

The Divergence of Regulatory Logic in Field Practices of Land Boundary Return Policy Implementation

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Abstract. *The land boundary reconciliation policy was originally designed to guarantee legal certainty over land rights, but divergences between regulatory texts and the reality of field practices continue to occur. This study aims to identify the determinants and dissect the root causes of these divergences through a sequential explanatory mixed methods approach. Quantitative analysis involved 100 respondents from Land Offices in Java, Kalimantan, and Sumatra, tested using multiple linear regression based on the theory of George C. Edward III. Meanwhile, qualitative data were collected through in-depth interviews in Sleman Regency and Yogyakarta City to explore two contrasting field practices. The results of the quantitative analysis demonstrate that Communication, Resources, and Bureaucratic Structure have a significant influence on policy implementation, with the availability of Measurement Drawings (Resource Sector) being the most dominant factor. Interestingly, Bureaucratic Structure shows a negative influence; clarity of Standard Operating Procedures (SOPs) is often used as a legitimizing instrument in the field to divert services as a form of policy drift. This quantitative model explains 20% of the variation in implementation, indicating the significant role of pragmatic field factors such as legal risk, physical land dynamics, and low public awareness. This study concludes that the root of the divergence is not due to unclear regulations, but rather to a failure to reconcile the "logic of implementation," representing formal regulatory directives, and the "logic of discovery," born of technical experience in the field. The dominance of the logic of discovery in Sleman resulted in a complete shift to boundary delimitation services, while the balance of the two logics in Yogyakarta allowed for the maintenance of boundary reestablishment practices in the field.*

Keywords: Divergence, Land; Limit; Policy; Return.

1. Introduction

Efforts to restore the upper boundaries of a land plot are a crucial instrument in agrarian policy to ensure legal protection and certainty of land ownership rights in the country (Mandoyo, 2020; Cahyono, 2023). Through this policy, the government seeks to align the

geographic location, area size, and concrete boundaries of the land with information collected in the database of the Ministry of Agrarian Affairs and Spatial Planning/National Land Agency (ATR/BPN). From a regulatory perspective, this type of service is categorized as part of the measurement procedure, the mechanism of which is based on Government Regulation Number 24 of 1997 concerning Land Registration, Regulation of the Minister of State for Agrarian Affairs/Head of the National Land Agency Number 3 of 1997, Circular Letter of the Directorate General of Agrarian Infrastructure Number 024/S-300.UK.01.02/I/2020, and Technical Instructions for Risk-Based Measurement and Mapping in 2021. However, real conditions in the practical realm often show discrepancies or gaps between written regulations and the implementation of these policies in the field.

From a technical perspective, operationalizing boundary reconciliation requires definitive stages and regulations. The 2020 Circular Letter from the Directorate General of Agrarian Infrastructure outlines four mandatory, interconnected criteria: completeness of the Measurement Drawing documents, availability of control points or tie points on site, synchronization between Measurement Drawing data records and actual conditions in the field, and the preparation of a Minutes agreed upon by the applicant and adjacent landowners. If even one of these criteria is not met, the application will not be permitted to proceed as a boundary reconciliation procedure but must instead be diverted to a boundary delimitation or re-measurement mechanism. Although these four parameters were formulated to ensure material validity and legal guarantees, this aspect often presents a crucial gap that gives rise to deviations due to the uneven availability of databases and ideal portraits at each Land Office.

A pre-survey conducted at 13 Land Offices in 2025 revealed that 12 offices had stopped accepting applications related to boundary reclamation. Instead of processing them, applicants were redirected to utilize boundary delimitation services or remeasurements. This real-world phenomenon confirms the gap between *das sollen* and *das sein*, namely the misalignment between the ideal provisions outlined by regulations and the actual facts on the ground (Noor, 2017). This condition is emphasized by national statistical data from the Ministry of ATR/BPN, which recorded a drastic decline in the volume of boundary reclamation applications from 9,029 files in 2021 to 3,783 files in 2025, accompanied by a reduction in the number of offices serving these applications from 348 to 232 offices during the same period.

To analyze the factors that stimulate this deviation, this study adopts the theoretical framework of policy implementation formulated by George C. Edward III. In his theoretical model, four crucial elements are identified that dictate the success of a policy's execution: Communication, Resources, Disposition, and Bureaucratic Structure. However, this research limits its focus by testing only three main variables: Communication, Resources, and Bureaucratic Structure. The Disposition element was deliberately excluded from the test because regulations regarding boundary reversal are categorized as a technical-administrative domain with minimal ambiguity and conflict, thus falling within the realm of

administrative implementation, where the personal preferences of implementing officials do not play a determining role (Matland, 1995). Furthermore, bureaucratic culture in Indonesia places loyalty to superiors' instructions and adherence to formal regulations as far more dominant determinants of work behavior than individual personal tendencies (Dwiyanto et al., 2017). Even though the dimensions of the attitudes and behavioral orientations of these officers were not measured quantitatively, this perspective was still explored through a qualitative approach in order to deepen and enrich the resulting analytical treasure.

A number of previous literatures have consistently mapped the various elements that dictate the successful execution of policies in the agrarian sector. Through a quantitative approach, communication variables and bureaucratic structures have been confirmed to have a significant impact on the implementation of the ATR/BPN Strategic Plan (Yuntarto, 2017) as well as on maximizing the policy for Settlement of Land Ownership in Forest Areas (Manik, 2022). Furthermore, a series of qualitative studies have also emphasized that limited resource availability is often a major obstacle, both in the collection of Land and Building Tax (Candradewini, 2018) and the implementation of Complete Systematic Land Registration (Darmotannyono et al., 2022; Syamsi et al., 2024). Specifically in the scope of land boundary restoration, classic obstacles are found that continue to recur such as damaged Measurement Drawing documents, scarcity of technical apparatus, transformation of topographic conditions, and the risk of disputes (Mandoyo, 2020; Arifah et al., 2022; Cahyono, 2023). In fact, an investigation by Setiabudi et al. (2025) revealed operational disparities in two neighboring work units, where the Yogyakarta City Land Office was observed to consistently process boundary restoration applications, while the Sleman Regency Land Office was found to have completely migrated to a boundary arrangement system. The accumulation of these premises validates the urgency that aspects of communication, adequacy of resources, and bureaucratic organization are crucial determinants that require quantitative analysis, especially for the object of boundary restoration policy which has never been explored through a combination of mixed methods.

Although the explanatory power of various previous studies has established a comprehensive theoretical foundation, a research gap remains that has not been empirically explored. Previous quantitative studies have not specifically measured the causal significance of communication variables, resource capacity, and bureaucratic structure on the implementation of land boundary restitution policies. Meanwhile, existing qualitative research tends to be limited to descriptively identifying obstacles without calculating the degree of influence of these factors on the emergence of implementation gaps. To date, there is no literature that integrates mixed methods to test the significance of determinants and confirm the root causes of disparities through comparative studies at two work locations with differentiated operational practices. The scientific novelty of this research rests on three main pillars. First, on the thematic aspect, this study pioneers empirical testing of the influence of variables in the Edward III model on boundary

restitution policies. Second, on the methodological dimension, the application of a combined approach combined with comparative analysis across land offices facilitates deeper analysis in uncovering the primary causes of these gaps. Third, at the theoretical level, this study integrates the concept of policy drift, which is an actual shift in the realm of policy practice that occurs gradually without formal amendments to the regulatory framework (Hacker, 2005), and the policy logic framework according to (Martin et al., 2024) in conceptualizing the dynamics of land law implementation. To transform the understanding of the persistence of this gap, (Martin et al., 2024) offers an organizational learning perspective that combines two contradictory but complementary logics: the logic of deployment and the logic of policy implementation.

The first logic indicates a top-down approach oriented toward realizing regulations in the practical realm, while the logic of discovery represents a bottom-up approach articulated based on the crystallization of empirical experience in the field. The inability of institutions to construct an equilibrium between these two logics triggers what is known as a failure of mutual adaptation, an anomaly that is the main substance of the emergence of the implementation gap. However, this conceptual framework remains very little tested in the discourse on land law policy in Indonesia. Therefore, this study is projected to eliminate this academic gap through the application of mixed methods that combine statistical testing of implementation determinants with qualitative exploration of sociological dynamics in the field. The objective of this research is to identify and empirically measure the influence of communication variables, resource capacity, and bureaucratic structure on the fulfillment of boundary return policies, as well as to contribute a comprehensive analysis of the primary causes of the gap between normative (*das sollen*) and empirical (*das sein*) aspects through the lens of policy drift and failure of mutual adaptation at the Land Office in Indonesia.

2. Research Methods

This study applies a mixed-methods approach with a sequential explanatory design, where the quantitative phase is carried out first to test the hypothesis, then deepened qualitatively to confirm the root causes of the policy gap (Bowen et al., 2017). In the quantitative phase, data were collected through a structured questionnaire with a Likert scale of 1–5 distributed to 120 respondents from the Survey and Mapping Section at Land Offices Types A, B, and C (40 respondents each) drawn using a cluster random sampling technique based on regional representation of the islands of Sumatra, Java, and Kalimantan. The measurement instrument includes independent variables of the Edward III model, namely Communication X1, 12 items), Resources (X2, 14 items), and Bureaucratic Structure X3, 11 items) and the dependent variable Implementation of the Boundary Return Policy (Y, 13 items) adapted from the latest ATR/BPN regulations; where the Pearson Product Moment validity test left 44 valid items and the Cronbach's Alpha reliability test stated that all instruments were reliable. Quantitative data analysis was operated through the IBM SPSS 26 program using multiple linear regression after the

model was declared to have passed the classical assumption test (Kolmogorov-Smirnov normality, multicollinearity through Tolerance and VIF values, and heteroscedasticity using the Glejser method), followed by hypothesis testing via the F test, t test, and coefficient of determination (R²) analysis. Furthermore, the statistical results were used as a substantial basis for compiling interview guidelines in the qualitative phase, which were explored purposively with 6 informants (Substance Coordinators, Measurement Officers, and Administration Officers) during March–April 2026 in two loci with contrasting practice characteristics, namely the Sleman Regency Land Office and Yogyakarta City (Setiabudi et al., 2025). This qualitative data was then analyzed using the Miles and Huberman interactive model through reduction, data presentation, and triangulation-based conclusion drawing, in order to integrate the two research phases in explaining how and why disparities in land policy implementation occur in the field.

3. Discussion and Results

3.1. Determinants Influencing the Actualization of Land Boundary Restoration Policy

An in-depth analysis of the sociodemographic profiles of the research subjects is a crucial step in contextualizing the validity of subsequent statistical testing results. The distribution of characteristics including gender composition, academic qualifications, job formation, and stratification based on office type and geographic region representation serves as an instrument to measure technical capacity while confirming the sample's representativeness of the actual employee population in the Survey and Mapping Section under the Land Office. To provide a comprehensive description, the classification of respondents' demographic indicators, including gender, formal education level, job structure, office institutional typology, and work area distribution, is mapped in detail in Table 1.

Table 1. Demographic Profile of Respondents

Classification (n=120)	Typology	Amount	Percentage (%)
Gender	Man	74	74.00
	Woman	26	26.00
Level of education	Senior High School	2	2.00
	Diploma I (DI)	65	65.00
	Diploma III (D-III)	1	1.00
	Diploma IV (D-IV)	12	12.00
	Bachelor degree)	17	17.00
	Masters (S2)	3	3.00
Position	Head of Survey and Mapping Section	2	2.00
	Substantive Coordinator	10	10.00
	File Administration Officer	4	4.00

	Mapping Officer	6	6.00
	Measuring Officer	73	73.00
	Cadastral Surveyor Assistant	5	5.00
Office Type	Type A	34	34.00
	Type B	33	33.00
	Type C	33	33.00
Region	Sumatra	33	33.00
	Kalimantan	33	33.00
	Java	34	34.00

Source: Primary data processed in 2026

The predominance of male research subjects, reaching 74.00% (Table 1), represents the nature of operational technical assignments in the survey and mapping sector, which have historically been dominated by male personnel. In terms of academic qualifications, the absolute majority of respondents are alumni of the Diploma I in Cadastral Measurement and Mapping from the National Land College, amounting to 65.00%, an indicator that policy enforcement officers in the field have compiled technical competencies that are in line with the demands of the measurement work corridor. Based on the formation mapping, as many as 73.00% of respondents carry out the mandate as Measurement Officers who play a crucial role as direct executors of factual measurement activities in the work area. This demographic structure ensures that all primary data collected comes from key actors who are in direct contact with and master the methodological intricacies of implementing land boundary restoration policies. In the institutional classification dimension, the subjects were proportionally distributed including Type A Offices at 34.00%, and Types B and C each contributing 33.00%, so that the heterogeneity of organizational managerial capacity can be accommodated in the analysis modeling. In addition, the regional zoning grouping reflects a very balanced representation between the islands of Sumatra, Java, and Kalimantan, which statistically are the three regions that contribute the most densely populated Land Office work unit base in Indonesia. The complexity of the varied demographic profiles of these respondents provides a valid empirical foundation for escalating the study to the next stage of hypothesis testing.

After all classical assumptions were fulfilled as described in the research methods section, multiple linear regression analysis produced findings summarized in Table 5.

Table 2. Results of Multiple Linear Regression Analysis

Variables	Regression Coefficient (B)	t-count	Significance	Information
Communication (X_1)	0.301	2,845	0.005	Significant
Resources (X_2)	0.384	4,812	0,000	Significant
Bureaucratic Structure (X_3)	-0.460	-4,329	0,000	Significant

Source: Primary data processed in 2026

The most dominant factor is Resources, with a regression coefficient of 0.384 and the highest t-value of 5.268 (Table 2). These results demonstrate that the availability of technical data, particularly Measurement Drawings, is a crucial element in determining the success of boundary restoration implementation. The Communication aspect also has a positive and significant impact with a coefficient of 0.301, indicating that the clarity of policy instructions plays a significant role in the implementation process. On the other hand, Bureaucratic Structure recorded a significant negative coefficient of -0.460, confirming that an increase in the score on this aspect actually decreases the success of boundary restoration implementation. This phenomenon is unusual within the Edward III theoretical framework, which generally positions bureaucratic structure as a supporting element for policy success. This indication shows that transparency in Standard Operating Procedures (SOPs) does not guarantee compliance in the field, so a more in-depth explanation will be presented in the qualitative findings section.

Based on the F-test, the variables Communication, Resources, and Bureaucratic Structure simultaneously had a significant impact on the realization of the boundary restoration policy, with an F-value of 12.031 and a significance level of 0.000. The coefficient of determination R^2 of 0.218 indicates that the combination of these three variables is able to explain 21.8% of the variation in policy implementation, while the remaining 78.2% is influenced by other aspects outside the model. Although the R^2 achievement is relatively small, a figure exceeding 0.1 or 10% is considered appropriate in social studies as long as the majority of the independent variables are proven significant (Ozili, 2022). This phenomenon also indicates that the implementation of the boundary restoration policy is complex and involves many elements outside the variables being analyzed.

This quantitative data gained deeper meaning through interviews at two Land Offices. In Sleman Regency, all applications related to boundary restitution were diverted to boundary demarcation based on instructions from superiors. Informants at the agency explained that this diversion was deliberately taken for the sake of work efficiency, to prevent a backlog of documents and reduce the risk of conflict in the work area. This unidirectional and comprehensive internal communication pattern ultimately changed the procedures previously outlined in the 2020 Circular Letter of the Directorate General of Agrarian Infrastructure and the 2021 Technical Guidelines for Risk-Based Measurement and Mapping. This situation demonstrates that policy communication, while statistically significant, can have contradictory effects: it can either strengthen implementation according to standard regulations or trigger the emergence of alternative routes due to leadership discretion.

The information delivery pattern in Yogyakarta City exhibits varying characteristics. Each application file undergoes a validation process for the availability of a measurement drawing before being determined to be processed through the boundary restoration procedure or moved to the boundary arrangement mechanism. Informants in Yogyakarta explained that reviewing old documents is a mandatory initial step, with ongoing synergy

between registration and archive management staff. This resolution pathway allows the boundary restoration program to remain viable as long as supporting documents are found, while maintaining alignment with existing regulations.

In terms of resources, the most striking disparity between the two agencies lies in the availability of measurement drawings. In Sleman Regency, measurement drawings are frequently missing, particularly for land parcels issued through strategic programs such as the National Agrarian Program (PRONA) and the Complete Systematic Land Registration (PTSL). This situation aligns with Mujiburohman's (2018) conclusion that the focus on quantity within the PTSL program often overrides the quality of measurement files and document management. Furthermore, Abdillah & Aditya (2026) found that in the implementation of PTSL, discrepancies between legal land spatial information and actual facts in the work area are still common, resulting in uncertainties regarding the availability of existing documents for land boundary reconstruction activities. Poor governance in document lending and storage exacerbates these obstacles, resulting in a lack of data reference for officers to implement boundary restoration.

In contrast, in Yogyakarta City, the resource factor related to old documents is quite comprehensive, encompassing historical documents dating back to the Dutch colonial era that contain detailed cadastral dimensions in the form of verponding, rijksblad, and even old maps. As long as the documents in question have clear validity, staff will use them as a basis for remapping land boundaries. Regarding the quantity and capability of the workforce, both agencies believe that their surveying staff are adequate, so the fundamental difference lies not in the number of employees, but in the availability of supporting technical data. The results of this study confirm the analysis by Hapsoro et al. (2024), which emphasizes that the readiness of the Measurement Drawing documents acts as a determining factor in the success of the boundary restitution agenda.

The disparity in implementation between the two agencies is evident in four fundamental factors: communication instructions from superiors, the existence of Measurement Drawing documents, the implementation of SOPs, and the basis for transferring service types. To present this comparison map in a more structured manner, a summary of the operational differences between the two agencies is presented in Table 3.

Table 3. Comparison Matrix of Practices in Two Land Offices

Aspect	Sleman Regency	Yogyakarta City
	National Land Agency Office	Land Office
Communication	Directions leadership to divert all requests for returning boundaries to the boundary arrangement mechanism.	The leadership's direction is to always check the availability of the measurement drawings first.
Resource are often	Availability Measurement Images	The availability of measurement drawings is relatively complete, including historical data from the colonial era before land registration.
Bureaucratic Structure	No found. Formal SOPs are not implemented due to internal instructions to carry out direct <u>transfers..</u> Efficiency strategies to reduce	SOP compliance is maintained through verification and coordination of each application file.
Basis of Transfer	arrears and minimize legal risks and potential disputes.	The diversion mechanism only applies when reference data for boundary reconstruction is not available.

Source: Primary data processed in 2026

The operational disparity between the two agencies does not stem from differences in the interpretation of regulations, but rather from the interaction between resource realities and the orientation of instructions from superiors, as summarized in Table 3. In Sleman Regency, the lack of Measurement Drawing documents prompted superiors to impose discretion in the form of transferring all submission files, which in the process shifted the essence of the SOP from a compliance enforcement tool to an instrument of legal justification. Conversely, in Yogyakarta City, the existence of more adequate supporting data facilitated the SOP to work as a medium for cross-unit alignment to validate each incoming file. This dynamic demonstrates that the implementation gap arises structurally when the workload in the operational area is not supported by data readiness and control over discretionary policies.

The most striking finding was the negative effect of the Bureaucratic Structure variable. Based on Edward III's theoretical model, a well-established bureaucratic structure should foster successful policy execution. However, the regression analysis revealed the opposite relationship. In-depth interviews demonstrated that the SOP for boundary restructuring, outlined in the 2021 Technical Instructions, was clearly understood by officials in both office areas. However, the SOP contained a clause that allowed for the transfer of services to boundary restructuring procedures if the cumulative requirements were not met. In Sleman Regency, this regulatory loophole was then used as the primary basis for transferring all applicant files without prior verification.

This reality demonstrates that bureaucracy can play contradictory roles when formal regulations are confronted with less than supportive operational situations in the field. The availability of transparent guidelines does not automatically guarantee compliance, but can instead become a legal justification for the transfer of services, reflecting a shift in policy direction due to limited resources and misaligned communication. This situation is what Hacker (2005) defines as policy drift, a condition in which field practices shift gradually without any accompanying revisions to the formal regulatory text. Therefore, the effectiveness of restructuring boundary restoration policies relies not only on the clarity of written instructions but also heavily on the availability of valid technical data and the clarity of operational instructions in the field.

3.2. Main Sources of Disparity between Formal Regulation and Policy Implementation

The negative impact of the Bureaucratic Structure demonstrated in the quantitative results provides an initial indication that the root of the discrepancy is not due to the absence or ambiguity of regulations. The work procedures contained in the 2020 Circular Letter of the Directorate General of Agrarian Infrastructure and the 2021 Technical Instructions for Risk-Based Measurement and Mapping actually contain very detailed procedures, complete with cumulative criteria and service diversion routes when those criteria are not met. Nevertheless, this disparity persists in a structured manner because the interaction between the points outlined in the standard regulations and the realities encountered by officials in the field has not yet reached a balanced meeting point.

This unequal synergy can be analyzed through Martin et al.'s (2024) conceptualization of the existence of two sets of logics in policy execution. Within each policy, there is a top-down logic of deployment that functions to convert regulatory points into concrete actions. Simultaneously, a bottom-up logic of discovery emerges, shaped by the authentic experiences of officers confronting field realities that often align with regulatory premises. Ideally, these two logics should operate in harmony and complement each other. The legal framework provides orientation and certainty, while facts on the ground contribute to regulatory improvement. The failure to align these two aspects is what triggers the stalled process of mutual adaptation, and that is where the essence of regulatory inequality lies, which Martin et al. (2024) term the policy-practice gap.

In Sleman Regency, this logical aspect of discovery has grown massively. Based on years of work, field officers have repeatedly encountered the reality that Measurement Drawing documents were missing, the physical layout of the work area had shifted, and the boundary reconstruction process often sparked conflict between landowners. This track record ultimately crystallized the assumption that the boundary restoration procedure carries a significant level of risk, both in the legal and technical operational realms. Gradually, the response to this obstacle transformed into an alternative operational route, shifting all document submissions to the boundary arrangement system. What initially served as a special dispensation later shifted to an internal institutional rule through instructions from superiors. Through this dynamic, the implementation logic represented

by the SOP as formal law gradually lost its effectiveness because it was not supported by an ecosystem that enabled the regulation to be implemented.

The presence of transparent SOPs apparently does not guarantee compliance by officials and fails to stem operational deviations in the field. The regulation contains loopholes for service transfer, which are loosely interpreted by officers. Provisions originally designed as a safety valve when technical prerequisites are not met have instead become a justification for transferring all applicant files without going through the initial validation phase. It is at this point that a contradiction emerges, uncovered by quantitative analysis: the clearer the guidelines, the more concise the procedures are used as a legal justification for practices that deviate from their original essence. Regulations, as representations of the logic of implementation, no longer function as a corridor for enforcing compliance but instead become a medium that reinforces the dominance of the logic of discovery. This unilateral dominance of the logic of discovery, which ignores the logic of implementation, is what triggers bottlenecks in the process of mutual adaptation. As a result, operations at lower levels increasingly deviate from formal regulatory standards, while the policy text itself is not updated based on empirical facts on the ground.

The opposite reality can be observed in the city of Yogyakarta. In this agency, the logic of implementation remains consistently maintained through the verification stage of the Measurement Drawing document before the service classification is decided. At the same time, the space for the logic of discovery is not immediately closed, but rather directed to support the formal procedure, not replace it. When a Measurement Drawing document is found missing, officers do not immediately change the type of service, but instead attempt to track down replacement data references such as old registration maps or preserved historical documents. Harmonization between these two forms of logic facilitates the implementation of the boundary restoration program without compromising compliance with applicable regulations. Referring to the theory of Martin et al. (2024), the Yogyakarta City Land Office demonstrates that the process of mutual adjustment remains potential when the logic of implementation and the logic of discovery proceed in tandem and reinforce each other.

In addition to the struggle between these two forms of logic, the interview process also identified several external factors that contribute to and widen the policy gap. The first factor relates to concerns about legal repercussions and potential land conflicts. A track record of facing resistance from neighboring landowners or even lawsuits has led officials to favor the boundary delimitation option, which is considered safer because it relies on consensus between the parties. Several field studies demonstrate that boundary reconstruction results based on Measurement Drawings are not always well-received by the public, particularly when these results lead to overlapping ownership with other parcels, leading to legal disputes (Arifah et al., 2022). Faced with this dilemma, officials are faced with the choice of upholding standard procedures, risking conflict, or pursuing alternative routes with lower risks.

The second factor is the increasingly difficult-to-avoid shift in the physical layout of work areas, particularly in areas experiencing rapid development. Road construction, building construction, and land conversion activities cause the physical landscape to become out of sync with the information on the Measurement Drawings, which may have been produced decades ago. When archival documents and real-world facts become desynchronized, remapping boundary positions becomes an extremely complex task for officers (Hapsoro et al., 2024). This objective obstacle serves as a complementary argument encouraging the acceleration of the shift in services to a boundary arrangement system, given that this mechanism is more adaptable to shifts in the area and geometry of land parcels.

The third factor relates to the demand for operational effectiveness and reduced administrative workload. The boundary reorganization procedure is perceived as having a faster completion time because it is not hampered by the often time-consuming process of tracking and validating archival documents. Furthermore, previous track records demonstrate that boundary reorganization programs often leave application documents unpaid, thus increasing the agency's backlog. By shifting to a boundary reorganization scheme, the office is able to maintain a smooth service management rhythm. This drive for efficiency is a manifestation of adaptive tactics initiated by officers to address workload and limited resource capacity (Insani, 2023).

The fourth factor of similar urgency is the lack of concern among residents regarding the maintenance of boundary markers on their land plots. The provisions of Article 17 paragraph (3) of Government Regulation Number 24 of 1997 actually rigidly outline that the installation and maintenance of boundary markers act as an absolute obligation for land rights owners. However, in empirical reality, the level of public compliance with this point is still very minimal (Fabian, 2017). Residents are found to pay little attention to the existence of boundary markers after they have the official certificate documents, and only realize the urgency of these markers when boundary conflicts arise or the process of transferring ownership rights. The loss of boundary markers complicates the boundary reconstruction process, and the situation is further exacerbated if the Measurement Drawing document is also missing, leaving officers in the field with no other option but to switch services to alternative procedures.

The aforementioned series of constraints do not operate in isolation, but rather intertwined and cumulatively drive officers' tendencies to take the less risky and more pragmatic route. From the perspective of street-level bureaucracy, as proposed by Lipsky in Tummers & Bekkers (2014), this preference represents a form of discretionary action that arises as a response to adjustments to operational burdens in the work area. Such discretionary policies are essentially legal and even necessary within certain corridors, in line with the mandate of Law Number 30 of 2014 concerning Government Administration. However, when such discretion dominates without being accompanied by strong controls or regulatory updates, the policy turns into a loophole that widens the gap in implementation inconsistencies (Teddy et al., 2019).

The conclusions of this analysis further support the thesis of Hudson et al. (2019), who asserted that the implementation of regulations under a dispersed governance model has the potential to create regional diversity. Rigid regulations uniformly designed by central agencies are forced to rely on the diversity of real conditions at the lower levels. Without the support of a reliable harmonization scheme, the emergence of policy gaps is almost certain. In the realm of land policy, the inconsistent operational portrait of Land Offices—including factors such as the completeness of old documents, human resource competencies, workloads, and geographic characteristics—makes it difficult to implement a single, rigid regulation effectively across all regions. Therefore, the deviation between written legal norms and operational reality in boundary restoration schemes is not merely a case-by-case oddity, but rather a representation of structural obstacles in the governance of public policy implementation in Indonesia.

3.3. Academic Significance and Practical Utility of Policy

The results of this study contribute several important contributions to the expansion of policy implementation theory, particularly as it relates to agrarian governance in Indonesia. Edward III's framework, which positions bureaucratic structure as a supporting element for effective program implementation, needs to be applied more contextually and rigidly. This research output demonstrates that transparency in SOP work procedures does not automatically escalate successful execution, especially when the corridor is faced with minimal support for resource readiness aspects. In this crippled ecosystem, the bureaucratic order can actually operate anomalously: formal flows designed to control compliance instead transform into a medium for legal justification for the occurrence of policy deviations. The results of this analysis enrich the treasury of the concept of policy drift (Hacker, 2005) in the land law sector, by demonstrating that regulatory shifts do not always erupt at the macro level due to political or fiscal dynamics, but can also crystallize at the micro level in technical work unit offices due to the clash between resource deficits and discretionary policies from leaders.

The concept of two sets of logics, popularized by Martin et al. (2024), has proven highly relevant in explaining the reasons behind the persistence of the gap between regulations and operational reality over a long period of time. This study found that the stalled process of mutual adaptation between the logic of implementation and the logic of discovery acts as the main pathway that triggers the divergence of regulatory texts and actual practices. As the logic of discovery grows dominant without being balanced by strengthening the logic of implementation, alternative operational routes that initially serve as local adjustments mutate into new habits that eliminate formal regulations. This conclusion enriches the literature on policy execution in the agrarian sector, a domain that has often been analyzed using only qualitative or quantitative methods separately.

Practically, this research underscores the urgency for the Ministry of Agrarian Affairs and Spatial Planning/National Land Agency (ATR/BPN) to immediately formulate a more assertive policy direction regarding boundary restoration. If the program is to be

maintained, modernizing the measurement database through digitalization and integrated document management of Measurement Drawings at the national level is an urgent agenda that cannot be postponed. Without uniform information availability, even detailed work guidelines will continue to be loosely and freely interpreted in the workplace. Implementing a pre-service mechanism, in the form of validating the availability of Measurement Drawings before application files are officially registered, can act as an alternative technical solution that prevents file backlogs and reduces the risk of future disputes. Synergy between registration counter staff and land document management staff must also be improved to ensure the verification process is swift and precise. Conversely, if the policy evaluation finds that the boundary restoration program is no longer relevant and difficult to implement consistently across all regions, eliminating or completely revising the regulation is a more transparent option while ensuring legal certainty for both the public and officials. A comparative study from Poland shows that updating the statutory regulations regarding the return of boundary markers can be an alternative solution in reducing ambiguity and increasing the level of legal certainty (Maślanka, 2020).

On a broader scale, these findings contribute to scholarly discussions on the relationship between discretionary policies and implementation gaps in bureaucratic structures in developing countries. Discretionary policies are often viewed as a double-edged sword: on the one hand, they are necessary to break the rigidity of written regulations and provide flexibility for field officers, but on the other hand, they also open up room for deviations in practice if not supported by a reliable accountability system (Lipsky in Tummers & Bekkers, 2014). In the boundary reclamation phenomenon in Sleman Regency, the discretion applied by agency leaders has exceeded the limits of adaptive tolerance and shifted to become a local internal rule that annuls formal law. The results of this analysis emphasize the importance of strict control over the use of discretion, especially for various policies whose operationalization is widespread across various work units within the Land Office.

From the perspective of institutional capacity building, this research output indicates that accelerating resource utilization cannot simply rely on increasing staff or procuring technical measurement tools. The root of the main obstacle lies in the lack of orderly management of measurement data archiving, which leaves it vulnerable to the risk of document loss. The national digitization of Measurement Drawings not only simplifies access and accelerates the validation process, but also supports the sustainability of the cadastral data maintenance system, particularly for land boundary reconstruction.

For future research, the limited scope of the quantitative model in this study opens up significant opportunities for further academic exploration. The model formulation, which only explains 21.8% of the variation in implementation, suggests that there are still many other external aspects that urgently need to be explored. Further research is recommended to examine complementary variables proven to have a qualitative impact, such as concerns about legal risks and the level of community concern in maintaining

boundary markers. Furthermore, the use of different theoretical frameworks, such as the Van Meter and Van Horn implementation model or the Mazmanian and Sabatier model, is believed to enrich perspectives in analyzing the dynamics of agrarian policy implementation in Indonesia. Comparative studies with broader coverage, including targeting eastern Indonesia, which is characterized by different geographic characteristics and institutional capacities, would also provide a more comprehensive portrait of the extent to which these disparities are systemic at the national level.

4. Conclusion

This study concludes that the implementation of the land boundary restoration policy at the Land Office is significantly influenced by Communication, Bureaucratic Structure, and Resources, with the availability of Measurement Drawing documents being the most dominant factor. Anomalously, the Bureaucratic Structure shows a negative impact because the transparency of SOPs is often used as an instrument of legal legitimacy to shift services to boundary delimitation procedures without prior verification, reflecting the phenomenon of policy drift due to the failure of mutual adaptation between the logic of implementing central regulations and the logic of discovery from technical experience in the field. This systemic gap is exacerbated by concerns about legal risks, physical changes in the land, demands for efficiency, and low public awareness in maintaining boundary markers. Therefore, certainty of policy direction is needed from the Ministry of ATR/BPN through steps to digitize national archives and pre-service procedures if the policy is to be maintained, or an open regulatory review for legal certainty. Meanwhile, for future research, it is recommended to test additional variables such as perceptions of legal risk and expand the scope of the study area to obtain a more comprehensive picture.

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