

Navigating “Tanah Musnah”: Governance Dilemmas and Social Impacts in the Semarang-Demak Toll Road Land Acquisition

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ARTICLE INFO	ABSTRACT
Keywords: Land Acquisition; Semarang-Demak Toll Road; Lost Land Date logs: Received: April 21, 2026 Reviewed: May 6, 2026 Accepted: June 26, 2026 Published: July 15, 2026 How To Cite: Utami, W., Idawijayanti, T., Fuadina, LN., (2026). Navigating “Tanah Musnah”: Governance Dilemmas and Social Impacts in the Semarang-Demak Toll Road Land Acquisition. <i>Marcapada: Jurnal Kebijakan Pertanahan</i>, 6(1), 28-46. https://doi.org/10.31292/mj.v6i1.202	The Semarang-Demak Toll Road National Strategic Project (PSN) is a solution to boost the economy, alleviate congestion, and adapt to climate change. The long-term construction of the Semarang-Demak toll road (2019–2023) has been hampered by land acquisition on the route inundated by tidal flooding. This study aims to analyze the problems and policies of land acquisition in cases of lost land. The research was conducted using a descriptive qualitative approach to examine the problems, policies, and governance issues of land acquisition in three villages (Bedono, Sriwulan, and Purwosari). The findings demonstrate that land subsidence and climate-induced tidal flooding caused the physical disappearance of land parcels, rendering standard statutory mechanisms inapplicable. Therefore, the government introduced a compassionate compensation scheme under Presidential Regulation No. 27 of 2023 to mitigate the social impacts experienced by affected communities, as the assessment of this lost land has implications for the incapacity to provide compensation. This scheme is referred to as a compassionate fund (dana kerohiman). Although the scheme cannot fully compensate for the communities' economic and social losses, but on the other hand, this mechanism is a solution for handling social impacts on the community.

A. Introduction

The National Strategic Project (PSN-*proyek strategis nasional*), as a program to accelerate infrastructure development, is a crucial component of driving economic growth, equitable development, reducing inequality, and improving public welfare (Aifadianis, 2025; Utami & Sarjita, 2021). One of the long-term National Strategic Projects undertaken by the government (2019–2023) is the construction of a toll road connecting Semarang City, the center of government and economic growth, with Demak Regency (Hidayat et al., 2022). Although the North Coast (Pantura) road connects these two regions, tidal flooding and land subsidence caused by climate change disasters frequently destroy the road network, which resulting in severe traffic jams as vehicles slow down by up to 78% (Kusumowardani et al., 2023). Additionally, physical damage from tidal flooding causes costly reconstruction as well as road maintenance expenses (Wijayanto & Marlina, 2024). In order to provide efficient transportation connectivity and reduce congestion, the Semarang-Demak toll road access must be built immediately. It is also a means of adapting or mitigating the impacts of tidal flood

disasters (Devi et al., 2012; Coordinating Ministry for Economic Affairs, 2024). This toll road construction project is divided into two sections, one of which is constructed predominantly over coastal waters, namely Section I Semarang (Kaligawe) - Sayung with a length of 10.69 km and Section II Sayung-Demak (Kadilangu) with a length of 16.31 km.

Since the Pantura access links the economic hubs of East Java and Central Java (Demak, Jepara, Kudus, Pati, and Rembang) with Semarang City, the road accessibility between Semarang City and Demak Regency is crucial for the country's logistics, distribution, and utilization of goods and services (Hidayat et al., 2022). Yet because tidal flooding is becoming more often and continuing longer, it causes a lot of losses, such as prolonged travel times, higher fuel requirements, vehicle damage from seawater corrosion, damage to cargo and logistics, and delays to trade and service cycles (Sutanto et al., 2025). The government has repeatedly implemented road elevation and repair projects, but these initiatives have not been able to keep up with the rate of land subsidence as well as the increasing rate of height and area of tidal flooding. The government's sole feasible way to deal with these problems is to construct a toll road. Due to the large population and industrialization of both areas, the proposed Semarang-Demak toll road confronts a number of obstacles. Constructing the toll road entirely on land is difficult because of land scarcity and dense settlements, hence a toll road across the sea or waterways is such a viable alternative.

Land acquisition studies for infrastructure development are one of the important researches to be studied, this is influenced by the complex stages that must be carried out (Utami & Sarjita, 2021), the significant social and economic impacts (Utami et al., 2021), environmental impacts due to land acquisition (Moreda, 2017; Muliawan, 2018; Ren, 2017; Smyth & Vanclay, 2017; Tantja et al., 2021; Utami et al., 2024b), as well as the numerous problems and conflicts caused by land acquisition (Abubakari et al., 2020; Mahato & Ogunlana, 2011; Pritangguh, 2019; Sabir et al., 2017). Many studies have been conducted discussing the problems and solutions for land acquisition on non-lost land. Angela & Setyawati, (2022); Wenno et al., (2023) examined the extremely complex land acquisition on communal land through a legal review.

Coastal communities in Indonesia have long faced socio-environmental challenges arising from tidal flooding, land subsidence, and changing patterns of land use, which have increasingly disrupted settlement systems, livelihoods, and tenure arrangements (Utami et al., 2026; Pinuji & Vries, 2023; Soejarwo et al., 2025). These natural dynamic caused by coastal hazards emphasize existing governance challenge in land administration and acquisition, such as property valuation, community involvement, legal certainty, and the protection of affected vulnerable societies. In this context, the Semarang-Demak Toll Road project such a critical case, as portions of the required land for the construction were permanently inundated and later identified as lost land. While structural issues regarding land acquisition are quite common in Indonesia, the land acquisition procedures in instances where land no longer exists has received more consideration in both policy and academic discussions.

The Semarang-Demak case therefore provides an opportunity to examine how existing land governance frameworks respond to climate-induced land transformation and to identify the dilemmas that emerge at the intersection of infrastructure development, environmental change, and agrarian justice. This case exposes a fundamental tension within Law Number 2 of 2012, which is premised on the assumption that land is a stable and enduring spatial object which is clearly bounded, physically

verifiable, and legally attachable. In contexts of climate-induced land loss, where terrestrial parcels have physically transformed into marine space, this ontological foundation becomes untenable. The disappearance of the land object undermines core legal mechanisms of acquisition, including the identification of parcels, verification of rights, and determination of compensation, all of which rely on the persistence of land as a fixed entity.

The Semarang–Demak toll road case demonstrates that situations characterized by legal uncertainty and overlapping institutional responsibilities require not only precautionary decision-making but also more adaptive, transparent, and people-centered governance arrangements (Sugiarti et al, 2025). Rather than relying only on procedural compliance, future policy solutions should improve systems for multi-stakeholders collaboration, community participation, and accountability when determining land status and compensation schemes. Particular attention should be also provided to practicing good governance frameworks that recognize affected populations' socioeconomic vulnerabilities, which account for the loss of livelihoods caused by lost land. This situation provides clearer institutional mandates for managing land acquisition procedure in areas of permanent inundation. Such reforms are required to ensure that approaches for climate-related land loss promote not only legal certainty, but also distributive and procedural justice for affected populations. Moreover, the transition from land to sea generates a jurisdictional discontinuity between agrarian and coastal-marine governance regimes, leaving affected areas in a regulatory void. As a result, the existing legal framework proves ill-equipped to address not only the technical challenges of valuation and compensation, but also the broader socio-spatial consequences of displacement and loss. This case therefore highlights the urgent need to reconceptualize land within agrarian law as a dynamic and contingent entity, particularly in the face of accelerating climate change that destabilizes the very permanence upon which current legal systems depend. Therefore, this study is expected to provide lessons learned and complement previous research on the implementation and theory of land acquisition in Indonesia, therefore land acquisition for the public interest can better comprehend both justice and prosperity.

B. Methods

The research was conducted on land acquisition for the construction of the 16.31 km Sayung-Demak (Kadilangu) Toll Road. The research used a descriptive qualitative approach aimed at providing a complex and comprehensive overview (Fiantika et al., 2022) of information and phenomena related to land acquisition for the Semarang-Demak toll road construction. A normative juridical approach was used to analyze the appropriateness of land acquisition stages for land indicated as lost. The normative-juridical approach examines the conformity of the Semarang–Demak Toll Road land acquisition process toward Indonesia's legal framework governing land acquisition and lost land, including Law No. 2 of 2012 on Land Acquisition for Development in the Public Interest, Government Regulation No. 19 of 2021, Presidential Regulation No. 27 of 2023, and Ministerial Regulation of ATR/BPN No. 3 of 2024. Meanwhile, a good governance approach adapted from UNDP (1997) was used to examine the implementation of land acquisition policies by analysing governance performance. This study adopts a good governance framework consisting of five key dimensions: transparency, accountability, responsiveness, independence and justice. The data in this study were

obtained primarily from observations and interviews with stakeholders. Three representatives from the Demak Regency Land Office/BPN, consisting of the Head of the Survey and Mapping Section, the Head of the Land Management Section, and the Head of the Land Acquisition Section, as well as residents of the three impacted villages were involved in semi-structured interviews and field observations to gather information for this study. Secondary data were obtained from land acquisition documents at the Demak Regency Land Office/BPN, as well as regulations and policy documents related to land acquisition and lost land management.

Qualitative research in this study refers to the stages as conveyed by Sugiyono (2012), through the orientation/description stage of the information obtained; the reduction stage to focus information related to problems and challenges in land acquisition; the roles of the parties involved; then continued with an in-depth analysis stage to produce themes that are constructed into knowledge or can provide input to land acquisition theory. On the orientation stage, information were collected through spatiotemporal analysis, in-depth interviews, field observations, and document review to understand the chronology of coastal inundation; the process of determining lost land status; and the implementation of land acquisition process for the Semarang–Demak Toll Road construction. During the reduction stage, data were filtered and classified into several analytical categories, including stakeholder roles, legal and regulatory issues, compensation mechanisms, and community participation. While on the interpretation stage, relationships among these categories were analyzed to identify governance arrangements and the implications of land acquisition on affected societies.

This research is located on the Semarang – Demak Kaligawe section II road route covering 237 land parcels, with the following details. Administratively, the research location covers three villages, namely Bedono, Sriwulan, and Purwosari, Sayung District, Demak Regency (Figure 1). An overview of the study location conditions and the Semarang-Demak toll road route can be seen in Figure 2. This research also employed spatiotemporal analysis to observe land cover and environmental changes over time using historical satellite imagery available in Google Earth Pro. The software was used to identify and analyze the progression of tidal inundation and land transformation within the study area across different time periods. An overview of the study location conditions and the Semarang-Demak toll road route can be seen in Figure 2.

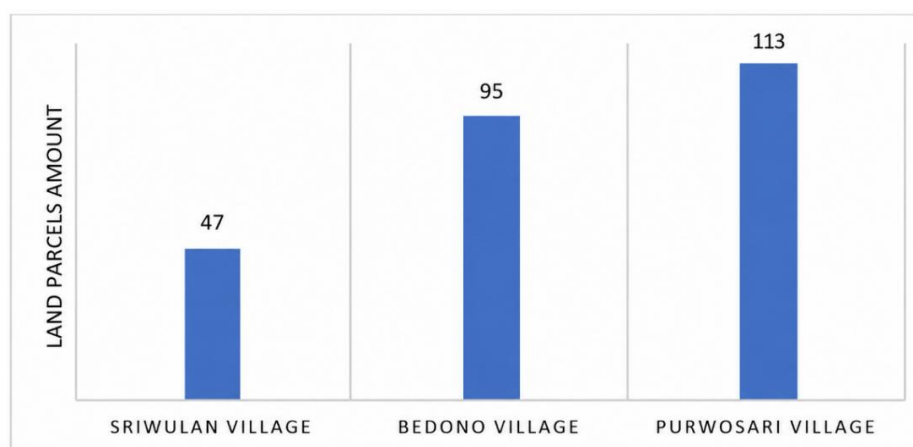


Figure 1. Diagram of Land Plots Indicated as Missing in Toll Road Land Acquisition
Source: Demak Regency Land Office, 2025

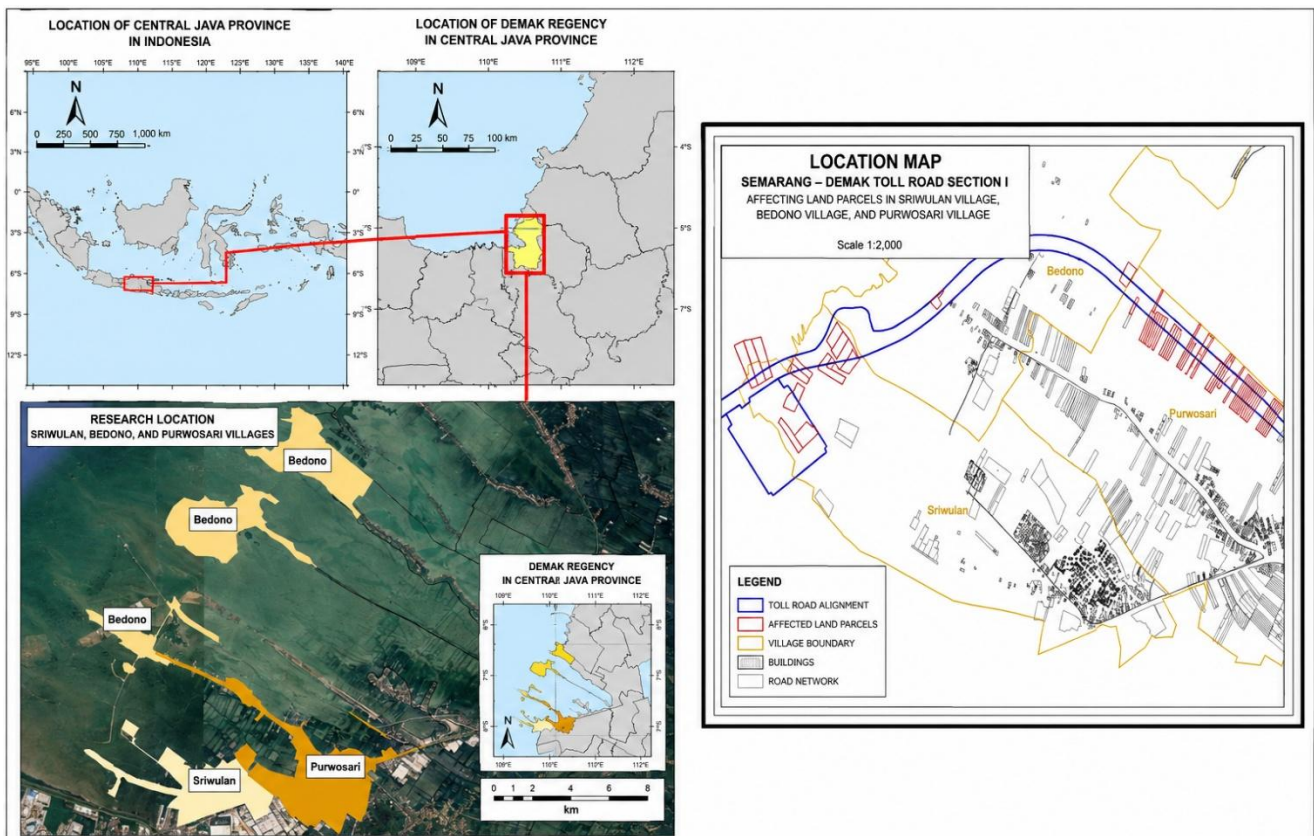


Figure 2. Toll Road Costruction Site

Source: Documentation from the Demak Regency Land Office

C. Result: Stages and Problems of Determining Lost Land

Land acquisition for the Semarang-Demak toll road construction presents a complex challenge, particularly for land inundated by tidal flooding and physically transformed into open water. Land that was previously utilized by the community for fish farming and agricultural purposes has been transformed by the disaster, making it difficult to utilize. Observations showed that when the identification and inventory team conducted inspections, the physical condition of the land was no longer visible, had no boundaries, and was no longer functionally usable and utilized as intended. The condition of the land used for the toll road construction, which is oceanic, can be seen in Figure 3.

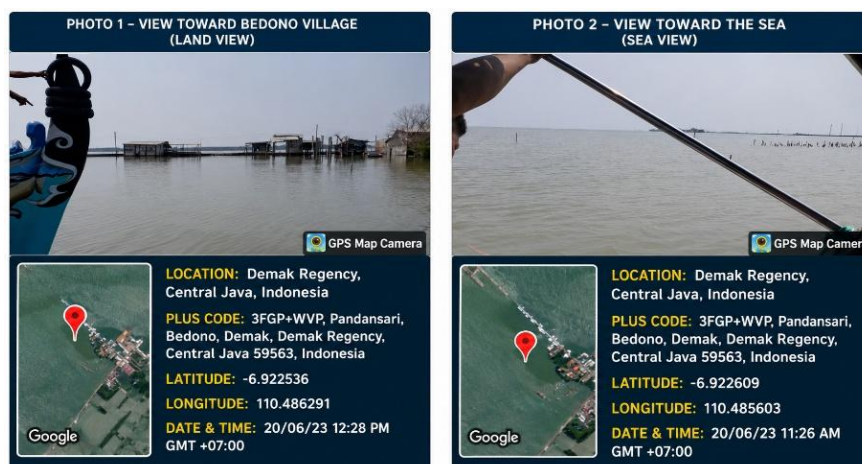


Figure 3. Land Parcels Transformed into Sea (Lost Land)

Source: Documentation from the Demak Regency Land Office, 2023

Legally, when considered from the object/land side, the land acquiring procedure at the study location, if referring to Law Number 2 of 2012 regulating land acquisition for public interest, no longer meets the requirements thus making the regulation inapplicable. In Law No. 2 of 2012, it is clearly explained that what is meant by land acquisition objects includes land, buildings, and plants as well as objects that can be assessed. It was extremely difficult and impossible to conduct an evaluation at the research location because of the flooding caused by sea water, which also obscured the land object and the items on it, as well as the boundaries of the land parcels. Likewise, functionally, the land/object can no longer be used as it should, which has implications for changes in the value and usefulness of the land.

The guidelines used for land acquisition for the Semarang-Demak toll road construction refer to the Decree of the Governor of Central Java Number 590/59 of 2019. As an effort to conduct initial identification of the land acquisition location, the Demak BPN Land Office conducted an initial identification as outlined in the Decree of the Head of Demak Regency Land Office Number AT.02.01/1197-33.21/VI/2021 dated June 29, 2021. The results of the initial identification show that the boundaries of the land that will be used for the construction of the toll road and sea wall can still be partially identified (by using bamboo fence boundaries), but most of it has been flooded conditions and it is difficult to identify the physical form of the land and its boundaries. Based on these conditions, the government designated the location as land indicated as lost through the Decree of the Head of the Demak Regency Land Office Number. 600/SK-33.21.HP.01.04/VIII/2021 dated August 24, 2021. The legal basis used to determine the land indicated as lost in the study area is the Regulation of the Minister of ATR/Head of BPN Number 17 of 2021, which was subsequently amended to the Regulation of the Minister of ATR/Head of BPN Number 3 of 2024. In this regulation, it is emphasized that lost land is land that has experienced changes from its original form caused by natural events; land that can no longer be identified; and land that cannot be functioned, used and utilized as it should.

Handling and resolving the issue of land indicated as lost in this land acquisition requires thoroughness, caution, and comprehensive observation. To formulate the results of the land acquisition, a research team was formed, appointed through Decree of the Head of the Demak Regency Land Office Number 601/SK-33.21.HP.01.04/VIII/2021 dated August 24, 2021 in conjunction with Decree Number 666/SK-33.21.HP.01.04/IX/2021. The task of the land acquisition committee for this toll road construction is very difficult and risky because it must understand complex regulations, analyze and implement new and first-time regulations, face resistance and rejection from the community, and deal with the condition of the land acquisition object which is mostly ocean. The complexity and high risks faced in this land acquisition require the research team to have a strong foundation, data and support for thinking to analyze whether the land indicated as lost is truly destroyed (has undergone changes in form, cannot be identified and cannot be used as intended).

The complexity of the parties involved and the high level of problems to be faced, as well as the high level of resistance from the community, implies the need for the involvement of several parties in the committee. Several elements involved in the lost land research team include: BPN, the Demak Regency government, the Department of Agriculture and Food Security, the Department of Fisheries and Maritime Affairs, the Department of Public Works and Spatial Planning, the Sub-district Head, and the Village Heads of the three villages affected by land acquisition (Bedono, Sriwulan, and Purwosari).

The involvement of these parties is intended to ensure that the process of identification, inventory, and analysis/assessment of lost land results are more objective and free from misinterpretation. The research team must ensure the current conditions in the field, some of which are already oceanic, in addition to performing legal analysis of land rights status documents or land rights bases (checking the type and number of rights; measurement letter number/area; type of use and utilization of the land).

Along with field observations, the study team used spatiotemporal analysis to gather historical data and land conditions that have transformed into land designated as lost in order to perform this analysis of lost land conditions. Some of the data used by the research team include 1994 image data, 1998 land and building tax maps, multitemporal Google Earth imagery to monitor land use changes, and drone photos from 2017. In addition to using spatial data (maps), the team also conducted analysis with several supporting data including land registration data and certificate issuance as well as information from the village head. Figure 4 is a spatio-temporal analysis that provides an overview of land conditions from year to year.

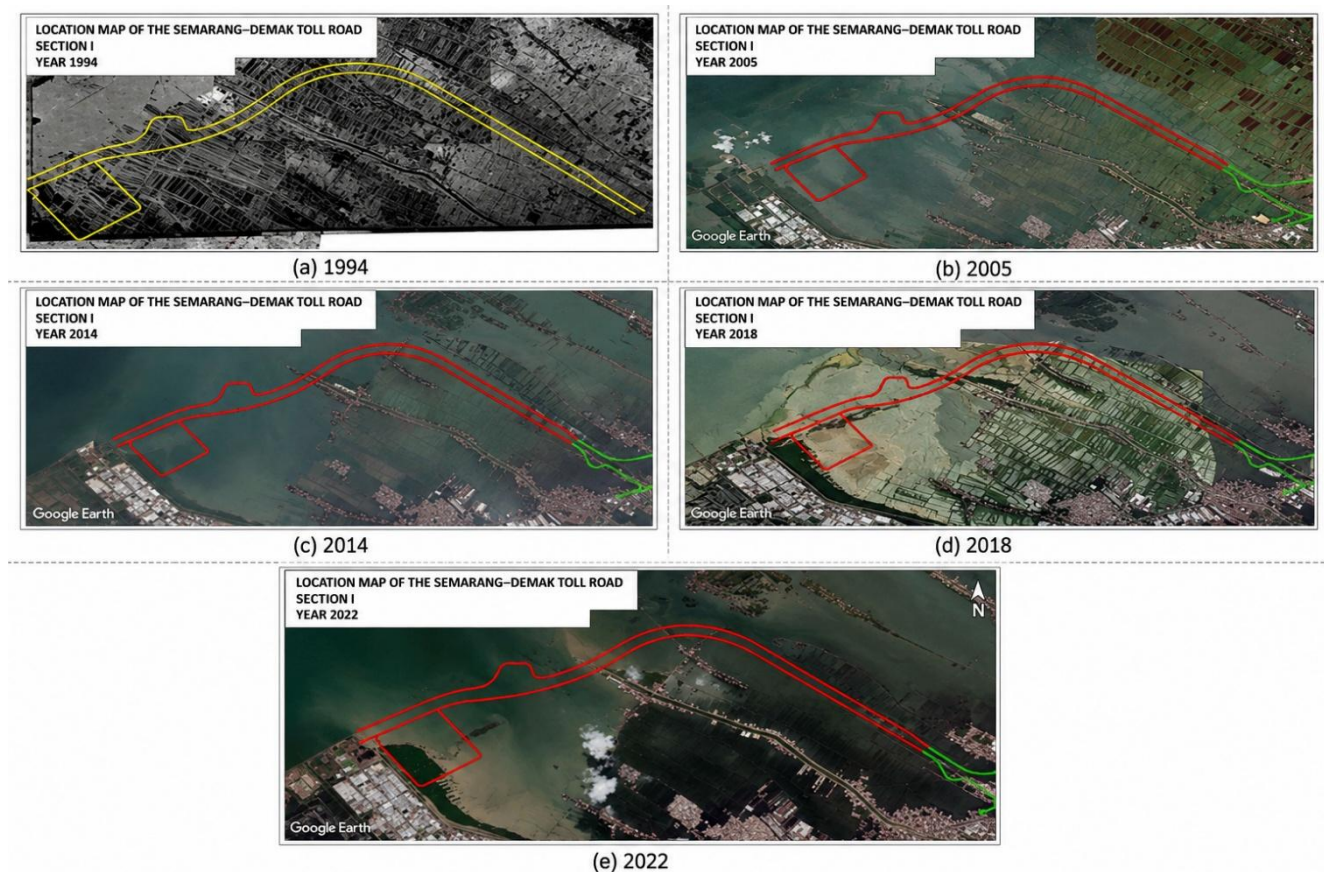


Figure 4. Spatiotemporal Condition of Land Indicated to be Missing
Source: Documentation from the Demak Regency Land Office

The spatial and temporal analysis shown in Figure 4 indicates that the study area has undergone gradual transformation since the 1990s as a result of continuous tidal flooding and land subsidence. These changes have progressively altered land use patterns, residential areas, and farming/fisheries cultivation activities, ultimately leading to the designation of several parcels of land indicated as lost land. The land cover changes chronology demonstrates that the challenges faced during the Semarang-Demak toll road construction land acquisition process cannot be viewed simply as a matter of whether

specific existing regulations have been implemented. Rather, these issues highlight larger governance dilemmas arising from the interaction between a relatively static land administration system and a highly dynamic coastal environment. Land governance frameworks in Indonesia have conventionally implemented under the assumption that land is a permanent spatial object with robust boundaries and perdurable legal status. In fact, coastal area transformations resulting from climate change challenge these assumptions by creating situations in which land ownership, land use, and the physical presence of the land itself evolve over time. Consequently, as also mentioned in Pinuji et al., (2023); Dong et al., (2024), future governance frameworks must transcend the binary distinction between regulated and unregulated conditions and instead develop adaptive mechanisms capable of accommodating the historical and changing nature of coastal landscapes while ensuring legal certainty, social protection, and environmental justice for affected communities. Therefore, in order to ensure legal certainty, social protection, and environmental justice for impacted communities, future governance frameworks must go beyond the binary distinction between regulated and unregulated conditions and instead create adaptive mechanisms that can accommodate the historical and continuous changing of coastal landscapes.

Before land is designated as lost land, a public discussion process regarding indications of lost land must be conducted, as required by Regulation of the Minister of ATR/Head of the National Land Agency Number 17 of 2021 concerning Procedures for Determining Lost Land, which was later amended to Regulation Number 3 of 2024. On October 27 and 28, 2021, the study team held public meetings regarding indications of lost land. In order to inform the public about lost land indicators, community rights and obligations, priority rights, including rules and phases, the steps involved in determining lost land, and plans for building sea walls and toll roads, such outreach is crucial. Figure 5 displays the documents for this outreach.



Figure 5. Documentation of Lost Land Socialization Activities
Source: Documentation from the Demak Regency Land Office

The stages involved in land acquisition for flooded land are far more complex than those for land acquisition on normal land. The committee must ensure complete physical and legal aspects of the land, while data collection results indicate that not all land is certified. Despite numerous obstacles and limitations, the research team continued its efforts to conduct field studies, identification, and land inventory, which were then documented in the research team report No. 5/HP.01.03/I/2022

dated January 11, 2022. The results of this identification and inventory include data indicating land loss based on land title status, as presented in Table 1.

Table 1. Data on the Number of Plots Indicated as Lost Land Based on Land Rights

No	Land Rights	Number of Parcels
1	Right of Ownership (Hak milik)	67
2	Building Rights (Hak Guna Bangunan)	1
3	Tanah Yasan/Letter C	205
Total		273

Source: Lost Land Analysis of Demak Regency Land Office

In addition to examining the state of land rights, the field review of land designated as lost generated formulations pertaining to the state of the land parcels, such as: land plots with fully identifiable boundaries, some land parcels that have been lost but not totally lost, and land that has been totally lost, as illustrated in Figure 6. The results of the land report indicating loss also provide field-based information on land conditions in the form of image maps and photographs from field surveys. Several examples of land conditions that are considered lost, partially lost, or not lost based on the field survey results are shown in Figure 7.

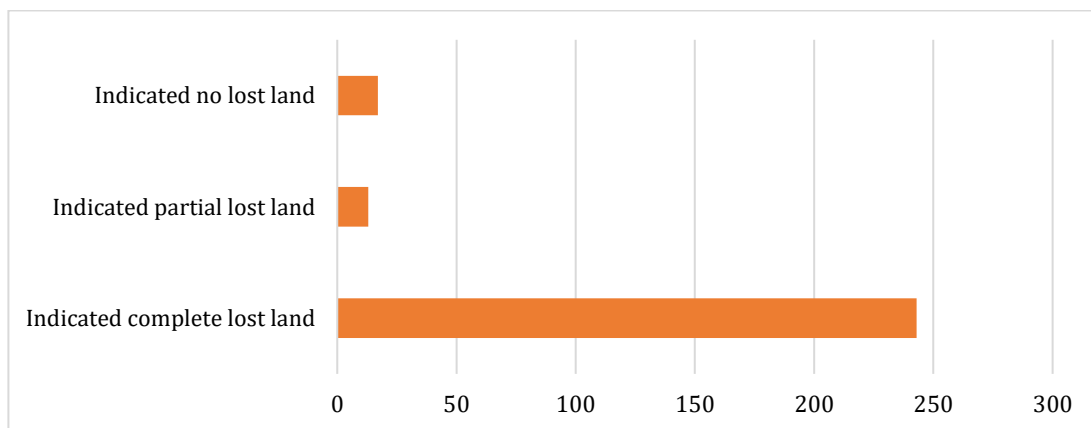


Figure 6. Graph of Identification Results for Land Indicated as Lost
Source: Lost Land Report, Demak National Land Agency



Figure 7a. Results of Identification and Inventory of Total Lost Land (No. 8)

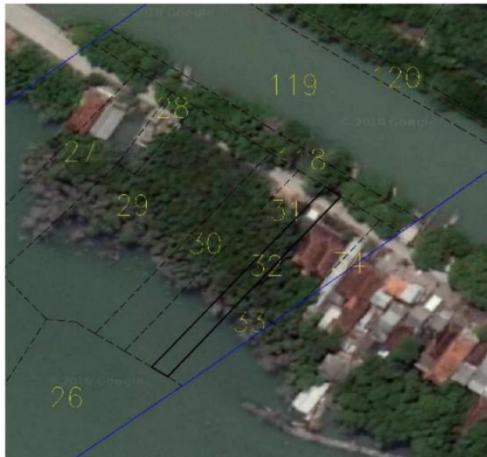


Figure 7b. Results of Identification of Flooded/Partially Lost Land (No. 30)



Figure 7c. Results of the Identification and Inventory of Land Indicated to Be Destroyed
Source: Documents from the Demak Regency Land Office

A nominative list of land parcels designated as lost is compiled mostly from the findings of the research team's reports. The announcement stage for land parcels to be designated as lost land must be conducted in written form, publicly displayed at the Village/Sub-district office and the Land Office, and posted on the Ministry of ATR/BPN website within 14 days, as per the Regulation of the Minister of ATR/Head of BPN No. 3 of 2024. The public is allowed to submit a written statement requesting priority rights within a 14-day announcement period; if the public does not submit a statement using priority rights within this timeframe, they are considered to have approved, and the land parcel may be declared as lost land; if the public does submit a statement of priority rights, they must undertake reclamation and reconstruction within 1 (one) year. In order for the land to be evaluated and used appropriately in accordance with Law Number 2 of 2012, this rule also requires that the community applying for priority rights be able to complete reclamation and reconstruction of the area within the allotted time frame. However, the community will not get compensation or compensatory funds for managing social consequences on the community if, within the allotted time, the community that made a statement does not carry out reclamation and reconstruction of the site.

According to the study's findings, no community members exercised or submitted a statement of priority rights throughout the announcement period. The high water level (1-3 meters), the land's location—partially in the middle of the ocean—the size of the impacted area, the difficulty of getting

there (only by boat), the high costs of reclamation and reconstruction, and the high risk or small probability of success of these processes all contributed to this condition. Land that has been announced in the nominative list may be transferred and identified as lost land if no community member submits a priority rights application.

The government established Presidential Regulation Number 52 of 2022, which was later changed to Presidential Regulation Number 27 of 2023, in an attempt to establish a legal foundation for managing the social effects on the community of land designated as lost land in the context of development for the public interest. This regulation was then followed up by the Central Java Provincial Government in the form of Central Java Governor's Decree Number 590/56 of 2023 concerning the Provision of Compensation Funds for Handling Community Impacts in the Framework of Land Acquisition for the Construction of the Semarang - Demak Toll Road Section 1 (Kaligawe-Sayung), which was stipulated on November 29, 2023. With a strong legal basis and after conducted all stages in accordance with the rules, the lost land at the study location was determined through the Decree of the Head of the Demak Regency Land Office Number 187/SK-33.21.HP.01.04/XI/2023, dated November 30 concerning the Determination of Lost Land in Bedono Village, Sayung District. Meanwhile, the determination of lost land in Sriwulan Village was identified through the Decree of the Head of the Demak Regency Land Office Number 186/SK.33.21.HP.01.04/XI/2023.

D. Discussion

1. Problems in Handling Social Impact on the Community

Following the land acquisition for the toll road and seawall development, the challenges and problems of land acquisition for the construction of the toll road and seawall have not yet ended. Public rejection and protests against the amount of the compensation fund have resulted in escalating tensions and a worsening situation. In the initial assessment phase, the amount of the compensation fund determined was considered too low and inadequate to replace the lost land, the economic and social value of the land. In the initial phase, the amount of the compensation fund provided was 25% of the NJOP value, where the average NJOP value was only Rp. 5,000/m². The debate over the initial compensation offer of only 25% of the NJOP (Rp. 5,000/m²) highlights a larger agrarian political economy challenge in land acquisition processes (Pattrra et al., 2025). While the NJOP serves as an administrative benchmark for taxation purposes, it often fails to reflect actual market values as mentioned in the study conducted Marhendra & Aminah (2025), particularly in environmentally dynamic coastal areas where socio-economic and ecological conditions change rapidly. This condition often results in tax injustice and impacts regional tax revenue. In the case of the Semarang–Demak toll road project, the reliance on NJOP-based valuation generated significant dissatisfaction among affected communities, who perceived the compensation as disproportionate to the economic value of their land and coastal assets as their livelihood capital.

Physical protests were not the only way the community opposed the compensation fund level; legal action was also taken to make sure the fund was reasonable and equitable. In an effort to provide a solution regarding the amount of the compensation fund and resolve the escalating tensions, the land acquisition committee decided to conduct a review of the compensation fund amount. To provide an accurate, impartial, and unbiased evaluation, the Public Appraisal Services Office (KJPP) was invited

in as an independent party. KJPP's assessment efforts were conducted as objectively as feasible, taking into account the concepts of appropriateness and feasibility as well as employing a market price approach. The minimal amount of compensation funds that could be given to the community was determined to be 30% of the NJOP value based on the findings of this reassessment.

2. Examining the Governance of Land Acquisition on Lost Land

According to the study's findings, from a legal perspective, all phases of the land acquisition procedures for building toll roads on tidal-inundated land have been completed with comprehensive, extensive, and detailed documentation. This study examines the governance aspects of policy implementation by referencing the principles of good governance, which include transparency, responsibility, responsiveness, independence, and justice, in addition to examining if the phases comply with regulatory restrictions (UNDP, 1997; (Hai et al., 2021). From the transparency aspect, it shows that the government, in this case the land acquisition committee, has attempted to provide transparency to the public regarding the condition of the land object as shown through spatio-temporal data using satellite imagery from 1994 to drone photos in 2022.

In addition, the research team also conducted identification and inventory directly in the field by involving village heads/local communities, where the results were proven with photo data and coordinates. Public transparency and clarity were demonstrated by the verification, data collection, and field analysis procedures described in the research team's records for each land parcel. Data on land parcels, both those with certificates and those with merely unregistered land claims (Letter C), were inventoried as part of the legal data gathering and analysis process in addition to the physical data collection.

Transparency and accountability in land acquisition governance are also demonstrated through community outreach programs conducted in each village. This socialization, in addition to providing the public with an understanding of the regulations and stages of land acquisition for land indicated as lost, also provides an understanding of the rights and obligations of the community holding ownership rights and unregistered land claims (Letter C). The announcement of the nominative list of objects suspected of being lost, along with the opportunity for the public to apply for priority rights, is an indicator of transparency, accountability, and justice for the community. By giving the public the chance to apply for priority rights, the state is allowing them to recover and rebuild land that they believe has been lost. The public has a fair chance to apply for priority rights given the comparatively long 12-month period.

Good governance of policy implementation also requires the principle of independence. In the context of land acquisition indicated to be lost, such efforts have been made, including the formation of an assessment team involving various stakeholders not only from the BPN elements, but also involving elements of related agencies (the Department of Fisheries and Maritime Affairs, the Department of Public Works and Spatial Planning, the Department of Agriculture and Food Security), the Sub-district Head, and elements who understand the context of the region/community, namely the Village Head as presented in Table 2. When the public rejects a compensation fund value that is considered low, the government also demonstrates its independence and responsiveness by promptly

forming an independent assessment team, the Public Appraisal Services Office, to conduct a re-assessment.

The aspect of justice and equality is one of the indicators of good governance that is continuously pursued, where in the study, the acquisition of lost land is carried out through the provision of compensation funds. Although the assessment of compensation funds has been carried out by an independent party/KJJP using a market value approach, for some communities, the value is still not appropriate. This form of fair and reasonable value is quite difficult to formulate (Wibawa et al., 2023), since each party has a different perspective and standards and uses different legal bases and considerations. As mandated by the regulations, the committee team and the government work to give a fair and reasonable value when it comes to compensation funds. Former landholders, together with all the social ties and practical values associated with it, feel that the compensation funds are unable to make up for what has been lost. Previous research has contributed significantly to the disparities between the amounts of compensation and the values chosen for compensation funds (Sari et al., 2022; Utami & Sarjita, 2021). According to a study by Wibawa et al. (2023), the income capitalization approach should also be used and taken into consideration when determining compensation funds because the three villages' uses of the inundated land varied greatly, with some still being used for shellfish ponds and while others not.

Although several indicators of public policy implementation have been implemented, this land acquisition study still identifies several areas that need to be optimized, including community participation in land acquisition. High levels of community rejection of the compensation fund, which was initially set at just 25% of the NJOP, are characteristics of this suboptimal participation. Various views are also caused by a lack of communication between the government and the community, especially when it comes to the amount of the compensation fund. Additionally, because land acquisition policies are frequently top-down, they often lead to low levels of public trust, which in turn causes significant amounts of opposition to the proposed program.

According to the study's findings, the initial implementation of land acquisition for lost land in the study area faced with difficulties, was extremely risky (both legally and criminally), and encountered strong opposition from the local community. There was limited opportunities for dialogue and community involvement during the early phases of land acquisition due to demonstrations and the complexity of the issues. These results are consistent with studies by Rahadiano (2021) and Aifadianis (2025), which discovered that a lack of conversation space frequently hampered program implementation. Furthermore, limited community capacity and knowledge regarding rights and obligations related to lost land also resulted in a prolonged land acquisition process.

Table 2. Matrix Good Governace Of Land Acquisition on Abraded Land

The principles of good governance	Current Approach	Explanation
1. Transparency	Satellite imagery of land use changes disclosure	The government is attempting to provide public transparency regarding the condition of the land by using satellite imagery from 1994 to drone photos in 2022. The information is

2. Accountability	The government largely follow applicable rules, however procedural compliance alone did not overcome governance challenges related to participation and social justice.	understandable and quite sufficient for communities to make informed decisions. Announcement of a nominative list of land objects suspected of being lost, along with an opportunity for the public to apply for priority rights. The nominative list of objects derived from the inventory is obtained through verification, data collection, and field analysis of the land subjects and objects.
3. Responsiveness	The government formed an independent assessment team, namely the Public Assessment Services Office (KJPP), in an effort to assess lost land objects more appropriately.	The government was attempting to conduct a thorough examination of livelihood losses using a more reliable valuation method. It is anticipated that the compensation paid would be substantially more equitable.
4. Independence	The formation of an assessment team involving various stakeholders not only from the land office, but also involving elements from other related institutions.	Determining the status of lost land involves an assessment team comprising representatives from the Land Office and other relevant institutions. This multi-stakeholder arrangement facilitates the integration of technical, administrative, and legal considerations into the verification process. From a good governance perspective, such coordination is necessary to solve complex issues such as lost land due to coastal hazard or other natural disaster, which transcends the mandate of a single institution. However, effective coordination also requires clear roles, procedures and responsibilities to minimize institutional overlap and ensure accountability.
5. Justice	Reclaiming lost land is conducted through the provision of compensation funds.	Offering a compensation fund was an effort to mitigate the negative impact that societies suffered as a result of loss of livelihood. It is expected that vulnerable societies are treated fairly throughout the process. As a result, justice should be defined not only as legal conformity, but also as the fulfillment of socially acceptable and equal outcomes.

E. Conclusion

Land acquisition for the Semarang-Demak Toll Road construction in an area commonly inundated by tidal flooding is one of the first occurrences in Indonesia involving infrastructure construction on property that was later recognized as lost land. This case further highlights the limitations of conventional land administration systems, which are generally based on the assumption of permanent land objects. Since compensation under Law No. 2 of 2012 could not be applied, the government implemented a compassionate fund mechanism through Presidential Regulation No. 27 of 2023 and Ministerial Regulation No. 3 of 2024. Based on the study, those who were impacted interpreted the loss as not just the loss of land ownership but also the loss of productive aquaculture

assets and livelihoods, which led to strong community resistance. From an understanding of good governance, the situation emphasizes how critical it is to manage climate-induced land use changes and lost land determination process with transparency, accountability, responsiveness, institutional coordination, participation, and justice. Such measures are essential to promote not only legal certainty but also procedural and distributive justice for affected communities.

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