

# Closing the Asset Governance Gap in the Handover of Housing Infrastructure, Facilities and Utilities: An Evidence-Based Regulatory Model from Parigi Moutong Regency, Indonesia

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Publication Date: 2026/08/05

**Abstract:** Developers' obligation to hand over housing infrastructure, facilities, and utilities—locally termed PSU—often goes only partially fulfilled across Indonesian regencies, and Parigi Moutong Regency is no exception. A share of the PSU already built on the ground has never formally changed hands into regional ownership, which in turn blocks any lawful allocation of regional budget for its upkeep. This study traces the problem across four dimensions—the state of regulation, the rigor of technical verification, the readiness of asset governance, and regional fiscal capacity—while building a PSU handover regulatory model grounded in asset governance. Twenty-four informants drawn from six stakeholder groups (regional government agencies and housing developers) were purposively selected and rated on a 1–5 scale instrument; the resulting data were processed through composite scoring and gap analysis, tested for association with Spearman Rank correlation, tested for perceptual differences with Mann-Whitney U and Kruskal-Wallis, and finally validated through a Focus Group Discussion. Regulation scored low (2.31; 53.8% gap), technical verification moderate (3.23; 35.4% gap), while asset governance posted the widest gap of the four dimensions (2.17; 56.7% gap), and fiscal capacity landed in the moderate range (2.67; 46.7% gap). Regulation, technical verification, and fiscal capacity moved together in a statistically significant pattern ( $\rho = 0.593$ – $0.699$ ;  $p < 0.01$ ), whereas asset governance stood apart from all three—a finding that reshaped the policy direction of this study. Rather than betting on a single regulatory fix, the study produced four interlocking instruments: a draft regional regulation, a technical verification standard operating procedure, a PSU asset governance guideline, and a circular letter functioning as a transitional bridge ahead of the regional regulation's enactment. The validation forum rated the package fit for implementation (score 4.12), reinforcing the case for treating asset governance as a policy track of its own rather than an afterthought bolted onto handover regulation.

**Keywords:** PSU Handover; Asset Governance; Regulatory Gap; Technical Verification; Regional Assets.

**How to Cite:** Mohamad Bachrudin Yusuf; Ruslan Muh Yunus; Adnan Fadjar (2026) Closing the Asset Governance Gap in the Handover of Housing Infrastructure, Facilities and Utilities: An Evidence-Based Regulatory Model from Parigi Moutong Regency, Indonesia. *International Journal of Innovative Science and Research Technology*, 11(7), 2998-3001. <https://doi.org/10.38124/ijisrt/26jul1560>

## I. INTRODUCTION

Every new housing subdivision arrives with a network of roads, drainage channels, green space, and other utilities that, once the developer's maintenance period lapses, are meant to pass into local government hands. Indonesian law spells this obligation out plainly, through Law Number 1 of 2011 concerning Housing and Settlement Areas and Government Regulation Number 14 of 2016 as amended by Government Regulation Number 12 of 2021. Yet an obligation written into

statute does not automatically translate into practice on the ground.

In Parigi Moutong Regency, the pattern that emerges is a familiar one: the infrastructure, facilities, and utilities—hereafter PSU—stand physically complete and residents have long since moved in, yet ownership remains unresolved. Some PSU has never been handed over by the developer at all; other portions have technically changed hands but were never recorded as regional assets. The result is a gap in accountability: no line item in the regional budget can lawfully fund its upkeep,

and the physical condition of the PSU quietly deteriorates while responsibility for it remains unclear.

The national regulatory landscape shifted mid-study. Minister of Home Affairs Regulation Number 15 of 2026 concerning the Handover of Public Housing Infrastructure, Facilities, and Utilities to Regency/City Governments formally superseded Minister of Home Affairs Regulation Number 9 of 2009, introducing considerably more detailed provisions on verification stages, the criteria for abandoned PSU, and administrative handover formats. Indonesian National Standard (SNI) 1733:2026 concerning Quality Requirements for Urban Housing and Settlements likewise refreshed the technical benchmarks long relied upon. Together, these two developments opened a window for local governments, Parigi Moutong Regency included, to draft genuinely up-to-date derivative regulations.

Existing scholarship on PSU handover has tended to stop at diagnosing procedural friction—convoluted paperwork, weak coordination among regional agencies, or developers' limited legal awareness. Rarely examined is what happens AFTER the handover: how assets that have already changed hands are subsequently recorded, monitored, and kept in working order. That is precisely the gap this study sets out to address.

Building on this gap, the study pursues three aims: (1) to measure how far the existing condition of PSU handover in Parigi Moutong Regency falls short of the ideal across four dimensions—regulation, technical verification, asset governance, and regional fiscal capacity; (2) to trace the relationships among these dimensions and the differences in outlook across stakeholder groups; and (3) to formulate a PSU handover regulatory model grounded in asset governance and tested participatorily. The novelty of this study lies in its refusal to settle for a single regulatory product: once the data revealed that asset governance moves independently of the other three dimensions, the study responded by assembling four complementary instruments—a draft regional regulation, a technical verification standard operating procedure, an asset governance guideline, and a circular letter serving as a transitional bridge—a combination not found intact in prior work on the subject.

## II. RESEARCH METHODS

The study rests on a descriptive quantitative design: field conditions were measured systematically first, then interpreted qualitatively through a Focus Group Discussion (FGD) to test and refine the resulting regulatory model. The research was carried out in Parigi Moutong Regency, Central Sulawesi Province.

Twenty-four informants were purposively drawn from six groups directly involved in the PSU handover chain: the Regional Housing and Settlement Agency, the Regional Public Works, Spatial Planning, and Housing Agency, the Regional Investment and One-Stop Integrated Services Agency, the Legal Bureau of the Regional Secretariat, the Regional Financial and Asset Management Agency, and housing developers. Selection emphasized informants' direct involvement, authority, and working knowledge of specific stages in the PSU handover process, so that even with a modest headcount the depth of insight gathered remained intact.

Four variables anchored the measurement framework: PSU handover regulation (X1), PSU technical verification (X2), PSU asset governance (X3), and regional fiscal capacity (X4), each broken down into a set of operational indicators. Primary data were collected through a 1–5 Likert-scale questionnaire completed directly by informants, accompanied by interviews to ensure each item was understood in its proper field context.

Data analysis proceeded through four sequential stages. The first computed a composite score as the mean of all indicators per variable, then converted it into a gap percentage relative to the ideal condition using the formula:  $\text{Gap (\%)} = [(\text{Ideal Score} - \text{Mean Score}) \div \text{Ideal Score}] \times 100\%$ . The second tested relationships among variables with Spearman Rank correlation. The third tested perceptual differences—Mann-Whitney U to compare the two broad camps (local government versus developers), Kruskal-Wallis to compare all six informant groups at once. Nonparametric tests were chosen given the ordinal nature of the data and the modest sample size. The fourth stage distilled the findings into a regulatory model, whose acceptance was then re-tested through an FGD using the same rating scale.

### III. RESULTS AND DISCUSSION

#### ➤ *How Far Current Conditions Sit from the Ideal*

Table 1 summarizes where each of the four variables stands relative to the ideal condition.

Table 1. Position of the Four Variables Relative to the Ideal Condition

| Variable                        | Mean Score | Gap (%) | Category |
|---------------------------------|------------|---------|----------|
| PSU Handover Regulation (X1)    | 2.31       | 53.8    | Low      |
| PSU Technical Verification (X2) | 3.23       | 35.4    | Moderate |
| PSU Asset Governance (X3)       | 2.17       | 56.7    | Low      |
| Regional Fiscal Capacity (X4)   | 2.67       | 46.7    | Moderate |

What stands out in this table is not merely that all four variables fall short of the ideal—that much was expected—but their ORDERING. Asset governance, not regulation, occupies the furthest-behind position (56.7%), edging out regulation itself (53.8%). Put differently, even if a new regional regulation were enacted tomorrow, the PSU handover problem in Parigi Moutong would not necessarily be solved, because the deeper root of the issue lies in how already transferred assets are managed day to day.

#### ➤ *How the Variables Relate to One Another*

The Spearman Rank correlation test shows that regulation, technical verification, and regional fiscal capacity move together in a statistically significant way ( $p = 0.593\text{--}0.699$ ;  $p < 0.01$ )—strengthening any one of the three carries a reasonable chance of lifting the others, meaning all three could plausibly be addressed through a single integrated policy package. Asset governance, by contrast, runs on its own track: no significant relationship surfaced between it and the remaining three variables. The implication reaches beyond a

statistical footnote—it is the direct reason this study ultimately proposed an asset governance guideline as a stand-alone instrument, rather than a clause tucked into the regional regulation.

#### ➤ *Where Stakeholder Views Diverge*

The Mann-Whitney U test confirms a statistically significant perceptual gap between local government stakeholders and housing developers on several of the variables, while the Kruskal-Wallis test captures variation in outlook across all six informant groups. This divergence is not something to be flattened by fiat; rather, it signals that drafting regulations and technical guidelines needs to actively involve every party from the outset, so that the resulting product does not read as foreign to any one group.

#### ➤ *Four Instruments, One Regulatory Model*

Building on the gap pattern and the relationships traced above, the study assembled a regulatory model comprising four interlocking instruments, summarized in Table 2.

Table 2. Four Instruments of the Regulatory Model and the Variables Addressed

| Instrument                     | Main Function                                                                                                                     | Variable Addressed                           |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| Draft Regional Regulation      | Regional legal basis for the handover, verification, and abandoned-PSU determination stages                                       | Regulation (X1)                              |
| PSU Technical Verification SOP | 14-step operational procedure from application to handover to the managing regional agency                                        | Technical Verification (X2)                  |
| PSU Asset Governance Guideline | Asset registration, inter-agency data integration, maintenance budget linkage, and continuous oversight                           | Asset Governance (X3), Fiscal Capacity (X4)  |
| Transitional Circular Letter   | An administrative instrument of the Head of Agency that can take effect immediately, ahead of the Regional Regulation's enactment | Regulation (X1), Technical Verification (X2) |

The fourth instrument—the circular letter—deserves particular note, as it was not part of the study's original design. It emerged from a practical concern: legislative deliberation of the regional regulation at the regional legislature takes time, while PSU handover problems persist daily in the meantime. As an administrative product of the Head of Agency, the circular letter can be enacted immediately to bring order to field practice without waiting for the legislative process to conclude, while also serving as the operational bridge for the technical verification SOP and asset governance guideline already drafted.

The asset governance guideline was purpose-built to answer the finding that asset governance represents both the widest gap and a variable standing independent of the rest, through five stages: initial asset registration into the Regional Asset Register, cross-agency data integration, linkage with maintenance budget planning, periodic data updating, and continuous reporting and oversight.

#### ➤ *Testing Whether the Model Is Accepted*

The four instruments above were tested for acceptance through a Focus Group Discussion (FGD) with representatives of regional agencies and housing developers. The resulting mean score, 4.12 on a 1–5 scale, places the model in the category fit for regional implementation needs. Input gathered during the forum was also used to refine the wording of the articles, procedures, and guideline before finalization—a process that, beyond the statistic itself, helped build shared ownership of the resulting model.

### IV. CONCLUSION

PSU handover in Parigi Moutong Regency turns out to be not merely a matter of absent regulation but also—arguably chiefly—a matter of unsettled asset governance, as evidenced by the 56.7% gap recorded on this dimension, the widest among the four studied and shown to bear no significant relationship with the other three. This finding reshaped how the study responded to the problem: not with a single regulatory fix, but with four interlocking instruments—a draft regional regulation, a technical verification standard operating procedure, an asset governance guideline, and a transitional circular letter—validated as fit for implementation through a participatory forum. The model is intended as a reference for Parigi Moutong Regency and other regions with comparable characteristics, while remaining aligned with Minister of Home Affairs Regulation Number 15 of 2026 and SNI 1733:2026. Future research should test the model's implementation effectiveness once formally enacted, and extend the geographic scope to test whether these findings hold in different regional contexts.

### ACKNOWLEDGMENTS

The authors thank the Master of Civil Engineering Study Program, Postgraduate Program, Tadulako University, and all research informants from the regional agencies of Parigi Moutong Regency and housing developers who contributed to this study.

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