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Conceptual Disaster Management in Regional Policy Analysis

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Abstract

Disaster management is one of the government's efforts to protect the community from disaster hazards. For this reason, in terms of disaster management that has occurred in disaster-prone areas so far. The role of the local government bureaucracy is often less relevant between the rules and the implementation that occurs in the field. As a result, there is a clash between the interests of the community, inter-regional interests, and inter-agency interests, so the role of the local government bureaucracy becomes less optimal and less effective, which has an impact on not paying attention to public awareness to be independent in dealing with natural disasters. The purpose of this research is to describe conceptual disaster management and regional policy analysis. The method used is a qualitative method with a descriptive approach through literature study. Based on the results of the research, it can be understood that a Disaster Management System is an integrated disaster management implementation system covering aspects of legislationregulation, planning, institutional and funding, as well as the implementation of disaster relief. The conceptual disaster management that needs to be strengthened for the disaster management system includes Pre-Disaster, Emergency Response, and Post-Disaster. Thus, in analyzing the policy there are interconnected factors between one another and their implementation in the field must go hand in hand. Improve institutional and community readiness in preventing, facing, and overcoming natural disasters that will occur, (prioritizing disaster risk reduction as a national priority with strong institutions, identifying, assessing, monitoring disasters and implementing early warning systems, and disaster management and increasing disaster preparedness.

Keywords: Conceptual, Disaster Management, Regional Policy.

INTRODUCTION

The unitary Republic of Indonesia is a vast archipelago, covering a land area of 1,904,569 km2, and an ocean area of 3,288,683 km2, accompanied by a large number of islands, namely 17,508 islands and a large population. Until now there have been several natural disasters, ranging from earthquakes, tsunamis, volcanic eruptions, floods, landslides, storms, and droughts. Therefore, Indonesia can be said to be a country with great potential for natural disasters. The problem of natural disasters in Indonesia is very complex because it occurs in areas where the population is often poor or vulnerable, and the location is far from the center of government, making it difficult to reach. Therefore, a new paradigm of disaster management model needs to be created immediately to overcome these problems.

Currently, community disaster management, namely towards a community that can be independent, able to recognize hazards from the environment, and be able to save themselves, is a step that must be taken now to create future sustainability.

According to data from the National Disaster Management Agency (BNPB), there were 3,056 natural disaster events in Indonesia during the period January 1 - October 3, 2023. The majority of these natural disasters were in the form of floods, totaling 893 events, followed by extreme weather with 861 events. Next, there were 687 forest and land fires (karhutla), 449 landslides, 116 droughts, 24 tidal waves/abrasion, 24 earthquakes, and 2 volcanic eruptions. Meanwhile, not a single tsunami event has occurred in Indonesia since the beginning of this year. Based on the region, on January 1-October 3, 2023 the most natural disasters occurred in West Java, reaching 524 events. Then natural disasters in Central Java had 445 events, South Sulawesi 193 events, and Aceh 172 events. BNPB reported that all of these disasters caused 5.35 million

people to suffer and be displaced, 5,555 people were injured, 204 people died, and 10 people were missing. The disaster also caused 25,116 houses to be damaged, of which 3,387 houses were severely damaged, 3,844 were moderately damaged, and 17,885 were lightly damaged. Then there were 714 public facilities damaged by the entire disaster, consisting of 348 educational facilities, 314 worship facilities, and 52 health facilities (Annur, 2023).

The government manages natural disasters as a step towards post-disaster high-risk. By Law No. 24 of 2007, Nurjannah et al (2012) state that the government develops disaster management plan from government initiatives and commitments. This then involves post-disaster management, leading to a paradigm shift in disaster management in Indonesia. As a change from the nature of disaster management that was previously based on emergency response, it has now shifted to preventive activities that only reduce risk (mitigation). Mitigation efforts are organized and managed in the National Medium-Term Development Plan (RPJMN) when considered through the aspect of development planning, so far, related to natural disaster management and the stabilization of living space. Central/regional governments have the authority to cope with disasters through planning and development, including elements of government decision-making related to disaster management (Marfuah, 2021).

The legal framework aims to respond to various disasters in Indonesia by creating a legal, institutional, organizational (pre-, emergency response and postdisaster) disaster management system and set a budget.Law No.24/2007 on Disaster Management was jointly issued by the Government and the House of Representatives to build a resilient disaster management system in Indonesia.

Furthermore, derivative regulations were established, among others: Government Regulation No. 21 of 2008 on the Implementation of Disaster Management; Government Regulation No. 22 of 2008 on Funding and Management of

Assistance; Government Regulation No. 23 of 2008 on the Participation of International Institutions and Foreign Non-Governmental Organizations in Disaster Management. Institutionally, the National Disaster Management Agency was established in 2008 and has the function of coordinating the implementation of disaster management activities in a planned, integrated and comprehensive manner with the promulgation of Regulations.No.8 of 2008 of the President relating to the country regulations Disaster management agency.

Law No. 24/2007 on Disaster Management refers to any event that is a threat caused by natural and unnatural factors and human factors that result in casualties, environmental damage, material losses, and psychological impacts (Wihayati, 2018). With the existence of Law No. 24/2007, planning policies including disaster management financing emerged. Meanwhile, Hidayah (2015) argues that in the era of regional autonomy, most regions are not yet aware of natural disaster management. With this law, several important things need to be considered, including a paradigm shift related to disaster that focuses on pre-disaster situations or risk mitigation, disaster management will be more proactive and no longer reactive, and the government will be more proactive and no longer reactive. prioritizing community participation over domination or control, then the field of disaster management is no longer the absolute right of the central government but has become a regional responsibility, or in other words, decentralized to the regions both in terms of budget costs and costs for the process of developing public policies.

So far, disaster management in Indonesia is still a cause for concern. Despite the passing of the Disaster Management Act or similar integrated regulations that have legal force to deal with disasters and refugees (a kind of disaster management act). But in reality, it has not been implemented consistently, we still see many incidents related to disaster management with unprofessional disaster management. Of the approximately 17,508 islands in Indonesia (which have names or have not been named), disasters and emergencies are often present in crowded

centers, and even floods are always present in big cities. Some of these areas have lower ground contours and river surfaces. Predictions and pre-disaster or emergency actions must also be followed by announcements and socialization of disasters or emergencies to all stakeholders. This of course requires cooperation between related sectors and regions, by the principles in the implementation of decentralization, deconcentration, and assistance tasks stipulated in Government Regulation No. 38 of 2007 concerning the Division of Government Affairs between Provincial Regional Governments, and Regency / City Regional Governments, which is implemented with due regard to Government Regulation No. 50 of 2007 concerning Procedures for Implementing Regional Cooperation.

To achieve the goal of overcoming natural degradation, preventive efforts are needed from the beginning, which requires significant efforts from the government, from the central level down, as well as cooperation from protected communities, and combining activities with development programs. To minimize the negative impacts of natural disasters, disaster risk reduction is carried out with the primary goal of a non-disaster situation. From there, where possible, efforts to reduce community losses will be applied to development plans at the national and local levels. The government develops disaster response plans starting from the government's initiative and commitment, identification of disaster risks, behavioral adjustments, and division of labor as well as the level of availability of manpower and resources as well as preparatory steps. Planning by providing continuous support and efforts to improve the program until it achieves the expected results and standards, and minimizes errors during implementation. Meanwhile, when the regions hold the authority to run their government, and tackle disasters there are still regional attitudes that are less concerned or can also be called not good enough to mainstream pre-disaster prevention in preparing their regional development plans.

Since its inception, conceptual disaster management policy has not only emphasized the role of the state. This is consistent with concepts such as governments moving from a collaborative and interactive command-and-control model of government to a collaborative governance network model (Shalih, 2021). Considering the above background, to face the challenge of increasing threats of natural and non-natural disasters and achieve a resilient Indonesia 2045, there is a need to design and analyze resilient and reliable disaster prevention policies in Indonesia according to the Disaster Management Master Plan established by Presidential Decree. The purpose of this paper is to formulate conceptual disaster management in regional policy analysis

RESEARCH METHODS

This research uses a qualitative research method with a descriptive approach. Primary data was obtained from various books and literature related to the research theme, and secondary data was obtained through social media news and related journals. Data validation techniques were carried out using data source triangulation.

RESULT AND DISCUSSION

Disaster management is a series of activities covering various aspects of disaster management before, during, and after a disaster occurs, known as the disaster management cycle. The cycle aims to (1) prevent loss of life; (2) reduce human suffering; (3) inform the public and authorities about risks, and (4) reduce damage to infrastructure, major property, and loss of economic resources.

In general, a disaster management system is a conceptual framework that integrates several aspects, namely legal framework (regulation), planning, institutions, financing (budgeting), capacity building, and disaster management implementation (Maarif, 2012). Due to the high risk of disasters in Indonesia, the disaster management system contained in Law No. 24 of 2007 on Disaster Management System should be implemented throughout Indonesia (Kristian, 2018).

The disaster management system is based on the basic legal framework of Law No. 24/2007 on Disaster Management and its derivatives (Government Regulation, Presidential Regulation, BNPB Secretary Regulation, etc. (Maarif, 2012). Naturally, disaster management also needs to be done comprehensively. This means that disaster management is not partial but takes into account all aspects of life. It was explained that disasters are a multi-stakeholder concern as part of disaster prevention policy. In its development, disasters as an all-parties issue is now known as the Pentahelix approach model, involving government, academia, business, communities, and the media.

The Penta helix or multi-helix approach model involving government, academia, business, community, and media is now considered very suitable to accommodate the participation of all parties with coordination and collaboration mechanisms (collaborative governance). However, as required by legislation, the main responsibility lies with the government, both at the central, provincial, district/city, and village levels (heavy government). In stages, the implementation of disaster management starts from the pre-disaster, emergency response, and postdisaster stages.

Although national disaster management systems are organized in a conceptual framework, the implementation of disaster management systems is also highly regional. Each region has local knowledge regarding disaster management and disaster risk management (Maarif et al., 2012). Various research findings from different countries in Asia, America, and Africa show that the success of disaster prevention programs depends on the participation and contribution of local communities. Local communities play the leading role in disaster preparedness. Participatory approaches, local skills, and knowledge (local wisdom) become an integral part of disaster management systems and play an important role in disaster risk reduction efforts (Maarif, 2013).

In line with this, the authoritative system for calamity administration, to be specific Law Number 24 of 2007 concerning Calamity Administration, has also emphasized the significance of community interest in fiasco administration "that each citizen has the correct to take part in choice making in calamity administration", where this interest incorporates "choice making, giving data, supervision, arranging, execution, and upkeep of programs" (Hadi, 2020). With perspectives that are locality, each person is anticipated to preserve and protect nature. These endeavors must be made by each person in all their activities to guarantee the quality of human life (we pay attention to nature, nature takes care of us). Conceptually, this can be in line with building catastrophe strength endeavors. Each improvement arranging is expected to supply arrangements (agreed arrangement arranging) in agreement with nature. Improvement arranging based on a biological approach is anticipated to preserve the adjustment of nature (Kodar, 2020).

The development of a disaster risk reduction system in Indonesia cannot be separated from the role of all parties including the Government of Indonesia (Kurniasari, 2017). The system has been developed since the era of Indonesian independence (Pusponegoro & Sujudi, 2016). For this reason, a conceptual analysis is described as follows (LAN RI, 2023):

- Action Plan

Disaster management plans need legality to be implemented by all parties involved in disaster management efforts. The document can be in the form of regional regulations or Regent/Mayor regulations. The main problem faced by the regions is that the regulations governing disaster management are not specific to technical issues, almost all local governments

in Indonesia already have a Regional Regulation (PerDa) on disaster management but do not have enough derivative regulations for the implementation of the PerDa. In addition, the Regional Regulation on the Regional Spatial Plan (RTRW) owned by the region has not been explicitly oriented towards disaster risk reduction so many residential areas or other areas are located in disaster-prone areas, and the lack of assertiveness of the government to relocate residential areas that are included in disaster-prone areas.

- Logistics

Logistics systems play an important role in dealing with disasters and seeing the readiness of the region to anticipate the hazards and impacts of disasters. Logistics is the main key to surviving an emergency response situation that is enforced for a certain period after a disaster occurs. The challenges of damaged infrastructure, lack of human resources, and distribution channels must be prepared so that later the entire system in disaster capacity can be integrated. Information about the location and components of the storage warehouse can be accessed by the BPBD which will later be connected to the disaster information system. So that the flow of aid from the warehouse to the shelter location or temporary shelter can run more efficiently.

- Disaster Information System

Disaster information systems are very useful in reducing disaster risk, especially for disaster-prone areas. Every disaster-prone area is considered necessary to strengthen information systems and management in disaster management so that people can easily get access to disaster management information. One thing that must be done is to utilize the information network that has been built by the local government. Provision of information advice in the form of a special radio network that reaches directly to the community and lower levels of government such as villages and sub-districts so that the government does not only depend on cellular networks, socialization that reaches all levels of society to remote villages and sub-districts as well as to school children and youth in the village.

- Finance

Each local government should allocate adequate disaster management funds for BPBDs and also provide a budget in the form of unexpected funds that are ready to be used when a disaster occurs, but before budgeting large funds for disasters, each region should first develop regulations for disaster financial management to avoid misuse of disaster budgets.

- Infrastructure

The most important disaster infrastructure that must be available is permanent evacuation posts equipped with other facilities, the availability of public kitchen cars, heavy equipment, and clear evacuation routes.

- HR

Disaster human resources are not only civil servants from BPBD but all elements of government and society, especially community volunteers who are trained and equipped with disaster management skills.

- Organization

BPBD Regional Apparatus Organization has a vital role in disaster management, the role of BPBD must be strengthened so that all parties can be coordinated properly, besides BPBD must also form a disaster management technical implementation unit at the sub-district and village levels so that disaster management can be closer to the community.

Furthermore, the regional policy is described as follows:

- Action Plan:

a. The preparation of local regulations, both spatial planning regulations and disaster management regulations, must go through a comprehensive disaster study Responsible Person: Ministry/Agency (Ministry of Home Affairs, Bappenas, Ministry of PUPR), Local

Government (Bappeda, Balitbangda, Regional Secretariat, BPBD, Inspectorate, PUPR Office, Social Service)

b. Control of violations of Regional Regulations on regional spatial plans (RTRW) Responsible Person: Local Government (Inspectorate, BPBD, PUPR Office, Spatial Planning Office, Satpol PP, DPMPTSP)
c. Implementation of an evaluation of the implementation of local regulations regarding the RTRW carried out nationally by the relevant institution/ministry Responsible: Ministry/Agency (Ministry of PUPR, Bappenas, Ministry of Home Affairs)
d. Evaluation of the implementation of local regulations on disaster management conducted nationally by the relevant agency/ministry in charge: BNPB and BPBD

- Logistics:

a. Strengthening the mapping of geographical areas and population numbers to facilitate the identification of the need for distribution of emergency logistics needs and preparation of logistics distribution channels. Person in Charge: Local Government (BPBD, Disdukcapil, PUPR Office, Regional Secretariat)
b. Establish several logistics centers or depots at the district/city and sub-district levels that can accommodate logistics assistance with a more practical distribution system or flow of goods in and out. Responsible Person: Ministries/Agencies (BNPB), Local Governments (BPBD, PUPR Office, Regional Secretariat, Social Service)
c. Strengthening synergy with various agencies and related parties on duties and responsibilities when a disaster occurs. Responsible Person: Local Government (BPBD, Regional Secretariat, PUPR Office, Hospital, Social Service, DPRD)
d. Maximize control and evaluation functions, including documentation of funding and documentation of logistics distribution to disaster victims Responsible Person: Ministry/Agency (BNPB), Local Government (BPBD, Regional Secretariat, Social Service)

- Disaster Information System

a. Create a disaster awareness communication forum consisting of various stakeholders including government, private sector, academics, and NGOs Responsible Person: Local Government (BPBD, Regional Secretary, Village, Sub-district)
b. Develop an appropriate socialization model based on existing community groups. Responsible Person: Local Government (BPBD, Social Service, BPSDM)
c. Establish a disaster information system in the form of a special disaster radio network down to the village level Responsible: Local Government (BPBD, sub-district, village, Informatics Office)
d. Strengthening the Capacity of Infrastructure Management of the Person in Charge: Local Government (BPBD, Social Agency, Public Works Agency)

- Finance

a. Establish a nationally integrated regional disaster financial management system Responsible Person: Ministries/Agencies (Ministry of Finance, BNPB, Bappenas, Kominfo, and the House of Representatives), Local Governments (provincial and district/city BPBDs, Bappeda and DPRDs)
b. Increase the amount of regional disaster financial management budget Responsible Person: Ministries/Institutions (Ministry of Finance, BNPB, Bappenas, and the House of Representatives), Local Governments (provincial and district/city BPBDs, Bappeda and DPRDs)

- Infrastructure

a. Realizing the procurement of disaster infrastructure in the region Responsible Person: Local Government (BPBD, Social Agency, Public Works Agency)

b. Preparation of disaster equipment needs plan Responsible Person: Local Government (BPBD, Regional Financial Management Office and Development Planning Agency)
c. Build evacuation shelters based on the results of needs and mapping of vulnerable disaster areas Person in Charge: Local Government (BPBD, Regional Financial Management Office and Regional Planning Agency)
d. Strengthening the Capacity of Infrastructure Management of the Person in Charge: Local Government (BPBD, Ministry of Social Affairs, PUPR)

- HR

a. Creation of Education and Training Programs for all sectors of society and the ASN in charge: Ministry/Agency (LAN RI, Basarnas, Ministry of Social
b. Affairs, BNPB), Local Government (BPBD, Social Service, BPSDM)
c. Create a system and mechanism for the socialization of disaster management preparedness Responsible Person: Ministries/Agencies (BNPB, BASARNAS, BPBD, Ministry of Social Affairs), Local Governments (BPBD, Social Services)
d. Establish disaster technical competency standards Responsible Person: Ministry/Agency (BNPB, BPBD, BASARNAS, Kemenpan-RB, Ministry of Home Affairs, LAN RI), Local Government (BPBD)

- Organization

a. The design of the organizational structure of Provincial and Regency/City BPBDs should be aligned with Government Regulation No. 18/2016 on Regional Apparatus where the term Classification is changed to Typology A, B, and C with a maximum of four Sectors and at least two Responsible Persons: Ministry/Agency (National Disaster Management Agency (BNPB), Ministry of Home Affairs, and Ministry of Administrative Reform and Bureaucratic Reform), Local Government (Provincial and District BPBDs)
b. Strengthen the Command Unit or Command Post under the control of the Regional Secretary as the highest Middle High Leadership Official in the Province and the highest Primary High Leadership in the Responsible District/City: Ministries/Agencies (National Disaster Management Agency (BNPB), Ministry of Home Affairs, and Ministry of Administrative Reform and Bureaucratic Reform), Local Governments (Provincial and District BPBDs)
c. The design of a specialized BPBD structure dealing with the Equipment Sector can be established that focuses on equipment management, maintenance, operations, and procurement of a Person in Charge: Ministries/Agencies (National Disaster Management Agency (BNPB), Ministry of Home Affairs, and Ministry of Administrative Reform and Bureaucratic Reform), Local Governments (Provincial and District BPBDs)

Establishment of disaster management technical implementation units down to the sub-district/village level Responsible Person: Ministries/Agencies (National Disaster Management Agency (BNPB), Ministry of Home Affairs, and Ministry of Administrative Reform and Bureaucratic Reform), Local Governments (Provincial and District BPBDs)

CONCLUSION

From the discussion above, Law No. 24/2007 on Disaster Management has described a National Disaster Management System and is an integrated disaster management system covering aspects of legislation-regulation, planning, institutional and funding, as well as the implementation of disaster relief. The reformulation of disaster management policies that need

to be strengthened for the disaster management system is as follows: (1) Pre-Disaster, (2) Emergency Response, and (3) Post-Disaster.

Inter-regional and cross-sectoral cooperation is needed in all aspects of disaster management, especially in its implementation, both in the pre-, during, and post-disaster. For this reason, it is necessary to have a more strategic local government policy that underlies disaster issues to facilitate and launch cooperation. In disaster-prone areas, it is very necessary to cooperate and improve the quality of leadership for coordination, especially at the emergency response stage, where the scarcity of resources is often an inhibiting factor, complicating and constraining cooperation. With the existence of references and guidelines for handling officers and other related officers, disaster management is expected to be more efficient and more effective, especially with the harmonious optimization of resources. The use of results and data for disaster management is greatly influenced by the quality of coordination and managerial ability to implement humanitarian assistance activities.

In disaster management efforts, it is necessary to improve the capacity building of internal work systems and working relationships between cross-sectoral disaster management institutions. In addition, this effort can be successful if it is followed by an increase in the knowledge, skills, behavior, and attitudes of qualified handling officers, to be able to respond to various problems faced appropriately and effectively. The lack of clarity and incompleteness of regulations is a gap that can be exploited.

There needs to be an effort to improve the internal work system and working relationships between cross-sectoral disaster management institutions. In addition, these efforts can be successful if they are followed by an increase in the knowledge, skills, behavior, and attitudes of qualified handling officers, to be able to respond to various problems faced appropriately and effectively.

Improving institutional and community readiness to prevent, face, and cope with natural disasters that will occur, (prioritizing disaster risk reduction as a national priority with strong institutions, identifying, assessing, monitoring disasters and implementing early warning systems, and disaster management and improving disaster preparedness. Improved disaster management performance, both in the emergency and recovery stages, more programmed and planned to handle before, during, and after disasters and disaster risk reduction. Stronger institutional capacity, especially in the context of community empowerment, related to funding in handling and increasingly decentralized disaster management and disaster risk reduction efforts, accompanied by increased preparedness in the face of disasters, and increased usability of regional spatial plans in disaster management.

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