

Multi-stakeholder communication and coordination systems in post-disaster socio-economic recovery collaboration

Mochammad Rozikin

Faculty of Administrative Sciences, Universitas Brawijaya

163 MT Haryono Street, Lowokwaru, Malang, Indonesia

Email: mochrozikin@ub.ac.id and Phone Number: + 62341 553737

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Abstract This study explores the crucial role of multi-stakeholder communication and coordination systems in the socio-economic recovery collaboration implemented in East Lombok, Indonesia following a significant disaster. Using a qualitative research approach, this paper examines the interactions and communication dynamics among various stakeholders, including government agencies, non-governmental organisations, local communities, and the private sector. The research highlights the importance of effective communication and coordinated efforts in rebuilding the socio-economic fabric of disaster-affected areas. Findings indicate that collaborative frameworks significantly enhance the efficiency and effectiveness of recovery processes, fostering resilience and sustainable development. The study also identifies key challenges such as resource allocation, stakeholder coordination, and cultural barriers which can impede recovery efforts. Recommendations are provided for improving communication strategies, stakeholder engagement, and policy implementation to strengthen post-disaster recovery initiatives. This research contributes to the field of communication studies by offering insights into the dynamics of multi-stakeholder collaboration in disaster recovery, emphasising the need for integrated and inclusive approaches to achieve long-term socio-economic stability and growth.

Keywords: collaboration; multi-stakeholder communication; post-earthquake disaster

INTRODUCTION

Indonesia is a country that is greatly exposed to experiencing various types of natural disasters (Widyaningrum et al., 2020). The UN report places Indonesia in fourth place as the country that is most vulnerable to the impacts of natural disasters in the Asia Pacific region (Isa, 2016). The same report also estimates that more than 18 million Indonesians were affected by natural disasters between 1980 and 2009. (Herdwiyanti, 2013).

Disasters can threaten society with serious impacts resulting in many casualties, environmental damage, property loss, and psychological impacts. In the context of international policy, disaster management is the key to achieving the goal of reducing poverty as stated in the Millennium Development Goals (MDGs) and Sustainable Development Goals (SDGs) initiated by the United Nations (UN). Since the United Nations Conference on Environment and Development in Rio de Janeiro in 1992, disaster risk reduction and post-disaster management have been recognised as integral components of sustainable development. (Chazienul, 2014). Awareness of the link between disasters and sustainable development reached its peak with the ratification of the 2005-2015 Hyogo Framework for Action (HFA) by 168 UN members (Rego, 2022).

The law of the Republic of Indonesia Number 24 of 2007 concerning Disaster Management is the legal basis that regulates disaster management in Indonesia. This law was

created to provide protection to the community from the threats of disasters, regulate the involvement of the government, community, and other stakeholders in disaster management efforts, and ensure the availability of effective disaster management systems and mechanisms.

Law Number 24 of 2007, known as the Disaster Management Law, provides a comprehensive framework for disaster management in Indonesia. This includes the responsibilities of government institutions, disaster risk reduction strategies, community involvement, the establishment of disaster management institutions, funding mechanisms, as well as the rights and obligations of individuals and communities.

This law emphasises collaboration between stakeholders, including government agencies, non-government organisations, and the private sector, to reduce disaster risks and improve disaster response capabilities. It established the National Disaster Management Agency (BNPB) and the Regional Disaster Management Agency (BPBD) to coordinate disaster management activities and implement response plans. Additionally, the law outlines funding mechanisms for disaster management efforts and guarantees the right to protection and assistance for individuals and communities affected by disasters. This law provides a comprehensive framework for disaster management, effective implementation and enforcement of the law is essential to ensure community resilience and safety in the face of disasters.

With the existence of Law Number 24 of 2007, it is hoped that disaster management in Indonesia can be carried out more systematically, coordinated, and effectively, to reduce the negative impact of disasters in the society and national development.

Law no. 24 of 2007 concerning Disaster Management defines a disaster as an event or series of events that threatens and disrupts people's lives and the environment, whether caused by natural or non-natural factors, and can cause human casualties, environmental damage, property loss, and psychological impacts. Disaster management highlights the importance of multi-stakeholder collaboration and partnerships (Bormasa, 2023).

In Multi-stakeholder partnerships (MSPs), synergy and coordination are vital. Effective communication enables stakeholders to work together harmoniously and complement each other (Ministry of National Development Planning/Bappenas, 2019). Each sector brings unique expertise and resources, and through good coordination, they can prevent overlapping activities and maximise the collective impact. For instance, the private sector can provide technology and innovation, philanthropy can contribute funds, academia can offer research and data, the media can assist in information dissemination, and NGOs can work on the ground to implement programs. These partnerships allow for the sharing of risk burdens and resources among different stakeholders. From an organisational communication perspective, this reflects the principles of collaboration and solidarity. Through transparent and inclusive communication mechanisms, each party can understand and appreciate each other's contributions, fostering a sense of shared responsibility. For example, in disaster situations, the private sector and philanthropy can provide financial and logistical assistance, while NGOs and local communities can ensure that aid distribution is precise.

Multi-stakeholder partnerships (MSPs) in disaster risk reduction require effective coordination and communication among various stakeholders. The perspective of organisational communication provides an important framework for understanding and optimising this collaboration. By emphasising synergy, transparency, resource sharing, and flexibility, MSPs can achieve disaster risk reduction goals more efficiently and sustainably. Implementing this concept in Jakarta and other regions in Indonesia can serve as an effective model for facing future disaster challenges.

The Indonesian government has recognised the importance of partnerships in disaster management since 2012. The Coordinating Ministry for People's Welfare together with engineering and construction companies formed the Disaster Management Partnership Network, which is one of the largest in the world after India and Mexico. The aim of establishing this network is to respond to disasters in the region, especially considering the large potential for disasters in Indonesia. The government realises that working alone is not enough, especially in dealing with large-scale natural disasters such as tsunamis, earthquakes, and floods. Therefore, the Indonesian government is mobilising a partnership network to jointly face this disaster. However, to carry out evacuation quickly, precisely, and without causing new victims, special techniques are required.

Post-disaster management presents a complex challenge that cannot be tackled by a single entity alone. It necessitates collective efforts from a spectrum of stakeholders with diverse roles and interests to effectively respond to, recover from, and rehabilitate post-disaster conditions. Governments, operating at both central and regional levels, must engage in collaboration with an array of entities that include non-governmental organisations, businesses, local communities, research institutions, and other sectors. Multi-stakeholder collaboration stands as the linchpin in addressing the multifaceted aspects associated with post-disaster recovery.

Agyepong & Liang (2023) underscores the significance of public risk communication in disaster risk management. They pinpoint that a widespread understanding and knowledge of public risk communication can fortify post-disaster responses. This discovery resonates with the emphasis placed on multi-stakeholder collaboration as pivotal in optimising risk and disaster management endeavours. Raheem et al. (2023) delve into the correlation between cultural diversity and disaster preparedness. Their findings reveal that a profound comprehension of cultural diversity can bolster preparedness for disasters. This underscores the importance of involving local communities with diverse cultural backgrounds in post-disaster recovery efforts. Concurrently, Ngaire (2023) delves into the role of non-governmental organisations (NGOs) in disaster management, drawing insights from case studies in Japan and New Zealand. This research accentuates the substantial contribution of NGOs in facilitating collaboration among governments, communities, and other sectors in post-disaster recovery endeavours. This resonates with the role of NGOs as facilitators in fortifying community resilience and providing sustained support. Collectively, these three studies underscore that multi-stakeholder collaboration, encompassing the roles of government, NGOs, and academia is imperative in tackling post-disaster recovery challenges. By amalgamating knowledge and resources from diverse sectors, such collaboration, it can fortify post-disaster responses and augment community resilience in confronting future calamities.

Cooperation with communities is a reflection of good governance practised by the government in disaster management efforts. This collaboration signifies the spirit of effective governance, where all parties work together to achieve the same goal: the safety and well-being of the community (Bingham & O'Leary, 2014).. By actively involving the community and leveraging the knowledge and experience from various sectors, Indonesia becomes better equipped to face disaster challenges and provide better responses to protect its citizens.

However, when examining programs in other countries such as Japan, significant differences are apparent in the approach and implementation of community cooperation in disaster management. Japan is renowned for having an excellent disaster management governance system, with one of the key successes being the direct involvement of the community in all stages of disaster management (Shaw & Goda, 2004). Japanese citizens are engaged in planning, preparation, response, and post-disaster recovery. They undergo regular training, and sophisticated early warning systems enable them to respond quickly to disasters. Several other developed countries have demonstrated best practices in engaging with communities as part of good governance in disaster management efforts. The Government of New Zealand has developed an inclusive governance model by involving various community groups, including Maori tribes and other minority communities, in planning and implementing disaster management strategies (Kenney & Phibbs, 2015; Paton et al., 2014). This approach ensures that the needs and interests of all community members are considered in every step of disaster management. The United States of America (USA) has various community cooperation programs in disaster management, both at the federal and local levels. One notable best practice is the Neighbourhood Emergency Preparedness Program (NEPP), where residents in a neighbourhood are encouraged to prepare for disasters by forming local emergency response groups (Lindell & Perry, 2012). This program allows communities to identify risks, create emergency plans, and collaborate during emergencies.

In Indonesia, despite efforts to involve communities in disaster management, several challenges need to be addressed. One of them is the lack of awareness and understanding among the public about their role in disaster management (Prasetyo et al., 2022). Additionally, there are obstacles in terms of accessibility and timely distribution of accurate information to the public. This can be attributed to limited resources and uneven communication infrastructure across Indonesia. However, there are promising initiatives in Indonesia, such as disaster training

programs for communities, the use of digital technology to disseminate information, and community-based approaches in planning and implementing disaster management programs. By continually raising public awareness, strengthening communication infrastructure, and improving coordination between the government and communities, Indonesia can improve governance in disaster management and enhance its readiness to face future disasters.

Collaborative governance is emerging as an innovative strategy used by governments around the world to overcome challenges in disaster management. Through collaboration with various stakeholders, the government aims to encourage collective action and increase disaster resilience in its communities. In the Sri Lankan context, Abdeen et al. (2021) highlight the complexity inherent in multi-agency collaboration in disaster management. Their research provides valuable insight into the Sri Lankan perspective, highlighting the opportunities and challenges faced in coordinating efforts across multiple institutions.

Likewise, Syal et al. (2021) explored the role of civil society in disaster governance in India. Their study investigates whether civil society engagement is collaborative, co-optive, or navigational, thereby providing important insights into the dynamics of disaster governance in the Indian context. By examining interactions between government and civil society, their research contributes to a deeper understanding of effective disaster governance strategies. In addition, Alam & Ray-Bennett (2021) studied disaster risk governance for landslide risk management at the district level in Bangladesh. Their research provides an important perspective on how local governments can effectively manage landslide risk through collaborative governance approaches. By involving various stakeholders, including communities and non-governmental organisations, governments can develop disaster management strategies that are more resilient and tailored to the specific needs of their regions. Collectively, research conducted by Abdeen et al. (2021), Syal et al. (2021), and Alam & Ray-Bennett (2021) underscores the importance of collaborative governance in disaster management. Through collaborative efforts involving governments, civil society, and other stakeholders, countries can build stronger and more resilient communities that are able to survive and recover from disasters more effectively.

By involving many stakeholders who have their respective expertise, emergency response, evacuation, and medical assistance actions can be coordinated more efficiently. Multi-stakeholder collaboration will involve many stakeholders in the planning and decision-making process, ensuring that policies and steps taken reflect the various perspectives and needs of affected communities. Multi-stakeholder collaboration helps ensure that post-disaster recovery efforts not only rebuild what has been damaged but also increase community resilience to future disasters (Saputra, 2023).

Post-disaster recovery is a complex process and requires collective efforts from various stakeholders, including government, private institutions, NGOs, and civil society. Multi-stakeholder collaboration is the key to effectively overcoming the challenges of post-disaster socio-economic recovery. In this article, we will evaluate the literature related to multi-party collaboration in the context of post-disaster recovery.

In terms of etymology, the word 'collaborative' comes from a combination of the words "co" (meaning together) and 'labour' (meaning work or effort). This refers to the idea of pooling energy or increasing capabilities used to achieve goals that have been agreed upon or set together. Furthermore, the term 'collaboration' is often used to describe the process of completing work that crosses sectoral, relationship, and organisational boundaries, even involving cross-border cooperation. (Huang et al., 2010).

Albuquerque et al., (2015) define multi-party collaboration as a joint effort by various parties to achieve common goals in the context of post-disaster recovery. This collaboration includes the roles of government, the private sector, NGOs, and civil society. Failure to collaborate can hinder the recovery process and prolong the impact of a disaster (Ansell & Gash, 2008).

The term 'collaborative' originated from English, specifically 'collaboration', which denotes working together. Frans & Bursuck (1996) delve deeper, defining collaboration as a professional approach aimed at achieving common goals. This suggests that participants in collaborative endeavours share aligned objectives, necessitating coordinated planning, implementation, evaluation, and follow-up mechanisms to attain the predetermined shared goals.

Collaboration is a form of teamwork, interaction, and negotiation between various components, involving individuals, organisations, and parties related directly or indirectly, who experience the results and benefits. In this context, collaboration is not just teamwork, but also involves interaction and negotiation between various components, both individuals, organisations and other related parties. The basic principles of collaboration include shared goals, shared understanding, readiness to be involved in the process, mutually beneficial contributions, honesty, compassion, and a foundation rooted in community (Paripurnawaty, 2021). Communication management plays a crucial role in triggering good collaborative governance, a concept that refers to a form of cooperation that involves various parties to achieve common goals. In Gray's (2012) view, collaboration is a process where the parties involved acknowledge differences in understanding of a problem and try to find solutions and exceed the limitations of their abilities. In this context, communication management becomes important because it allows the creation of shared understanding and facilitates a process of sustainable interaction between the individuals and organisations involved. Through effective communication, parties can overcome differences in understanding, identify the best solution, and plan joint steps to achieve collaborative goals. Thus, good communication management can be the main trigger for the realisation of good collaborative governance.

Natural disasters have significant impacts on various aspects of life in a region, including physical, social, and economic aspects. Earthquakes, floods, or tropical storms often leave extensive damage and cause suffering to the affected communities. The post-disaster recovery process requires a holistic approach and active participation from various stakeholders, including government, communities, academics, and non-governmental organisations.

Public communication plays a crucial role in coordinating post-disaster recovery efforts. As a connector, public communication helps convey information among various involved parties, ensuring a clear understanding of recovery measures, available resources, and ways for communities to participate in the process (Paton, 2001). However, in its implementation, there are several challenges that need to be addressed. One of them is the lack of coordination among stakeholders, which often leads to overlapping efforts and confusion in messages conveyed to the public (Baggio et al., 2010). Additionally, the low digital literacy among communities poses a challenge in effectively delivering information through online media.

To address these challenges, effective communication strategies are needed. This includes utilising various communication channels such as social media, notice boards, and local community meetings. Involving community leaders and local influencers as communication agents is also important to deliver accurate and convincing information to the public (Lindell, 2013). The effectiveness of public communication in supporting multi-stakeholder collaboration can be measured by the level of community participation in the recovery process, their understanding of the measures taken, and the level of trust in the government and related organisations. With good public communication, community participation in recovery will increase that will lead to more sustainable and inclusive outcomes (Norris et al., 2008).

Some main challenges identified include the lack of coordination among stakeholders, limited access to information, and poor digital literacy among communities. Successful communication strategies include the use of local and social media, regular discussion forums, and the involvement of community leaders as communication bridges. The application of information and communication technology (ICT) has also been proven to accelerate information flow (Lindell, 2013; Paton, 2001). Effective public communication positively impacts transparency, builds trust, and strengthens coordination among stakeholders. This has a positive impact on the effectiveness of socio-economic recovery programs, with increased community participation and synergy among various initiatives (Norris et al., 2008; Putnam, 2000).

The role of public communication in post-disaster recovery is crucial. By addressing existing communication challenges and implementing effective strategies, various stakeholders can collaborate more effectively and achieve more sustainable and inclusive results. Therefore, efforts to develop and enhance public communication in the context of post-disaster recovery need to be continuously improved to achieve sustainable progress (Anderson, 1999).

The private sector also plays an important role in post-disaster socio-economic recovery. Companies can provide the financial resources, infrastructure, and knowledge needed in the recovery process (Rochana et al., 2022). Collaboration with the private sector can produce innovation and more efficient solutions.

Disaster management is one of the critical challenges in the modern era that requires strong collaboration between various parties, including government, non-governmental organisations, society, and the private sector. The important role played by the private sector in disaster management efforts is through multi-stakeholder cooperation. Based on empirical evidence and case studies, it shows that there is a significant contribution, the private sector contributes to assisting disaster preparation, response, recovery, and mitigation. In many cases, private companies have invested in technology and infrastructure that enable more effective early warning and faster response to disasters. The importance of the private sector in developing technology and infrastructure for early warning is crucial in reducing the risk of disaster impacts (Izumi & Shaw, 2015).

In the case of a true disaster, the private sector can provide critical material and logistical support in response efforts. Many companies have launched emergency response initiatives providing medical aid, clean water, and other support equipment. This private sector contribution can have a positive impact on disaster response coordination. The private sector has been a reliable partner in supporting disaster response efforts, with their capacity to provide valuable resources and logistical support (White & Lang, 2012).

Apart from that, the private sector also has a role in long-term disaster mitigation. Many companies have taken action to reduce disaster risks, such as building earthquake-resistant structures, promoting sustainable business practices, and supporting environmental conservation initiatives. Private sector efforts in disaster mitigation not only have a positive impact in the short term but also contribute to the long-term resilience of communities to disaster threats (Shaw, 2018).

The description above shows that the private sector has great potential to increase the capacity for disaster preparation, response, and mitigation. By continuing to encourage cooperation between governments, non-governmental organisations, and the private sector, we can achieve more effective and sustainable disaster management.

Post-disaster recovery becomes an inseparable unity with existing disaster management in Indonesia. Earthquake disaster management earth consists of two activities: (1) pre-disaster and (2) post-disaster. Pre-disaster activities cover preparedness, education risk awareness, training, planning spatial planning, and durable structural design disaster. On the other hand, post-disaster activities include disaster response, emergency response, and disaster recovery among other things (Kholil et al., 2019).

Pribadi et al., (2014) argue that process recovery is one step important which must be implemented after a disaster occurs, this is similar to Han & Waugh (2017), which states that recovery disaster can be conceptualized as a process aimed at restoring, rebuilding, return from physical form, socio-economic and natural environments through post-disaster planning and action after a disaster occurred. Disaster recovery could be an opportunity for the government in developing a better region and can survive the risk of those bigger disasters in the future. The recovery process is referred to as the 'rehabilitation' and 'reconstruction' phase

The rehabilitation and reconstruction phase is usually the improvement of infrastructure and facilities to restore the social and economic functions of disaster-affected areas while the reconstruction phase appears as a long-term restoration that includes not only the physical improvement of affected communities but also the revival of livelihoods, economy, industry, culture, tradition, and environment (Ong et al., 2016).

The contribution of the private sector in post-disaster recovery has a very important role in helping affected communities and regions to recover and rebuild their lives. Post-disaster recovery is a critical phase in the disaster management cycle that involves various efforts to restore daily life, infrastructure, economy, and the environment affected by the disaster.

NGOs and civil society often have direct access to disaster-affected communities. They can play a role in mobilising local resources, providing psychosocial support, and fighting for community interests in the recovery process (Akhirianto, 2019). Post-disaster management is a very important stage in efforts to recover communities and areas affected by disasters. In this phase, the role of NGOs and civil society has a significant impact in providing needed assistance and support, facilitating community participation, and assisting in long-term recovery.

NGOs are often the first to respond to disasters and provide emergency assistance in the form of food, clean water, health services, and temporary shelter to disaster victims. NGOs play an important role in coordinating post-disaster relief efforts, including managing logistics and

distributing aid to areas in need. Several NGOs are assisting in economic recovery by providing training and assistance to affected small and medium-sized businesses.

The emergence of various local Non-Governmental Organisations (NGOs) has had a significant influence on the results of real disaster management. The diversity of work approaches carried out by several humanitarian agencies has given rise to the achievement of disaster management programs in the field. The dynamic approach to relationship patterns between NGOs has an impact on the implementation of maximum and targeted work to the needs of the disaster victim community (Arfriani Maifizar et al., 2019).

NGOs also take part in determining the direction and agenda of development. By influencing development policies and programs, they have a key role in shaping development priorities and focus on various countries. However, in some cases, especially in the implementation of development programs in third-world countries, the role of NGOs may also change. They may be encouraged to take a more capitalist role and penetrate rural areas that were previously difficult to access. This can be caused by a variety of factors, including economic pressures, changes in organisational orientation, or shifts in development priorities.

According to Korten in Suharko (2003) There are four generations of NGOs that have different strategies, including aid and welfare (relief and welfare), community development (community development), sustainable system development (sustainable systems development), and people's movement (Suharko, 2003). The World Bank also has two categories to differentiate development NGOs, particularly operational NGOs that aim to design and implement development-oriented projects and advocacy NGOs tasked with defending specific cases and efforts influencing World Bank policies and practices (Malena, 1995). In conclusion, NGOs have a very important role in development, starting from supporting society at the grassroots level, increasing political influence to participating in determining the direction and agenda of development. However, this changing role in some contexts may reflect more complex dynamics in the implementation of development programs in third-world countries.

Apart from that, the role of civil society in post-disaster management also encourages active participation in the planning, decision-making, and implementation of post-disaster recovery programs. Civil society also advocates on behalf of affected communities, ensuring that their needs and aspirations are taken into consideration in recovery efforts. Civil society often monitors and evaluates recovery programs to ensure accountability and transparency in the use of resources.

There are many challenges to creating effective multi-party collaboration, this includes differing interests, complex coordination, and a lack of trust between parties (Comfort, 2007). In post-disaster recovery, it is important to overcome these barriers for collaboration to be successful.

Multi-stakeholder collaboration is an approach that involves various parties, such as government, non-governmental organisations, the private sector, and civil society, to solve complex problems involving various dimensions (Ramdani & Resnawaty, 2021). Despite having great potential to produce more holistic solutions, multi-party collaboration is often faced with challenges and obstacles that must be overcome. Several main challenges that are often faced in the context of multi-party collaboration. Here's a flowchart illustrating the key challenges and efforts to overcome obstacles in multi-party collaboration (Figure 1). The flow chart at Figure 1 visually outlines the main challenges in multi-party collaboration and the efforts needed to overcome them.

Multi-party collaboration is an important approach in dealing with complex and multidimensional problems (Indra Kertati, 2023). However, the challenges and obstacles faced in collaboration need to be overcome to achieve successful collaboration goals. By developing effective communication, building trust, and good conflict management, multi-stakeholder collaboration has the potential to become a more effective tool in achieving holistic solutions to problems faced by society and the world at large.

Post-disaster management is a critical phase in recovery efforts for affected communities. To better understand the challenges and opportunities in post-disaster management, case studies are often seen as a useful tool. Case studies are a way to examine a particular situation in detail, identify lessons learned, and apply those findings in a broader context.

Many successful case studies in post-disaster recovery, such as reconstruction efforts following the Haiti earthquake, show that strong multi-stakeholder collaboration can reduce

vulnerability and speed recovery (Kapucu & Khosa, 2013).

Case studies are an effective tool for understanding, evaluating, and learning in the context of post-disaster management. Through analysis of real cases, we can better understand the impact of disasters, identify weaknesses and strengths, and develop the best strategies. Sharing information and experiences between countries is also important in strengthening post-disaster responses globally. With a holistic approach and continuous learning, we can better prepare for future disasters. The Figure 2, is a chart that illustrates the role and benefits of case studies in post-disaster management. The figure 2 visually represents the main points regarding the role of case studies in post-disaster management.

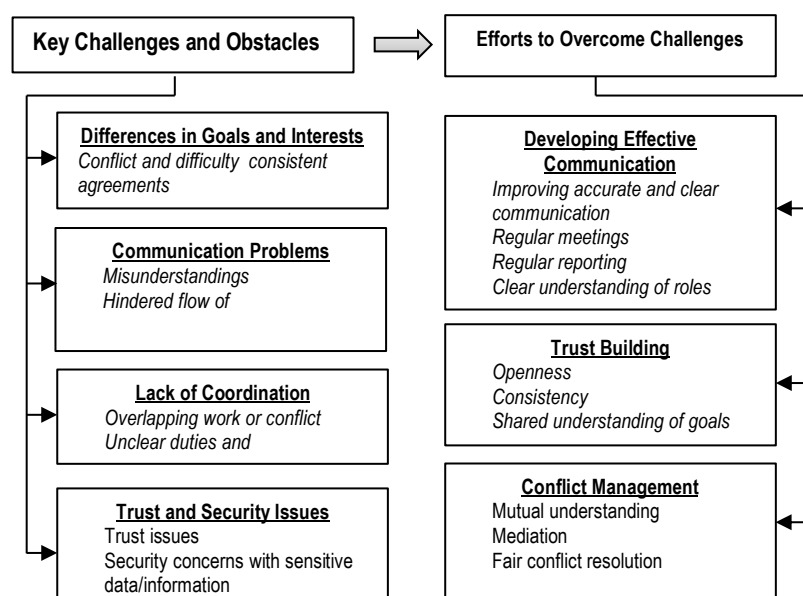


Figure 1. Efforts to Overcome the Main Challenges and Obstacles in Post-Disaster Socio-Economic Recovery
Source: Designed and created by Author, 2024

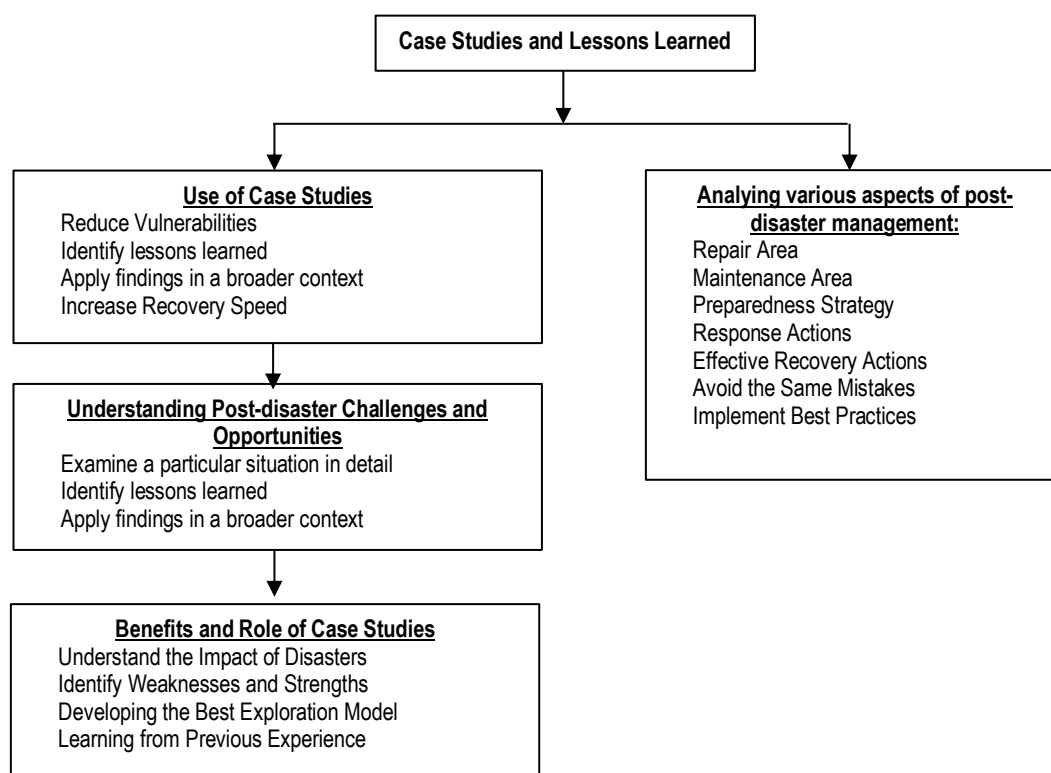


Figure 2. Case Studies and Lessons Learned in Post-Disaster Socio-Economic Recovery Management
Source: Designed and created by Author, 2024

METHODOLOGY

This research uses a qualitative approach with a focus on policy analysis in the context of post-disaster recovery in East Lombok Regency, Indonesia. This approach allows researchers to explore multiple policy dimensions and gain a deep understanding of the issues involved. A qualitative approach was chosen because it was fulfilling the aim of the research is to describe and understand phenomena, events, social activities, attitudes, beliefs, and public perception (Creswell & Poth, 2016).

Research location Lombok, Western Nusa Tenggara Province. The reasons for choosing this location are: (i) in 2018 there was an earthquake resulting in damage, loss, and a large loss of life quite large; (ii) recovery activities have been carried out post-disaster, including social recovery activities and economic; and (iii) declining economic growth has a serious impact on social and economic aspects public.

Information source data: (i) Office of the National Mitigation Agency Disaster; (ii) Disaster Management Agency Office Provincial Region; and (iii) stakeholders involved – government, society, business, academia, and the media.

The data collection methods in this research are interviews, observations, and documentation. In-depth interview was carried out with ten informants as key members. The author and team made observations to obtain notes in the study field. Related documentation is collected from various sources, such as Internet media and library documents.

Data analysis used three steps, namely data reduction, display, and verification which refers to the interactive model. Data reduction is sorting primary data, data display is presenting data, and data verification is concluding the main themes of the results. Validity and reliability use triangulation based on observation, in-depth interviews, and documentation analysis to obtain valid and reliable data addressing credibility, transferability, auditability, and confirmability. Credibility is associated with aspects of truth through triangulation to compare interview results with interviews with colleagues. Transferability shows the ability of research to be applied to other research so that readers can understand the results of qualitative research. Reports are made in detail, clear, and systematic.

Auditability means that it can be tested by examining the entire research process from the time the researcher designs the case study, determines data sources, collects data, analyses data, makes conclusions, and shows stages, processes, and results. Confirmability relates to objectivity that research results are agreed upon and accepted (Creswell & David, 2017).

RESULTS AND DISCUSSION

Recovery Program Social Post-Disaster Economy

Post-disaster recovery programs are a key step to mitigate the impact of disasters, restore social and economic stability, and build community resilience. East Lombok Regency is implementing various recovery programs to help communities affected by the earthquake. This program highlights cross-sector and government collaboration in carrying out post-disaster recovery tasks. Through Presidential Instruction No. 5 of 2018, the president has determined the role of each stakeholder in implementing these activities, creating close cooperation for more effective recovery.

In the context of implementing socio-economic recovery in East Lombok Regency, the roles and contributions of various parties involved in various activities can be seen. Each stakeholder plays a structured role according to the objectives set in the partnership framework. The main target of this framework is to carry out socio-economic recovery for communities affected by disasters in East Lombok Regency. Presidential Instruction (Inpres) Number 5 of 2018, emphasises the importance of accelerating post-earthquake rehabilitation and reconstruction in various regions, including West Lombok Regency, North Lombok, Central Lombok, East Lombok, Mataram City, and the affected areas in West Nusa Tenggara. Province. The Presidential Instruction outlines two main activities that are the focus of post-disaster recovery in NTB Province, according to the Figure 3.

From the Figure 3 it can be seen that one of the main focuses of implementing post-disaster recovery, which was emphasised directly by the President, is accelerating the socio-economic and cultural recovery of communities affected by disasters. This acceleration effort is carried out at both the rehabilitation and post-disaster reconstruction stages, with the main aim of accelerating the response and performance of various parties involved in recovery, through

structured multi-stakeholder collaboration.

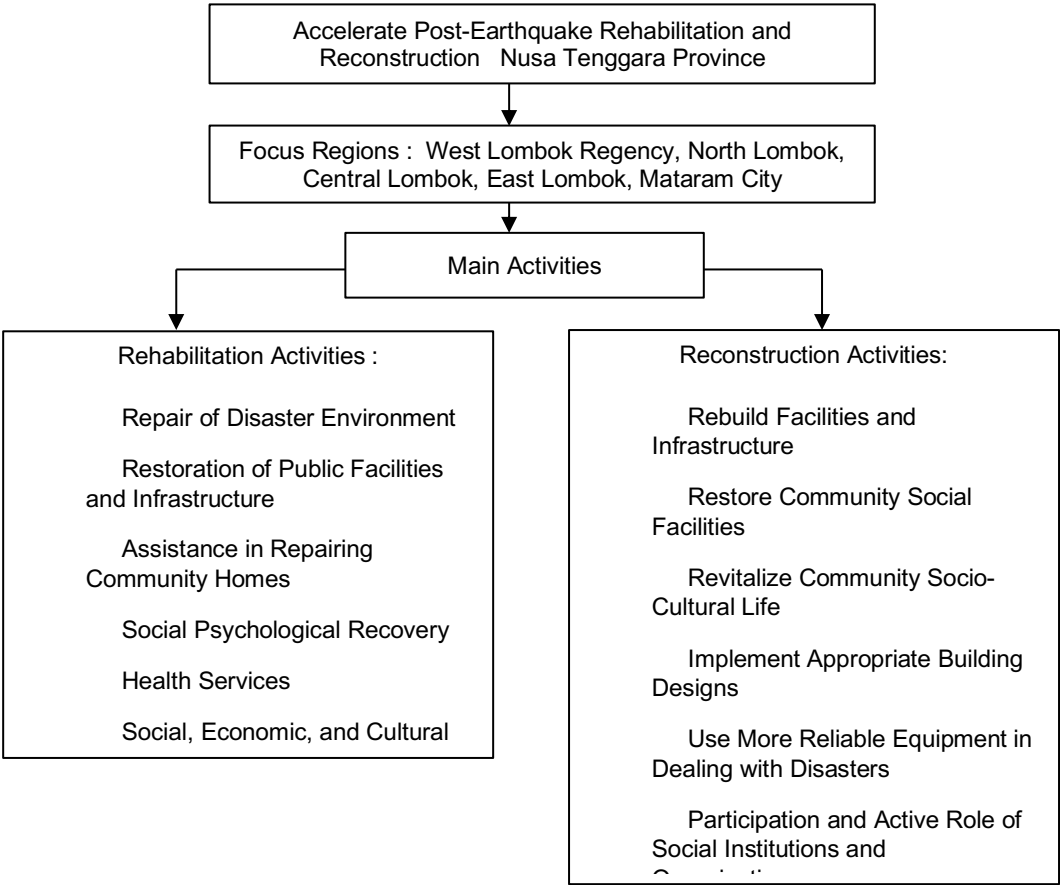


Figure 3. Accelerate Post-Earthquake Rehabilitation and Reconstruction in West Nusa Tenggara Province
Source: Designed and created by Author, 2024

The post-disaster socio-economic recovery program in East Lombok Regency is an important step in mitigating the impact of the earthquake that occurred. By involving various parties, this program succeeded in restoring the socio-economic stability of the affected communities. This recovery program is a clear example of the importance of cooperation and the role of various parties in post-disaster recovery who are involved in the partnership.

Post-disaster management that occurred in East Lombok is a major challenge that requires close coordination and cooperation between the various actors involved. These programs not only involve the government but also other actors who have an important role in ensuring effective and sustainable recovery after a disaster occurs. In this context, these actors can be divided into several main groups that play mutual roles in the partnership, based on the description in the Figure 4.

In Law No. 24 of 2007 concerning Disaster Management, article 27 states that in disaster management, the community has obligations in the form of: a) maintaining harmonious social life in society, maintaining balance, harmony, harmony, and preservation of environmental functions; b) carrying out disaster management activities; c) and provide correct information to the public about disaster management.

The program in implementing post-disaster socio-economic recovery in East Lombok Regency involves various parties. The aim is to expedite and accelerate the implementation of recovery, in accordance with Presidential Instruction No. 5 of 2018 concerning the Acceleration of Rehabilitation and Reconstruction after the Earthquake Disaster in areas including East Lombok Regency, emphasising the urgency of faster recovery. Partnership between all these actor groups is the key to success in post-disaster management. Good cooperation and efficient coordination between government, academics, NGOs, and community groups can speed up the recovery process, optimise available resources, and ensure that affected communities get the

support they need. In this way, post-disaster recovery can be more effective and sustainable.

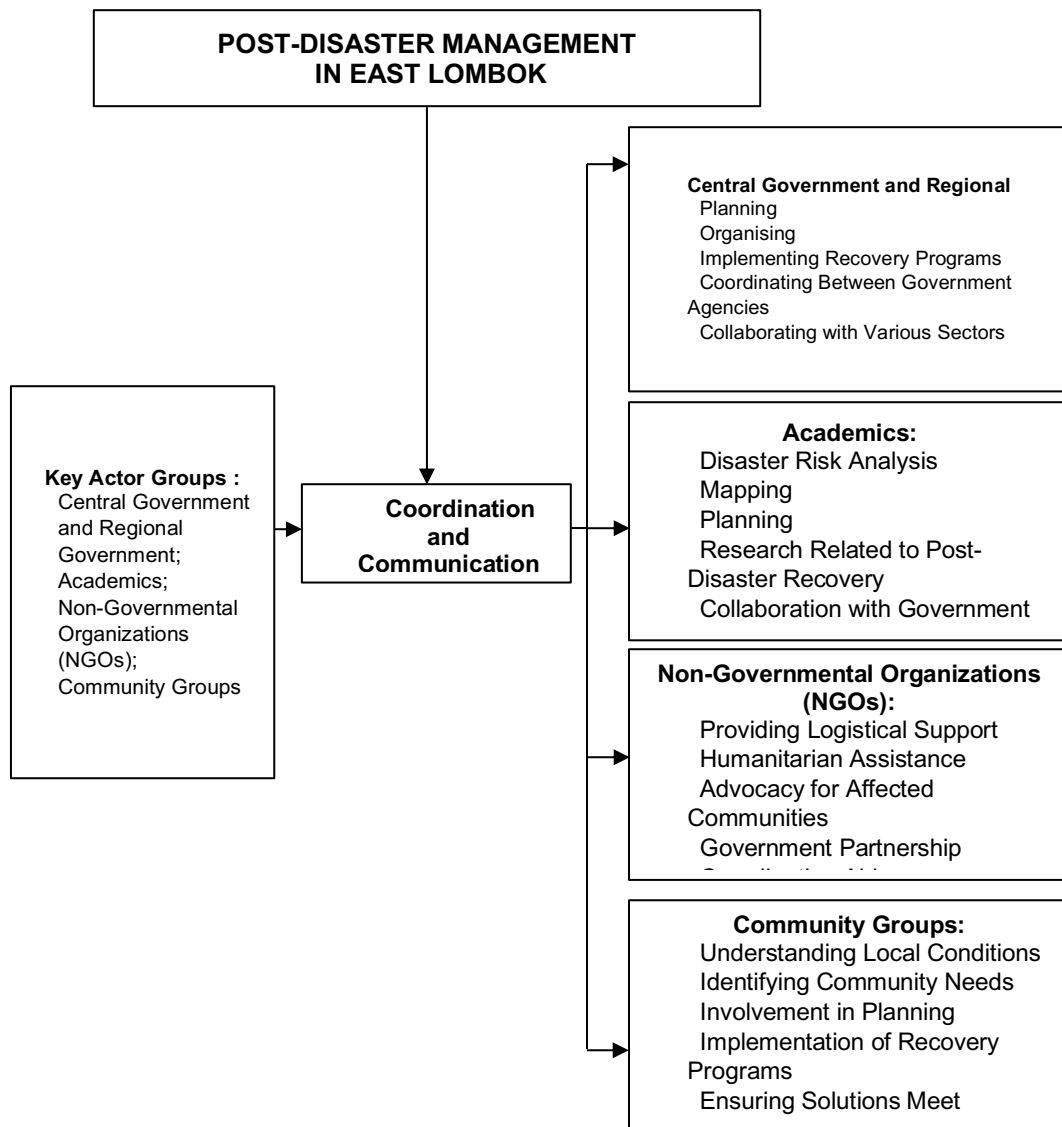


Figure 4. Post-disaster management in East Lombok
Source: Designed and created by Author, 2024

Based on Perka BNPB (Regulation of the Head of the National Disaster Management Agency) Number 11 of 2008, it was stated that in the implementation of the post-social economic recovery disaster, partnerships across sectors were held in various existing activities. The starting activities are socialisation and coordination programs, that includes: 1) coordination ranks government until; 2) level Village/Subdistrict; 3) socialisation to public general and victim; 4) building togetherness, solidarity, and volunteerism. Government coordination marks the start of implementation partnership in socio-economic recovery in East Lombok Regency.

Policy Act No. 24 the year 2007, mentioned that the central government and regional governments are the main parties responsible for the maintenance of countermeasures in disaster, such as in phase pre-disaster, responsive emergency, and also post-disaster phase. The central government and regional governments are the main command in all forms of activity that are aimed at the implementation of socio-economic post-disaster recovery in the Regency of East Lombok.

In Law No. 24 of 2007 concerning the Prevention of Disaster, chapter 27 mentioned that in counter measuring disaster, the public own obligation in the form of: a) maintaining harmonious, nurturing social life in society balance, harmony, harmony, and sustainability

function environment life; b) doing activity countermeasures disaster; c) and provide correct information to the public about disaster management.

Role Actor in Partnership

An earthquake occurred in Western Nusa Tenggara on the date 29 July 2018 that caused paralysis over a significant economy sector which greatly affected people's lives. Various stakeholders in Nusa West Southeast and those from outside the region flocked to come and help the victims of the earthquake and sought help through different channels.

Socio-economic recovery efforts are very dependent on various stakeholders in the effort of its implementation. In the effort to recover the social economy in the East Lombok Regency, the author found several actors who were directly involved in the field. The following are the roles and functions of internal stakeholders' efforts to recover the social economy in East Lombok Regency

Role of the government in carrying out recovery efforts in the field of social economy, especially in region-affected disasters is an obligation contained in existing policies. Programs or government activities need to be prepared for the social and economic recovery affected by public-affected disaster. However, the government itself is constrained by its limitations in terms of its own resources, this of course shows that there is a need for participation of stakeholders. The government can work appropriately side by side with various types of institutions, both governmental and non-governmental organizations, to achieve a common objective such as a welfare society, especially for those affected by disaster.

In disaster mitigation, the government also needs to prepare the community if in the future a disaster occurs again, so that it is hoped that the entire disaster mitigation process starting from, pre-disaster to disaster can minimise loss that can happen. Therefore, the government can synergise with other stakeholders to carry out programs and activities for the creation of a resilient community economy, especially after an occurrence of a natural disaster.

Look at the potential disasters in Indonesia, these disasters include not only natural disasters but social disasters that demand a response from the Republic of Indonesia's government. The government of Indonesia has mandated in Constitution Number 24 Year 2007 regarding the countermeasures of disasters, duties and implementation related to disaster activities and programs in Indonesia. This National Disaster Management is the official institution that is tasked with policy determination in respect to disaster prevention, emergency response, and rehabilitation, which on the other hand has been deemed inadequate in meeting its responsibilities.

In disaster mitigation efforts, the government's task also includes preparing the community to face future disasters. This means that the entire mitigation process, from pre-disaster to post-disaster must be implemented to minimise losses that could occur. Therefore, the government must work together with other stakeholders, both in planning programs and in implementing them. The government as the central actor plays a major role in coordinating various programs and activities carried out by various ministries and agencies. In their implementation, they must adhere to certain principles such as speed, accuracy, priority, coordination, efficiency, transparency, and accountability. The central government also collaborates with regional governments to implement socio-economic recovery programs.

In this very complex situation, the central government acts as the main policy initiator and coordinator, with standards that have been set as a reference for recovery programs. The central government plays a crucial role in making decisions and is responsible for the results of implementing the socio-economic recovery program. Recovery principles include building better and stronger infrastructure that safeguards community well-being, and reducing the risk of future disasters. Regional governments also have their responsibilities in managing disaster mitigation and management in their areas. They must allocate funds in the Regional Revenue and Expenditure Budget (APBD) to carry out disaster management and collaborate in disaster risk reduction which is integrated into regional development planning.

In this case, East Lombok Regency has a Regional Disaster Management Agency (BPBD) which acts as a partner of BNPB. BPBD's task is to implement disaster management policies in the East Lombok Regency area. The formation of BPBD in each region is based on the guidelines set by BNPB and is intended to implement disaster management in that area.

Overall, good central and regional governments play an important role in post-disaster socio-economic recovery efforts. They work together with various other stakeholders to achieve a common goal, namely ensuring that the socio-economic recovery of affected communities is efficient and sustainable. Cooperation and partnerships between various stakeholders are the key to success in facing the challenges of post-disaster recovery.

In 2018, the West Nusa Tenggara region was hit by an earthquake. The biggest impact occurred in the North Lombok Regency and East Lombok Regency. Mataram University responded to this significant damage by building a community network in East Lombok Regency to support economic recovery, especially through Micro, Small, and Medium Enterprises (MSMEs). The University of Mataram shows its commitment by establishing an agreement with the National Disaster Management Agency (BNPB) and involving several non-governmental organisations such as Akunsi, which have similar goals, namely creating a region that is resilient in facing disasters and reducing the impact of disasters in the future. This concept is realised through various programs with a focus on reducing disaster risk.

The role of academics, especially Mataram University, in this partnership is as facilitators and companions in various socio-economic recovery activities for communities affected by disasters in East Lombok Regency. Their participation was visible from the planning stage, where the local knowledge possessed by the University of Mataram was very useful in designing the recovery program. This is following the statement from Mr. HAB, a BNPB employee, who underlined the important role of local knowledge in determining recovery programs. Furthermore, Mataram University also plays a role as an implementer of assistance for socio-economic recovery in East Lombok Regency. This assistance is carried out after the recovery program implementation plan has been approved by BNPB. This assistance aims to assist in both physical and non-physical forms to community groups that have been determined in previous planning.

Academics, in this case, the University of Mataram, are also responsible for carrying out existing activities. This form of accountability is aimed at the Government as a joint evaluation step regarding the implementation of partnerships in post-disaster recovery. This accountability report is the basis for improvements in future partnership implementation and to ensure that the same mistakes are not repeated. Thus, Mataram University plays an important role in the socio-economic recovery of communities affected by disasters in East Lombok Regency.

In the 2018 earthquake incident, the West Nusa Tenggara region was hit by an earthquake that damaged most of East Lombok Regency. The impact of the earthquake was very serious, especially in the economic sector. Local agricultural commodities are a top priority that requires support in recovery efforts. The support needed includes infrastructure and resolving social conflicts that arise as a result of the disaster community empowerment is an important element in this recovery effort, in line with the mandate of the law.

These conditions encouraged various NGOs (Non-Governmental Organisation) to respond to the 2018 earthquake in West Nusa Tenggara. They assisted in the form of labour and logistics to the affected communities. In this context, several NGOs that had previously been active in East Lombok Regency, such as the LSM Akunsi, played a key role. Conception is a local NGO that has significant influence in formulating local government policies in West Nusa Tenggara, especially because most of its members are academics. Conception's vision is to become a non-governmental organisation that encourages the creation of new initiatives in sustainable resource management and democratic values. Through various partnerships established by this NGO, Akunsi can carry out research and development based on local communities.

In the context of the emergency response after the 2018 earthquake, Conception has an important role in encouraging the formation of policies related to key issues, such as disaster risk reduction, gender equality, social inclusion, and climate change. Conception can provide field data that supports the creation of regional regulations related to emergency response and also assists communities in developing product diversification based on analysis of available resources.

Partnerships built by Conceptions at various regional levels support post-disaster emergency response programs and strengthen the community's economy. Through regular assistance, Akunsi works together with the community to improve their standard of living. In this context, society is not only an object but also a subject in the research and economic recovery

process carried out together with partners in various sectors.

The findings above show that NGOs play a central role in efforts to restore the socio-economic community in East Lombok Regency. Their main role is as facilitators and companions for community groups affected by disasters. They help guide and direct the community in improving their capabilities and ensuring the continuation of the economic recovery process.

The people of East Lombok Regency, which are dominated by the Sasak tribe, are very close to the term 'Sasak Sangka Bira' which can be interpreted as every community being connected to support and sustain each other. Therefore, the people in East Lombok Regency were so strong in facing the earthquake disaster in 2018 that they were able to survive for months even though the economic sector stopped. On the other hand, moral support from community leaders is also something important, such as motivating people to live independently and help each other.

The strength of togetherness is demonstrated by the social spirit that exists in the people of East Lombok Regency. Those affected by the earthquake have the possibility of surviving the impact of the earthquake because of the strong will of their community. Even in disasters, the community consciously forms a Village Disaster Preparedness Team (TSBD) for the Sembalun sub-district where those who join come from various levels of society and become volunteers. Their awareness arose because the Sembalun area was always hit by floods every year. In carrying out its program, TSBD is accompanied by various organisations such as BPBD East Lombok Regency and Conceptions, a Non-Governmental Organisation which has a concentration on creating disaster-resilient villages in the West Nusa Tenggara region.

Not only TSBD in the disaster sector, but in the MSME sector it also assists MSMEs which are being developed in several places in the East Lombok Regency area. Like the Resilient Women's Group (KWT) in the Siagian Region, economic assistance to the community is carried out by developing the potential of the PKK women's association in Siagian which also makes the community's economic growth more advanced. With the natural potential that exists in Siagian, where potential resources such as bananas, cassava, and even the main commodity in this region, cashew nuts, can now be developed into various kinds of superior products that will later be sold not as ingredients but as processed products that have a higher selling value.

One of the MSME community groups that is the object of current research is KWT black garlic Putri Rinjani, Sembalun Village, East Lombok Regency. KWT is an association of women farmers in Sembalun Village which is engaged in the production and processing of black garlic agricultural products which is one of the main commodities for MSMEs in East Lombok Regency. In this post-disaster recovery program, this group is one of the groups that received assistance in the form of economic recovery through assistance provided by the NGO Akunsi.

In implementing this partnership, KWT Putri Rinjani, which is part of a community group that is a stakeholder in the socio-economic recovery partnership in East Lombok Regency which on the other hand has a responsibility as the implementer of the empowerment program facilitated by the Government, NGOs, and Academics.

From the findings above, it can be concluded that in implementing the post-disaster socio-economic recovery partnership in East Lombok Regency, community groups who are the main actors in this recovery activity have the main responsibility for implementing and developing all forms of programs that existing facilitators have assisted. They are required to have a high willingness to implement, maintain and develop all potential that can improve their socio-economic status.

Stages Implementation of the Partnership

The socio-economic recovery program in East Lombok Regency shows how important the principles and provisions in multi-stakeholder partnerships are to harmonise various interests and perspectives. Initiated by the central government and coordinated by the National Disaster Management Agency (BNPB), this partnership includes ministries, business actors, NGOs and foreign institutions. BNPB's role as the main initiator and coordinator aims to prevent program overlap and pool resources for effective recovery. Below is a flow chart image of the Multi-Stakeholder Partnership Stage for Socio-Economic Recovery in East Lombok Regency.

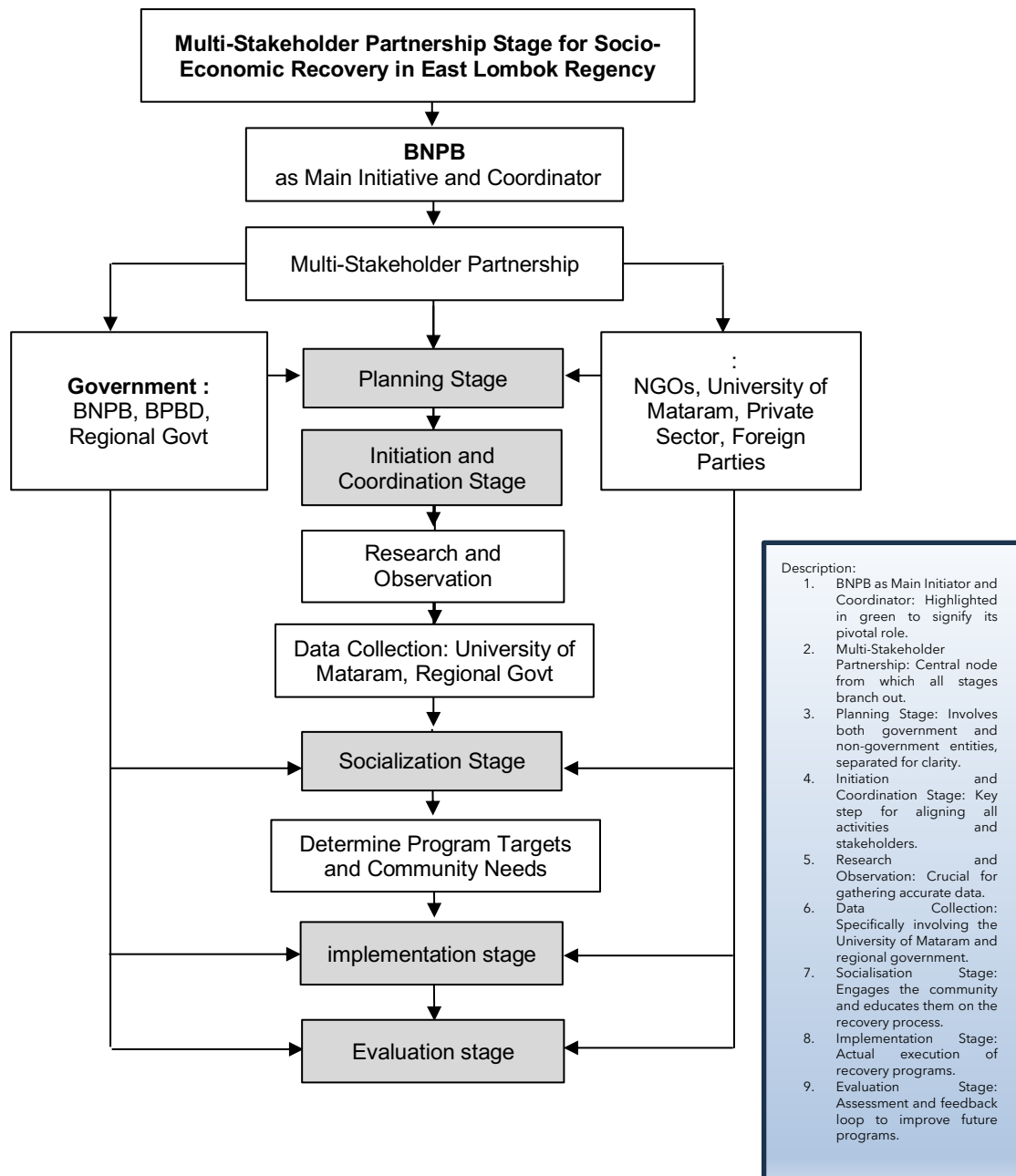


Figure 5. Multi-Stakeholder Partnership Stage for Socio-Economic Recovery in East Lombok Regency
Source: Designed and created by Author, 2024

In Figure 5, Multi-Stakeholder Partnership Stage for Socio-Economic Recovery in East Lombok Regency, shows the partnership process starting with coordination led by BNPB, followed by joint planning involving government agencies, the University of Mataram, and the regional government. This stage emphasises data collection through research and community observation to identify program targets and community needs. Planning outlines the roles and responsibilities of each stakeholder. At the initiation and coordination stages, BNPB connects various stakeholders to avoid overlapping efforts and consolidate resources. This phase includes preparing a recovery plan and identifying community needs with the assistance of Mataram University. Further outreach efforts ensure recovery plans align with community needs and educate affected communities about disaster recovery strategies.

Implementation involves collaborative efforts to assist economic and social recovery. NGOs such as Conception empower community groups, while the University of Mataram and government agencies provide social assistance and training. The final evaluation stage assesses stakeholder performance to improve future recovery programs. Even though this stage was

successful, this research identified less than optimal synergy between stakeholders, with central government dominating and local governments needing to be more active. Improved coordination and increased stakeholder involvement are needed for more effective socio-economic recovery in East Lombok Regency.

In implementing a partnership involving various parties, principles and provisions that cannot be contested are very important. This is due to the various interests and different views brought by each stakeholder. Partnerships that involve many stakeholders, such as the socio-economic recovery program in East Lombok Regency require these principles so that the initial objectives of the partnership agreement can still be achieved.

The theoretical implications of this research underscore the importance of coordinated, principle-centred partnerships in disaster recovery, and highlight the central role of coordinating agencies such as BNPB. This emphasises data-based decision making and the involvement of local communities in planning and implementation. The challenges in achieving effective coordination between stakeholders reflect theoretical discussions regarding the complexity of multi-stakeholder collaboration. Finally, the emphasis on evaluation and continuous improvement supports theories that support adaptive management and iterative learning in the disaster recovery process

CONCLUSION

The post-disaster recovery program in East Lombok Regency is a strategic initiative aimed at mitigating disaster impacts, restoring social and economic stability, and strengthening community resilience. Cross-sector partnerships and cooperation, particularly between various levels of government, play a crucial role in ensuring effective recovery. Presidential Instruction No. 5 of 2018 emphasises the importance of close cooperation in post-disaster recovery efforts. This multi-stakeholder partnership involves the central government, local governments, academics, NGOs, and affected community groups. Efficient cooperation and coordination among these stakeholders are key to accelerating the recovery process and providing appropriate support to affected communities. The central government serves as the primary coordinator, orchestrating programs and activities in collaboration with regional governments. Mataram University contributes significantly by facilitating and supporting the planning and implementation of recovery programs, leveraging its local expertise for program design. The NGO 'Conception' plays a pivotal role in social and economic recovery by providing labour, logistics, and conducting research focused on local community needs. Community involvement is also critical, with the formation of Village Disaster Preparedness Teams (TSBD) and groups like the Resilient Women's Group (KWT) to drive economic development. In this process, the community acts both as the subject and the object of recovery efforts. The stages of implementing partnerships in post-disaster recovery include Coordination; Planning; Initiation and Coordination; Socialisation; Implementation; and Evaluation

This research indicates that although the partnership has made significant progress, there is still room for improving synergy among stakeholders, particularly in terms of coordination. The central government currently dominates the implementation process, and local governments need to take a more active role in these partnerships. The evaluation stage is crucial for assessing stakeholder performance and enhancing future socio-economic recovery programs.

Based on the findings and discussions above, the researchers propose several suggestions and recommendations to enhance post-disaster recovery efforts in East Lombok Regency. Firstly, there is a need to strengthen inter-agency cooperation by encouraging both the central and regional governments to deepen their collaboration and coordination in implementing recovery programs. This involves expanding the role and active involvement of local governments in the partnership process. Additionally, there is a call for more adequate resource provision, including sufficient funds and quality human resources, to support the smooth implementation of recovery programs. Furthermore, it is essential to empower local communities by fostering their active participation in recovery initiatives through education and training aimed at enhancing their capacity to manage economic recovery. To ensure the effectiveness and sustainability of recovery efforts, there is a suggestion to establish a robust evaluation mechanism to assess the performance of all stakeholders involved and identify areas for improvement. Moreover, involving research institutions and academics in planning and executing recovery programs, particularly those based on local communities, can provide

valuable insights into the needs and challenges faced by affected communities. Collaboration with non-governmental organisations, such as Conception, should be facilitated to broaden resources and support available for post-disaster recovery. Increasing public awareness about disasters through educational campaigns and programs is also crucial for building resilient communities capable of responding effectively to disasters. Lastly, implementing ongoing monitoring mechanisms is necessary to ensure the continuity of economic and social recovery beyond the conclusion of recovery programs, thereby fostering long-term community resilience. By implementing these suggestions and recommendations, the post-disaster recovery program in East Lombok Regency can be more effective and sustainable, thereby providing greater benefits for the communities affected by the disaster.

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