

# Evaluation of the Effectiveness of Post-Natural Disaster Management: A Case Study at the Bima City Regional Disaster Management Agency

Post-Natural Disaster  
Management

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## ABSTRACT

*Regional Disaster Management Agency. This type of research is qualitative descriptive research. The data collection techniques used are observation, interviews, and documentation. The analysis technique is qualitative descriptive analysis, which starts from data reduction, data display, and verification and conclusions. The results of this study that facing the risks and impacts of natural disasters in Bima City, this study provides deep insights related to the implementation of post-disaster management by the Regional Disaster Management Agency (BPBD). Various findings and research results create an important foundation for understanding the challenges and opportunities faced in efforts to improve Bima City's resilience to natural disasters. The importance of synergy between local governments, the private sector, and communities is the main focus in building community resilience. Increased awareness, skills, and collaboration between agencies are key to success in minimizing risks and mitigating disaster impacts. By strengthening the post-disaster management system, Bima City can face a more resilient, responsive, and able to maintain the security and welfare of its people. By continuously improving understanding and implementing effective strategies, Bima City has the potential to become an example in building a safe and resilient city against the threat of natural disasters.*

**Keywords:** Implementation, Mitigation, Disaster

## ABSTRAK

*Penelitian ini bertujuan untuk mengetahui tentang Pelaksanaan Penanggulangan Pasca Bencana Alam Pada Badan Penggulangan Bencana Daerah Kota Bima. Jenis penelitian ini adalah penelitian deskriptif kualitatif. Teknik pengumpulan data yang digunakan yaitu observasi, wawancara dan dokumentasi. Teknik analisisnya yaitu analisis secara deskriptif kualitatif, yang dimulai dari reduksi data, display data, dan verifikasi dan pengambilan kesimpulan. Hasil penelitian ini bahwa menghadapi risiko dan dampak bencana alam di Kota Bima, penelitian ini memberikan wawasan mendalam terkait pelaksanaan penanggulangan pasca bencana oleh Badan Penanggulangan Bencana Daerah (BPBD). Berbagai temuan dan hasil penelitian menciptakan landasan penting untuk memahami tantangan dan peluang yang dihadapi dalam upaya*

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*meningkatkan ketahanan Kota Bima terhadap bencana alam. Pentingnya sinergi antara pemerintah daerah, pihak swasta, dan masyarakat menjadi fokus utama dalam membangun ketahanan komunitas. Peningkatan kesadaran, keterampilan, dan kolaborasi antarlembaga menjadi kunci keberhasilan dalam meminimalkan risiko dan memitigasi dampak bencana. Dengan memperkuat sistem penanggulangan pasca bencana, Kota Bima dapat menghadapi masa depan yang lebih tangguh, responsif, dan mampu menjaga keamanan serta kesejahteraan masyarakatnya. Dengan terus meningkatkan pemahaman dan implementasi strategi yang efektif, Kota Bima berpotensi menjadi contoh dalam membangun kota yang aman dan berdaya tahan terhadap ancaman bencana alam.*

***Kata kunci:*** Pelaksanaan, Penanggulangan, Bencana

## INTRODUCTION

Disasters are events or series of events that threaten and disrupt people's lives and livelihoods caused by both natural and non-natural factors and human factors, resulting in human casualties, environmental damage, property loss and psychological impacts (Lestari et al., 2012; Habibullah, 2013; Dewi, 2018). Disaster is a serious disruption to the functioning of a society, causing widespread losses to human life in terms of material, economic or environmental aspects and exceeding the ability of the community concerned to overcome it using their own resources (Meiwanda, 2016; Erman, 2017).

A natural disaster is something that is unexpected and that we do not want, whenever and at any time, even under any circumstances, it cannot be predicted that it will occur, for this reason various efforts are made to overcome and overcome it (Kurniawan et al., 2014; Haeril et al., 2021; Kusumasari, 2014). The government's attention to Natural Disaster Management is very great, namely by issuing various regulations, including: Republic of Indonesia Law no. 24 of 2007 concerning Disaster Management, Government Regulation RI No.21 of 2008 concerning Implementation of Disaster Management; Republic of Indonesia Government Regulation no. 22 of 2008 concerning Funding and Management of Disaster Assistance; Republic of Indonesia Government Regulation no. 23 of 2008 concerning the Role of International Institutions and Foreign Non-Governmental Organizations in Disaster Management; RI Presidential Regulation No.8 of 2008 concerning the National Disaster Management Agency (National Disaster Management Agency, 2018).

The aim of disaster management is to prevent and limit the number of human casualties as well as damage to property and the environment; eliminate misery and difficulties in the lives and livelihoods of disaster victims; returning disaster victims from shelter/refugee areas/locations to their areas of origin if possible or relocating them to new areas/locations that are livable and safe; restore the function of main public facilities, such as communication/transportation, drinking water, electricity, telephone. including restoring the economic and social life of disaster-affected areas; reduce further damage and loss; lay the necessary foundations for implementing rehabilitation and reconstruction activities in a development context; guarantee the implementation of disaster management in a planned, integrated, coordinated and comprehensive manner; appreciate local culture; encourage the spirit of mutual cooperation, solidarity and generosity; and creating peace in social, national and state life (Marendra et al., 2014; Ketaren, 2016; Ahdi, 2015).

Natural disasters are a threat that can have a serious impact on social, economic, and environmental life in Bima City. As one of the areas vulnerable to natural disasters, it repeatedly faces challenges in managing and overcoming post-disaster impacts. The Bima City Regional Disaster Management Agency (BPBD) has a strategic role in implementing post-disaster management efforts, however, a number of problems arise in its implementation (Widodo & Waskita, 2014). Bima City is in an area that has high vulnerability to natural disasters such as earthquakes, floods, and landslides. This geographical condition makes this city vulnerable to the impacts of natural disasters which

often involve a number of losses in terms of casualties, infrastructure damage and loss of natural resources. Even though the Bima City BPBD has a mature disaster management plan, its implementation in the field is often faced with complex challenges. Effective coordination, appropriate resource allocation, and rapid response are the keys to dealing with post-disaster impacts (Santoso, 2013; Hidayat, 2008).

The active involvement of the community and the private sector in post-disaster management efforts is an important factor that can strengthen collective resilience and responsibility. However, it is not clear to what extent their involvement in supporting Bima City BPBD activities (Tenggara et al., 2012; Dewi, 2013). Infrastructure and logistics readiness are crucial elements in responding to post-disaster impacts (Faturahman, 2017; Fan et al., 2021). Sustainability of operations and maintenance of critical facilities such as evacuation centers, communications equipment, and disaster management vehicles need serious attention to ensure BPBD readiness (Rahmat et al., 2021; Rahmah & Ikhsan, 2022). Through an in-depth understanding of the background of this problem, it is hoped that constructive ideas and solutions can emerge in increasing the readiness and effectiveness of the Bima City Regional Disaster Management Agency in facing post-natural disaster challenges.

## **LITERATURE REVIEW**

### **Understanding Disaster Management**

Law Number 24 of 2007 concerning Disaster Management states that what is meant by Disaster Management is a series of efforts which include establishing development policies that are at risk of disasters, disaster prevention activities, emergency response and rehabilitation. As well as disaster response activities before, during and after a disaster which includes disaster prevention, mitigation, preparedness, emergency response and recovery of conditions resulting from the impact of a disaster. Law Number 24 of 2007 Article 1 paragraph 5 states that "the implementation of disaster management is a series of efforts that include establishing development policies that are at risk of disasters, prevention activities, emergency response and rehabilitation".

### **Disaster Management**

Disaster Management is a dynamic, integrated, and sustainable process to improve the quality and steps related to disaster observation and analysis as well as prevention, mitigation, emergency response, preparedness, rehabilitation, and reconstruction (Nisa, 2014). Disaster management is defined as a planned and organized process of planning, implementing, financing and evaluating actions to minimize the risks and impacts of disasters." (Khan et al., 2008; Alagh, 2021). According to WHO, disaster management is a series of coordination activities and management that is planned, organized, and implemented to involve or mobilize resources to counter the threat or impact of a disaster (Sun et al., 2020; Stenchion et al., 2018; Al Eid & Arnout, 2020).

Meanwhile, according to David Alexander in (Lestari et al., 2012; Batalipu et al., 2019) Disaster management is a disaster risk management process that involves risk recognition, risk reduction, and response to disasters with the aim of reducing the impact of disasters. Furthermore, the International Strategy for Disaster Reduction (ISDR) explains that disaster management is a planned and coordinated process for planning, training, and involving actions that will reduce the risk and impact of disasters (Yuliana, 2019; (Regional, 2019). So that disaster management and anticipatory actions are through absolute requirements to be able to live side by side with natural disasters (Rivai, 2021; Handayani, 2011; Alam et al., 201); Comfort, 2005; Kristianto Day, 2020). Therefore, there is a need for the government's political will to immediately prioritize disaster management programs and outreach activities to the community (Amirudin et al., 2021; Hapsari & Djumiarti, 2016); Khodarahmi, 2009).

## **RESEARCH METHODS**

This research adopts a qualitative descriptive research method as the main framework to explore an in-depth understanding of the Implementation of Post-Natural Disaster Management by the Bima City Regional Disaster Management Agency. With this approach, researchers try to produce descriptive data that can reveal the processes that occur in the field. Qualitative descriptive research methods allow researchers to collect narrative and contextual data, to provide a holistic understanding of the phenomenon being researched. This descriptive research aims to describe, describe, and analyze Implementation of Post-Natural Disaster Management, with a focus on the role of the Bima City Regional Disaster Management Agency. In the process, the author will present the results of an in-depth analysis related to the steps, policies and practices carried out by the agency in dealing with the impacts of natural disasters. Thus, this research not only offers a general overview, but also provides qualitative insights that can make a substantial contribution to the understanding of post-natural disaster management practices at the regional level.

## **RESULTS AND DISCUSSION**

Bima City is in an area that is often affected by natural disasters such as earthquakes, floods, and landslides. This geographical condition places Bima City at high risk, which makes post-disaster management very important. The Regional Disaster Management Agency (BPBD) has a central role in handling post-disaster impacts. Through planning and coordination, BPBD is at the forefront of managing response and recovery. Challenges in coordination and communication between institutions are the main obstacles in post-disaster management. The effectiveness of the response depends on good collaboration between BPBD, local government and related parties. Active involvement of the community and the private sector plays an important role in post-disaster management. Their participation can speed up the recovery process and expand available resources.

Infrastructure and logistics readiness is an important factor in post-disaster management. Regular maintenance and repairs are required to ensure adequate availability. Evaluation of the effectiveness of the early warning system is a critical step in increasing public awareness. Continuous improvement is required to minimize risks. Looking at the experiences of other cities in post-disaster management can provide valuable insight. Best practices and successful strategies can be adopted and adapted. BPBD's readiness to deal with disasters needs to be strengthened through continuous education and training. Continuously improving skills and knowledge are key to an effective response.

The support and active involvement of local governments is very important in ensuring the sustainability of post-disaster management efforts. Appropriate policies and budget allocations need to be implemented. Modern technology, such as early warning systems, can improve rapid response to disasters. Integration of these technologies needs to be considered to maximize their effectiveness. Increasing community participation in the decision-making process regarding post-disaster management can strengthen inclusive and effective responses. Every disaster should be an opportunity for in-depth evaluation. Learning from previous experiences can improve disaster management capacity in the future. Synergistic efforts between BPBD, regional government, the private sector and the community need to continue to be improved. Strong collaboration will strengthen the city's resilience to disasters.

## **CONCLUSIONS AND RECOMMENDATIONS**

In order to deal with the risks and impacts of natural disasters in Bima City, this research provides in-depth insight into the implementation of post-disaster management by the Regional Disaster Management Agency (BPBD). Various research findings and results create an important basis for understanding the challenges and opportunities faced in efforts to increase urban resilience to natural disasters. Overall, fragile geographic

conditions indicate the need for more effective planning and implementation of post-disaster management strategies. BPBD, as the main institution responsible for handling disaster impacts, has a crucial role. Key challenges involve interagency coordination and communication, active community involvement, and the use of technology to improve early warning systems. The importance of synergy between local governments, the private sector, and communities are the focus in building community resilience. Increasing awareness, skills and collaboration between institutions is the key to success in minimizing risks and mitigating the impact of disasters. By strengthening the post-disaster management system, Bima City can face a future that is more resilient, responsive, and able to maintain the security and welfare of its people. By continuing to improve understanding and implementation of effective strategies, Bima City has the potential to become an example in building a city that is safe and resilient to the threat of natural disasters.

To increase the preparedness and responsiveness of Bima City in facing the threat of natural disasters, several practical suggestions can be proposed. First, it is necessary to improve coordination mechanisms between related institutions, including the Regional Disaster Management Agency (BPBD), regional governments, the private sector, and NGOs. Better alignment efforts between these entities are expected to increase the efficiency and effectiveness of post-disaster responses. It is necessary to implement intensive education and outreach programs to increase community understanding of their role in post-disaster management. Active community involvement is considered crucial in strengthening local responses and accelerating the recovery process. In addition, it is recommended to organize regular training and education programs for BPBD personnel to improve their skills in dealing with various types of disasters. Strengthening this capacity is expected to support a faster and more effective response. Overall, the holistic implementation of these measures is expected to form a stronger foundation for the city's sustainable resilience to natural disasters.

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