Local Government Strategies in Managing Flood Disaster in Tompobulu, Maros, Indonesia

Muh Hasbi Azis Agani
Faculty of Social and Political Sciences, Universitas Muhammadiyah Makassar, Indonesia
E-mail: muh.hasbihajid@gmail.com

Dwi Nur Ilma Aulia
Faculty of Social and Political Sciences, Universitas Muhammadiyah Makassar, Indonesia
E-mail: ilmaauliadwinur@gmail.com

Ahmad Takbir Abadi
Faculty of Social and Political Sciences, Universitas Muhammadiyah Makassar, Indonesia
E-mail: takbir39@gmail.com

Herman
Faculty of Social and Political Sciences, Universitas Muhammadiyah Makassar, Indonesia
E-mail: hermanking0104@gmail.com

Vinka Audrina Sahrir
Faculty of Social and Political Sciences, Universitas Muhammadiyah Makassar, Indonesia
E-mail: vinkaudrinaa@gmail.com

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Abstract
Disaster is one of the risks to regional resilience, one of which is the flood disaster, which influences the social, economic, and environmental community, necessitating the community's involvement in the Government's efforts. The study aimed to figure out the regional Government's flood-prevention strategy in Tompobulu District, Maros Regency, Indonesia. This study is a qualitative descriptive study. Observation, interviews, and documentation are used to collect data. The researcher uses the Miles and Huberman data model in the data analysis technique. The Chrysantin theory, which is based on formulation, implementation, and evaluation, was applied in this study. The study's findings demonstrate that the formulation or planning shows that the Regional Government has produced different plans and has carried out various types of planning or formulation. Specifically, the existence of Musrenbang, which includes discussions on flood disaster management and other formulations or planning carried out by the Maros Regency Government's Climate Village Program, overcoming floods is divided into two categories: adaptation and mitigation. The intended implementation or execution has gone as anticipated, beginning with the construction of embankments, weirs, and low-rise streets, as well as demands for environmental cleaning, mainly along riverbanks and the planting of trees around springs—evaluation of all types of planning, implementation of the evaluation section as a finishing or repair method.
Keywords: Regional Government Strategy, Flood Disaster Management, Indonesia

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Introduction

Indonesia is vulnerable to a wide range of disasters, including natural disasters. Natural disasters are natural occurrences that can inflict environmental damage and destruction and casualties, property losses, and damage to already constructed developments. Flood disasters have become an inexhaustible problem for people throughout history, present, and future. These disasters are usually the consequence of natural phenomena or human activities, and they can even be caused by both nature and humans at the same time.

Floods are classified into three types: minor floods, which are characterized by puddles of rainwater in various locations; medium floods, which are characterized by overflowing rivers and inundation of riverbank areas, rice fields, and settlements; and major floods, which affect a large area and are characterized by sinking and damage to various public facilities, Settlements and bridge drift, as well as the failure of safety levees and the disconnection of essential roadways, are all possible outcomes (Maryono, 2014).

Extreme rainfall can cause flooding, causing damage to property and life, especially in flood-prone areas such as rivers and coasts. Government policies are often not sufficient to overcome these things, which require good spatial planning to be able to improve and enhance economic development in flood-prone areas (Aerts et al., 2018)

Increasing the ability of regions may be aided by improving the quality of Government. As a result, when developing effective development policies, not only policymakers but also civil society should pay close attention to how regional governments exercise authority, demonstrates that policymakers attempting to improve resilience through institutional reforms must consider a range of complementary and alternative elements that might increase or diminish the importance of government quality (Rios & Gianmoena, 2020).

To prepare for this, the Government established Badan Nasional Penanggulangan Bencana (BNPB) as a disaster response arm of the Government. The BNPB is the realization of Article 10 paragraph (1) of Law No.24 of 2007 of the Republic of Indonesia on Disaster Management. This institution is a non-departmental government agency at the ministerial level, according to Article 10 paragraph (2) of the same Law. The Regional Disaster Management Agency (BPBD) must be established at the province, district, and municipal levels, according to Article 18 of Law No.24 of 2007. (Awusi et al., 2018)

In a Regional Regulation of Maros Regency Number 03 of 2010 concerning Formation of Organizational Structure and Work Procedure of the Regional Disaster Management Agency of Maros Regency in a Regional Regulation with the function in Article 5 of formulating and stipulating disaster management policies and handling refugees by acting quickly and precisely, effectively and efficiently; as well as coordinating the planned, integrated, and comprehensive implementation of disaster management operations. The rain that flooded Maros Regency on January 22, 2019, flooded people in Turikale Subdistrict, flooding the Kassi neighborhood and Pettuadae Village; in Simbang, it flooded Bukkamata Hamlet and Tanete Village; and in Lau, it flooded Allepolea and Mattiro Deceng Villages. Floods in two hamlets in Tompobulu District, namely Baddo Ujung Hamlet and Tombolo Hamlet, Tompobulu Village, was caused by the water discharge of the Tompobulu river overflowing and creating flooding on March 2, 2019 (Flora, 2019)

On March 2, 2019, a flash flood of up to two meters hit Tombolo Hamlet and Baddo Ujung Hamlet in Tompobulu Village, Tompobulu District, Maros Regency. In Tompobulu District, the abrupt flood wrecked dozens of homes, destroyed many belongings, and carried away the locals' livestock. To witness the flood's effects, On March 3, 2019, the Regent of Maros, HM Hatta Rahman, paid a visit to the hamlet. He said that the flash flood was caused by heavy rain and environmental changes, such as forest degradation and illegal mining (Ansar, 2019).

It was based on previous research (Sari et al., 2020). The findings revealed that the Gresik Regency Disaster Management Agency's responsibility in disaster emergency response was

directed by Regional Regulation Number 7 of 2012 on disaster management implementation. Rapid and precise assessments, human resource mobilization programs, equipment and logistics deployment programs, victim rescue and evacuation, and early recovery are all part of the disaster emergency response carried out well in collaboration with related parties to ensure that disaster management runs smoothly.

With the title "Local Government Strategies in Overcoming Flood Disasters in the Tompobulu village, Maros Regency," it is an exciting topic to study whereas a government what steps or actions should be taken in flood prevention in the Tompobulu Village, especially in two hamlets, namely Tombolo Hamlet and Baddo Ujung Hamlet.

Literature Review

Strategy Concept

A strategy to improve regional resilience The current focus is on developing sectors contributing to the three key pillars of social, economic, and environmental sustainability. According to a literature review based on historical catastrophe experiences, this public open space has tremendous potential to be used for disaster resilience, as a facilitator for emergency evacuation, as a recovery agent, and as a hazard reduction technique (Jayakody et al., 2018)

It can be said that it is essential to develop a strategy for an agency in order to generate value for stakeholders, with the general goal of achieving the strategy's objectives from both an outside- in and an inside- out strategic perspective and to make changes in the strategy development process as needed (Bakoğlu et al., 2016).

The data were analyzed in light of potential stakeholders and public participation in decision-making processes on risk mitigation and infrastructure strengthening for region resilience. (Komendantova, 2018)

Vigorous enforcement of policies and mitigation plans are advocated for vulnerability- driven risk villages, whereas strengthening of structural measures and flood- plain zoning is recommended for hazard- driven risk villages. Such comprehensive flood- risk data could be a valuable cartographic product for local governments and stakeholders, allowing them to prioritize flood mitigation efforts for better environmental planning and management (Mohanty et al., 2020).

This point of view ultimately raises how the Strategy concept speaks at the level of decision-making campaigns, such as managing and moving resources with various opinions held by the company, and will limit and determine the direction of the company's strategy by using the environmental scanning process, strategy formulation, implementation, and evaluation. (Chrysantin et al., 2013)

Disaster Management

Individuals, teams, and organizations can use knowledge management to achieve their strategic and operational goals by systematically and collaboratively creating, distributing, and utilizing knowledge systematically and collaboratively. On the one hand, knowledge management improves the efficiency and efficacy of operations, but on the other side, it leads to innovation and increased competitiveness. Knowledge- based management attempts to develop information knowledge and turn it into a long- term competitive advantage to contribute to business success. (North & Kumta, 2018)

Furthermore, the consequences of climate change impact the likelihood of future flood dangers (Blöschl et al., 2019). As a result of past and future land usage and climate change, future flood events are more likely to cause human and economic losses (Dottori et al., 2018).

Complex natural disasters, such as flash floods can never be avoided entirely. As a result, improving flood prediction and mitigation technologies is critical to reducing the loss of human life and the socio- economic consequences of floods. The first and most crucial phase in flood modeling and risk assessment is flooding susceptibility mapping, flood-prone locations can be

detected via flood susceptibility mapping, and appropriate structural and non- structural solutions can be implemented to mitigate flood-related losses (Khosravi et al., 2019).
Disaster management is seen as a critical aspect and an effective technique for reducing the severity of any disaster. When man- made calamities and catastrophic natural disasters strike, disaster management is strategic planning and procedure that is administered and implemented to preserve critical infrastructures (i.e., crucial assets) from severe damage (Oktari et al., 2020).
As previously said, Disaster Management is a systematic procedure that leads to action prior to, during, and after a disaster in order to preserve human lives (Polenberg, 2015).
As a country, we must thoroughly comprehend the exact geographic and sectoral scope of disaster losses to determine how and where to intervene with future mitigation efforts and whether previous mitigation efforts were successful (Wilkins et al., 2021).

Research Methodology

The research method used in this study is qualitative research by using words and language to describe something in a unique natural setting and employing various scientific approaches. As a result, qualitative research is used in this study because it will expose more societal issues. This study's kind is descriptive, which means it describes several variables related to the subject under investigation.
Data was collected directly from the subject of the investigation. Primary data was gathered through observations and interviews with people familiar with the Regional Government's Flood Disaster Response Strategy. Data sources that don't offer data directly to data collectors, such as through other persons or documents. Secondary data is supplied from various sources, including central Statistik bureau Maros Regency, Organizational Structure, Books, Journals, and Maros Regency's Vision and Mission.

Research Result

The results of this study describe an excellent local government strategy in tackling flood disasters in Tompobulu District, Maros Regency, especially in two Hamlets, namely Tombolo Hamlet and Baddoujung Hamlet, which often experience flood disasters according to Chrysantin et al. (2013), namely making a formulation in starting something. Activities, implement in the implementation of these activities, and assess the programs implemented in these activities:

Formulation

The formulation is also referred to as a plan which is meant to make a specific formulation that will be able to show a more focused picture of the solution in the form of general problems that occur in the location and then make efforts by the local Government of Maros Regency in collaboration with the local Government. and the community in order to minimize the impact caused by the flood disaster.
Regarding the formulation strategy of the Maros Regency Regional Government and BPBD Strategy in Overcoming Flood Disasters, there is a formulation through the Musrenbang held by consultants from Bappeda. Before that, they studied the morphology of the river first in Tompobulu Village, Tompobulu District, as stated by Chrysantin et al. (2013) that in the strategy, there needs to be cooperation with other parties.
The formulation indicator, namely BPBD, also makes efforts to overcome flooding by outreach to flood victims. Cooperation between a government, the Regional Disaster Management Agency, and the community is essential. The Government has an essential role in building public awareness so that they are willing to prevent and overcome flood disasters.
With the establishment of cooperation with related institutions between the Government community organizations, it is easy to carry out early socialization and training directly to the community. So it's easy to give directions and warnings to the community so that people are

aware of the dangers of flood disasters, and it is essential to prevent and cope. With direction and early warning, they also understand what steps must be taken to prevent and overcome flood disasters.

The formulation strategy of the Maros Regency Environment Service is to carry out the Climate Village Program, which includes Mitigation and Adaptation, for example, not throwing garbage in the canal in both dry and rainy seasons, besides planning the establishment of a Waste Bank.

Regarding formulation indicators, it can be understood that the Regional Government has carried out various kinds of Planning or Formulation, namely the existence of Musrenbang at the Tompobulu Village level, including discussing flood disaster management and mitigation. Strategy Formulation talks about the need for something uncertain, namely the future. Assumptions and public trust in the Government impact the community's future, and the Regional Government will make changes for the better in the future. Thus, strategy almost always starts from what can happen and not from what happens.

Implementation

Implementation, which can also be referred to as a form of implementation, is an application or action or concrete form in carrying out a careful and detailed plan that has been designed or made previously by the Regional Government of Maros Regency in tackling the impact of the flood disaster in Tompobulu District, especially in two Hamlets namely Tombolo Hamlet and Baddoujung Hamlet, Tompobulu Village.

From the formulation made by the Head of the Natural Resources Division at the Public Works Department of Maros Regency, the implementation has been running so far, for example, the construction of embankments, construction of weirs and road elevations that are considered low, such as structural efforts in dealing with flood hazard problems are technical efforts aimed at facilitating and preventing flooding. There is an overflow of river water or the occurrence of puddles in flood-prone areas.

In the Emergency Sector, along with the agencies that play a role, they also assist with clothing, food, boards, namely clothing in the form of clothing, food, namely food, and boards in the form of housing to be inhabited during an emergency.

The Head of Pollution Control and Environmental Damage in Maros Regency has advised not to throw garbage in rivers, just as an indiscriminate garbage disposal, including in river channels, can raise the flood water level because it blocks the flow, awareness itself must be the one who initiates it.

The Head of Baddoujung Hamlet strives for the community to protect the surrounding environment, at least not litter, if people do not clean.

It can be concluded that the planned implementation has proceeded as planned, starting from the construction of embankments, weirs, the streets are considered low, calls for maintaining the cleanliness of the surrounding environment, especially on riverbanks.

Apart from being an informant who knows all the problems related to infrastructure in their area and knows more about the potential in their area to be developed, the community takes part in the development process. Where community participation, in this case, is marked by direct involvement by devoting their physical energy to every development activity carried out and assisting by providing consumption for residents who work indirectly carrying out the process of monitoring development.

The process of improving people's living standards in an area, whether in terms of economy, social, or environment, requires an empowerment process for the community before implementing participatory activities.

Evaluation

Evaluation is an identification process to measure or assess whether the activities or programs follow the desired plans or objectives. Evaluation is needed in people's lives, especially in

tackling floods in Tompobulu District, especially the two Hamlets, namely Tombolo Hamlet and Baddoujung Hamlet, to improve the progress of the activities carried out evaluate things that must be done in the future.

Evaluation is essential for seeing the success of the extent to which a particular activity or program has been achieved so that it can be seen if there is a difference between the standards that have been set and the results that can be achieved.

The evaluation stage in Rehabilitation at BPBD Maros Regency is only in infrastructure improvements with conditions that must be met first.

Evaluation can be carried out if the implementation is complete, such as whether the development project was achieved or not, whether it was according to what was planned or not, if not, why is that, and what steps need to be taken in the future.

It can be concluded that in the evaluation of all forms of planning, the implementation of the evaluation section is finished or as a form of improvement.

Evaluation needs to be done on Development Policies/ Priorities, and Priority Focuses, Development Programs, or Priority Activities. The analysis includes the success or failure of implementing the planned development, including achieving targets and targets.

The evaluation is intended to analyze the impact of development carried out by development actors and enjoyed by development beneficiaries. So evaluation is entirely different from various policy assessments, let alone monitoring programs. The evaluation consists of a quantitative analysis of the impact of the implementation of the policy and includes an explanation of its achievements or non- achievements and a description of the policy implications that may occur.

Supporting Factors

All factors supporting that are conducive to encouraging, supporting, launching, assisting, accelerating, and so on the occurrence of everything and to get an overview of things that support or encourage an excellent local government strategy in tackling flood disasters in Tompobulu Village, Maros Regency, in particular the two hamlets of Tombolo Hamlet and Baddoujung Hamlet. One of the supporters is community support because, without it, the local government would be unable to discover or understand the challenges faced by flood victims. Cooperation is critical because it is difficult to overcome problems without it. Cleaning events were held along the river's banks to reduce the flood disaster impact.

The occurrence of a change process in a community is created by variables that foster it, backed by the Regional Government's strong dedication to good collaboration, which has been spread through the efforts made to achieve the stated activities.

Obstacle Factors

In the process of change, there are not always only supportive elements but also inhibiting factors. The numerous hurdles identified in the strategy process are all types of variables inhibiting (making it slow) or even blocking and holding back anything from happening. The Regional Government's Response to Flood Disasters in Tompobulu Sub- district, Maros Regency, focuses on two hamlets in Tompobulu Village, Tombolo Hamlet and Baddoujung Hamlet. The most significant impediment is the central Government's limited budget, and the public should be able to see that all technical calculations made by the Government are reasonable and good; it is only up to the people to accept them for the general good.

There is still a dearth of public knowledge, awareness, and participation by the community in terms of maintaining the surrounding ecosystem. There is still a scarcity of access and infrastructure to support community activities. Based on this, it can be concluded that obstructive things will always hinder all development activities; the obstructive factor is a lack of community mindset in dealing with the surrounding environment, a lack of access that can facilitate activities, and one of the most significant obstacles is a budget constraint.

Of course, some factors influence the Regional Government Strategy in dealing with flood disasters, both supportive and inhibiting factors from the overall supporting and inhibiting factors of the Regional Government Strategy in Dealing with Flood Disasters in Tompoulu Village, Maros Regency, especially the two hamlets, namely Tombolo Hamlet and Baddoujung Hamlet, the encouraging factors include good cooperation from the Regional Government, which has spread through the efforts made. In contrast, the inhibiting factors include a lack of community mindset in dealing with the surrounding environment, a lack of access that can facilitate activities, and a lack of community mindset in dealing with the surrounding environment.

Conclusion

The following conclusions can be drawn based on the findings of the research and discussion given, especially the Regional Government Strategy in Overcoming Flood Disasters in Tompobulu District, Maros Regency, namely the two hamlets of Kuncio Hamlet and Baddoujung Hamlet: The three aspects of a good government strategy are: formulation or planning, demonstrating that the Regional Government has made several plans, the Regional Government has carried out various types of planning or formulation, the existence of the Musrenbang includes discussing flood disaster management, while the Maros Regency Government held a Climate Village Program, conquering floods in two ways, namely adaptation, and mitigation.

The intended implementation or implementation has gone as planned. Starting with the construction of embankments, weirs, and low- traffic streets, calls for maintaining the cleanliness of the surrounding environment, mainly along riverbanks, and planting trees near springs—evaluation of all types of planning, as well as the completion or enhancement of the evaluation section.

The Regent of Maros Regency, who directly interfered with the officials concerned and students who participated in socializing the community, were both supportive and hindering elements in the study, with the majority of the community responding positively. The problem of a very restricted budget is an impediment, and there are only pros and contracts that occur in the field to the community. Based on the findings of the study, the authors have made numerous recommendations to build a sound local government plan for dealing with flood catastrophes in Tompobulu District, Maros Regency, particularly in the Dusun Hamlets, namely Kuncio Hamlet and Baddoujung Hamlet, namely:

1) Meetings or seminars are required to discuss littering, conservation, and other factors that may contribute to the flood disaster impact.
2) Then there are patrols needed around the forest at the study site to ensure that no renegade elements cut down trees at will.

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