

Legal Issues of Land Acquisition and Application of Risk Management in the Implementation of the Trans Sumatra Toll Road Project

Adi Faqdh Akbar¹, Sadino Sadino², Aris Machmud³

PT. Hutama Karya (Persero), Indonesia¹

Universitas Al-Azhar Indonesia Indonesia^{2,3}

Email: adifaqdh@gmail.com¹, sadinob@gmail.com², aries_machmud@uai.ac.id³

ABSTRACT

The development of national strategic infrastructure demands legal certainty at every stage to support economic growth and equitable development. The Trans Sumatra Toll Road (JTTS) Project exemplifies this complexity, facing legal, social, and administrative challenges in land acquisition for the public interest. This study examines how the national legal framework for land acquisition is applied in the JTTS project and how law-based risk management supports its effectiveness in overcoming acquisition barriers. Using a juridical-normative approach focused on statutes, this research analyzes Law No. 2 of 2012 concerning Land Acquisition for Development for the Public Interest, Presidential Regulation No. 100 of 2014 jo. Presidential Regulation No. 42 of 2024 on Accelerating Toll Road Construction in Sumatra, and Supreme Court Regulation (PERMA) No. 3 of 2016 on Procedures for Objections to Land Acquisition Compensation, alongside case studies from the JTTS project. Findings reveal that although the legal framework provides a comprehensive basis, implementation faces regulatory disharmony, weak inter-agency coordination, and limited transparency in compensation. PERMA No. 3 of 2016 serves as a *lex specialis*, strengthening legal protection and certainty for affected communities. The study confirms that successful JTTS implementation depends on synergy between legal certainty and effective legal risk management. Reforming land law policy by harmonizing regulations, digitizing land data, and reinforcing the PERMA-based objection mechanism is a strategic step toward a fair and sustainable system for land acquisition.

Keywords: JTTS, legal framework, risk management, land acquisition, investment decision-making.

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INTRODUCTION

Infrastructure development is the main foundation supporting the acceleration of economic growth and equitable distribution of national development outcomes. Infrastructure not only functions as a means of transportation or physical connectivity but also as a legal and economic instrument capable of driving national production, distribution, and investment activities (Hussain, 2019; Mhlanga, 2021; Osmundsen & Bygstad, 2022; Samanta, 2015; Smaoui et al., 2021). The Government of Indonesia has positioned this sector as a catalyst for economic transformation through the National Medium-Term Development Plan (RPJMN), as well as the National Strategic Project (PSN) policy, based on the principles of good governance and the rule of law (Bappenas, 2020; Leone, 2023; Purnama & Bestari, 2020; Yuningsih et al., 2024).

As part of the PSN, the Trans Sumatra Toll Road (JTTS) is a strategic project initiated through Presidential Regulation No. 100 of 2014 jo. Presidential Regulation No. 42 of 2024 concerning the Acceleration of Development on Toll Roads on the Island of Sumatra, with PT Hutama Karya (Persero) as the main implementing state-owned enterprise. JTTS connects Bakauheni (Lampung) to Banda Aceh (Aceh) with a length of approximately 2,700 kilometers,

crossing multiple provinces on the island of Sumatra. Its main goal is to strengthen economic integration between regions, reduce national logistics costs, and increase the equitable distribution of development results (Anugerata & Anas, 2024; Hu et al., 2024; Indah et al., 2023; Putri et al., 2023; Situmorang, 2024). However, behind its strategic potential, the JTTS project faces complex legal challenges, especially at the land acquisition stages, which are key conditions for the project's success.

Juridically, the land acquisition process is regulated by Law No. 2 of 2012 concerning Land Acquisition for Development for the Benefit of the Wider Community, along with supporting regulations such as Presidential Regulation No. 71 of 2012 jo. and Presidential Regulation No. 148 of 2015. These regulations provide the legal basis for the four main phases of land acquisition—planning, preparation, implementation, and delivery of results—that aim to ensure legal certainty and protect the rights of affected communities.

However, the implementation of these rules in the field often faces obstacles such as overlapping norms, differences in interpretation between agencies, and a lack of synergy among the central government, regional authorities, and institutions implementing projects. This situation reflects the gap between the written law and its implementation in practice, as expressed by Soerjono Soekanto in the theory of legal effectiveness. In the context of JTTS, the legal substance is quite complete, but structural factors (implementing institutions) and legal culture (public acceptance) have not been effectively integrated. This ineffectiveness impacts project progress, causing delays, social resistance, and increasing land tenure disputes.

These findings are supported by a study conducted by Kholfa Anisa, Priyo Katon Prasetyo, and Dwi Wulan Pujiriyani (2021), which examined the impact of land acquisition for the Trans Sumatra Toll Road on the living conditions of affected communities in Serdang Village, Lampung. They found that compensation often failed to consider the socio-economic aspects of the affected communities, creating livelihood vulnerabilities post-acquisition. Furthermore, Marthen Robert Singal (2023), in his thesis on the Analysis of Factors Causing Delays in Land Acquisition for the Padang–Pekanbaru Toll Road Project (Padang–Sicincin Section), found that overlapping authority, unclear proof of ownership, and weak coordination between agencies were dominant factors causing project delays.

These studies confirm that legal weaknesses are not only normative issues but also managerial and systemic. In addition to substantive legal factors, judicial aspects significantly influence the effectiveness of land acquisition dispute resolution. Supreme Court Regulation (PERMA) No. 3 of 2016 concerning Procedures for Filing Objections to the Determination of Compensation for Land Acquisition provides a specific litigation mechanism for residents who disagree with compensation amounts. However, the implementation of this PERMA still faces challenges regarding time effectiveness and public access to justice, as the objection process often prolongs project completion. This highlights the need for a non-litigation approach or alternative dispute resolution (ADR) as a form of integrating substantive justice in infrastructure projects.

Legal risk management is an approach oriented towards identifying, analyzing, and mitigating legal risks that could hinder project implementation effectiveness. Based on ISO 31000:2018, risk management should be an integral part of legal and public policy decision-making. In the context of JTTS, this approach helps prevent risks of delay, compensation uncertainty, and social conflict through data-driven and regulatory mitigation strategies.

Several previous studies underline the relevance of risk management to the legal issues of infrastructure projects. A. Kusuma et al. (2019), in their research on Residual Land Compensation in Toll Road Construction Projects (Bakauheni–Terbanggi Besar Package II Section), emphasized that weak legal risk management often causes further disputes due to unclear compensation mechanisms for residual land.

Based on previous research, there remains a gap in integrating land acquisition regulations with the implementation of legal risk management. Most earlier studies have highlighted social, technical, or administrative aspects, while the legal risk management dimension—as a normative and managerial approach—has not been deeply studied. Therefore, this study offers an updated integrative analysis of the national legal framework for land acquisition alongside law-based risk management implementation in the JTTS project. The ultimate goal is to provide a conceptual model that strengthens legal effectiveness, improves administrative efficiency, and promotes more transparent, accountable, and socially equitable governance of national strategic projects.

This research is expected to make dual contributions—both theoretical and practical. Theoretically, it will enrich administrative law and agrarian law, especially on integrating land acquisition regulation and legal risk management approaches in national strategic projects. Practically, it provides governments, regulators, and project implementers with insights to formulate more synergistic policies, improve inter-agency coordination, and optimize fair and efficient dispute resolution mechanisms. The resulting recommendations are expected to support the acceleration of infrastructure development while protecting people's rights and ensuring legal certainty for investors.

METHOD

This study adopted a normative juridical method, an approach focused on analyzing the applicable legal rules regulating land acquisition for the public interest and the application of legal risk management principles in the implementation of the Trans Sumatra Toll Road (JTTS) Project. This approach was chosen because the problems studied were closely related to the effectiveness of legal norms and their application in the practice of implementing national strategic projects. The normative juridical approach allowed the researchers to trace the relationship between laws and regulations, legal theory, and the implementation of public policies in the infrastructure sector.

Within the framework of this study, several main legal instruments were used as references for analysis, including Law No. 2 of 2012 concerning Land Acquisition for Development for the Public Interest, Presidential Regulation No. 100 of 2014 jo. Presidential Regulation No. 42 of 2024 concerning the Acceleration of Development on Toll Roads on the Island of Sumatra, and Supreme Court Regulation (PERMA) No. 3 of 2016, which regulates the procedure for submitting objections to compensation decisions. These three regulations formed the main legal framework for analyzing the implementation of the JTTS land acquisition policy and the effectiveness of dispute resolution arising during the process. The study also used a case study of land acquisition implementation in the National Strategic Project (PSN) of the Trans Sumatra Toll Road, a priority project managed by the government through PT Hutama Karya (Persero).

An important reference was the previous research by Kholfa Anisa et al. (2021), which examined the socio-economic impact of JTTS land acquisition in Lampung, as well as the study by Marthen Robert Singal (2023), which identified legal factors causing delays in land acquisition on the Padang–Pekanbaru section. The data analysis method was qualitative with a descriptive-analytical approach, describing, interpreting, and relating various legal and empirical data to produce a comprehensive understanding of the effectiveness of legal application in the JTTS project. The analysis integrated legal certainty theory, social justice theory, and risk management principles based on ISO 31000:2018, emphasizing systematic identification, analysis, and mitigation of legal risks. This approach aimed to contribute to the development of more adaptive legal policies, transparency, and social justice focused on land acquisition for national strategic infrastructure projects.

RESULTS AND DISCUSSION

Legal Problems in JTTS Land Acquisition

The legal framework that governs investment decisions in infrastructure projects in Indonesia, such as Law No. 2 of 2012 concerning Land Acquisition for Development in the Public Interest and Presidential Regulation No. 38 of 2015 concerning Cooperation between the Government and Business Entities (PPP), has a fundamental role in creating legal certainty. This regulation provides guidelines for investors and business entities to understand their procedures, authorities, and legal responsibilities in national strategic projects, including the Trans Sumatra Toll Road Project (JTTS). However, in practice, the construction of toll roads not only changes the technical and economic aspects, but also has a significant impact in the social, legal and political fields. One aspect that deserves attention is the state's right to control the land needed for infrastructure development. These rights can have an impact on the rights of local residents, including property rights, land use rights, and customary rights. Weaknesses in cross-agency coordination and overlapping authority are often the main causes of delays in the implementation of strategic infrastructure projects, including in the toll road sector, as well as regulatory disharmony that increases administrative legal risks that have implications for increased project costs and reduced investor confidence.



Figure 1.

Source: Road Map for the Development of JTTS Presidential Decree No. 100 of 2014 j.o. Presidential Decree No. 42 of 2024 concerning the Acceleration of Toll Road Construction in Sumatra

The existence of this legal framework has not fully answered the implementation challenges in the field. The delay in land acquisition in the National Strategic Project (PSN) on the Trans Sumatra Toll Road is caused by weak coordination between agencies and differences in perceptions in the implementation of the provisions of Law No. 2 of 2012, which have a direct impact on the effectiveness of national strategic projects. These findings are in line with the conditions on the ground in the JTTS project which shows the problem of policy overlap between the central and regional governments. The success of national infrastructure projects is highly dependent on the effectiveness of the implementation of the principles of risk-based governance, where weak integration of legal policies has the potential to increase social and legal risks in project implementation. In practice, various implementing regulations often give rise to dualism of authority between the central government, local governments, and business entities as project implementers. This regulatory disharmony causes a dualism of norms that has the potential to hinder the effectiveness of project implementation. Therefore, this study considers it important not only to examine the normative aspects of positive law, but also to assess its conformity with the principles of good regulatory governance in the context of national infrastructure development. Legal problems in the land acquisition of the To1 Trans Sumatra Road Project (JTTS) cannot be separated from the complexity of the relationship between legal principles, public policy, and empirical facts in society. Land acquisition, which is ideally a definite, fair, and efficient legal process, often creates tension between national development interests and individual people's rights to land. This situation illustrates the gap between written law and its implementation in practice, which is one of the main characteristics of legal problems in Indonesia's infrastructure sector.

Land ownership conflicts are the root of the main problem in the JTTS land acquisition process. There are still often cases of overlapping certificates, customary land claims, and data

discrepancies between land registers at BPN and field conditions. For example, in several toll roads in the Lampung and South Sumatra regions, one of the sources of conflict in toll road projects is the lack of transparency in the validation of land ownership data, which has implications for the uncertainty of the value of compensation and potential violations of community land rights as well as disputes between owners of title certificates and indigenous peoples who consider themselves to have customary rights over the land. This problem shows the weakness of the national land administration system, especially in terms of data validation and coordination between government agencies. The main root of the delay in toll projects comes from weak land data validation and inter-agency coordination, where land ownership data between BPN and local governments is often out of sync. This finding is in line with the conditions in the JTTS project which is also faced with conflicts of customary land ownership and double certificates.

In accordance with the provisions of national agrarian law, this issue shows the limitations of the implementation of the Basic Agrarian Law (UUPA) of 1960 in ensuring the certainty of land ownership status. The UUPA, which was originally intended to regulate the ownership and use of land fairly, now faces new challenges in the context of strategic development that demands acceleration. The imbalance between development interests and the protection of people's rights leads to the emergence of recurring structural conflicts. Therefore, it is necessary to reinterpret the principles of social justice in land acquisition, to be in line with the paradigm of sustainable development and human rights. The mechanism for determining the value of compensation is often non-transparent and non-participatory. Land price assessments are usually conducted by an independent appraisal team appointed by the government, but the consultation process with affected communities is often ignored. As a result, there is a perception of injustice and discrimination, which then develops into open conflicts or lawsuits to the courts. To resolve disputes regarding compensation for land acquisition, Supreme Court Regulation (PERMA) No. 3 of 2016 provides a firm legal basis regarding the procedure for submitting protests compensation decisions by entitled parties. This regulation is a concrete form of procedural legal protection for communities affected by national strategic projects such as JTTS, as it ensures that any objection to the assessment of compensation can be raised through an efficient, simple, and affordable judicial mechanism.

With this PERMA, the implementation of Law No. 2 of 2012 and Presidential Regulation No. 100 of 2014 jo. Presidential Regulation No. 42 of 2024 becomes more guaranteed from a procedural point of view. PERMA plays a *lex specialis* role in the mechanism for resolving land acquisition disputes, thereby strengthening the national legal framework as formulated in the formulation of the first problem of this study. In addition, the existence of PERMA also supports the implementation of legal risk management in the litigation stage, as it provides a measurable and predictable legal pathway, in accordance with the principle of legal certainty in strategic infrastructure projects. The existence of judicial institutions and mediation institutions is important as a dispute resolution forum that guarantees the principles of justice, utility, and legal certainty as affirmed by Gustav Radbruch. In the context of the rule of law, the Radbruch principle of justice becomes the normative basis for assessing whether the compensation policy has accommodated three fundamental values of law: justice, benefit, and legal certainty. Thus, the implementation of land acquisition should not only be oriented

towards administrative settlement, but also ensure equality of position between the state and citizens in the legal process.

However, resolving disputes through litigation is often ineffective, as court processes are time-consuming and costly. Alternative methods of resolving disputes such as mediation or deliberation based on local wisdom are more efficient options in the context of JTTS land acquisition, because they are more flexible and oriented towards social justice. Therefore, the legal policy on land acquisition in the future needs to be directed at strengthening the public mediation system and participatory governance, so that the land acquisition process can run more transparently, quickly, and fairly for all parties. The strengthening of the ADR system is in line with the principle of restorative justice in modern law, where dispute resolution is directed at restoring social relations, not simply winning one party. This model is relevant to be applied in land disputes because it prioritizes deliberation and local values, which at the same time reflects the philosophy of Pancasila in resolving social conflicts.

Thus, legal problems in JTTS land acquisition cannot be seen partially, but must be understood as part of systemic challenges in national land law governance. More harmonious regulatory reform and the application of legal risk management principles that are integrated in land acquisition policies are needed, so that national strategic projects such as JTTS can be carried out in an effective, efficient manner, and in accordance with the principles of social justice for all Indonesian people. The integration between agrarian law reform, public policy, and law-based risk management is the main prerequisite for the realization of equitable infrastructure development. The law is no longer positioned just as an instrument of control, but as an instrument of empowerment that ensures a balance between legal certainty and social justice.

Conceptually, the legal problem of land acquisition in JTTS can be categorized into three main dimensions: regulative, administrative, and social

1. Regulatory Aspects

This arises due to the inconsistency between regulations at the central and regional levels. For example, although Law No. 2 of 2012 has provided a clear legal basis regarding land acquisition for the public interest, in practice there is still overlap with regional policies regarding spatial planning, location permits, and land management authority. This condition creates policy dualism that hinders synchronization between implementing agencies, especially between the Ministry of ATR/BPN, Regional Governments, and PT Hutama Karya (Persero) as the project implementer.

2. Administrative Aspects

It is related to the length of bureaucratic procedures and overlapping authority between agencies. The process of locating and acquiring land often requires inefficient cross-agency coordination, resulting in delays in project implementation. The lack of accurate land tenure data at the National Land Agency (BPN) exacerbates this situation, as it hinders the process of verifying rights and paying compensation. As a result, project completion that should be fast and appropriate becomes protracted, increasing project costs, and causing legal uncertainty for investors and affected communities.

3. Social Aspects

It is related to community resistance to the value of compensation and socio-economic impacts due to land acquisition. In many cases, the community considers that the compensation

mechanism set by the government does not reflect the principle of substantive justice, as it is only oriented to the market price of land without taking into account social, cultural, and livelihood losses. This led to protests, rejections, and lawsuits to the district court, which ultimately slowed down the realization of the project.

Implementation of Risk Management in Supporting Project Efficiency

Risk management in the context of the implementation of the Trans Sumatra Toll Road Project (JTTS) functions not only as a technical mechanism for risk control, but also as a strategic legal instrument to maintain the effectiveness, efficiency, and accountability of project implementation. In a nation-scale infrastructure project, risks arise not only from the technical aspects of construction, but also from legal uncertainty, social conflicts, and changing policies. Therefore, the implementation of legal risk management is an important element in ensuring the creation of legal certainty as well as the effectiveness of development.

Within the framework of ISO 31000:2018 on Risk Management, there are three main stages that are relevant to be applied in the JTTS project, namely risk identification, risk analysis and evaluation, and risk control. At the identification stage, legal risks in land acquisition need to be systematically mapped, including potential overlapping land rights, administrative delays, and potential lawsuits from affected communities. This stage requires the active involvement of various stakeholders, such as the National Land Agency (BPN), the Ministry of Public Works and Housing, the Ministry of ATR, and the implementing business entity (BUJT), to ensure that all potential legal problems are detected early.

The next stage involves risk assessment and analysis, where all risks that have been found will be evaluated based on how likely they are and how impactful they are. In the legal context, this analysis can be carried out by the legal due diligence method, which is a systematic assessment of regulatory compliance, land ownership validity, and the validity of contracts between related parties. Through this approach, project managers can anticipate potential legal disputes, prepare mitigation measures, and design a proportionate legal liability scheme.

The third stage is risk control, which emphasizes the importance of a sustainable legal supervision system. In the JTTS project, this control is carried out through the preparation of a contract-based internal supervision mechanism, the implementation of standard operating procedures (SOPs) of project law, and the use of legal compliance documents at each stage of activities. This effort aims to create legal transparency and administrative accountability, while strengthening the integrity of project legal documents so that they have adequate evidentiary power in the event of a dispute.

The implementation of legal risk management also serves to integrate coordination between agencies, which has been a weak point in the implementation of national strategic projects. With an integrated legal risk assessment mechanism, each agency can understand the limits of its authority and work within a uniform legal framework. This is in line with the principles of coordination and institutional synergy as stipulated in Presidential Regulation No. 42 of 2024 concerning the Acceleration of Toll Road Construction in Sumatra. From a public policy perspective, the implementation of risk management also plays a role as a tool to mitigate legal and investment uncertainty. With the availability of a comprehensive legal risk map, governments and business entities can estimate potential project delays, policy changes,

and social disruptions that may arise. This has implications for increasing investor confidence, because projects are considered to have legal certainty and good governance.

The legal risk management approach is in line with the principles of due diligence and good governance in state administrative law. The government as the implementer of public policy has a legal obligation to ensure that every administrative action is carried out with the principles of prudence, transparency, and accountability. When these principles are applied consistently in land procurement, the likelihood of procedural errors, ownership conflicts, and abuse of authority can be minimized. The implementation of legal risk management also strengthens the preventive function of the law. Through the legal risk register mechanism, the JTTS project can identify regulations that have the potential to cause uncertainty and prepare policy revision recommendations based on empirical experience in the field. In the long term, this practice can enrich the process of sectoral law reform in the field of land and infrastructure, so that the law not only plays a role as a repressive instrument, but also as an instrument of controlling and directing development. In several JTTS project segments such as Binjai - Langsa, most of the community's lawsuits for compensation arise due to ignorance of the objection mechanism that has been regulated in PERMA No. 3 of 2016, thus showing the need for socialization and integration of these regulations in the legal risk management of infrastructure projects. In the context of the implementation of regulation-based legal risk management, the existence of PERMA No. 3 of 2016 can also be seen as an instrument for mitigating litigation risks in land acquisition. With a structured objection mechanism, project implementers such as PT Hutama Karya (Persero) and the government can anticipate potential disputes from the planning stage, by preparing legal documents and administrative evidence in accordance with the provisions of PERMA. This directly supports the second research objective, which is to analyze how law-based risk management regulations can improve the effectiveness and efficiency of the implementation of JTTS projects. The application of the principle of legal risk anticipation through PERMA strengthens the reliability of the national legal system and encourages the creation of transparent and accountable project governance.

Thus, the application of legal risk management in the JTTS project has two strategic benefits: first, it creates administrative and juridical efficiencies through measurable risk control; Second, strengthening the legitimacy and accountability of public legal policies. These two benefits directly contribute to increasing the effectiveness of the implementation of national strategic projects, while emphasizing the role of law as a pillar of equitable and sustainable development.

CONCLUSION

This research highlights the essential integration of legal frameworks, investment decision-making, and risk management for the successful implementation of National Strategic Projects (PSN), focusing on the Trans Sumatra Toll Road (JTTS). It finds that clear and consistent legal provisions are crucial, yet legal challenges in land acquisition reveal systemic issues across regulatory, administrative, and social dimensions—such as policy disharmony, weak inter-agency coordination, fragmented land data, and compensation practices that neglect socio-economic impacts. Although Law No. 2 of 2012 and related regulations provide a strong legal basis, tensions persist between constitutional land rights and national development priorities. Supreme Court Regulation (PERMA) No. 3 of 2016 functions as a *lex specialis*,

ensuring structured objection procedures and access to justice. Applying an ISO 31000:2018-based legal risk management approach strategically anticipates and mitigates legal risks throughout project stages, improving due diligence, compliance, and efficiency while fostering transparency and equity. This approach transforms law into an empowering governance tool rather than merely a control mechanism. Future research could focus on developing frameworks to better integrate social impact assessments within legal risk management for land acquisition, enhancing community participation, and measuring outcomes in PSN projects to ensure more inclusive and sustainable development.

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