accurate information accurate information about disaster, KIKK is also capable in shaping public empathy as well as encouraging the communities to survive in dealing with any problems emerging from the natural disaster.

In this range, at the time of disaster as well as after the disaster, communities and private institutions that have concern for disaster victims need accurate information. Communication during disasters is not only needed in disaster emergency situations, but it is also important at the time of disaster as well as before the disaster. Therefore it is said that communication is the best way to be succeeded in disaster mitigation, preparation, response, and recovery of a situation. By being able to deliver messages about disasters to the public, government, media and opinion leaders may decrease the risks of the disaster, save lives as well as the impact in disaster mitigation, preparation, response, and recovery of a situation during a disaster. The ability to communicate messages about disasters to the public, government, media and opinion leaders can reduce risk, save lives and the impact of disasters [3].

Haddow, G. D, and Kims [4] stated that there are 5 main bases in constructing effective disaster communication, namely:

- Costumer Focus, to comprehend any information needed by customers which in this case are the community and volunteers. The mechanisms for communication have to be established to make sure that information is delivered precisely and accurately.
- Leadership Commitment, leaders who are responsible in emergency situation must have commitment to deliver effective communication and is actively involved in the communication process.
- Situational Awareness, effective communication is based on the gathering, test and spread of controlled information related to disasters. The main keys to effective communication are being transparent and trusted.
- Media partnership, the existence of media such as television, newspapers, radio, and others are very important to appropriately deliver information to the public. Collaboration with those media shows the importance on the need for information particularly during disaster.

During and after a disaster, communication is an important thing to do, especially from the government to the affected communities. Disaster takes place turns out to be an important thing that has to be done, particularly when it comes from the government and is addressed to the affected communities.

Fig. 1. Commuication Reconstruction Aspects [6].

In this case, at the time of occurrence and post-disaster the need for accurate information is needed by the community and private institutions that have concern for disaster victims. In disasters, trustworthiness of information is essential for effective disaster response actions. Affected people rely on information that they perceive as trustworthy [7].

Disaster Management has to be supported by various approaches both soft power and hard power to reduce the risk of disasters. The soft power approach is to prepare community preparedness through the 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.

In the era of information disclosure, communities have the right to obtain correct and non-discriminatory information including information and communication about disasters that occur in their area. Thus, the role of Government Public Relations in carrying out the functions of communication and information to the public at the time of disaster becomes very vital. Disaster communication conducted by UMMC (Umbul Harjo Monitoring Merapi Community) young volunteer. Merapi affected communities is very important to reduce disaster risk. Based on the background above, the researchers wanted to know the disaster communication model of the Umbul Harjo District by UMMC Communities as a community-based volunteer society in Umbul Harjo concerning the Mount Merapi eruption communication on Juli, 2012. UMMC was born from the spirit upon the concerns towards merapi disaster which consists of the young people and the community of Pangukrejo Umbul Harjo.

According to Pace and Faules[8], communication organization emphasizes on activities handling of messages that are contained within the limits of organizational. In this context, we will analyze how UMMC as a caring community of Merapi disaster carries out communication and coordination between its communication networks and affected communities in Umbul Harjo in the management of the 2010 Merapi disaster.

II. RESEARCH METHOD

This research uses a qualitative approach, with the Umbul Harjo Monitoring Merapi Community as the research object. This research uses descriptive qualitative method by way of describing and analyzing the provided data based on the theory of community and disaster communication. This research is more directed towards the positivistic paradigm because this paradigm deals with the search for or discovery of the law of causation that can be used in different contexts and times.

The technique of collecting data uses primary data namely interviews and FGDs to related informants who are selected purposively in order to meet research needs, while secondary data is using literature study techniques and documentation to confirm and strengthen the data to be analyzed. While secondary data is obtained through literature study techniques and documentation to confirm and support the analyzed data. Qualitative data analysis requires researchers to carry out activities simultaneously with data collection, data interpretation and writing research reports [9]. Thus, data analysis is not done separately with 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 [10].

III. RESULT AND DISCUSSION

At the time of the occurrence of catastrophic events, the communication, information, cooperation and coordination (KIKK) is the key to success in handling the disaster. KIKK between instructions from the government, society and community done on time of occurrence of the disaster until after the occurrence of the disaster in terms of this at the time of the disaster Merapi in 2010 the government district of Sleman, BPBDs Sleman, BMKG Sleman and publicist Government of the District of Sleman and UPTD related conduct coordination KIKK with the Pangukrejo Umbul Harjo Community through the disaster care community, the Umbul Harjo Monitoring Merapi Community (UMMC). UMMC has a role huge in the implementation KIKK at the time of occurrence of the disaster Merapi 2010.

The purpose of KIKK activities is to deal with affected victims and avoid the risk of greater casualties. The existence of intensive communication, providing comprehensive information about disasters before they occur to affected communities is very important. This is mainly on the activities of communication of disaster where UMMC capable as a communicator and mediator are effective in the delivery condition at the time the disaster occurred to the Community Pangukrejo Bannerman Harjo, at the distance of 20 km from Mount Merapi.

The goals of KIKK activities are to provide assistance as well as to prevent the risk of greater number in casualties. It is very important to provide comprehensive information about disasters to the affected communities before the disaster takes place. In disasters, what matters most in effective disaster response actions is the credibility of the information or in other words, how much the information can be trusted. In this case, during and after the disaster the communities and private institutions that have concern for disaster victims need accurate information. In disasters, what matters most in effective disaster response actions is the credibility of the information or in other words, how much the information can be trusted.

The activities of communications disasters that do UMMC on Community Pangukrejo Umbul Harjo starts from the moment the mitigation of disaster they do communication is directly to the public through the RT and RW, besides that they inform Warning, Alert, and disasters using Mosque speaker and HT. It is as stated by Mr. Sokiran.

“As soon as there is increase in the level of the status of disaster from beware to alerts we announce through loudspeakers at the Mosque and we also use HT so that the public directly hear the announcement and instantly make quick moves. Information from the UMMC community becomes the quickest information to get because they are watching Merapi directly and we have more trusts with anything that is said by the UMMC community because it is also part of our people (Interview with Mr. Sokiran, a resident of Pangukrejo Umbul Harjo.)”

The closeness that is felt by the community with providers of information to be more credible, matter is in tune with what are presented by Fisher that in disasters, trustworthiness of

information is essential for effective disaster response actions. Affected people rely on information that they perceive as [7]. In addition as a provider of most actual information in Umbul Harjo Monitoring Merapi Community (UMMC) also serves as SAR Team who help the community at the time of evacuation to the distribution of relief disaster to the refugees.

The next stage is Preparedness, preparing the community to be alerted in evacuating and be prepared to bring important document and other valuables to be put into the bag. This is to prepare if there is a sudden disaster and those valuables can be quickly brought.

“So indeed we are called upon to collect files file it in one bag, to be ready when anything happens, all those valuables are already in one place. For the other inventories, such as vehicles or livestock are better left behind. (Interview with Pak Sarju, Member of the UMMC Community”



Fig. 2. Response of UMMC Community

In stage three, namely response, it includes actions taken to reduce or eliminate the impact of disasters. Response to communicate with the community for the location of the gathering point, any safe location and encourage them to leave the place where they live. Last on-stage Recovery, by way of help along with SAR Team and Community Response Disaster (Tagana) to help evacuate residents of the community including repairing, reconstructing or recovering what has been damaged / lost as part of a disaster. These four important aspects in disaster management are things that must be done to reduce the greatest risk from the disaster. This is in accord with the theory proposed by Coppola and Maloney

In this case, at the time of occurrence and post-disaster the need for accurate information is needed by the community and private institutions that have concern for disaster victims. In disasters, trustworthiness of information is essential for effective disaster response actions. Affected people rely on information that they perceive as trustworthy [7].

Than UMMC building effective disaster communication too. Things they do include:

- Customer Focus, which is UMMC which is classified as community leaders namely the head of the hamlet, RT, and RW understand what information is needed by the community in this case the community and volunteers. Communication mechanisms are

established and delivered by UMMC with accurate news.

- Leadership Commitments, UMMC plays a role in emergency response must be committed to effective communication and actively involved in the communication process. This is a routine way of providing counseling and appeals to the surrounding community to prepare securities and conduct disaster mitigation training.
- Situational awareness, effective communication is based on the collection, analysis, and dissemination of controlled information related to disasters. The principles of effective communication such as transparency and trust are the key. This is done by UMMC to provide up-to-date information to residents through Whatsapp Group
- Media, media such as television, newspapers, radio, and others are very important media to convey information appropriately to the public. UMMC uses HT, WAG media to deliver messages quickly and effectively.

Therefore, the communication model that is community based is considered more responsive and being paid attention to in time of disasters. In disasters, what matters most in effective disaster response actions is the credibility of the information or in other words, how much the information can be trusted. People who are affected by the disaster tend to depend on information they believe they can trust. People who are affected by the disaster tend to depend on information they believe they can trust. The mechanisms of communication are organized and delivered by UMCC through leaders who are responsible in emergency situation must have commitment to deliver effective communication and is actively involved in the communication process. Situational Awareness, effective communication is based on the gathering, test and spread of controlled information related to disasters. The main keys to effective communication are being transparent and trusted.

IV. CONCLUSION

At the time of the disaster occurrence communication, information, cooperation and coordination is the key to success in handling the disaster. The role of the UMMC community as a dominant communicator in disaster communication is to assist the government in handling disaster communication to the Community of Pangukrejo, Umbul Harjo. This is supported because of the closeness and trust of the local community in information sources. Stages conducted by UMMC are mitigation, Preparedness, Response, and Recovery.

KIKK between the Government, the community and the community is done at the time prior to the occurrence of the disaster until after the occurrence of the disaster in terms of this at the time of the disaster Merapi in 2010 the government district of Sleman, BPBDs Sleman, BMKG Sleman and publicist Government of the District of Sleman and related UPTD.

The mechanisms of communication are organized and delivered by UMCC through leaders who are responsible in emergency situation must have commitment to deliver effective communication and is actively involved in the

communication process. Situational Awareness, effective communication is based on the gathering, test and spread of controlled information related to disasters. The main keys to effective communication are being transparent and trusted.

Therefore, the communication model that is community based is considered more responsive and being paid attention to in time of disasters. In disasters, what matters most in effective disaster response actions is the credibility of the information or in other words, how much the information can be trusted. People who are affected by the disaster tend to depend on information they believe they can trust.

REFERENCES

- [1] Tirto, <https://tirto.id/erupsi-gunung-merapi-1872-disebut-terdahsyat-dalam-sejarah-modern-ejK9>, 2019.
- [2] Budi HH, Setio Disaster Communication, ASPIKOM, PERHUMAS Yogyakarta and Buku Litera : 364, 2011.
- [3] Haddow, G. D, and Kims, Disaster Communications, In A Changing Media World. London. Elsevier : xiv, 2008.
- [4] Rod,S.K., BotanCarl, Holen Are Risk communication and the willingness to follow evacuation instructions in a natural disaster, *Health, Risk & Society*, 14(1), pp. 87–99, Routledge, 2012.
- [5] Coppola, Damon, Maloney, Erin K, Emergency Preparedness Strategies for Creating a Disaster Resilient Public. Taylor and Francis Group, LLC, 2009.
- [6] Shaw, Rajib; Srinivas, Hari& Sharma, Anshu (Eds), *Urban Risk Reduction: An Asian Perspective*, Emerald Group Publishing Limited, 2009.
- [7] Cresswell, JW, *Research Design: Qualitative, Quantitative and Mixed Approaches*. Third Edition. Yogyakarta: Student Library, 2012.
- [8] Moorthy, Ravichandran, Benny, Guido, & Gill, Sajrit, Disaster Communication in *Managing Vulnerabilities*, 34 (2) p. 51-66 Retrieved, 2018.
- [9] Pace & Faules, *Organizational communication: strategies to improve company performance*. Bandung: RemajaRosdakarya, h.33, 2005.
- [10] Cresswell, J.W, *Research Design: Qualitative, Quantitative and Mixed Approaches*. Third Edition. Yogyakarta: PustakaPelajar, 201.2
- [11] Sutopo, H.B. *Qualitative Research Methodology: Basic Theory and Its Application in Research*, Surakarta: SebelasMaret University Surakarta, 2006.