

A STUDY OF THE GOVERNMENT'S ROLE IN THE PUBLIC-PRIVATE PARTNERSHIP (PPP) MANAGEMENT SCHEME: A CASE STUDY OF THE SITINJAU LAUIK FLYOVER PROJECT THROUGH THE COLLABORATION BETWEEN THE DIRECTORATE GENERAL OF HIGHWAYS AND PT. HUTAMA PANORAMA SITINJAU LAUIK

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Abstract

This study aims to analyze the role of government in managing Public-Private Partnership (PPP) projects through a case study of the Sitinjau Lauik Flyover development in West Sumatra Province, Indonesia. The project represents one of the strategic infrastructure initiatives implemented to improve safety and traffic flow along the challenging transportation corridor connecting Padang City and Solok. Within the PPP framework, the government functions not only as the project owner but also as a regulator, facilitator, provider of support and guarantees, and supervisor throughout the entire project lifecycle. This study employs both qualitative and quantitative approaches to obtain a comprehensive understanding of project management dynamics. Qualitative data were collected through in-depth interviews with stakeholders involved in the project, while quantitative data were gathered through Likert-scale questionnaires and analyzed using descriptive statistics. The analysis focuses on four principal dimensions of the government's role, namely regulatory functions, facilitative functions, government support, and supervision. The findings indicate that the government plays a significant role in directing policies, providing fiscal and non-fiscal support, and ensuring inter-agency coordination in the implementation of PPP projects. Nevertheless, the study also identifies several challenges faced by the government, including suboptimal inter-agency coordination, complex land acquisition processes, technical implementation issues, and policy consistency concerns that affect project sustainability. The study concludes that the success of PPP projects is strongly influenced by the government's institutional capacity, the effectiveness of project governance, and the quality of policies that facilitate balanced partnerships between the public and private sectors. Therefore, strengthening institutional coordination, enhancing transparency, and improving supervisory mechanisms are essential factors for increasing the effectiveness of PPP project implementation in Indonesia.

Keywords: *Public-Private Partnership (PPP), government role, project governance, infrastructure, Sitinjau Lauik Flyover.*

INTRODUCTION

Infrastructure development in Indonesia frequently encounters complex challenges related to financing, technical aspects, and institutional capacity. The Public-Private Partnership (PPP) scheme has emerged as a strategic solution to address fiscal constraints and accelerate the provision of public services. Within the PPP framework, the government serves not only as the project owner but also as a regulator, risk guarantor, and manager of partnerships with the private sector. Geographically, the Sitinjau Lauik area is an extreme mountainous route characterized by steep gradients and sharp curves. This corridor connects key economic activities, logistics distribution networks, and community mobility between Padang, the provincial capital, and Solok, which serves as a gateway to the hinterland and agricultural centers of West Sumatra. However, the existing Sitinjau Lauik route is highly vulnerable to traffic accidents, congestion, and disruptions in logistics distribution, particularly during adverse weather conditions and incidents involving trucks or buses experiencing brake failures. Several studies have highlighted the importance of the

government's role in ensuring the success of PPP projects. Nusriadi et al. (2024), in their study on toll road governance, demonstrated that effective governance acts as a bridge between intellectual capital, ownership structure, and project outcomes. Salwa Alifia Zaahra et al. (2025), in their analysis of the Trans Papua PPP project, found that government financing strategies through PPP mechanisms outperform conventional state budget financing, particularly in terms of transparency and risk adaptability. Mahani et al. (2024) revealed that the institutional capacity of local governments significantly influences the feasibility of Availability Payment projects. Meanwhile, the OECD/International Transport Forum (2013) reported that inadequate preliminary evaluations and weak contract monitoring exacerbate risk imbalances between public and private stakeholders.

Consequently, improving the quality of feasibility studies and strengthening governmental institutional capacity are critical factors in reducing the potential for future renegotiations. Syaifur Rohman (2025) further emphasized the importance of public participation and government transparency from the earliest stages of project planning. These studies suggest that the success of PPP projects largely depends on the quality of governmental involvement throughout the project lifecycle. In this context, the development of the Sitinjau Lauik Flyover—a project characterized by extreme geographical challenges—provides a relevant case for further examination. Through the Directorate General of Highways, the government collaborates with PT Hutama Panorama Sitinjau Lauik under a PPP scheme to establish a safer and more reliable transportation corridor. Therefore, it is essential to examine how the government fulfills its role in managing this project as a concrete case study of PPP implementation in the strategic infrastructure sector.

METHOD

This study employs both qualitative and quantitative approaches to obtain a comprehensive understanding of the government's role in managing the Public-Private Partnership (PPP) project of the Sitinjau Lauik Flyover in West Sumatra. The qualitative approach was utilized to explore the dynamics of government involvement in project planning, decision-making, implementation, and supervision through in-depth interviews and document analysis. Meanwhile, the quantitative approach was conducted through the distribution of Likert-scale questionnaires to measure respondents' perceptions regarding the effectiveness of the government's role in terms of regulatory, facilitative, supervisory, and support functions.

The research was conducted along the Padang–Solok National Road corridor, particularly in the Sitinjau Lauik area, which is known for its extreme geographical conditions and high rate of traffic accidents. This location was selected because it serves as the implementation site of the Sitinjau Lauik Flyover project, which is being developed under a PPP scheme involving both government and private sector participation. The study involved various stakeholders directly engaged in the project, including representatives from the Ministry of Public Works and Housing (PUPR), PT Hutama Panorama Sitinjau Lauik, consultants, auditors, and academics. Research data were collected through semi-structured interviews, document reviews, and questionnaire surveys administered to respondents selected purposively based on their expertise and experience in PPP projects.

Qualitative data were analyzed using the Miles, Huberman, and Saldaña model, which consists of data reduction, data display, conclusion drawing, and verification stages. Quantitative data were analyzed descriptively using mean scores, frequency distributions, and instrument reliability testing where necessary. The study focuses on the relationship between the government's role as the independent variable comprising regulatory, facilitative, supervisory, and support functions and the effectiveness of PPP project management as the dependent variable. Data validity and trustworthiness were ensured through source triangulation, member checking, audit trails, as well as validity and reliability testing of the research instruments to ensure a high level of credibility and accuracy of the findings.

RESULTS AND DISCUSSION

Research Findings (Qualitative)

The government's role in the Sitinjau Lauik Flyover PPP project is implemented through regulatory, facilitative, coordinative, supervisory, and project control functions. From a regulatory perspective, the government established the legal framework through Presidential Regulation No. 38 of 2015 and Ministry of National Development Planning (Bappenas) Regulation No. 7 of 2023, which serve as the foundation for PPP implementation. The government also appointed the Directorate General of Highways as the Government Contracting Agency (GCA) responsible for project management, defined risk allocation mechanisms within the Public-Private Partnership Agreement, and designated the

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Sitinjau Lauik Flyover as part of Indonesia's National Strategic Projects (NSPs). Furthermore, the government established service standards and post-construction contractual obligations to ensure long-term operational sustainability and public service quality. In its facilitative role, the government supports project implementation through the preparation of feasibility studies, fiscal support under the Availability Payment (AP) scheme, and non-fiscal assistance, including licensing, inter-agency coordination, and land acquisition. Both central and local governments contribute to land provision, administrative land settlement processes, and mediation of various social and technical challenges encountered during project implementation. Nevertheless, the findings indicate that land acquisition remains a major challenge due to regulatory complexities, differing stakeholder interpretations, and the social dynamics of communities affected by the project.

The government's coordinative function is manifested through inter-ministerial and inter-agency coordination, regular coordination meetings, periodic evaluation forums, and structured reporting systems. Coordination involves the Ministry of Public Works and Housing (PUPR), the Ministry of Finance, Bappenas, PT Penjaminan Infrastruktur Indonesia (PT PII), local governments, project companies, and contractors. The government has also established cross-agency coordination teams and strengthened central-regional collaboration to accelerate the resolution of administrative issues, land acquisition challenges, and the harmonization of fiscal and technical policies. This coordination framework serves as a critical foundation for maintaining the effectiveness of collaborative project governance based on a multi-stakeholder approach.

In addition to its regulatory and facilitative functions, the government performs supervisory and project control roles through progress monitoring, performance evaluation, risk allocation oversight, quality assurance, and safety and risk management supervision. Monitoring activities are conducted periodically through weekly, monthly, and quarterly reports, as well as joint evaluation forums involving all stakeholders. The government ensures that project implementation complies with technical standards, accountability principles, and contractual provisions. Supervision is particularly focused on managing geographical and technical risks, considering that the Sitinjau Lauik area is characterized by extreme topography, a high risk of landslides, and construction complexities that require intensive oversight.

The findings further reveal that the primary challenges in the Sitinjau Lauik Flyover PPP project stem not only from technical construction issues but also from institutional, administrative, land acquisition, geographical, and fiscal constraints. The complexity of stakeholder coordination, lengthy bureaucratic procedures, delays in land acquisition, and adjustments to financing arrangements significantly affect project implementation effectiveness. Therefore, strengthening inter-institutional coordination, accelerating land acquisition processes, enhancing institutional capacity, and adopting adaptive risk management practices are essential factors for supporting the successful implementation of strategic national infrastructure PPP projects in the future.

Quantitative Research Findings

Instrument Testing

1. Validity Test

Table 1. Validity Test Results

Variable	Item No.	Calculated r-value	Critical r-value	Result
Regulatory Role (X1)	X1.1	0.701	0.361	Valid
	X1.2	0.808	0.361	Valid
	X1.3	0.769	0.361	Valid
	X1.4	0.790	0.361	Valid
Facilitative Role (X2)	X2.1	0.731	0.361	Valid
	X2.2	0.732	0.361	Valid
	X2.3	0.673	0.361	Valid
	X2.4	0.860	0.361	Valid

Variable	Item No.	Calculated r-value	Critical r-value	Result
Supervisory Role (X3)	X3.1	0.835	0.361	Valid
	X3.2	0.851	0.361	Valid
	X3.3	0.680	0.361	Valid
	X3.4	0.521	0.361	Valid
Support Role (X4)	X4.1	0.762	0.361	Valid
	X4.2	0.822	0.361	Valid
	X4.3	0.601	0.361	Valid
	X4.4	0.808	0.361	Valid
PPP Project Management Effectiveness (Y)	Y.1	0.872	0.361	Valid
	Y.2	0.827	0.361	Valid
	Y.3	0.916	0.361	Valid
	Y.4	0.830	0.361	Valid

Source: Processed Research Data (2026)

Based on Table 1, all research instrument items have calculated correlation coefficients exceeding the critical r-value of 0.361. This indicates that each questionnaire item accurately and consistently measures the intended construct. Therefore, all indicators representing the Regulatory Role (X1), Facilitative Role (X2), Supervisory Role (X3), Support Role (X4), and PPP Project Management Effectiveness (Y) satisfy the validity criteria. Consequently, the research instrument is considered valid and suitable for subsequent data collection and analysis.

2. Reliability Test

Table 2. Reliability Test Results

Variable	Cronbach's Alpha	Reliability Standard	Result
Regulatory Role (X1)	0.763	0.60	Reliable
Facilitative Role (X2)	0.742	0.60	Reliable
Supervisory Role (X3)	0.701	0.60	Reliable
Support Role (X4)	0.712	0.60	Reliable
PPP Project Management Effectiveness (Y)	0.832	0.60	Reliable

Source: Processed Research Data (2026)

Based on Table 2, all research variables exhibit Cronbach's Alpha values exceeding the reliability threshold of 0.60. This finding indicates that the research instrument possesses a satisfactory level of internal consistency, ensuring that the collected data are reliable and appropriate for further analysis. In other words, the Regulatory Role (X1), Facilitative Role (X2), Supervisory Role (X3), Support Role (X4), and PPP Project Management Effectiveness (Y) variables demonstrate adequate reliability, thereby supporting the validity and credibility of the study findings.

Descriptive Analysis Results

Based on the descriptive analysis results, all research variables achieved mean scores above 4.00, falling within the "Agree" to "Strongly Agree" categories. This indicates that respondents perceived the implementation of the Sitinjau Lauik Flyover PPP project as generally successful. The Supervisory Role variable recorded the highest mean score at

4.42, followed by the Facilitative Role (4.30), Support Role (4.29), Regulatory Role (4.27), and PPP Project Management Effectiveness (4.21). These findings suggest that supervisory functions, coordination mechanisms, government support, and regulatory frameworks have contributed positively to the successful management of the project.

For the Regulatory Role variable, all indicators were categorized as “Strongly Agree,” with an overall mean score of 4.27. The highest score was observed in the clarity of duties and responsibilities among institutions (4.33), while the lowest score was associated with the flexibility of regulations in responding to field conditions (4.20). These findings indicate that PPP regulations, including Presidential Regulation No. 38 of 2015 and Bappenas Regulation No. 7 of 2023, have provided clear direction, legal certainty, and role allocation in the implementation of the Sitinjau Lauik Flyover project. Nevertheless, greater flexibility in regulatory implementation remains necessary to address operational challenges encountered in the field.

The Facilitative Role variable achieved an average score of 4.30, categorized as “Strongly Agree.” The highest-rated indicator was government support in providing project data, documentation, and permits, with a score of 4.47. This result reflects respondents’ perceptions that the government actively supports project implementation through inter-agency coordination, administrative facilitation, and efforts to accelerate the resolution of project-related obstacles. Similarly, the Supervisory Role variable demonstrated excellent performance, with an average score of 4.42. The highest score within this dimension was obtained for government oversight in maintaining project accountability (4.40). These findings indicate that the government has effectively exercised its supervisory function through routine monitoring, project audits, and transparent evaluation mechanisms.

Regarding the Support Role variable, the overall mean score of 4.29 indicates that both fiscal and non-fiscal government support significantly contributed to the smooth implementation of the PPP project. The highest score was recorded for the direct impact of government support on project implementation (4.53), whereas the lowest score was associated with project guarantees provided by PT Penjaminan Infrastruktur Indonesia (PT PII), which still achieved an “Agree” rating with a score of 4.00. These findings suggest that government support through mechanisms such as the Viability Gap Fund (VGF), Availability Payment (AP), licensing assistance, and institutional facilitation has enhanced the effectiveness of the Sitinjau Lauik Flyover project implementation.

Meanwhile, the PPP Project Management Effectiveness variable obtained an average score of 4.21, classified as “Strongly Agree.” The highest-rated indicator was the project's economic and social benefits for the community (4.43), while the lowest score was related to adherence to project timelines and budget allocations (4.03). Overall, the findings indicate that the Sitinjau Lauik Flyover PPP project has been implemented effectively, delivering substantial benefits to the public and being supported by adequate regulations, coordination mechanisms, supervision, and government assistance. Nevertheless, improvements in schedule control, cost management, and project coordination remain necessary to further optimize project implementation.

Discussion

The analysis demonstrates that the government's role in the Sitinjau Lauik Flyover PPP project reflects the concept of the **regulatory state**, in which the government no longer acts as the primary executor of development but rather as a regulator responsible for establishing legal certainty, risk allocation mechanisms, and strategic policy directions. Regulations such as Presidential Regulation No. 38 of 2015 and Bappenas Regulation No. 7 of 2023 have contributed to investment certainty, institutional role clarification, and the establishment of project financing and supervision mechanisms. Furthermore, the allocation of risks between the government and private entities reflects the principle of **risk allocation to the party best able to manage it**. However, residual risks, particularly those associated with land acquisition, continue to require additional government intervention during project implementation.

From a public-private partnership perspective, the government has also fulfilled a facilitative role through fiscal support, the provision of project documentation and permits, inter-agency coordination, and the implementation of the Availability Payment (AP) scheme, which provides performance-based payment certainty to private partners. These forms of support have enhanced project bankability and strengthened private sector participation. Nevertheless, the effectiveness of government facilitation continues to face challenges in non-fiscal areas, particularly land acquisition processes and administrative synchronization among institutions, which affect project readiness prior to the commencement of construction activities.

In terms of coordination and supervision, the project reflects the principles of **collaborative governance** through integrated multi-stakeholder engagement involving the central government, local governments, private entities, contractors, and guarantee institutions. The government exercises its coordination function through regular meetings, evaluation forums, periodic reporting systems, and performance-based supervision aimed at ensuring accountability, service quality, and project sustainability. Project oversight is conducted adaptively by taking into account the extreme geographical conditions of the Sitinjau Lauik area, including landslide risks, adverse weather conditions, and the complexity of construction structures. Consequently, continuous strengthening of risk management and quality control mechanisms remains essential.

Overall, the effectiveness of the Sitinjau Lauik Flyover PPP project is influenced by institutional internal factors, external social, geographical, and fiscal conditions, pre-contractual readiness, and the quality of project governance. Key challenges identified include inter-agency synchronization, land acquisition issues, delays in fiscal administration, and the geographical complexity of the project area. Despite these challenges, the PPP policy framework has contributed positively to sustainable infrastructure development by enabling long-term financing, promoting more structured risk-sharing arrangements, and strengthening public-private collaboration. Therefore, enhancing institutional capacity, ensuring land readiness before contract effectiveness, and improving coordination across different levels of government are crucial factors for increasing the success of future PPP projects.

CONCLUSION

Based on the research findings, it can be concluded that the government's role in managing the Sitinjau Lauik Flyover PPP project has been effectively implemented through regulatory, facilitative, coordinative, supervisory, and fiscal and non-fiscal support functions that contribute significantly to project success. The government has been able to establish a regulatory framework that provides legal certainty, risk allocation mechanisms, and strategic project direction while supporting project implementation through inter-agency coordination, the provision of documentation and permits, performance-based supervision, the Availability Payment (AP) scheme, and project guarantee mechanisms. Quantitative analysis indicates that all research variables achieved mean scores within the "Agree" to "Strongly Agree" categories, with the Supervisory Role variable recording the highest score of 4.42 and PPP Project Management Effectiveness achieving a score of 4.21. Nevertheless, the study also identified several major challenges, including the complexity of inter-agency coordination, delays in land acquisition, administrative constraints, and extreme geographical conditions that affect project implementation effectiveness. Therefore, strengthening institutional capacity, enhancing coordination between central and local governments, accelerating land readiness, and improving risk management practices are essential factors for ensuring the long-term success and sustainability of PPP projects in the future.

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