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Rethinking Local Government Asset Management in Indonesia: Governance, Planning, and Policy Evaluation

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Abstract

Effective asset management is essential for enhancing operational efficiency and achieving sustainable development within local governments in Indonesia. This study explores key challenges in asset management, focusing on governance, planning, and policy evaluation. Several critical issues are identified: fragmented governance, insufficient transparency and coordination, outdated asset inventories, and misalignment between asset management practices and broader development goals. Policy evaluation mechanisms are also inadequate, failing to measure asset utilisation effectively. These challenges lead to inefficiencies in resource allocation, underutilisation of assets, and missed opportunities for local economic growth. The findings align with Sustainable Development Goals (SDGs), particularly SDG 11 (Sustainable Cities and Communities), which promotes efficient resource use, and SDG 9 (Industry, Innovation, and Infrastructure), which supports enhanced infrastructure management. Addressing these goals enables local governments to align asset management strategies with broader sustainability objectives, fostering equitable growth and long-term development. Through a qualitative literature review, this study analyses data from government reports and prior research to highlight these challenges and propose solutions. An integrated approach—aligning governance frameworks, improving asset management planning, and strengthening policy evaluation—can overcome the identified barriers. By adopting this model, local governments can optimise asset management, leading to improved efficiency, better resource utilisation, and sustainable development. Future research should explore applying this framework across regions in Indonesia to validate its effectiveness.

Keywords: *Asset Management; Local Government; Strategic Planning*

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Introduction

Effective asset management is crucial for the sustainable development and operational efficiency of local governments (Bagus et al., 2024), particularly in Global South countries like Indonesia. Local governments manage public assets such as land, buildings, infrastructure, and equipment, which are essential for delivering public services (Kim & Ebdon, 2021). However, complexities in governance, planning, and policymaking present significant challenges in optimising these assets (Mureddu et al., 2020). Indonesia's evolving socio-economic landscape, combined with decentralisation, highlights the need to re-evaluate asset management practices at the local level (Istianah & Indriani, 2024).

Globally, asset management has advanced with the integration of digital technologies and data-driven decision-making (Frick, 2023). Countries such as Australia and New Zealand have implemented advanced asset management frameworks, incorporating strategic planning (Rose et al., 2023) and robust policy evaluation (Marlow et al., 2010). These frameworks demonstrate the importance of aligning governance, planning, and technological integration to maximise asset utilisation. However, in Indonesia, asset management remains fragmented, with previous studies focusing on isolated aspects such as technology (Rahadi et al., 2024) or governance (Wahyuni & Khoirudin, 2020), without addressing the broader, interconnected framework required for effective asset management (Chabane et al., 2023).

The gap in current research lies in the absence of a holistic framework integrating governance, planning, and policy evaluation in local government asset management (Todapa, 2024). While international practices offer insights into asset management efficiency, there has been limited adaptation of these practices in developing countries (Sastrawiria & Seigo, 2024), especially in the Global South, where governance structures are often weaker, and resources are more constrained (Walter & Sisli, 2007). This study seeks to fill that gap by proposing a comprehensive framework that aligns these elements to improve asset utilisation and governance outcomes.

In many developed countries, asset management benefits from mature governance systems (Gavrikova et al., 2020), strong accountability mechanisms (Syaifudin et al., 2020), and advanced technological tools (Walter & Sisli, 2007). For instance, the International Public Sector Asset Management Manual (IPSAM) used in the UK emphasizes strategic alignment and long-term planning (Thompson, 2021). In contrast, countries in the Global South, including Indonesia, face distinct challenges such as limited transparency, outdated asset inventories (Olanrewaju et al., 2024), and underutilised technological solutions (Gumelar, 2020). The lack of capacity in policy evaluation and fragmented governance systems exacerbate these challenges (Rayner & Howlett, 2009), leading to inefficient asset use and missed development opportunities (Admati, 2016).

The Global South perspective highlights the necessity of strengthening local capacity, enhancing transparency (Zalik, 2020), and adopting appropriate technological solutions to improve asset management (Erguido et al., 2019). Indonesia's decentralisation presents an opportunity to align local governance structures with international best practices (Shoesmith et al., 2020), but tailored approaches are needed to account for resource limitations and socio-economic conditions specific to the region (Herrero et al., 2014). Local governments in Indonesia face several critical challenges in managing their assets effectively (Tirayoh et al., 2021). A major issue is fragmented governance, where a lack of coordination among various agencies and departments leads to inefficiencies in asset management and utilisation (Abdeen et al., 2021).

Another significant problem is incomplete and outdated asset inventories, with many local governments lacking comprehensive and updated records, which hinders their ability to plan and optimise asset use effectively (Mulyasari, 2023). Additionally, there is often a misalignment between asset management strategies and broader regional development goals (Guarini et al., 2022), resulting in underutilised assets that fail to contribute to the region's full potential (Sriastiti et al., 2020). Weak policy evaluation processes further compound these challenges, as the absence of robust evaluation mechanisms limits oversight and accountability, making it difficult to assess the success of asset management initiatives (Head, 2010). Although technology is available to enhance these processes, many local governments experience significant gaps in technological adoption and integration, further impeding their ability to manage assets efficiently.

The issues examined in this research relate to several Sustainable Development Goals (SDGs), particularly SDG 9 (Industry, Innovation, and Infrastructure) and SDG 11 (Sustainable Cities and Communities). These goals emphasise the importance of sustainable infrastructure, inclusive urbanisation, and strong governance systems, all interconnected with effective asset management. SDG 9 focuses on building resilient infrastructure, promoting inclusive and sustainable industrialisation, and fostering innovation. Effective asset management is a fundamental component of resilient infrastructure (Izaddoost et al., 2021), ensuring that public assets such as buildings, roads, and facilities are well-maintained and utilised to their full potential (Park et al., 2016). By integrating governance, planning, and policy evaluation, this study identifies ways to enhance the management of these assets, which will improve infrastructure quality and sustainability in local governments across Indonesia (Jayawarsa et al., 2021). This approach aligns with the goal of promoting innovation in infrastructure management and supports adopting modern practices, such as digital technologies and data-driven decision-making.

SDG 11 aims to make cities and human settlements inclusive, safe, resilient, and sustainable. For local governments in Indonesia, effective asset management plays a critical role in achieving sustainable urban development (Azizah et al., 2024). With many municipalities facing issues like outdated inventories and underutilised assets, there is a need to improve the planning and utilisation of public resources (Premchand, 1993). Addressing these challenges can contribute to more efficient public service delivery, enhanced quality of life, and better urban management, which are key components of SDG 11 (Berisha et al., 2022). By proposing a comprehensive framework for asset management, this research supports efforts to foster sustainable cities that can effectively respond to socio-economic changes and growing demands.

This study aims to critically review existing asset management practices in Indonesian local governments, focusing on the integration of governance, planning, and policy evaluation. By examining these interconnected elements, the research proposes a new framework to guide future asset management practices, aligning them with local and international best practices. The hypothesis is that a more integrated and strategic approach will lead to improved governance outcomes, optimised asset utilisation, and enhanced regional development.

Research Methods

This study employs a qualitative research method, with a focus on a literature review as the primary approach to address the research problems. The literature review method was chosen to critically analyse existing research, policies, and practices related to asset management in Indonesian local governments. A literature review is a well-established method for synthesising and critically evaluating existing knowledge, offering insights into the current state of the field and identifying areas that require further investigation (Snyder, 2019). Through this approach, the study seeks to uncover gaps, challenges, and opportunities in the existing asset management framework, particularly focusing on governance, planning, and policy evaluation.

By utilising a qualitative literature review method, this study provides a comprehensive and critical analysis of the current body of knowledge on asset management in Indonesian local governments. Drawing on principles of systematic inquiry (Tranfield et al., 2003), the research ensures a thorough examination of the literature to address the complex issues inherent in this field. This method is particularly well-suited to the research problem as it allows for an in-depth exploration of multifaceted challenges, drawing on a wide range of sources to build a nuanced understanding of the subject. Additionally, this approach facilitates the identification of gaps in the literature, which the study seeks to address by proposing a novel framework to improve asset management practices.

Results and Discussion

The findings of this study stem from a thorough review of existing literature, enhanced by data from Indonesian government reports, policy documents, and previous research on local government asset management. This combination of sources provides a solid foundation for comprehending both the challenges and opportunities within asset management practices.

The findings are organised into three key dimensions: governance, planning, and policy evaluation, aligning with the study's analytical framework. This structure enables a well-rounded and systematic exploration of how these elements are interrelated and their influence on the effectiveness of asset management practices in Indonesian local governments. Categorising the results in this way provides a clearer insight into the interaction between these factors and their overall impact on management outcomes.

The decentralised governance structure of asset management in Indonesian local governments is designed to empower regional administrations, allowing them to tailor management practices to local needs. However, this decentralisation often leads to a fragmented approach, complicating coordination and standardisation across different levels of government (Ostwald et al., 2016). Variations in asset management protocols between provincial, district, and municipal governments create inconsistencies in tracking, maintaining, and utilising assets (Amaechi et al., 2022). In 2023, the Ministry of Home Affairs reported that 45% of local governments encounter significant obstacles in synchronising asset management efforts, resulting in operational inefficiencies and widespread mismanagement of public assets (Mubarok et al., 2023).

The fragmentation of asset management responsibilities means that local governments may develop policies misaligned with national standards or with each other. This misalignment results in conflicting priorities and approaches, further complicating effective oversight (Schoeman & Chakwizira, 2023). Discrepancies in asset valuation methods and maintenance schedules across regions lead to unequal conditions and management practices, ultimately affecting service delivery and resource allocation. Additionally, the decentralised system contributes to a lack of comprehensive asset information, as different local governments may employ varying systems for tracking assets (Kaganova & Amoils, 2020). This hampers the ability to compile a unified and accurate inventory, leading to inefficiencies such as redundant purchases, misplaced resources, and difficulties in assessing the true value of government-owned properties (Fachrudin et al., 2020).

Moreover, the decentralised approach restricts the development and implementation of best practices in asset management (Shah et al., 2023). Without a central coordinating body to standardise practices, innovative strategies from one region often go unshared and unadopted by others, limiting overall improvement and innovation. These challenges highlight the urgent need for stronger central oversight and standardised procedures to bridge the gaps between government levels. By establishing cohesive asset management frameworks and enhancing coordination, Indonesian local governments can reduce inefficiencies, improve transparency, and ensure effective management of public assets (Tirayoh et al., 2021). This integrated approach could lead to enhanced asset utilisation and contribute to more accountable local governance.

A critical issue in asset management is the lack of transparency and accountability. The Indonesian Corruption Eradication Commission reported in 2022 that irregularities were present in 28% of audited local governments, including inconsistencies in asset records and misuse of public assets. These lapses undermine the integrity of asset management practices and erode public trust (Dharma et al., 2023). The absence of clear records complicates auditing and accountability, exacerbated by insufficient enforcement of regulations and a lack of standardised procedures across local governments (Ali et al., 2007).

Considering these challenges, there is increasing recognition of the need for robust governance frameworks that incorporate monitoring and evaluation mechanisms (Neves et al., 2020). Stronger oversight and accountability measures are essential to address irregularities and foster transparency. Implementing centralised asset management systems, conducting regular audits, and enforcing regulations could mitigate these issues (Watson & Emery, 2004). The findings from the Indonesian Corruption Eradication Commission underscore the importance of an integrated and strategic approach to asset management. By aligning governance structures with transparent practices (Hanis et al., 2011), local governments can enhance asset tracking, resource allocation, and overall governance outcomes (Wataya & Shaw, 2019).

Furthermore, adopting strategic frameworks that emphasise transparency and accountability can lead to the effective utilisation of public assets. Improved practices not only reduce irregularities but also promote equitable resource distribution and better service delivery. Therefore, addressing current gaps in transparency and accountability is crucial for advancing asset management practices and achieving sustainable development goals in local governments.

Asset Management Planning in Local Government Authorities

Strategic planning is a cornerstone of effective asset management; however, its development remains significantly inadequate in many Indonesian local governments. According to the Ministry of National Development Planning, only 32% of local governments have established comprehensive asset management plans that align with broader development objectives. This insufficient level of strategic planning undermines local governments' ability to manage assets efficiently and integrate them into long-term development strategies (Kaganova & Telgarsky, 2018). The challenge is further compounded by a lack of accurate and up-to-date asset inventories.

Figure 1 illustrates the conceptual framework for effective asset management, highlighting the critical components necessary for improvement. The Supreme Audit Agency reported in 2021 that nearly 40% of local governments lack a complete and current inventory of their assets. This inventory gap creates significant hurdles for effective planning and resource allocation. Without a thorough understanding of available assets, their condition, and their value, local governments struggle to make informed decisions regarding asset maintenance, upgrades, or disposal (Giglio et al., 2018). Incomplete data may lead to suboptimal decisions about asset investments and prioritisation, resulting in redundant investments or neglect of critical maintenance needs, ultimately leading to underutilised or deteriorating assets (Irawan et al., 2018).

Furthermore, the absence of standardised inventory practices across regions exacerbates inconsistencies in asset management and planning. To address these issues, local governments must invest in developing and maintaining accurate asset inventories and integrating these inventories into their strategic planning processes. Implementing standardised procedures for asset tracking and reporting can enhance the accuracy of asset data and support more effective planning (Jiang et al., 2022). Strengthening coordination between asset management and broader development planning will help ensure that asset management activities align with local development goals, contributing to overall efficiency and effectiveness. Efforts to improve strategic planning in asset management should also involve capacity building for local officials, including training in best practices for asset management and planning (Atikoh et al., 2017). By enhancing both the infrastructure for asset management and the skills of those involved, local governments can better address existing gaps and improve their ability to manage assets in a way that supports sustainable development and efficient public service delivery.

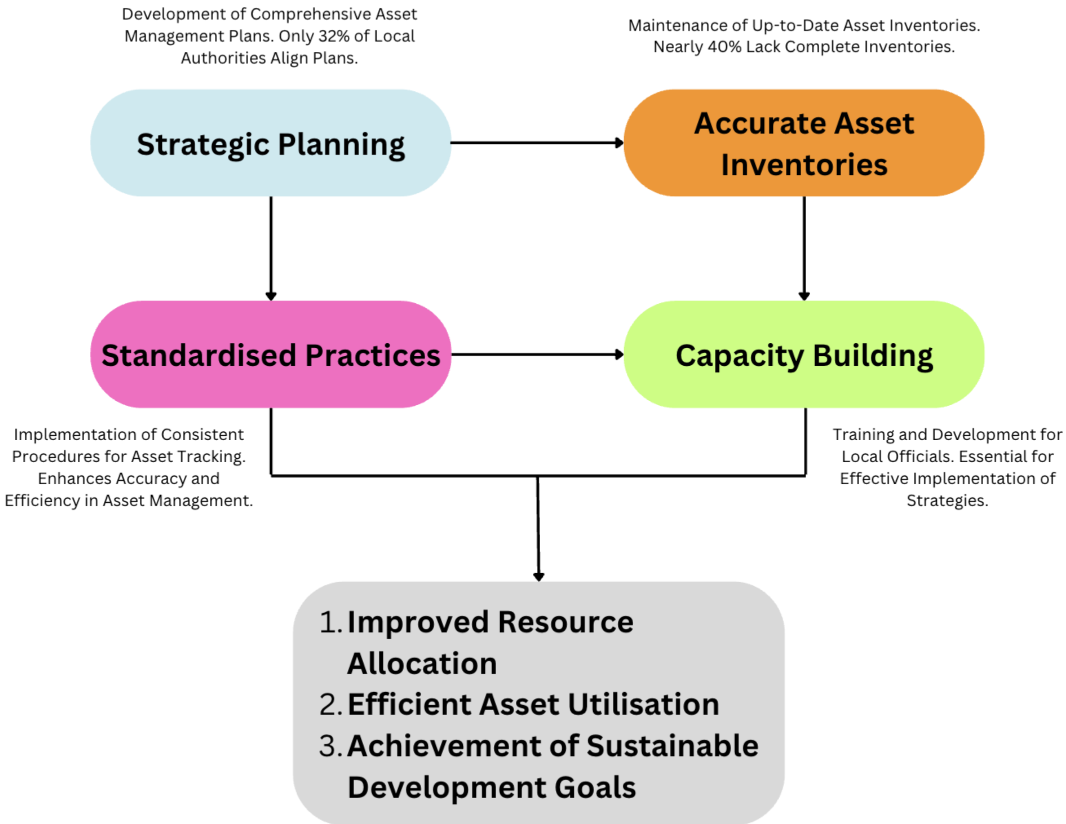

Figure 1. Conceptual Model for Asset Management Efficiency in Local Authorities
Source: Processed by Authors (2024)

To address these issues and align with the Sustainable Development Goals (SDGs), particularly SDG 9 (Industry, Innovation, and Infrastructure) and SDG 11 (Sustainable Cities and Communities), it is crucial for local governments to adopt more integrated and systematic asset management practices. SDG 9 emphasises building resilient infrastructure, promoting inclusive and sustainable industrialisation, and fostering innovation. By standardising inventory practices and integrating asset data into strategic planning processes, local governments can optimise infrastructure utilisation and ensure that investments are directed towards projects that support economic growth and community resilience. Enhanced asset management will enable more efficient allocation of resources and maintenance scheduling, thereby contributing to the longevity and quality of public infrastructure.

Similarly, SDG 11 aims to make cities and human settlements inclusive, safe, resilient, and sustainable. Effective asset management plays a key role in achieving this by ensuring that public assets—such as roads, public facilities, and utilities—are adequately maintained and utilised to meet the needs of urban populations. The integration of asset management into broader development planning supports the creation of sustainable urban environments by facilitating coordinated investments in infrastructure and public services that align with local development goals. This alignment not only helps to reduce waste and inefficiencies but also promotes the equitable distribution of resources, which is essential for creating livable and resilient cities.

Incorporating capacity-building initiatives for local officials, as recommended in this research, will further reinforce the link between asset management practices and sustainable development outcomes. Training programmes in best practices for asset management and strategic planning can empower local governments to prioritise projects that advance SDG 9 and SDG 11, while also adapting to the specific socio-economic contexts of their regions. By addressing these gaps, local governments can significantly improve their capacity to manage assets in a manner that supports sustainable development and enhances the quality of life for their communities.

The inadequate integration of asset management into broader planning processes is a significant barrier to achieving sustainable development goals at the local level. Without clear planning, local governments struggle to prioritise investments, manage maintenance schedules, and allocate resources efficiently. This finding underscores the need for a more systematic approach to planning, as proposed in this research, which would better align asset management with local governance and development objectives.

Policy Assessment and Implementation in Asset Management

Policy evaluation is essential for ensuring that asset management practices are effective and aligned with local needs. However, in many Indonesian local governments, the processes for evaluating asset management policies are hindered by insufficient capacity and limited resources. Data from the Regional Autonomy Watch in 2023 reveals that only 25% of local governments engage in regular evaluations of their asset management policies. This limited engagement is concerning, as periodic evaluations are necessary to assess the effectiveness of current policies and identify areas for improvement (Hidayat & Nugroho, 2022). Furthermore, among those local governments that do conduct evaluations, fewer than half leverage the findings to make informed revisions or improvements to their policies. This lack of actionable follow-up diminishes the potential for policy enhancement and fails to address the evolving needs and challenges faced by local governments (Buntaine et al., 2021).

The inadequacy of effective policy evaluation is often exacerbated by resource constraints and limited technical expertise. Many local governments struggle with inadequate funding for comprehensive evaluation activities and face challenges in employing skilled personnel capable of conducting detailed assessments (Masuda et al., 2022). As a result, evaluations may be superficial and fail to capture the full scope of issues or provide actionable insights for policy improvement. Additionally, the absence of a standardised framework for policy evaluation further complicates the process. Without a uniform approach, local governments may apply inconsistent methods, making it difficult to compare results across regions or effectively implement best practices. This variability can lead to missed opportunities for improving asset management and addressing inefficiencies (Haas & Hudson, 2015).

Table 1. Challenges and Solutions in Policy Evaluation and Implementation
Source: Processed by Authors (2024)

Challenges	Proposed Solutions	Future Agenda
Insufficient capacity for policy evaluation	Invest in training and resources	Establish national standards for evaluation
Limited engagement in evaluations	Encourage regular evaluations through incentives	Create partnerships for collaborative evaluations
Lack of standardised evaluation frameworks	Develop uniform evaluation protocols	Promote best practices across regions
Disconnect between policy and implementation	Improve coordination among departments	Foster integrated planning and oversight

Table 1 presents the key challenges faced in policy evaluation and implementation, alongside proposed solutions and future agendas to address these issues. The first challenge, insufficient capacity for policy evaluation, can be addressed by investing in training and resources, as well as establishing national standards for evaluation. Limited engagement in evaluations can be improved through incentives for regular evaluations and by creating partnerships for collaborative assessments. To tackle the lack of standardised evaluation frameworks, it is essential to develop uniform evaluation protocols and promote best practices across regions. Lastly, resolving the disconnect between policy and implementation requires enhanced coordination among departments, accompanied by integrated planning and oversight.

To overcome these challenges, there is a pressing need to strengthen the capacity of local governments in policy evaluation. This includes investing in training programmes to build skills in evaluation techniques, providing resources for comprehensive evaluations, and establishing standardised frameworks for assessing asset management policies. Enhancing these aspects can ensure that evaluations are more systematic, insightful, and actionable, ultimately leading to more effective asset management practices and better alignment with local development needs (Rahadi et al., 2024). By fostering a culture of continuous evaluation and improvement, local governments can better adapt their asset management strategies to address emerging challenges and optimise the use of public resources. This proactive approach will not only enhance the efficiency of asset management but also contribute to more responsive and accountable governance.

The disconnect between policy formulation and implementation is notably reflected in the widespread underutilisation of government assets. Research conducted by the Institute for Development of Economics and Finance (INDEF) in 2022 highlighted that approximately 35% of government-owned land in urban areas remains underutilised. Despite being designated for public use in official development plans, these lands often sit idle due to ineffective implementation and oversight. This significant underutilisation represents a missed opportunity for advancing local economic development and underscores broader systemic issues within asset management practices.

Root causes of underutilisation include inadequate strategic planning, insufficient resource allocation for implementation, and a lack of robust monitoring mechanisms. For instance, land earmarked for public projects or commercial development often remains vacant due to delays in project execution, bureaucratic inefficiencies, or gaps in coordination between local government departments responsible for asset management and development planning (Gupta & Tiwari, 2022). Moreover, the underutilisation of these assets reflects broader challenges in the effectiveness of policy evaluation. When asset management policies are not rigorously assessed and adjusted based on performance and changing local needs, opportunities for maximising asset value and achieving development goals are lost.

These findings align with the research hypothesis that current asset management practices in Indonesian local governments are insufficiently integrated across governance, planning, and policy evaluation. The fragmented approach contributes to inefficiencies, perpetuates asset underutilisation, and complicates the achievement of local development objectives. To address these issues, more cohesive and integrated asset management strategies are needed to bridge the gaps between policy intentions and practical execution. Improving the alignment between policy formulation, strategic planning, and implementation—and enhancing the capacity for effective evaluation and oversight—will enable local governments to better utilise their assets. This integrated approach will optimise the use of government-owned land and resources, supporting more robust local economic development and more effective achievement of development goals.

Addressing the root causes of asset underutilisation is also crucial for achieving Sustainable Development Goals (SDGs) 9 and 11, as outlined in this research. SDG 9 emphasises building resilient infrastructure and fostering innovation, while SDG 11 aims to make cities inclusive, safe, resilient, and sustainable. The underutilisation of public assets, such as government-owned land and infrastructure, undermines efforts to achieve these goals by limiting the potential for economic development, delaying essential public services, and reducing the quality of urban environments.

Inadequate strategic planning and gaps in policy evaluation prevent local governments from fully leveraging their assets to support sustainable infrastructure development (SDG 9). When land designated for public or commercial use remains unused, the opportunity for economic growth and community development is lost. Delays in execution and bureaucratic inefficiencies often result in stalled projects, missed investments, and a failure to develop critical infrastructure that could benefit the local economy. Addressing these planning and coordination issues through integrated asset management strategies can unlock the potential for resilient and innovative infrastructure projects that support industrialisation and economic growth.

Furthermore, optimising asset utilisation is key to achieving SDG 11, which focuses on sustainable cities and communities. The ineffective use of public land and infrastructure not only wastes valuable resources but also detracts from efforts to create sustainable urban environments. For example, unused land and abandoned facilities can become liabilities, leading to increased maintenance costs, safety concerns, or lost opportunities for community-enhancing projects. By implementing cohesive strategies that align asset management with urban development planning, local governments can promote more efficient land use, support housing and commercial development, and enhance public service delivery.

Improving the alignment between policy formulation, strategic planning, and implementation is therefore essential for maximising the value of public assets. It will enable local governments to better meet the demands of urban populations, facilitate coordinated investments, and foster more sustainable economic development. This integrated approach will not only help achieve the objectives of SDG 9 and SDG 11 but also contribute to the broader aim of sustainable local development by ensuring that public assets are used effectively to meet the evolving needs of communities.

Conclusion

The study highlights the critical need for an integrated approach to asset management within Indonesian local governments, emphasising the interconnections between governance, planning, and policy evaluation. The findings indicate that fragmented and siloed asset management practices significantly undermine the effective utilisation of public assets, leading to inefficiencies that hinder local development. Governance challenges—such as a lack of transparency, accountability, and strategic planning—are central to these issues. Understanding these dynamics is essential for policymakers and local government officials. The proposed integrated framework not only offers a pathway for improving asset management practices but also aligns with key Sustainable Development Goals (SDGs), particularly SDG 9 (Industry, Innovation, and Infrastructure) and SDG 11 (Sustainable Cities and Communities).

By addressing the critical interdependencies among governance, planning, and policy evaluation, the framework supports sustainable infrastructure development and fosters the creation of inclusive and resilient urban environments. These alignments ensure that local governments not only optimise asset utilisation but also promote sustainable regional development and community well-being in line with the broader global agenda. This framework represents a novel contribution to the field by addressing aspects that have been overlooked in previous studies. By fostering collaboration between governance structures and enhancing planning processes, local governments can better address the evolving needs of their communities.

Looking ahead, it is crucial for future research to explore the practical implementation of this integrated framework in diverse local contexts across Indonesia. Such studies could involve piloting the framework in selected regions, evaluating its impact on asset management outcomes, and refining the approach based on empirical evidence. This ongoing research will be vital in developing asset management practices that are responsive to the unique challenges faced by local governments and that ultimately contribute to a more sustainable and effective governance framework, advancing Indonesia's progress towards achieving the SDGs.

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