

THE ROLE OF REGIONAL DISASTER MANAGEMENT AGENCIES IN NATURAL DISASTER MITIGATION IN CIANJUR DISTRICT

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ABSTRACT

To reduce the high impact of disaster risk, *BPBD* Cianjur Regency has made several efforts, one of which is the pre-disaster stage, namely disaster mitigation. This research aims to analyze natural disasters that often occur in Cianjur Regency and the need for natural disaster mitigation measures in order to minimize the risk or impact caused. The theory used in this research is the role theory proposed by Haroepoetri Arimbi and Santosa (2003). The result of this research is that *BPBD* Cianjur Regency in the implementation of natural disaster mitigation focuses on non-structural mitigation by running several programs. Overall, the implementation of the mitigation program has been running well but has not been maximized due to the limited budget and the vast area of Cianjur Regency, making it difficult for *BPBD* to run and develop natural disaster mitigation programs in all areas of Cianjur Regency.

Keywords: *Natural Disasters, Mitigation, Role.*

A. INTRODUCTION

Cianjur Regency is a regency in West Java Province with an area of 3,614.35 km², about 10.85 percent of the total area of West Java Province. Geographically, Cianjur Regency is located at the coordinates 106°42'-107°25' East Longitude and 6°21'-7°25' South Latitude, with an altitude of 7 - 2,962 meters above sea level and has a land slope of 0-40%. Cianjur Regency has 32 sub-districts and 360 villages.

The *Peraturan Bupati Cianjur No 125 Tahun 2022* explains that Cianjur Regency is a disaster-prone area, so it is necessary to plan for the implementation of disaster management which is one of the bases for regional development. *BPBD* Cianjur Regency states that all areas in Cianjur Regency are at risk of

landslides, extreme weather in the form of tornadoes, drought, earthquakes and forest and land fires. In the northern part of Cianjur Regency, located at the foot of Mount Gede, 9 sub-districts and 17 villages are at risk of volcanic disasters. Meanwhile, in the southern part of Cianjur Regency, 3 sub-districts and 18 villages are at risk of tsunami (*RENSTRA* 2021-2026).

Table 1 Cianjur Regency Natural Disaster Information Data, 2023

No.	Disaster	Amount
1	Flood/Flash Flood	38
2	Landslides / Land Movement	61
3	tornado	56
4	Earthquake	15
5	Forest and Land Fires (natural factors)	3
Total		173

Source: BPBD Cianjur Regency, 2023

Cianjur Regency is an area prone to natural disasters, this is proven by the occurrence of various types of disasters in Cianjur Regency. Based on the table above, earthquakes, landslides and floods are the most frequent disasters.

Various forms of disasters that have befallen the people of Cianjur Regency have resulted in enormous losses, both moral and material losses. The community felt the direct impact of the disasters that occurred, such as the earthquake at the end of 2022, precisely on November 21, which resulted in a devastating disaster in Cianjur Regency, especially in Cugenang District. The disaster resulted in a death toll of 635 people, 2,046 injured, and 39 missing (possibly buried under collapsed buildings) (Supartoyo et al, 2023).

To reduce the high impact of disaster risk, *BPBD* makes several efforts, one of which is the pre-disaster stage, namely disaster mitigation. According to the *Undang Undang No. 24 Tahun 2007 Pasal 9* explained that Mitigation is a series of efforts to reduce disaster risk, both through physical development and awareness and improvement of the ability to face disaster threats. With the implementation of natural disaster mitigation, it is hoped that the community will understand the importance of disaster mitigation and understand the first thing to do when a disaster occurs.

Based on initial observations, the researcher identified several issues related to the implementation of natural disaster mitigation in Cianjur Regency, namely The implementation of structural disaster mitigation measures has not been optimal. The implementation of natural disaster mitigation by the Regional Disaster Management Agency (*BPBD*) of Cianjur Regency is divided into two categories: structural mitigation and non-structural mitigation. Structural mitigation refers to efforts made by building physical infrastructure and applying technological approaches. Meanwhile, non-structural mitigation involves efforts to reduce the impact of disasters by increasing awareness and the ability to adapt to nature.

Table 2 Implementation of Natural Disaster Mitigation, 2023

Mitigation Type	realized	Not realized	Activity	additional information
Structural	-	√	-	-
Non structural	√	-	Disaster Resilient Village	145 Village
	√	-	Socialization	17 Subdistrict
	√	-	Preparedness Training	For disaster resilience volunteers
	√	-	Tree planting (reforestation)	In areas affected by the earthquake

Sourcer : BPBD Cianjur Regency 2023, processed by the author

Based on the table above, it can be seen that the Regional Disaster Management Agency (*BPBD*) of Cianjur Regency has implemented non-structural mitigation through various activities, namely the disaster-resilient village program, socialization, preparedness training, and reforestation. However, the implementation of structural mitigation has not been carried out optimally. This is due to the still low efforts in disaster prevention and management to reduce the impact of disaster risks with infrastructure support that is in line with technological advancements (source: *RENSTRA* Document of *BPBD* Cianjur Regency 2021-2026).

To provide a new perspective and differentiate this research from previous studies, the author has reviewed a number of studies that are closely related to the topic under study. The first previous research was written by Fery Irfandy Muhamad and Yaya M Abdul Aziz (2020) titled "Policy Implementation in Flood Disaster Mitigation in Dayeuhkolot Village," explains that the implementation of flood disaster mitigation policies in Dayeuhkolot Village, Bandung Regency has not been running optimally and still faces various problems and obstacles. This is indicated by the persistent issues in the implementation of flood disaster prevention, flood disaster emergency response, and post-flood disaster rehabilitation and reconstruction. The execution of these activities has not been optimal, resulting in flood disaster mitigation in Dayeuhkolot Village being considered ineffective in reducing the risk of flood disasters that frequently affect the village. The problems and obstacles in implementing flood disaster mitigation policies need to be addressed immediately so that policy objectives can be achieved effectively (Muhammad & Aziz, 2020).

The research conducted by Agung Perkasa titled "The Role of *BPBD* in Landslide Disaster Mitigation in Ambon City" states that the landslide disaster mitigation carried out by *BPBD* has been running well but is not yet optimal. Factors hindering the efforts include the Covid-19 pandemic, inadequate human

resources and infrastructure both in quality and quantity, densely populated residential areas, and lack of public awareness in environmental preservation. Efforts made to overcome these obstacles include coordinating to select the most needed mitigation activities, approaching the community, and conducting training to improve employee competencies. Although landslide disaster mitigation has been running well, it still needs optimization and addressing various obstacles to be more effective (Perkasa, 2019).

The research "Strategy of the Regional Disaster Management Agency in Reducing Natural Disaster Risk in Bima Regency," was written by Haeril, Taufik Irfadat, and Mas'ud (2022). This study analyzes the *BPBD* strategy in reducing disaster risk through a descriptive qualitative research method using purposive sampling technique conducted through interviews, documentation, and observation. The results of this research explain that the *BPBD* of Bima Regency has strategies in disaster management, namely by strengthening institutional rules and capacity, conducting integrated disaster management planning, organizing disaster education, training, and research, enhancing community capacity, collaboration, and participation, implementing disaster risk reduction strategies, and striving to improve the effectiveness of disaster emergency response. The strategy of *BPBD* Bima aims to prepare comprehensive disaster management, both from the institutional aspect, human resources, regulations, and community involvement. With this strategy, it is expected that disaster management in Bima Regency can be carried out effectively (Haeril et al., 2022).

Based on the three previous studies quoted above, researchers identified several differences which are certainly interesting to study, including that there has been no research that discusses natural disaster mitigation comprehensively and other differences also exist in the use of theories and methods used. These differences provide opportunities for further exploration and analysis in the current research, potentially offering new insights into the field of natural disaster mitigation. In this study, the researcher found that the implementation of natural disaster mitigation in Cianjur Regency has not been optimal, as evidenced by the lack of structural mitigation measures. Therefore, the researcher is interested in investigating this issue with the title "The Role Of Regional Disaster Management Agencies In Natural Disaster Mitigation In Cianjur District"

B. LITERATURE REVIEW

Public Organization

According to Sulistyani (2009), public organizations are government agencies that have formal legality, supported by the state to carry out the interests of the people in all complex fields. The state is obliged to serve every citizen and resident to fulfill their rights and basic needs within the framework of public services, as mandated by the 1945 Constitution. The establishment of public organizations is an effort to affirm the rights and obligations of every citizen and resident and to realize the responsibilities of the state and corporations in the delivery of public services (Pardede et al., 2022: 6-8).

The role of local government in natural disaster mitigation

A role can be defined as a form of behavior in carrying out one's rights and obligations that demonstrates one's position within an environment, in order to meet both one's own needs and the needs of others (Lestari, D. et al 2024).

Horoepoetri, Arimbi and Santosa (2003) in Riva'i (2016: 15) put forward five dimensions of role as follows:

1. Role as a policy. This definition explains how policy makers or policy implementers formulate a policy to deal with problems that arise from an institution.
2. Role as a strategy. This dimension explains how an institution organizes the plans that have been made so that they are carried out and do not deviate from the original objectives and so that they can get support from the community (public supports).
3. Role as a communication tool. This dimension explains that the role is used as a tool to be able to organize a comprehensive understanding of the object of purpose and become a means of providing advice in order to realize responsive and responsible decisions.
4. Role as a dispute organizer. This dimension describes the role as a way to resolve problems that arise by increasing understanding and tolerance.
5. Role as therapy. This dimension explains the role of therapy as an effort to restore the impact of a problem (community psychology) which is then followed up so that the situation returns to normal.

According to Ryaas Rashd, the government was formed with the main purpose of ensuring the creation of order in society. Thus, every citizen can live their lives calmly, peacefully, and peacefully (Riva'i, 2016: 19).

Disaster Mitigation

The *Undang-undang No. 24 Tahun 2007* on disaster management explains that mitigation is a series of efforts to reduce disaster risk, both through physical development as well as awareness and capacity building to deal with disaster threats. Mitigation is divided into two, namely structural and non-structural mitigation. Structural mitigation is an effort made by building physical infrastructure and applying a technological approach. Meanwhile, non-structural mitigation is an effort to reduce the impact of disasters by increasing awareness and adaptability to nature.

Disaster mitigation can be defined as an effort to tame natural disasters. In principle, mitigation is a variety of efforts that are both physical and non-physical preparations in the face of natural disasters. Physical preparations include spatial planning of disaster-prone areas and the establishment of building codes, while non-physical preparations include education about natural disasters to the community. So mitigation includes both physical and non-physical preparatory measures to reduce the impact of natural disasters (Heryati, 2020).

C. RESEARCH METHODS

The research that will be conducted by researchers on the role of the Regional Disaster Management Agency (*BPBD*) in natural disaster mitigation, with the object of research BPBD Cianjur Regency. In this study, researchers

used a qualitative approach. Researchers use qualitative methods to gain an in-depth understanding of the role of *BPBD* in natural disaster mitigation. The informant determination technique used in this research is purposive sampling technique, which is a data source sampling technique with certain considerations (Sugiyono, 2012: 218).

Data collection techniques in this study through observation, interviews and documentation. After the data is collected, data validation is carried out using triangulation techniques. Data analysis techniques are carried out in three stages, namely data reduction, data presentation, and conclusion drawing/verification.

D. DISCUSSION

Role Theory according to Haroepoetri, Arimbi and Santosa 2023 is the theory that researchers use to be a data analysis material in this study, the theory explains that a role can be successful if it pays attention to 5 dimensions including, namely, the role as policy, the role as strategy, the role as a communication tool, the role as dispute resolution and the role as therapy.

Role as Policy

In the implementation of natural disaster mitigation, *BPBD* Cianjur Regency only implements non-structural mitigation. In making structural mitigation policies, *BPBD* Cianjur Regency makes several programs by referring to several regulations, namely:

1. The *Peraturan Daerah Kabupaten Cianjur No. 6 Tahun 2019* concerning the implementation of disaster management in Cianjur Regency explains that the Regency Regional Government is responsible for implementing disaster management in the region. In carrying out the responsibility of organizing disaster management, the Regency Regional Government delegates its main duties and functions to *BPBD*.
2. The *Peraturan Bupati Nomor 125 Tahun 2022* concerning Disaster Risk Assessment of Cianjur Regency explains that Cianjur Regency is a disaster-prone area, so it is necessary to plan for the implementation of disaster management which is one of the foundations of regional development.
3. The *Peraturan Bupati Nomor 125 Tahun 2021* concerning the Development of Disaster Resilient Villages and Villages which explains that in order to realize the strengthening of regional capacity for disaster prevention, preparedness and emergency response in disaster risk reduction efforts, it is necessary to develop Disaster Resilient Villages in Cianjur Regency.
4. The Regent's Decree on the formation of *RETANA* (Disaster Resilience Volunteers) stipulates that each village in Cianjur Regency has 5 disaster resilience volunteers.

The initial stage in implementing mitigation programs in a non-structural manner *BPBD* Cianjur Regency prepares planning documents.

1. *RTRW* document (Regional Spatial Plan)
2. *RDTR* (Detailed Spatial Plan)
3. *KRB* (Disaster Risk Assessment)
4. *RPB* (Disaster Management Plan)

5. Contingency Plan Document

From the planning document, it is derived into programs that will be carried out by *BPBD* Cianjur Regency. The implementation of programs in natural disaster mitigation in Cianjur Regency are:

1. *RETANA* (disaster resilience volunteer)
2. *DESTANA* (Disaster Resilient Village)
3. Disaster preparedness bag
4. Tree planting (reforestation)
5. *SPAB* (Disaster Safe Education Unit)
6. Socialization and simulation of hatred
7. Disaster signs

Role as Strategy

Every organization needs a process to realize the goals that have been set. The process needed to achieve these goals is called strategy. If the goals and objectives are known in the process, then an effective form of strategy to achieve the goals can be determined. With a strategy, a series of stages or steps to realize the goal can be determined.

The Cianjur Regency *BPBD* carries out a strategy by increasing capacity for the community by providing disaster education. This is done so that the community understands the importance of mitigation as well as understanding what the first thing to do when a disaster occurs. *BPBD* also carries out strategies by optimizing facilities and infrastructure, increasing the capacity of preparedness and resilience training in disaster management with several programs that are carried out regularly, *BPBD* Cianjur Regency also carries out strategies by increasing socialization and disaster education for both the community and school children.

Role as a Communication Tool

Communication in every activity is needed and very important to build trusted relationships, and refers to efforts to achieve togetherness. In order for the programs designed by *BPBD* for the community to run well, good communication is needed between *BPBD* and the community.

BPBD communicates to the community through various means, such as socialization, training, disaster resilient village programs, and disaster volunteers. The community plays an active role in the implementation of the program and the existence of disaster volunteers in each village and sub-district makes it easier for *BPBD* Cianjur Regency to convey information quickly to the entire community.

Role as dispute resolution

Judging from the vision, mission and goals of *BPBD* Cianjur Regency, it aims to prevent and reduce the risk of natural disasters. Cianjur Regency is an area where all areas are indicated to be prone to disasters, so currently *BPBD* is focusing more efforts on strengthening prevention. In addition, *BPBD* also acts as a mediator in solving problems that occur in Cianjur Regency related to natural disasters.

Natural disasters are one of the problems that cannot be avoided. *BPBD* as a dispute resolution tool must provide prevention as well as handling in the event of a natural disaster. There are still many people in Cianjur Regency who are not

aware of disasters and their impacts so that *BPBD* continues to provide appeals to the community, especially people who live in disaster-prone areas. Many people whose living conditions are under the slope or even in the middle of the slope, it is very dangerous and the impact of disaster risk is very large. The *BPBD* has communicated with the community regarding the solution offered, which is to move. However, the majority of the community refused to move due to their financial limitations. This is also done so that people are always more introspective because of the risks they have to face due to their actions, but *BPBD* still monitors it so that it can be prevented as well as possible.

Role as Therapy

The *BPBD* as a therapy in natural disaster mitigation is by conducting socialization, education and training. This is done so that community knowledge increases and understands the importance of mitigation as well as understanding what the first thing to do when a disaster occurs.

The *BPBD* Kabupaten Cianjur carries out its role as a therapy by strengthening community knowledge through socialization, training and education programs to the community. Currently, *BPBD* Cianjur prioritizes 4 natural disasters based on the RPB (Disaster Management Plan) document, namely earthquakes, floods, flash floods and landslides. The role of *BPBD* in this case is seen from how they are able to involve and invite community participation in natural disaster mitigation efforts in Cianjur Regency. Based on the Big Indonesian Dictionary, therapy is defined as treatment that follows a diagnosis, so in this context *BPBD* is tasked with improving the ability of the Cianjur Regency community to mitigate natural disasters.

Inhibiting Factors in Natural Disaster Mitigation in Cianjur Regency

1. Limited budget

The limited budget is a factor that has not maximized the *BPBD* program in natural disaster mitigation in Cianjur Regency. As a result, it is difficult for *BPBD* to run and develop natural disaster mitigation programs throughout Cianjur Regency.

2. Inadequate facilities and infrastructure

The facilities and infrastructure owned by *BPBD* Cianjur Regency are generally still insufficient and need to be added because some equipment has been damaged and there is a lack of disaster equipment.

3. Area of Cianjur Regency

The vast area of Cianjur Regency is an obstacle in the implementation of natural disaster mitigation. Cianjur Regency has 32 sub-districts and 36 villages, all of which are at risk of natural disasters. Especially in the southern part of Cianjur Regency, the distance from the *BPBD* office reaches 3-7 hours which is very time consuming.

E. CONCLUSIONS

Based on the analysis conducted by the researcher, as explained previously, regarding the role of *BPBD* in natural disaster mitigation in Cianjur Regency, which refers to the role theory according to Haroepoetri Arimbi and Santosa (2003), the researcher draws the following conclusions:

1. Role as Policy

The *BPBD* of Cianjur Regency, in formulating natural disaster mitigation policies, refers to several regional regulations of Cianjur Regency. The initial stage in policy-making is the preparation of planning documents. These planning documents are then translated into programs to be carried out by the *BPBD* of Cianjur Regency. The existence of policies will guide the selection of methods or strategies to achieve goals and objectives more quickly.

2. Role as Strategy

The *BPBD's* role as a strategy has been well implemented. In implementing natural disaster mitigation strategies, *BPBD* focuses more on increasing the capacity of disaster education, preparedness, and resilience in disaster management.

3. Role as Communication Tool

BPBD has performed its role well in terms of communication. All natural disaster mitigation programs are directly related to the community, and with the presence of disaster-resilient volunteers, *BPBD* can effectively convey information to all residents of Cianjur Regency.

4. Role as Dispute Resolution

In its role as a dispute resolver, *BPBD* must provide both prevention and handling of disasters. In this case, *BPBD* enhances preparedness and resilience in disaster management, as well as increases socialization, training, and disaster education for the community.

5. Role as Therapy

In this role, *BPBD* has performed well, as seen from how *BPBD* is able to engage the community to participate in natural disaster mitigation.

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