



Reconstructing the Role of Government in Handling Chronic Flooding in Ten Villages in Sayung Subdistrict, Demak: A Social and Environmental Justice Approach

Sukimin Sukimin^{1, a)}, A. Heru Nuswanto^{1, b)}, Raka Wahyu ananda^{1, c)}

¹*Faculty of Law, Universitas Semarang, Semarang, Indonesia*

^{a)} Corresponding author: sukimin@usm.ac.id.

^{b)} heru.nuswanto@usm.ac.id

^{c)} A11220201@student.usm.ac.id

Abstract. Tidal flooding (rob) that has persistently affected ten villages in Sayung District, Demak Regency, has become a chronic problem requiring urgent government intervention. This phenomenon is not merely a natural event caused by rising sea levels but also the result of spatial planning inequality, land subsidence, and weak environmental governance. This study aims to reconstruct the government's role in addressing the rob disaster through the lens of social and environmental justice. The research employs a socio-legal method, examining the relationship between legal norms (*das sollen*) and social realities (*das sein*) within the affected coastal communities. Findings reveal a legal vacuum in Indonesia's Law No. 24 of 2007 on Disaster Management, as it does not explicitly recognize tidal flooding as a form of natural disaster. Consequently, government responses remain partial, reactive, and unsustainable. Although village governments have advocated for their citizens, limited legal and fiscal authority constrains effective action. The reconstruction of the government's role is therefore essential through legal reform, local regulations on rob mitigation, and stronger community participation in policy formulation. By applying principles of social and environmental justice, rob management can become fairer, more inclusive, and sustainable, serving as a national policy model for coastal disaster governance in Indonesia.

Keywords: government role reconstruction, tidal flooding, social justice, environmental justice, Sayung District

1 INTRODUCTION

Tidal flooding has become an annual phenomenon in the northern coastal region of Central Java, particularly in Sayung District, Demak Regency [1]. Ten villages in this subdistrict, such as Sriwulan, Timbulsloko, Bedono, and Purwosari, are areas that are flooded by seawater almost every day due to land subsidence and rising sea levels [2]. This situation has forced the community to live in a state of emergency that has lasted for years, with no certainty of comprehensive action from the government [3].

Tidal flooding can no longer be categorized as a purely natural phenomenon, but has become a structural problem rooted in spatial imbalance, weak environmental policies, and the government's unpreparedness in coastal disaster mitigation [4]. Continuous tidal flooding causes damage to infrastructure, a decline in economic productivity, and large-scale population migration [1].

The coastal community of Sayung has adapted in various ways, from raising their houses to relocating. However, independent adaptation without systematic support from the government is only temporary and does not solve the root of the problem. This shows a gap between the needs of the community and the government's policy response [2].

Normatively, the Indonesian State, through Article 28H paragraph (1) of the 1945 Constitution, guarantees the right of every citizen to live in physical and spiritual prosperity, as well as to reside in a good and healthy environment [3]. This means that the state has a constitutional responsibility to ensure a decent life, including protection from the effects of disasters [4]. However, the reality on the ground shows that this right has not been fully realized for the coastal residents of Sayung.

From a *das sein* (actual reality) perspective, the handling of tidal flooding disasters is still partial and reactive. Local governments often only take technical measures such as building embankments or elevated roads without a sustainable social, economic, and ecological approach. These policies tend to be short-term and do not address the dimension of social justice.

Meanwhile, in terms of what should happen, the state should be actively and systematically involved by designing fair protection and recovery policies [5]. This includes the responsibility of the central and regional governments in formulating clear regulations on the designation of tidal flooding as a natural disaster and the development of long-term community-based adaptation strategies.

Unfortunately, to date there are no explicit provisions in Law No. 24 of 2007 on Disaster Management that clearly regulate tidal flooding as a type of natural disaster. This legal vacuum has resulted in limited authority and resources for tidal flooding management at the local level, meaning that affected residents often do not receive adequate compensation or legal protection.

This legal vacuum has also caused administrative confusion regarding the responsibilities of the central and regional governments. The Demak district government often finds itself in a dilemma because, although it is closest to the affected communities, its fiscal and legal authority is limited when it comes to officially declaring a disaster.

In this context, it is urgent to reconstruct the role of government [6]. The government needs to review the roles, policies, and coordination between levels of government in order to create an integrated, socially just, and sustainable model for handling tidal flooding. Village governments, as the front line, have an important role in articulating the aspirations of the community and demanding attention from local governments.

The village government in Sayung Subdistrict has actually made efforts to fight for justice for its citizens through various coordination forums, village development planning meetings, and advocacy at the district level. However, without a strong legal framework, these efforts often stop at the administrative level without concrete results that can be felt by the community [7].

From the perspective of social justice, the coastal community of Sayung is a vulnerable group that is economically, socially, and politically weak within the government system. They have not only lost their homes, but also their access to public services, education, and decent work. This situation calls for more supportive and inclusive government intervention.

Environmental justice is also an important aspect of this issue. The principle of environmental justice requires the state to provide equal protection for all citizens against environmental risks. In the case of Sayung, the poor coastal communities are the most affected, even though they are not the main cause of the environmental degradation that led to the tidal flooding.

The handling of tidal flooding should not only focus on physical aspects such as embankments or relocation, but also on socio-economic recovery and coastal ecosystems. Mangrove rehabilitation programs, spatial planning improvements, and community involvement in policy planning are concrete forms of reconstructing the government's role in environmental justice.

Within the framework of law and public policy, this reconstruction means that the Disaster Management Law needs to be revised to include tidal flooding as a disaster whose status can be officially determined. This will provide the government with a clear legal basis for allocating budgets and recovery programs for affected communities.

In addition, local governments need to formulate local regulations on tidal flooding mitigation and adaptation, which can be derived from national policies. However, it must be adapted to local conditions. These regulations must clearly define the division of roles between village, district, and provincial governments and place the community at the center of the policy-making process.

The reconstruction of government roles also requires a participatory approach. Local communities have the wisdom and experience in dealing with tidal flooding that can form the basis for policy formulation. Through a participatory approach, the government does not only regulate from above, but also listens to the needs and solutions from below (bottom-up approach).

The involvement of academics, non-governmental organizations, and the private sector is also an important part of strengthening the role of government. Cross-sector collaboration can create more effective policy innovations and adaptation technologies, such as data-based risk mapping, strengthening the coastal economy, and developing green infrastructure.

A social and environmental justice approach forms the moral and legal basis for reconstructing the role of government. The state must not remain neutral towards the suffering of communities affected by tidal flooding, but must side with the victims by ensuring the restoration of their rights to a decent life and a healthy environment.

If this reconstruction can be realized, then the handling of tidal flooding in Sayung Subdistrict can become a model for national policy in dealing with coastal disasters. Fair, inclusive, and rights-based handling will strengthen public trust in the state and support the Sustainable Development Goals (SDGs). Thus, the problem of tidal flooding in Sayung is not merely a technical issue, but one that concerns the state's responsibility for social and environmental justice. The reconstruction of the government's role is a moral, constitutional, and policy imperative for the state to be truly present in protecting its citizens from the impact of chronic tidal flooding.

2 RESEARCH METHOD

This study uses a sociological-legal method, which is a legal research approach that connects applicable legal norms (*das sollen*) with the social reality that occurs in society (*das sein*) [6]. This approach views law not only as a normative text, but also as a social practice that exists within society and is influenced by various economic, social, and political factors [8]. Thus, law is understood as something dynamic and its effectiveness must be tested through the behavior of society, not only through written regulations [9].

The sociological-legal method was chosen because the tidal flooding problem in Sayung Subdistrict is not only a technical environmental issue, but also relates to weak legal policies and a lack of government responsibility in handling it [10]. This approach allows researchers to examine the extent to which legal norms, such as Article 28H paragraph (1) of the 1945 Constitution and Law Number 24 of 2007 concerning Disaster Management, have been applied in practice and their impact on the protection of coastal communities.⁵

This type of research is descriptive qualitative, which is research that aims to describe legal and social phenomena in depth based on empirical data obtained from the field [3]. Primary data was collected through in-depth interviews with residents affected by tidal flooding, village officials, and local government officials. In addition, field observations were conducted to examine the geographical, social, and economic conditions of coastal communities affected by tidal flooding [11].

Meanwhile, secondary data was obtained from various legal materials, such as the 1945 Constitution, Law No. 24 of 2007, government regulations, scientific journals, and previous research results [12]. The data was obtained through literature studies and reviews of government policy documents related to coastal disaster mitigation.

Data analysis was conducted interactively, following the Miles and Huberman model, which includes three stages: data reduction, data presentation, and conclusion drawing [1]. This analysis links empirical findings with normative provisions to examine the gap between the law as it should be and the law as it is practiced.

With this approach, the study aims to reconstruct the role of the government in handling tidal flooding disasters to be more equitable, effective, and sustainable. The sociological-juridical approach provides a framework for assessing the state's responsibility in protecting the constitutional rights of the people to a good and healthy environment [13].

3 RESEARCH RESULTS

Based on field research, it is known that tidal flooding in Sayung Subdistrict, Demak Regency, has been occurring for more than ten years and is now a perennial problem. Ten villages in the coastal area, such as Sriwulan, Timbulsloko, Bedono, Purwosari, Surodadi, and Dukuh Morosari, are the most affected areas. The geographical conditions of these villages are now mostly located below sea level, so that it is flooded by seawater almost every day. This phenomenon has a major impact on the decline in the quality of life of the community, the loss of agricultural land and productive fish ponds, and an increase in coastal poverty [10].

Flooding, which was originally considered a seasonal natural disaster, has now turned into a complex socio-ecological disaster. The increasing intensity of flooding is caused by a combination of land subsidence due to excessive groundwater exploitation and sea level rise due to global climate change. Local governments have so far attempted to take several measures, such as building emergency embankments, raising village roads, and providing social assistance, but these measures are reactive and do not address the root of the problem structurally [2].

In the legal context, this study found a normative gap in Law No. 24 of 2007 on Disaster Management, as it does not explicitly include "rob" as a category of natural disaster [7]. As a result of this legal vacuum, the government does not have a strong legal basis for declaring a tidal flood emergency, allocating special funds, or providing compensation to affected residents. In fact, Article 28H paragraph (1) of the 1945 Constitution stipulates that every citizen has the right to physical and spiritual prosperity and to live in a good and healthy environment [3].

This situation shows that, normatively (*das sollen*), the state has a constitutional obligation to guarantee the public's right to a decent environment, but factually (*das sein*), this responsibility has not been optimally implemented. According to Siregar, the right to a healthy environment is part of human rights that must be guaranteed by the state through fair and ecologically just policies [4]. Thus, the absence of specific regulations regarding tidal flooding can be seen as a form of state failure to protect the constitutional rights of its citizens.

Interviews with the community show that most residents feel they have not received adequate protection and attention from the government. Many of them have lost their homes, land, and livelihoods, but are not included in the category of official compensation recipients because tidal flooding is not classified as a national disaster. In this case,

the welfare state theory described by Asshiddiqie emphasizes that the state should not only function as a regulator, but also as a protector and guarantor of the people's welfare [5]. Therefore, the government's role in handling tidal flooding must be directed towards redistributive policies and social protection that favor vulnerable groups.

In addition to legal issues, this study also found that there are policy gap between the central and regional governments. The Demak Regency Government does not have sufficient fiscal authority to declare a tidal flood disaster, while the central government has not yet issued a national policy specifically regulating coastal disasters [14]. As a result, the village government became the frontline in dealing with the community, but without adequate institutional support and resources to carry out sustainable management.

From an environmental justice perspective, the coastal community of Sayung, most of whom are low-income earners, has become the most affected group [1]. They are not the main cause of environmental degradation, but they bear the brunt of the damage to ecosystems and poor spatial management. According to Goebel and Dewi, the main cause of coastal erosion in northern Central Java is closely related to land subsidence due to groundwater exploitation and weak coastal spatial control [15].

To address these issues, the government needs to prioritize long-term adaptation strategies through environmental rehabilitation programs such as mangrove planting, coastal belt development, and community-based relocation. The government must also strengthen interagency coordination and ensure community participation in every stage of policy planning and implementation. As Soekanto emphasized, the effectiveness of law is not only determined by written norms, but also by the extent to which the law can be enforced through the support of legal structures and cultures that exist within the community.

This study shows that the legal vacuum regarding the designation of tidal flooding as a natural disaster has weakened the position of coastal communities in obtaining their rights to protection and adequate compensation. Therefore, the revision of Law No. 24 of 2007 is a legal urgency so that tidal flooding is recognized as a natural disaster that requires integrated management. Local governments also need to establish Regional Regulations on Tidal Wave Mitigation and Adaptation that explicitly regulate the responsibilities of village, district, and provincial governments in coastal zone management.

The reconstruction of the government's role in handling tidal flooding should not only focus on physical development such as embankments or drainage, but also include social, economic, and ecological aspects. If the government is able to carry out its responsibilities fairly and with environmental justice, then the coastal communities of Sayung will obtain legal certainty and the right to a more decent life in the future.

4 CONCLUSION

Based on the results of research and discussion, it can be concluded that the chronic tidal flooding in Sayung Subdistrict, Demak Regency, is not merely a natural problem, but rather a socio-ecological disaster rooted in spatial planning policy inequalities, coastal environmental degradation, and the state's weak responsibility in guaranteeing the community's right to a decent life. The recurring phenomenon of tidal flooding indicates a systemic failure of the government to carry out its functions of protection and public service as mandated in Article 28H paragraph (1) of the 1945 Constitution.

Legally, there is a legal vacuum in Law No. 24 of 2007 on Disaster Management, because tidal flooding has not been explicitly recognized as a type of natural disaster. This legal vacuum has resulted in local governments lacking a strong legal basis for declaring tidal flooding a disaster, allocating emergency funds, or providing compensation to affected communities. As a result, the response has been reactive, technical, and short-term, without addressing the underlying structural issues.

From a social perspective, the coastal communities of Sayung are the most vulnerable and marginalized group. They have lost their homes, jobs, and access to adequate public services. This situation reflects a violation of the principles of social and environmental justice, whereby communities that have not contributed to ecological damage bear the brunt of unsustainable development policies.

Institutionally, coordination between the central, provincial, and district governments remains weak. Village governments are at the forefront of handling the situation on the ground, but they lack adequate fiscal and legal authority. Therefore, a stronger and more integrated reconstruction of the government's role is needed through:

1. Revision of Law No. 24 of 2007 to include tidal flooding as an official category of natural disaster;
2. Formulation of local regulations on tidal flooding mitigation and adaptation that affirm the responsibilities of each level of government; and
3. Strengthening the participation of coastal communities in the planning, implementation, and evaluation of tidal flooding management policies.

Thus, the reconstruction of the government's role must be directed towards the formulation of policies that promote social and environmental justice, rather than merely physical development. The state needs to be actively present as a protector, regulator, and guarantor of people's welfare, in accordance with the principles of the welfare state. The implementation of social and environmental justice in handling tidal flooding in Sayung District will become a model of adaptive policy that not only solves technical disaster issues but also strengthens public trust in the state and supports the achievement of sustainable development goals (SDGs).

REFERENCES

1. E. Widura et al., "Land Consolidation Policy in Addressing Slums and Tidal Flooding in Kampung Bugisan through Restructuring of Land Tenure and Land Use," *The Journal of Indonesia Sustainable Development Planning (JISDeP)*, vol. 6, no. 1, pp. 67–83, 2025.
2. Badan Perencanaan Pembangunan Nasional (Bappenas), *Evaluasi Kebijakan Pesisir dan Penurunan Tanah di Pantura Jawa*. Jakarta, Indonesia: Kementerian PPN/Bappenas, 2024.
3. Undang-Undang Dasar Negara Republik Indonesia Tahun 1945, Pasal 28H ayat (1).
4. M. A. Siregar, "Perlindungan Hak Atas Lingkungan dalam Perspektif Konstitusi," *Jurnal Konstitusi*, vol. 17, no. 4, pp. 812–829, 2020.
5. J. Asshiddiqie, *Negara Kesejahteraan dan Konstitusi*. Jakarta, Indonesia: Rajawali Pers, 2020.
6. S. Soekanto, *Faktor-Faktor yang Mempengaruhi Penegakan Hukum*. Jakarta, Indonesia: Rajawali Pers, 2020.
7. Undang-Undang Nomor 24 Tahun 2007 tentang Penanggulangan Bencana, Lembaran Negara Republik Indonesia Tahun 2007 Nomor 66.
8. P. M. Marzuki, *Penelitian Hukum: Edisi Revisi*. Jakarta, Indonesia: Kencana Prenada Media, 2020.
9. S. Rahardjo, *Ilmu Hukum*. Bandung, Indonesia: Citra Aditya Bakti, 2020.
10. I. P. Nugraha, "Pesisir Terendam: Ketimpangan Kebijakan dan Penanganan Rob di Jawa Tengah," *Jurnal Lingkungan dan Pembangunan*, vol. 8, no. 2, pp. 115–130, 2022.
11. L. J. Moleong, *Metodologi Penelitian Kualitatif*. Bandung, Indonesia: Remaja Rosdakarya, 2021.
12. S. Putiarni, M. P. Patria, T. E. B. Soesilo, and A. Karsidi, "Coastal Vulnerability Assessment to Tidal (ROB) Flooding in Indramayu Coast, West Java, Indonesia," *Indonesian Journal of Geography*, vol. 55, no. 3, pp. 517–526, 2023.
13. M. B. Miles and A. M. Huberman, *Qualitative Data Analysis: An Expanded Sourcebook*. Thousand Oaks, CA, USA: Sage Publications, 1994.
14. S. Raharjo, "Kekosongan Hukum dalam Penanggulangan Bencana Lingkungan di Indonesia," *Jurnal Rechts Vinding: Media Pembinaan Hukum Nasional*, vol. 10, no. 2, pp. 233–247, 2021.
15. Z. Goebel and U. P. Dewi, "Creating Common Knowledge about the Causes of Tidal Flooding in Kendal Regency, Indonesia," *Signs and Society*, vol. 13, no. 1, pp. 1–25, 2025..

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