

Preparedness of the Magelang Regency Government in Disaster Management of the 2020 Mount Merapi Eruption during the Covid-19 Pandemic

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ABSTRACT: In 2020, Mount Merapi erupted at the same time as the Covid-19 pandemic spreads in Indonesia. Magelang is one of the areas with the most refugees, namely 828 people, who must face the multi-disaster threat of the eruption of Merapi and Covid-19. Disaster management efforts by local governments will be difficult to adapt from the experience of the Merapi eruption in the previous year. This condition is because the Covid-19 is a new type of threat that has never been experienced by Indonesia. Based on this phenomenon, this study seeks to analyze the preparedness of the Magelang Regency government in dealing with the 2020 Merapi eruption disaster during the Covid-19 pandemic. This study aims to analyze four indicators of preparedness based on Perka BNPB No. 3 of 2012. The research method used is descriptive qualitative with a case study research design. The results showed that the government had met the first indicators (Policies, Institutional Technical Capacity, and Disaster Emergency Management Mechanisms), third (Financial Reserves, Logistics, and Disaster Anticipation Mechanisms), and fourth (Procedures Relevant to Information Exchange). Meanwhile, the second indicator (Disaster Contingency Plan and Regular Exercise) has not been fulfilled because contingency plans are not yet available in all agencies.

KEYWORDS -Government preparedness, Magelang, the eruption of Merapi, Covid-19, multi-disaster.

I. INTRODUCTION

In geography, Indonesia is included in the Southeast Asia region which is located between two oceans, namely the Indian and the Pacific. In this vast archipelago, 269 million people live in areas that have a high level of threat. There are three active tectonic plates including: Eurasia to the north, Australia to the south, and the Pacific to the east. In addition, the southern and eastern parts stretch volcanic arcs or volcanic chains from the islands of Sumatra, Java, Nusa Tenggara, to Sulawesi. The rest features old volcanic mountains and lowlands dominated by swamps (Kusumasari& Alam, 2012). The Center for Volcanology and Geological Hazard Mitigation (PVMBG) noted that there were 127 active volcanoes spread throughout Indonesia (PVMBG, 2020). These geographical and geological characteristics indicate that Indonesia is one of the countries that is prone to natural disasters.

Of the many volcanoes in Indonesia, Mount Merapi, which is located on the border of Central Java and Yogyakarta, is the most active so that its activity status has always been monitored by scientists since 1918.

Mount Merapi is known to experience small to moderate eruptions with pyroclastic flows from the dome collapse (Surono et al., 2012). In 2010, a massive explosive eruption occurred which caused a tragic catastrophe. This event had a severe impact on the area around the volcano within 30 km, resulting in 400 lives and 150,000 buildings collapsing. and an estimated loss of more than 300 million US dollars (Tasic& Amir, 2016). The handling of the Merapi eruption at that time already had good preparedness management in the pre-disaster stage. Coordination is carried out through each district and is based on PVMBG recommendations. Cooperation between government agencies runs harmoniously. Information related to the condition and morphology of the volcano is reported from each post to BPPTK and to the Mount Merapi Observatory in Yogyakarta, which is then forwarded to PVMBG.

In 2020, Mount Merapi erupted again, which was marked by the appearance of hot clouds on January 4, 2020. Almost every month Mount Merapi showed increasing activity. Since the change in activity status from level II to level III on November 5, 2020 by BPPTKG, the government immediately evacuated all residents living in disaster-prone areas. . A number of natural tourist attractions on the slopes of Mount Merapi must also be closed to respond to the state of disaster preparedness (CNN Indonesia, 2020a). BNPB's Pusdalop recorded that as many as 1,831 people had to flee their homes on November 15, 2020. The total number was divided into four regions, including 828 people in Magelang Regency, 401 people in Boyolali, 388 people in Klaten, and 214 people in Sleman (CNN Indonesia, 2020b). Based on these data, the Magelang Regency has the highest number of refugees than other regions.

Handling for disaster risk reduction at Mount Merapi 2020 is faced with new challenges with the emergence of the Covid-19 pandemic which was detected for the first time in Indonesia on March 2, 2020 with the appearance of two people suspected of being infected as a result of direct contact with Japanese citizens. A spike in positive patient cases and the number of cases has occurred since the incident (Pangaribuan&Munandar, 2021). The spread of the corona virus reached the Magelang Regency area, where until December 2020 the accumulated Covid-19 cases had reached 4655 people who were confirmed positive. This number consists of 1282 people who are recovering, 3261 people have recovered, and 112 people have died (Harsono, 2020). This condition is classified as a high Covid-19 case, making Magelang Regency included in the list of Covid-19 red zones (Ulum, 2020).

This situation has made Magelang Regency a red zone area due to the high number of Covid-19 cases. Covid-19 which can spread between humans directly or indirectly can potentially become a multi-disaster threat during the 2020 Merapi eruption disaster evacuation. Disaster management efforts by local governments, both in terms of policies, disaster management mechanisms, and institutional technicalities will be difficult to implement. adapting from the experience of Merapi eruptions in previous years. This condition is because the Covid-19 pandemic is a new type of threat that has never been experienced by Indonesia. Based on this phenomenon, this study seeks to analyze the thesis problem with the title of preparedness of the Magelang Regency Government in dealing with the 2020 Mount Merapi eruption disaster during the Covid-19 pandemic. The novelty of this research is being able to find out problems regarding government preparedness that focus on handling the eruption of Mount Merapi and the Covid-19 pandemic, especially in Magelang Regency.

II. THEORETICAL BASIS

2.1. Disaster Management Theory

Disaster management is referred to as an applied science by Carter (2008) which is in the form of systematic observation and analytical actions on a disaster. It aims to improve preparation for the formation of plans and develop ways to deal with disasters that will or have come. Carter divides the stages of disaster management into 5 types, namely prevention, mitigation, preparedness, emergency response, and recovery.

Prevention is carried out as the beginning of disaster management, namely when a disaster has not yet occurred. This stage aims to avoid the potential for negative impacts of disasters through actions taken before the disaster strikes. Furthermore, the mitigation stage is an effort to reduce and limit the adverse impacts of

disasters that cannot be prevented. Often the bad impacts of disasters are difficult to completely prevent, but with mitigation, the magnitude of the impacts can be suppressed by various strategies and actions.

The special stages are divided into 3 parts, namely preparedness (preparedness), response (emergency response), and recovery (recovery). The first stage, preparedness is an effort made by all elements of society to be able to quickly carry out control efforts during an emergency situation. This can be done by developing knowledge and capacity for the government, organizations, experts, communities, and individuals to be able to anticipate, respond to, and recover from the impact of disasters. The second stage, emergency response is an action that must be taken immediately when a disaster occurs. Generally, this phase is more focused on rescue and protection measures, as well as on how the affected victims can get through all the disturbances and bad effects of the disaster.

After the emergency response phase is complete, then the next phase of recovery is carried out as an effort to restore the situation in the disaster-affected area as before when the disaster had not yet struck. The living conditions of the community are restored through the improvement of public facilities and infrastructure, assistance for housing repairs, including in the social, economic, and psychological fields of the community. It was this third stage that formed the basis for Carter's disaster management circle. This is because in the recovery stage there is a damage review process which will be a benchmark for preparation for the next disaster which is included in the mitigation and prevention stages.

2.2. Disaster Preparedness Theory

Within the scope of Indonesian policy, preparedness has been stated in the Regulation of the Head of the National Disaster Management Agency Number 3 of 2012 concerning guidelines for assessing regional capacity in disaster management. Preparedness plays a role in regional capacity assessment efforts that refer to the implementation of disaster management and determining the success of disaster risk reduction. In the Act, preparedness is defined as a form of effort aimed at reducing or even eliminating various kinds of disaster threats through a series of activities carried out by individuals, communities, and the government (BNPB, 2012). From the results of the ratification of the Hyogo Framework for Action which was agreed upon by more than 160 countries, 5 priorities and 22 indicators of achievement were produced, one of which is on preparedness. The fifth priority reads "Strengthening disaster preparedness for an effective response at all levels." From the policy, there are 4 (four) indicators which include:

- a. Availability of policies, institutional technical capacity as well as a strong disaster emergency response mechanism with a disaster risk reduction perspective in its implementation.
- b. Availability of potential disaster contingency plans that are ready at all levels of government, regular exercises are held to test and develop disaster emergency response programs.
- c. Availability of financial and logistical reserves as well as anticipatory mechanisms that are ready to support effective emergency response efforts and post-disaster recovery.
- d. Availability of relevant procedures for conducting post-disaster reviews of the exchange of relevant information during the emergency response period.

The scope of preparedness theory has 3 (three) scopes of discussion, this is explained by the Indonesian Institute of Sciences (LIPI) in collaboration with the United Nations Educational, Scientific and Cultural Organization (UNESCO) in the writing of Sopaheluwakan (2006), namely (Widodo, 2017):

- a. Individual and household preparedness, which includes disaster knowledge, emergency response plans, warning systems, resource mobilization, and preparedness levels.
- b. Government preparedness, which includes disaster knowledge, policies and guidelines, emergency response plans, critical facilities, warning systems, ability to mobilize resources, and level of preparedness.

- c. Community preparedness, which includes disaster knowledge, policies and directions, emergency response plans, warning systems, ability to mobilize resources, and level of preparedness.

2.3. National Security Concept

The definition of security describes a safe situation which means being free from various threats of danger, anxiety, and fear (Anggoro, 2003). This shows that the concept of security does not only refer to one field. The development of security studies began in the 1980s when the peak of the Cold War resulted in the definition that security was solely military in nature. However, after the Cold War ended and had an impact on other aspects of life, the concept of security became more flexible. The scope of security is becoming wider, from global, regional, country level, to individual human level (Setiawan, 2017).

In line with Buzan (2008), he explained that the concept of security can be analyzed at all levels of life, namely from individual, national, international, including regional and wider systems. Therefore, the dimensions covered will be comprehensive to all sectors of life such as the military, social, economic, political, and environmental dimensions. Buzan also added that the two components, the level of analysis and the security dimension, should be integrated to produce a security concept that is easy to understand.

III. METHODOLOGY

This study uses a qualitative descriptive method with a case study research design. The research subjects all came from the Magelang Regency area which was obtained from purposive sampling technique, including the Regional Secretariat who was assigned to Bappeda, the Head of the Regional Disaster Management Agency who was assigned to the Head of the Logistics Section, the Head of the National Search and Rescue Agency, the Head of the Indonesian Red Cross of Magelang Regency, and the Head of Banyurojo Village. Data collection techniques using interview techniques and literature study.

IV. RESULT AND DISCUSSION

Based on the results of interviews with several representatives of agencies in Magelang Regency when handling the 2020 Merapi eruption disaster during the Covid-19 pandemic, researchers got an overview of government preparedness. To facilitate understanding, the data are presented in the following table.

Table 1. Preparedness of the Magelang Regency Government in handling the 2020 Merapi eruption during the Covid-19 pandemic

| No | Preparedness | | Institution | | | | |
|----|--|-----------------------------------|-------------|------|----------|-----|----------------|
| | Indicator | Element | Bappeda | BPBD | Basarnas | PMI | Desa Banyurojo |
| 1 | Availability of policies, institutional technical capacity, and disaster emergency management mechanisms | Volunteer | ✓ | ✓ | ✓ | ✓ | ✓ |
| | | Emergency Response Command System | ✓ | ✓ | ✓ | ✓ | ✗ |
| 2 | Availability of disaster contingency plans and regular exercises | Evacuation Training | ✓ | ✓ | ✓ | ✓ | ✗ |
| | | Contingency Plan | ✗ | ✗ | ✗ | ✗ | ✗ |
| 3 | Availability of financial reserves, logistics, and anticipatory mechanisms | Aid | ✓ | ✓ | ✗ | ✓ | ✓ |
| | | Special Disaster Budget | ✓ | ✓ | ✓ | ✗ | ✗ |
| 4 | Availability of post-disaster relevant procedures for the exchange of information | Standard Operating Procedure | ✓ | ✓ | ✓ | ✗ | ✗ |
| | | Recording | ✓ | ✓ | ✓ | ✓ | ✓ |

Source: Processed by researchers (2022)

4.1 Policies, Institutional Technical Capacity, and Handling Mechanisms

Disaster emergency management efforts require various policies and capacities in their implementation. Without adequate institutions to build and implement them, disaster emergency management efforts will not be effective in reducing the negative impacts of disasters (Law No. 3 of 2012). The availability of volunteers and an emergency response command system are the initial elements that can be met to achieve disaster preparedness for an effective response.

The preparedness of the Magelang Regency government has met the first indicator in handling the 2020 Merapi eruption during the Covid-19 pandemic. The availability of volunteers comes from individuals, experts, institutions, community organizations, and military components. Based on the registration of volunteers by BPBD, all sub-districts in Magelang Regency donated volunteers to reach 85 communities, of which Dukun District became the largest contributor. Every year, BPBD becomes the agency that manages the data of volunteers and coordinates them to areas that are experiencing disasters. In addition, volunteers are also provided with trainings for handling the eruption of Merapi and the Covid-19 pandemic conditions so that they will create quality human resources.

Then, the emergency response command system in Magelang Regency has been divided into the scope of work in each OPD to achieve more efficient disaster management results. The distribution is coordinated by BPBD when a disaster meeting is held, although there is no official document as a guide. However, the division of tasks has been described in the chart below.

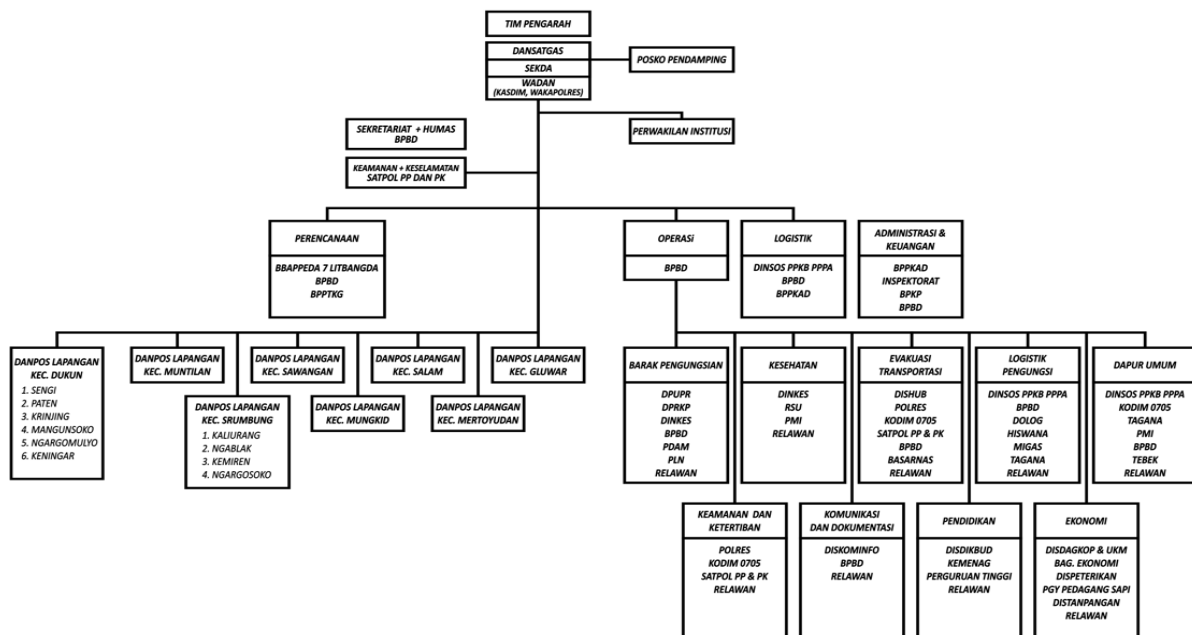


Figure 1. Emergency Response Command System Chart (BPBD Magelang Regency, 2022)

In addition to a chart regarding the handling structure, there is also an operational plan document that has been adapted to the Covid-19 pandemic but is still in draft form so it has not been officially distributed to the related OPD. Directions for handling procedures from disaster meetings are also supported by internal SOPs from each agency. For the smallest agencies, SKTD is not available due to time constraints in its formation. This makes disaster management, especially evacuation, rely on personnel who have experience in previous disasters, such as personnel managing the 2010 Merapi IDPs and the Covid-19 response team.

4.2 Disaster Contingency Plans and Regular Disaster Exercises

Disaster emergency management efforts require various policies and capacities in their implementation. Without adequate institutions to build and implement them, disaster emergency management efforts will not be effective in reducing the negative impacts of disasters (Law No. 3 of 2012). To fulfill the second indicator, the availability of evacuation training must exist so that the human resources who go to the field have competent competence in dealing with the disasters they face. In addition, the availability of contingency plans in an area can be a guideline for the direction of duties and responsibilities when handling disaster emergencies (Perbup No. 6 of 2021).

Evacuation training in Magelang Regency has existed in various forms which are generally coordinated by BPBD. In agencies that specifically deal with the field of disaster, the form of training is technical in nature with limited participants but its scope extends beyond the province of Central Java. The training was carried out by the Magelang Regency BPBD together with volunteers in the field of disaster emergency management (ORARI, 2020). In addition, there are tabletop exercise (TTX) and tactical floor game (TFG) training to strengthen preparedness to face the threat of Mount Merapi organized by BNPB (BNPB, 2020). Training at this level can increase cooperation and collaboration in policy formation and disaster management because of the exchange of ideas and ideas from the disaster sector in various regions. Meanwhile, the focus of evacuation exercises is not only carried out for regional agencies but also for communities in disaster-prone areas which are generally followed by village communities such as OPRB and LPBD. It aims to improve community competence regarding disasters that threaten them, both in terms of knowledge, attitudes, and skills when

dealing with disasters. Then, the humanitarian organization PMI carried out evacuation training in the form of using PPE, mastering evacuation routes, and promoting health in the community. However, agencies at the smallest scope do not have evacuation training because they are only tasked with accommodating refugees when they arrive.

The availability of contingency plans for the 2020 Merapi eruption disaster and the Covid-19 pandemic is not yet available in Magelang Regency. In 2021, a contingency plan related to the two new disasters was inaugurated in 2021 which was after the 2020 eruption disaster and the pandemic had occurred. The Renkon in question is a review document guided by the Regent's Regulation Number 6 of 2021 concerning the Mount Merapi Eruption Contingency Plan. This situation makes each agency use previous working procedures that have been adapted to health protocols.

4.3 Financial Reserves, Logistics, and Anticipation Mechanisms

The implementation of disaster emergency management efforts requires extraordinary efforts that require large-scale budgets and other needs to carry out the fulfillment of basic needs, protection of vulnerable groups and the construction of damaged critical facilities after a rapid assessment and search for help for existing victims is carried out. Areas identified as having the potential for a disaster on a large scale need to have budget reserves and other needs in accordance with the regional contingency plan for the disaster (Law No. 3 of 2012).

The third indicator has been met by Magelang Regency with the raising of aid and a special budget for handling disaster emergencies during the 2020 Merapi eruption during the Covid-19 pandemic. The mechanism for raising aid in Magelang Regency is managed by a regional agency that has been adapted to its scope of work. As the name implies, the National Amil Zakat Agency manages assistance in the specification of zakat. Then, Corporate Social Responsibility as a forum to receive assistance from volunteers and the community. The assistance will be managed by BPKAD and DPPKAD if it is in the form of money, while the Social Service will manage the assistance in the form of goods. In addition, assistance can be from neighboring areas, for example assistance from the Yogyakarta government if Magelang Regency is experiencing a disaster and vice versa. Meanwhile, for agencies that are more technical in handling disaster evacuation, the mechanism for raising aid is not available because it is not within their authority. Then, from the agency that manages refugees, the mechanism for raising aid is relatively simple, such as raising aid from the surrounding community, business actors, and social institutions. And if there is any remaining aid, it will be given to the refugees when they return to their area of origin for their survival needs for the next one to two weeks. The spread of news of the 2020 Merapi eruption disaster in the news and social media also contributed to increasing the arrival of assistance from the community.

In the second element, the Magelang Regency has a special budget for handling disaster emergencies. The regional government has a special budget for disaster in the Regional Incentive Fund managed by BPBD, Unexpected Expenditure funds, and the APBN. Meanwhile, smaller agencies do not have a special budget for the 2020 eruption of Merapi, which coincides with the Covid-19 pandemic, so the budget is only general for all disasters. The special budget from the local government is reimbursement, that is, the village government can obtain it through several procedures for collecting data on needs by the local village government and identifying disasters that have occurred by BPBD and volunteers. If the administrative requirements have been met, the budget will be given directly to the village. The purpose of this procedure is to identify accountability and report it. This condition makes several agencies use community donations such as in the Fund Month and personal funds from disaster management or committees to meet needs during the initial disaster period.

4.4 Relevant Procedures to the Exchange of Information

Evaluation of the effectiveness of disaster emergency management can be seen from the series of communications from parties involved in handling disaster emergencies both in the incident area and at the operations control center. To be able to carry out this evaluation, it is necessary to have adequate records of all emergency operations processes (Law No. 3 of 2012).

The fourth indicator has been fulfilled by Magelang Regency with the standard operating procedures resulting from the combination of each institution and recording or recording procedures. Local governments already have SOPs formed by adjusting the main tasks of each OPD as a technical reference for handling in the field. The procedure is obtained from the results of meetings with BPBD, all OPD, and volunteers which are held twice a year. The purpose of holding disaster meetings is to prepare for handling, evaluating, and managing aid for future disasters. The meeting finally resulted in a policy in 2021 as a guideline for standard operating procedures, namely Perbup Number 6 of 2021 concerning the Mount Merapi Eruption Contingency Plan. This policy is supported by the document Review of the 2020 Renkon Mount Merapi, Magelang Regency by BPBD to adjust the conditions of the Covid-19 pandemic. Meanwhile, agencies engaged in the technical field of handling evacuations use internal standard operating procedures and health protocols in collaboration with Law Number 29 of 2014 concerning Search and Help. However, for smaller agencies, standard operating procedures are not yet in the form of a document, so only communication is established from cooperation between agencies. And more simply using the internal working procedures that already existed and then adapted to the disaster conditions at that time.

In the second element, the procedure for recording or recording the Magelang Regency government has an official website called the Regency Disaster Information System which is managed by BPBD. SIKK is used by the government as a place to enter all disaster data, whether in the form of photos, videos, documents, or news. This page can be accessed by the general public for the purpose of disseminating understanding and knowledge about disasters in Magelang Regency. From there, the community can access knowledge about disasters in Magelang Regency, such as the location of the points, the number of victims, forms of handling, and needs. This one-stop information comes from institutions under the government. They do the recording and recording which is then always reported to the center. The documentation that has been taken is then used as material for disaster evaluation coordinated by BPBD. In general, evaluation meetings are held twice a year, but when a disaster strikes, the frequency of meetings will be increased to one to two times a month. The disaster evaluation will result in the renewal of emergency operating procedures that are adjusted to the regulations and current conditions so that disaster management will be more effective.

Based on the analytical data that has been obtained, Magelang Regency already has good disaster preparedness when handling the 2020 Mount Merapi eruption disaster during the Covid-19 pandemic. This is indicated by the fulfillment of several indicators of disaster preparedness even though the government's contingency plans do not yet have them. Fulfillment of disaster preparedness criteria is mostly found in high-level agencies such as Bappeda, BPBD, Basarnas, and PMI. Meanwhile, in the scope below, most of the Banyurojo Villages do not meet the criteria. This shows that the preparedness of Magelang Regency is not yet optimal at the lowest level agencies.

Of all the indicators spread across 5 agencies. The 12 elements were not fulfilled, therefore when viewed from the percentage, the preparedness of the Magelang Regency government reached 70% in disaster management at that time. This figure represents that the Magelang Regency government has entered the local government group that has good preparedness for handling the 2020 Merapi eruption disaster during the Covid-19 pandemic because its achievement has reached more than half of the preparedness requirements. Research on the role of local governments in disaster management has also been carried out by Sri Heryati (2020) which concludes that good coordination and mutual support involve various parties in a balanced way. This is in line with research conducted by researchers.

Associated with the concept of national security, disaster management includes social, economic, and environmental dimensions as mentioned by Buzan. Therefore, the fulfillment of disaster preparedness criteria when handling the eruption of Mount Merapi 2020 during the Covid-19 pandemic is in line with the goals and interests of the state contained in the concept of security at the national level.

V. CONCLUSION

Based on the results of the research and discussion that have been analyzed, the conclusion of this study is that the Magelang Regency Government's Preparedness has met the first indicator, namely the institutional technical capacity policy, and the handling mechanism. The availability of volunteers comes from individuals, experts, institutions, community organizations, and military components. Every year BPBD manages volunteer data and coordinates to areas that need assistance. Then, the emergency response command system has been divided and coordinated by BPBD into the scope of work for each OPD in order to achieve more efficient disaster management results. The operational plan document has also been prepared although it is still in draft form. For the smallest agencies, SKTD is not available due to time constraints in its formation. The preparedness of the Magelang Regency government has not met the second indicator, namely the disaster contingency plan and regular disaster drills. Evacuation training has existed in various forms which are generally coordinated by BPBD. In the technical scope, it includes joint training between disaster agencies and volunteers, rehearsal training or tabletop exercise, and tactical floor games. Within the community, the training was carried out with the participation of the village OPRB and LPBD. Within the scope of social institutions, training includes the use of PPE, mastery of evacuation routes, and health promotion. However, the smallest regional institutions do not have evacuation training.

The preparedness of the Magelang Regency government has met the third indicator, namely financial reserves, logistics, and anticipatory mechanisms. The aid-raising mechanism is managed by local agencies that have been adapted to their scope of work, including BAZNAS, CSR, BPKAD, DPPKAD, and the Social Service. Meanwhile, agencies in the smallest scope manage their assistance independently which is obtained from the surrounding community, business actors, and social institutions. However, in the agency that technically handles disaster evacuation, this mechanism is not available because it is not under their authority. Then, a special budget for handling disaster emergencies has also been owned through DID which is managed by BPBD, BTT, and APBN. Smaller agencies only have a general disaster budget because the special budget is obtained through a reimbursement procedure. This makes disaster managers and committees have to use personal funds at the beginning of the disaster.

The preparedness of the Magelang district government has met the fourth indicator, namely procedures relevant to the exchange of information. SOPs from the results of the combination of each institution already exist by adjusting the main tasks of each OPD. The SOP resulted in Perbup Number 6 of 2021 concerning the Contingency Plan for the Eruption of Mount Merapi and a derivative policy, namely the Review of the 2020 Renkon for Mount Merapi, Magelang Regency, 2020 by BPBD. In agencies that technically handle evacuations, use internal SOPs, health protocols, and Law no. 29 of 2014 concerning Search and Help. In smaller agencies, SOPs are not yet in the form of documents, so they rely on cooperation between agencies. Then, the recording or recording procedure is compiled into an official website called SIKK which can be accessed by the wider community.

From the results of the research that has been obtained, the researchers give advice to the local government of Magelang Regency to make a special program for training volunteers on handling multi-disaster threats so that volunteers have the knowledge before going to the field. Then, there needs to be good coordination and communication to the smallest scope so that all regional agencies can form a collaborative product regarding relevant disaster management procedures for achieving national security. The government also needs to provide evacuation training to all regional agencies in the form of seminars. It aims to provide knowledge if in the future you have to donate your energy when you are experiencing a shortage of personnel

during an evacuation. Related to the Covid-19 pandemic, it is necessary to make policies in handling multi-disaster for all types of disasters that occur simultaneously with other disasters. Last but not least, the government needs to allocate a special budget for certain disasters to areas that are always threatened by disasters to increase the synergy between the Magelang Regency Government.

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