

Implementation of the Rehabilitation and Reconstruction Policy Under Local Regulation No. 8 Of 2013 Following the November 2025 Floods in Medan Barat District, Medan City

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Floods are one of the most common hydrometeorological disasters in Indonesia and have various impacts on people's lives, infrastructure, the environment, and economic activities. These impacts are not only felt when the disaster occurs but also continue to affect the social and economic conditions of communities in the post-disaster period. Therefore, post-disaster management through rehabilitation and reconstruction is a crucial part of efforts to restore affected areas. The North Sumatra Provincial Government has enacted North Sumatra Provincial Regulation No. 8 of 2013 on Disaster Management as the legal basis for disaster management, including the rehabilitation and reconstruction phases. This study aims to analyze the implementation of rehabilitation and reconstruction policies based on North Sumatra Provincial Regulation No. 8 of 2013 following the November 2025 floods in Medan Barat District, Medan City. This study employed a literature review (library research) using a descriptive qualitative approach. Data were obtained by reviewing various sources, such as laws and regulations, scientific journals, books, government documents, and relevant previous studies. The analysis was conducted using George C. Edward III's theory of policy implementation, which encompasses communication, resources, disposition, and bureaucratic structure. The results of the study indicate that the implementation of rehabilitation and reconstruction policies is influenced by the effectiveness of inter-agency communication, the availability of resources, the commitment of policy implementers, and the clarity of the bureaucratic structure. However, policy implementation still faces obstacles in the form of budget constraints, suboptimal cross-sectoral coordination, and low community participation. Therefore, it is necessary to strengthen institutional capacity, improve coordination among stakeholders, and optimize the disaster management system to achieve more effective and sustainable post-disaster recovery.

Keywords: Policy Implementation, Rehabilitation, Reconstruction, Flood, Disaster Management.

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1. Introduction

Indonesia is a country with a high level of disaster vulnerability due to its diverse geographical, geological, hydrological, and demographic conditions. Various types of disasters—such as floods, landslides, earthquakes, and volcanic eruptions—occur frequently and have an impact on people's lives, the economy, the environment, and regional development. Among these disasters, flooding is one of the most common hydrometeorological disasters in urban areas due to heavy rainfall, changes in land use, and the limited capacity of drainage systems to handle water flow. The impacts of flooding not only cause physical damage to infrastructure but also disrupt social and economic activities, necessitating a planned and sustainable response.

In disaster management, efforts are not only focused on the emergency response phase but also include post-disaster rehabilitation and reconstruction. Rehabilitation is a series of activities carried out to restore the conditions of communities and environments affected by disasters so that they can return to normal

functioning. Meanwhile, reconstruction is the process of rebuilding facilities, infrastructure, and institutions damaged by a disaster based on the principle of “build back better” building back in a way that is safer and more sustainable. Both of these stages play a crucial role in accelerating the recovery of affected areas and enhancing community resilience against future disaster risks.

Through Law No. 24 of 2007 on Disaster Management, the Indonesian government has established a legal framework for comprehensive disaster management. As a follow-up to this policy, the North Sumatra Provincial Government enacted North Sumatra Provincial Regulation No. 8 of 2013 on Disaster Management, which governs various aspects of disaster management, ranging from the pre-disaster phase, through emergency response, to the post-disaster phase. This regulation serves as a guideline for local governments in carrying out rehabilitation and reconstruction efforts to restore the conditions of communities and areas affected by disasters.

The city of Medan is one of the areas in North Sumatra Province that is highly vulnerable to flooding. Rapid population growth, land-use changes, and limited drainage capacity have made flooding a frequent occurrence. In November 2025, the Medan Barat subdistrict experienced flooding that caused damage to residential areas, public facilities, transportation infrastructure, and community economic activities. These conditions necessitate the implementation of effective rehabilitation and reconstruction policies to ensure that the recovery process proceeds optimally and sustainably.

Previous studies have largely focused on disaster mitigation, community preparedness, and emergency response. Meanwhile, research that specifically examines the implementation of rehabilitation and reconstruction policies based on North Sumatra Provincial Regulation No. 8 of 2013 following the floods in the Medan Barat subdistrict remains relatively limited. In fact, the rehabilitation and reconstruction phases play a crucial role in determining the success of social, economic, and infrastructural recovery in the community following a disaster.

Based on the above description, this study aims to analyze the implementation of rehabilitation and reconstruction policies under North Sumatra Provincial Regulation No. 8 of 2013 following the November 2025 floods in Medan Barat Subdistrict, Medan City. The analysis was conducted using George C. Edward III's theory of policy implementation, which encompasses the aspects of communication, resources, disposition, and bureaucratic structure, in order to gain an understanding of the factors that support or hinder the implementation of post-disaster rehabilitation and reconstruction policies.

2. Literature Review and Problem Statement

Implementation of Public Policy

Policy implementation is a crucial stage in the public policy process because it determines the extent to which policy objectives can be realized in practice. Even a well-formulated policy will not yield optimal results if it is not implemented effectively. Policy implementation can be understood as the process of carrying out government decisions, involving various actors, resources, and administrative mechanisms to achieve predetermined objectives.

According to Edward III (1980), policy implementation is a process that involves interactions among the implementing organization, available resources, and the target groups affected by the policy. The success of policy implementation is determined not only by the quality of the policy itself, but also by the ability of the implementing organizations to translate the policy into concrete actions. Therefore, policy implementation is a crucial aspect of public administration because it is directly related to the effectiveness of governance and public services.

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In the context of disaster management, policy implementation is a key factor in determining the success of post-disaster rehabilitation and reconstruction. Policies established through regulations require cross-sectoral coordination, adequate resource support, and commitment from all stakeholders to ensure that post-disaster recovery goals are achieved effectively and sustainably.

Theory of Policy Implementation (Edward III)

This study uses the theory of policy implementation proposed by George C. Edward III as an analytical framework for examining the implementation of rehabilitation and reconstruction policies based on North Sumatra Provincial Regulation No. 8 of 2013. Edward III explains that the success of policy implementation is influenced by four key indicators: communication, resources, disposition, and bureaucratic structure.

a. Communication

Communication is the process of conveying policy information to implementers and target groups so that the objectives and substance of the policy can be clearly understood. Effective communication minimizes misunderstandings in policy implementation. Conversely, unclear communication can lead to differing interpretations that may hinder policy implementation. In disaster management, communication plays a vital role in conveying information about rehabilitation and reconstruction programs to affected communities and ensuring effective interagency coordination.

b. Resources

Resources are a critical factor in the successful implementation of policies. Edward III states that good policies cannot be implemented optimally unless they are supported by adequate resources. Resources include human resources, budgets, facilities, information, and the authority held by the implementing organization. In the implementation of post-disaster rehabilitation and reconstruction, the availability of resources is a critical aspect because the recovery process requires financial support, technical personnel, and adequate facilities and infrastructure.

c. Disposition

Disposition refers to the attitude, commitment, and willingness of implementers to carry out established policies. Implementers with a high level of commitment will strive to implement policies to the fullest extent possible despite facing various obstacles in the field. In the context of post-disaster rehabilitation and reconstruction, disposition can be seen in the seriousness with which local governments, the Regional Disaster Management Agency (BPBD), and related agencies work to accelerate the recovery process in disaster-affected areas.

d. Bureaucratic Structure

Bureaucratic structure relates to organizational mechanisms, the division of tasks, work procedures, and interagency coordination in implementing policies. A clear bureaucratic structure facilitates the implementation process because each actor understands their respective tasks and responsibilities. In disaster management, an effective bureaucratic structure is necessary to ensure that coordination between the central government, local governments, the Regional Disaster Management Agency (BPBD), community organizations, and the public can proceed in an integrated manner.

Post-Disaster Rehabilitation

Rehabilitation is a series of activities carried out to restore communities and environments affected by disasters so that they can return to normal functioning. Pursuant to Law No. 24 of 2007 on Disaster Management, rehabilitation is carried out through the restoration of the disaster-affected environment, the repair of public facilities and infrastructure, the social and psychological recovery of communities, the provision of health services, reconciliation and conflict resolution, and the restoration of government functions and public services.

Rehabilitation aims to mitigate the social and economic impacts caused by disasters and accelerate the process of restoring normal life for communities. Therefore, rehabilitation is a crucial phase in the disaster management cycle because it serves as a bridge between the emergency response phase and the reconstruction of affected areas.

Post-Disaster Reconstruction

Reconstruction is the process of rebuilding all facilities, infrastructure, and institutions that have been damaged by a disaster. Reconstruction is not only intended to restore conditions to what they were before the disaster, but also to improve the quality of development so that it is safer and more resilient to future disaster risks.

The “Build Back Better” concept serves as the guiding principle for reconstruction efforts. This principle emphasizes that reconstruction must result in conditions that are better than those that existed before the disaster. Thus, reconstruction is not only focused on physical recovery but also on enhancing the capacity of communities and the government to cope with future disaster threats.

Rehabilitation and Reconstruction Policy in North Sumatra Provincial Regulation No. 8 of 2013

North Sumatra Provincial Regulation No. 8 of 2013 on Disaster Management serves as the legal basis for the implementation of disaster management in North Sumatra Province. The regulation stipulates that disaster management must be carried out in a planned, integrated, coordinated, and comprehensive manner through the pre-disaster, emergency response, and post-disaster phases. In the post-disaster phase, the local government is responsible for carrying out rehabilitation and reconstruction to restore the lives of the community and repair the damage caused by the disaster. The implementation of rehabilitation and reconstruction involves various local government agencies, the Regional Disaster Management Agency (BPBD), the business sector, community organizations, and affected communities. Through this regulation, the North Sumatra Provincial Government seeks to establish an effective and sustainable disaster management system so that communities have greater resilience against future disaster risks.

3. Method

This study employs a literature review (library research) method with a qualitative descriptive approach. According to Creswell (2018), qualitative research aims to understand social phenomena through the interpretation of various relevant data sources. In this study, data were obtained through a document review of various sources of literature related to the implementation of post-disaster rehabilitation and reconstruction policies.

The research data sources consist of secondary data obtained from North Sumatra Provincial Regulation No. 8 of 2013 on Disaster Management, Law No. 24 of 2007 on Disaster Management, national and international scientific journals, books on public administration, government policy documents, and various previous research findings relevant to the research topic.

This study focuses on the implementation of post-disaster rehabilitation and reconstruction policies based on North Sumatra Provincial Regulation No. 8 of 2013 following the November 2025 floods in Medan Barat District, Medan City. The analysis was conducted using George C. Edward III's theory of policy implementation, which consists of four key indicators: communication, resources, disposition, and bureaucratic structure.

Data collection was conducted through the identification, classification, and critical review of various relevant sources of literature. The data were then analyzed using content analysis techniques through the stages of data reduction, data presentation, and drawing conclusions, as outlined by Miles, Huberman, and Saldaña (2014). This technique was used to gain a comprehensive understanding of the implementation of post-disaster rehabilitation and reconstruction policies from the perspective of public administration.

4. Results And Discussion

The implementation of post-disaster rehabilitation and reconstruction policies is an important part of disaster management. This phase aims to restore the social, economic, and environmental conditions, as well as the infrastructure, that have been affected by the disaster. In this study, the implementation of rehabilitation and reconstruction policies based on North Sumatra Provincial Regulation No. 8 of 2013 was analyzed using George C. Edward III's policy implementation theory, which consists of four indicators: communication, resources, disposition, and bureaucratic structure. The implementation of rehabilitation and reconstruction policies based on North Sumatra Provincial Regulation No. 8 of 2013 following the November 2025 floods in the Medan Barat District of Medan City was analyzed using George C. Edward III's policy implementation theory, which covers communication, resources, disposition, and bureaucratic structure. These four factors have a significant influence on the success of the post-disaster recovery process.

Communication

Communication is a key factor in the successful implementation of policies because it serves as a means of conveying information, coordinating efforts, and ensuring a shared understanding among policy implementers and target groups. Edward III (1980) explains that A policy can only be implemented effectively if its objectives and implementation procedures are clearly understood by all stakeholders involved.

In the context of post-flood rehabilitation and reconstruction in the Medan Barat Subdistrict, communication is essential to ensure coordination among the North Sumatra Provincial Government, the City Government of Medan, the Regional Disaster Management Agency (BPBD), relevant local government agencies, civil society organizations, and the affected communities. Effective communication ensures that the processes of needs assessment, aid distribution, and implementation of recovery programs are carried out in a targeted and effective manner.

These findings are consistent with the research by Asrori and Rahmawati (2022), which states that communication among government organizations is a key factor in the successful implementation of disaster management policies. Kurniawan and Putri (2021) also found that effective communication coordination can reduce overlapping jurisdictions and accelerate decision-making during the post-disaster recovery phase. Furthermore, Dewi and Putra (2023) explain that effective disaster governance requires an integrated communication system to support the synchronization of programs across agencies.

However, various studies indicate that cross-sectoral coordination often faces obstacles such as differing perceptions, delays in the dissemination of information, and a lack of data integration. These conditions have the potential to hinder the effectiveness of rehabilitation and reconstruction efforts. Therefore, it is necessary to strengthen information technology-based communication systems so that all stakeholders can access data and information quickly and accurately.

Resources

Resources are a critical factor in the successful implementation of policies. Edward III (1980) asserts that even good policies cannot be implemented effectively without adequate resources. These resources include human resources, budgets, facilities, information, and authority.

Post-flood rehabilitation and reconstruction efforts require significant resources because they involve restoring infrastructure, public services, and community economic activities, as well as rebuilding facilities damaged by the disaster. Therefore, the availability of funding is one of the key factors that influence the effectiveness of recovery programs.

The findings of this study are consistent with the research by Faturahman and Suryani (2021), which shows that budget constraints are the main obstacle to the implementation of post-disaster rehabilitation programs in Indonesia. Nasution and Harahap (2021) also explain that the capacity of local governments in disaster management is greatly influenced by the availability of human resources and adequate financial support.

In addition to the budget, the quality of human resources also influences the success of policy implementation. BNPB (2021) emphasizes that rehabilitation and reconstruction require professionals with expertise in disaster management, civil engineering, public health, regional planning, and social services. Limitations in the number or quality of personnel can slow down the recovery process and reduce the effectiveness of the programs being implemented.

This finding is also supported by Kelman (2020), who states that institutional capacity and the quality of human resources are key elements in building community resilience to disaster risks. Thus, strengthening the capacity of government officials and optimizing budget management are essential for the implementation of rehabilitation and reconstruction policies.

Disposition

Disposition refers to the attitude, commitment, and willingness of policy implementers in carrying out their duties and responsibilities. According to Edward III (1980), the success of policy implementation is greatly influenced by the level of commitment of implementers to the established policy objectives. In the implementation of post-flood rehabilitation and reconstruction in the Medan Barat subdistrict, disposition was reflected in the seriousness with which the local government and relevant agencies worked to accelerate the recovery of the affected areas. This commitment was demonstrated through the development of targeted programs, the acceleration of aid distribution, and the rebuilding of damaged facilities and infrastructure.

These findings are consistent with the research by Prasetyo and Rahman (2022), which shows that the success of post-disaster recovery programs is greatly influenced by the commitment of government officials to respond to community needs quickly and appropriately. Mardiyanto and Hidayat (2024) also emphasize that the integrity and professionalism of policy implementers are key factors in ensuring the success of rehabilitation and reconstruction.

In addition, Winarno (2018) explains that policy implementation will be more effective if those responsible for carrying it out share a common understanding of the policy's objectives and demonstrate a strong commitment to its implementation. Therefore, enhancing integrity, professionalism, and a public service orientation must be a top priority in the implementation of post-disaster rehabilitation and reconstruction policies.

Bureaucratic Structure

Bureaucratic structure relates to the division of tasks, working mechanisms, operational procedures, and coordination among organizations involved in policy implementation. Edward III (1980) explains that a clear bureaucratic structure facilitates policy implementation because each organization understands its respective tasks and authorities. In the implementation of North Sumatra Provincial Regulation No. 8 of 2013, rehabilitation and reconstruction involved various actors, such as the Regional Disaster Management Agency (BPBD), local governments, technical agencies, community organizations, and the public. The large number of actors involved requires a clear bureaucratic structure and effective coordination.

These findings are consistent with the research by Rahmawati and Wibowo (2023), which states that clarity in bureaucratic structure and standard operating procedures (SOPs) can enhance the effectiveness of disaster management policy implementation. Sari, Nugroho, and Wulandari (2024) also found that collaboration among stakeholders is a key factor in accelerating post-disaster reconstruction. Furthermore, UNDRR (2020), through the Sendai Framework for Disaster Risk Reduction, emphasizes the importance of integrated and collaborative governance in disaster management. Therefore, local governments need to strengthen interagency coordination and streamline bureaucratic procedures so that rehabilitation and reconstruction efforts can proceed more effectively.

Barriers and Efforts to Strengthen Policy Implementation

Based on the results of the literature review, the implementation of post-flood rehabilitation and reconstruction policies in the Medan Barat subdistrict still faces several challenges, including budget constraints, suboptimal cross-sectoral coordination, limited human resources, a lack of data integration, and low community participation in the post-disaster recovery process.

These findings are consistent with the research by Lestari and Yuliana (2023), which found that low community participation is one of the factors hindering the success of post-disaster rehabilitation programs. Aldrich and Meyer (2015) explain that social capital and community involvement play a crucial role in accelerating the recovery of disaster-affected areas. Communities that are actively involved in the recovery process tend to have higher levels of resilience compared to communities that merely receive program benefits.

Furthermore, Vale and Campanella (2005) explain that the success of post-disaster reconstruction depends heavily on the ability of the government and the community to rebuild social, economic, and institutional systems that are better than those that existed before the disaster. The “Build Back Better” concept developed by the UNDP (2017) and the World Bank (2020) also emphasizes that the reconstruction process should not be focused solely on physical recovery, but also on strengthening community capacity and reducing the risk of future disasters.

Therefore, policy implementation must be strengthened through improved inter-agency coordination, the development of an integrated disaster information system, human resource capacity building, optimized budget management, and increased community participation in all stages of rehabilitation and reconstruction. In this way, the goals of post-disaster social, economic, and infrastructure recovery can be achieved more effectively and sustainably.

5. Conclusion

The implementation of rehabilitation and reconstruction policies based on North Sumatra Provincial Regulation No. 8 of 2013 following the November 2025 floods in the Medan Barat subdistrict of Medan City was influenced by four main factors, as identified by George C. Edward III: communication, resources, Implementation of the Rehabilitation and Reconstruction Policy Under Local Regulation No. 8 Of 2013 Following the November 2025 Floods in Medan Barat District, Medan City. Dennis Jesse Siregar et.al

disposition, and bureaucratic structure. Based on the results of a literature review, effective communication between agencies and the community, the availability of adequate resources, the commitment of policy implementers, and a clear bureaucratic structure are important factors in supporting the success of post-disaster rehabilitation and reconstruction. However, policy implementation still faces various obstacles, such as budget constraints, suboptimal cross-sectoral coordination, limited human resources, and low community participation in the post-disaster recovery process. These findings indicate that the success of rehabilitation and reconstruction is not solely determined by the existence of regulations, but also by institutional capacity and synergy among stakeholders. Therefore, local governments are advised to strengthen inter-agency coordination, enhance human resource capacity through education and disaster training, optimize the use of information technology in data management and the implementation of rehabilitation and reconstruction programs, and encourage active community participation in every stage of post-disaster recovery. In addition, future research is recommended to empirically examine the implementation of rehabilitation and reconstruction policies through field research so as to provide a more comprehensive picture of the effectiveness of disaster management policy implementation at the local level.

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