

Synchronization of Protected Rice Field (LSD) Data with PPAT Deeds: Administrative Constraints in Urban Land Rights Transfer

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DOI: <https://doi.org/10.55299/jsh.v4i3.2009>

Article history: Received April 30, 2026: Revised May 20, 2026: Accepted May 30, 2026

ABSTRACT

This article examines the administrative constraints arising from the lack of synchronization between data on Protected Rice Fields (Lahan Sawah yang Dilindungi, LSD) and the deeds of sale and purchase (Akta Jual Beli) drawn up by Land Deed Officials (PPAT) in urban areas in Indonesia. Empirically, problems emerge when land has been transferred and registered at the Land Office, but later the urban planning office refuses to issue building permits because the plot is categorized as agricultural land or green zone under LSD mapping. This situation generates legal uncertainty regarding the object of sale and purchase, burdens bona fide buyers, and creates potential conflicts between spatial planning law, agricultural land protection, and land registration administration. Using a qualitative normative-empirical method, this research analyzes the regulatory framework on LSD, sustainable food crops farmland protection, and the role of PPAT and the Land Office, combined with case-based analysis from urban contexts. The study argues that the current regime does not sufficiently ensure legal protection and certainty for purchasers of land already bearing registered rights but subsequently designated as LSD in spatial and sectoral maps. It concludes that systematic synchronization of LSD data into land registration and PPAT due-diligence procedures, as well as a policy of review and reclassification of urban agricultural plots, is required to restore legal certainty and balance between food security objectives and urban development needs.

Keywords: Legal, Ppat, Administrative, Land

INTRODUCTION

Rapid urban development in Indonesia has intensified competition over land between agricultural and non-agricultural uses, especially in metropolitan and peri-urban areas. On the one hand, the State is constitutionally mandated to organize land policy for the greatest prosperity of the people and, in the field of food, to safeguard national food security through the protection of strategic agricultural land. Conversely, urbanization, housing demand, and infrastructural expansion generate strong pressure to convert agricultural parcels, including rice fields, into residential, commercial, and industrial land. This tension has led the government to issue a series of instruments to control the conversion of rice fields, culminating in the designation of Protected Rice Fields (Lahan Sawah yang Dilindungi, LSD) at the national level (Saptutyningsih & Kamilasari, 2025).

The LSD is a policy instrument developed to identify, map, and protect rice field areas that must be preserved to support sustainable food crops farmland and maintain the availability of land for national food needs. Presidential Regulation Number 59 of 2019 on the Control of Conversion of Rice Fields provides the policy foundation for accelerating the preparation of LSD maps and for integrating those maps into spatial planning and land administration. The Ministry of Agrarian Affairs and Spatial Planning/National Land Agency (Kementerian ATR/BPN) plays a central role in preparing, verifying, and setting LSD maps, which are produced using satellite imagery, base rice field data, land administration records, irrigation data, and forest area maps, in

coordination with regional governments. The LSD designation is also closely related to the implementation of Law No. 41 of 2009 on the Protection of Sustainable Food Crops Farmland, which seeks to protect agricultural land from unchecked conversion and maintain ecological balance and food sovereignty (Arisma Wardhani et al., 2025).

Parallel to this policy, Indonesia has developed a sophisticated system for land registration and transfer of land rights, where the Land Deed Official (Pejabat Pembuat Akta Tanah, PPAT) plays a pivotal role. Every transaction involving the transfer of land rights, such as sale and purchase, must be evidenced by an authentic deed drawn up by a PPAT, which then serves as the basis for registering the transfer at the Land Office (Kantor Pertanahan). PPAT are responsible not only for reading and formalizing the parties' agreement but also for ensuring that the deed complies with applicable legal requirements and that the object of the transaction corresponds to the registered data in the land register and certificate. After the deed is signed, the PPAT submits the deed and required documents to the Land Office within a specified period to process the name change (*balik nama*) and update the land book, culminating in the issuance of a new certificate in the buyer's name (Travelina & Handayani, 2025).

However, in practice, the regime governing the LSD and the land registration process often operates in parallel but insufficiently synchronized systems. LSD mapping is produced and updated at the national and regional levels, sometimes faster than the updating of spatial plans, and not always consistently socialized to the implementing officers at the Land Office or to PPATs serving urban communities. Consequently, there are cases in which a land parcel, fully registered and transacted in good faith, is later found to be located in an LSD area or land zoned as agricultural or green area under urban spatial planning, leading to serious administrative consequences for the buyer.

The practical problem that motivates this research arises when a PPAT prepares a deed of sale and purchase, the land passes verification at the Land Office, and the transfer of title is duly registered without any indication that the plot is categorized as agricultural land, a green belt, or LSD. Subsequently, when the new owner applies to the municipal urban planning or spatial planning office for a building permit (*Izin Mendirikan Bangunan*, IMB, now generally integrated into the building approval regime), the application is refused on the ground that the land falls within an agricultural designation or LSD area where such construction is prohibited. This discrepancy between the status reflected in land registration records and the restrictions embedded in spatial planning and LSD maps has profound implications for legal certainty, the protection of bona fide purchasers, and the credibility of the land administration system (Prakoso et al., 2024).

From the perspective of the purchaser, the existence of a valid land certificate in their name, issued after a PPAT deed and registration procedure, constitutes a strong indication of lawfully acquired rights and an expectation that the land can be used, enjoyed, and developed in accordance with the certificate and applicable permits. The refusal to issue a building permit due to an LSD or agricultural designation of which the buyer was never informed during the transaction undermines the principle of legal certainty (*kepastian hukum*) and raises questions about the adequacy of due diligence and disclosure obligations on the part of PPAT, the Land Office, and the spatial planning authorities. It may also give rise to claims for compensation or remedies when the State's own instruments create conflicting representations regarding the permissible use of land (Hutagalung et al., 2024).

Moreover, this situation indicates an institutional and administrative problem: LSD data and spatial planning designations are not systematically integrated into the operational databases and workflows of land registration and PPAT practice. While LSD mapping is intended to be spatially integrated with regional spatial plans (*Rencana Tata Ruang Wilayah*, RTRW) and other sectoral data, in reality, the level of integration varies significantly across regions, and local governments have faced challenges in translating central LSD decisions into clear, accessible, and up-to-date information for land administrators and the public. The Kementerian ATR/BPN has highlighted the need for inter-agency collaboration and synchronization in LSD verification and map updates, involving provincial and municipal institutions (Pyrohova et al., 2025).

This study focuses specifically on the intersection between LSD data and PPAT practices in urban areas, where agricultural plots may be embedded within expanding urban settlements and where the pressure for conversion is particularly acute. The core research problem can be formulated as follows: how does the lack of

synchronization between LSD data and PPAT deeds in urban contexts create administrative constraints in the transfer of land rights, and what are the implications for legal protection and certainty regarding the object of sale and purchase? This problem encompasses several interrelated issues: the normative framework governing LSD and agricultural land protection; the role and responsibilities of PPAT and the Land Office in verifying and disclosing spatial and LSD-related constraints; the position of the buyer who acquires land that is later treated as agricultural or green zone; and the need for policy reconsideration of agricultural land designations in urban areas.

This study had three objectives. First, we analyzed the regulatory basis and policy rationale of LSD and sustainable agricultural land protection and its integration into spatial planning and land registration systems. Second, to identify and conceptualize the administrative constraints that arise in the process of land rights transfer in urban areas when LSD mapping is not properly synchronized with PPAT deeds and Land Office data, with particular attention to the refusal of building permits, and Third, to propose legal and policy recommendations to strengthen legal protection and certainty for purchasers, including the need for a systematic review of agricultural land designations within urban areas and the formal incorporation of LSD data into PPAT due-diligence obligations and land registration procedures.

Methodologically, this research employs a qualitative approach, combining normative legal analysis of legislation and policy instruments with empirical, case-based insights drawn from practice and secondary studies on LSD implementation and PPAT's role. By examining how legal norms function in concrete administrative procedures and how discrepancies between parallel databases materialize in the form of administrative refusals and user grievances, this study aims to provide a comprehensive understanding of the problem and contribute to the debate on integrated land and spatial governance in Indonesia.

METHOD

This study employs a qualitative research method that combines normative legal analysis with an empirical, case-oriented approach to provide a comprehensive understanding of the synchronization problem between LSD data and PPAT deeds in urban land transactions. The qualitative method was chosen because the research questions focus on the interpretation of legal norms, the functioning of administrative procedures, and the experiences of legal subjects, which are not readily captured through quantitative indicators alone (Sugiyono, 2019).

From a normative perspective, this research begins with an examination of the statutory and regulatory framework governing agricultural land protection, LSD designation, spatial planning, and land registration. Key instruments include Law No. 41 of 2009 on the Protection of Sustainable Food Crop Farmland, which sets out the objectives and principles of agricultural land protection; Presidential Regulation No. 59 of 2019 on the Control of Conversion of Rice Fields, which provides the basis for LSD mapping; ministerial decrees and regulations of ATR/BPN regarding the determination and revocation of LSD; and regulations on the duties and authority of PPAT and the procedures for land registration. These documents were analyzed to identify the legal obligations of state institutions, the rights and obligations of landowners and purchasers, and the intended mechanisms for integrating LSD data into spatial planning and land administration (Creswell, 2021).

Normative analysis also considers doctrinal writings and legal scholarship that interpret and critique these instruments, particularly with respect to conflicts between land rights and spatial designations, the legal consequences of including non-agricultural land within LSD, and the availability of remedies such as compensation or reclassification. This allows the study to situate the practical problem within the broader theoretical debates on legal certainty, protection of legitimate expectations, and balancing public and private interests in land law.

On the empirical side, this research adopts a qualitative, case-based approach, relying on secondary data and documented experiences from different urban and peri-urban settings. Secondary data include official reports, policy briefs, and publications from government agencies involved in LSD mapping and spatial planning, such as the Coordinating Ministry for Economic Affairs, Directorate-General of Spatial Planning, and ATR/BPN, which describe the process of LSD identification, verification, and synchronization with regional spatial plans. They also

provide accounts of the challenges faced in reconciling LSD maps with existing land use and rights.

Furthermore, the study draws on case narratives and empirical analyses from legal journals and research reports that document specific instances of conflict or discrepancies between LSD designations and the status of the land as perceived by owners, developers, and local authorities. One such example is research in Padang Pariaman Regency, which reports on the impact of LSD designation on subsidized housing developers and non-agricultural landowners whose land was included in LSD polygons, as well as the mechanisms available for exclusion or compensation. Such cases provide valuable insights into how LSD policies are implemented and how conflicts are handled in practice (Arikunto, 2016).

For the dimensions of PPAT and land registration, the research reviews practical guides and doctrinal works explaining the sequence of land purchase transactions, the checks performed by PPAT, and the procedures at the Land Office. These sources detail the standard steps for verifying land certificates, ensuring tax compliance, drafting and signing the deed, and submitting the documents for registration and issuance of a new certificate. They also discuss the PPAT's role in preventing irregularities and ensuring that transactions meet legal requirements, which is crucial for understanding the expectations placed on the PPAT in relation to spatial and LSD information.

Methodologically, this study employs qualitative content analysis to systematically review and interpret the collected documents. Legal texts, policy documents, and case reports are coded according to categories such as "LSD designation process," "integration with spatial planning," "PPAT duties," "land registration procedures," "building permit refusal," "legal certainty," and "remedies/compensation." This coding facilitates the identification of patterns and relationships among the different elements of the legal and administrative framework and helps reconstruct the typical sequence of events in problematic cases where LSD data and PPAT deeds are not synchronized (Miles, M. B., & Huberman, 2014).

Given the normative-empirical character of the research, the analysis moves iteratively between legal norms and empirical observations. Legal provisions are interpreted in light of empirical cases to assess whether they achieve their stated objectives and identify gaps or inconsistencies that contribute to administrative constraints in practice. Conversely, empirical phenomena such as building permit refusals or mapping discrepancies are examined against the backdrop of applicable norms to determine whether they reflect unlawful administrative behavior, gaps in regulation, or structural limitations in inter-agency coordination.

This research is limited by its reliance on secondary data and documented cases rather than primary fieldwork or interviews with affected landowners, PPATs, or officials. Nonetheless, by triangulating multiple sources of legal texts, government publications, and academic analyses, this study seeks to construct a sufficiently robust and nuanced understanding of the synchronization problem and its implications for legal protection and certainty in urban land transactions.

RESULT & DISCUSSION

Regulatory and Institutional Framework of LSD

The findings confirm that LSD is embedded within a multi-layered regulatory framework aimed at controlling the conversion of rice fields and protecting sustainable food crop farmland. Law No. 41 of 2009 establishes the overarching objective of preserving food crop farmland through planning, designation, and control, while Presidential Regulation No. 59 of 2019 mandates the acceleration of LSD mapping as a key instrument for controlling rice field conversion. Ministerial policy documents explain that LSD identification begins with the verification of base rice field data using satellite imagery, land administration records, irrigation data, and forest area maps, followed by clarification with local governments before the formal designation.

Institutionally, the ATR/BPN is responsible for preparing and formalizing LSD maps, while regional governments are expected to integrate LSD data into their regional spatial plans and use these maps as a reference in planning and permitting decisions. The Coordinating Ministry for Economic Affairs and Directorate General of Spatial Planning have stressed the need for inter-agency collaboration to ensure that LSD maps are synchronized with other spatial datasets and updated based on factual verification in the field. However, reports from regional implementation indicate that discrepancies between mapped LSD polygons and actual land use remain common, particularly in urban and peri-urban areas, where development has proceeded rapidly.

The standard legal process for land purchase in Indonesia requires buyers and sellers to enter into a sale and purchase deed (AJB) before a PPAT after the PPAT has verified the validity of the land certificate and ensured that taxes and other obligations are fulfilled. The PPAT reads the deed aloud, both parties sign, and the PPAT submits the deed and supporting documents to the Land Office within a fixed period (commonly seven working days) to process the transfer of title. The Land Office examines the documents, updates the land book, and issues a new certificate in the buyer's name, thereby completing the transfer of rights.

The literature on PPAT's authority emphasizes that PPAT must ensure that each deed meets legal standards and that it plays a crucial role in preventing land mafia practices by thoroughly verifying documents and the legal status of the land. However, the existing guidance focuses primarily on the authenticity of certificates, the absence of disputes or encumbrances, and tax compliance, while the systematic integration of spatial zoning or LSD information into the PPAT verification checklist is less explicitly developed.

The core empirical finding of this research is that administrative constraints in urban land rights transfer arise when LSD and spatial planning data are not synchronized with the information used by the PPAT and the Land Office during the transaction and registration process. In documented cases, land parcels that were registered in the names of previous owners and transacted through PPAT deeds without any indication of agricultural or green-zone status later became subject to LSD or agricultural zoning, or were already included in LSD maps that were not consulted during the transaction process.

A recurring pattern is as follows: a buyer identifies a plot of land in an urban area, verifies the land certificate, and proceeds to sign a sale and purchase deed before a PPAT. The PPAT submits the deed for registration, and the Land Office processes the transfer and issues a new certificate in the buyer's name. At no point in this sequence does the Land Office provide formal information indicating that the land lies within an LSD area or is zoned as agricultural/green belt under the regional spatial plan. Subsequently, when the new owner approaches the urban planning or spatial planning office to obtain a building permit, the application is rejected because the land is classified as agricultural or protected rice field where construction is not allowed.

This pattern reveals a functional disconnect between the land registration system, which treats the certificate as a record of rights, and the spatial planning/LSD system, which imposes use restrictions that are not automatically reflected in the land certificate or disclosed during registration. The problem is particularly acute in urban areas where former rice fields have become de facto urban land or where LSD polygons still encompass parcels that are no longer used for rice cultivation but have not been formally reclassified.

To conceptualize this problem, this study compiles and synthesizes qualitative data from documented cases and policy reports. The following tables summarize the key qualitative dimensions of the issue distilled from the literature.

Table 1. Stages of Urban Land Transfer and Information Flows.

Stage of process	Main actor	Information checked	LSD / zoning information effectively used	Typical outcome in problematic cases
Pre-transaction due diligence	Buyer, often assisted by PPAT	Land certificate validity, ownership, tax status, visible land use	Limited; LSD and detailed zoning maps not systematically consulted	Buyer perceives land as suitable for building based on certificate and surroundings.
Deed preparation and signing	PPAT	Certificate data, identity of parties, tax obligations, absence of disputes	Generally no mandatory check against LSD database; zoning check ad hoc	AJB signed without reference to agricultural/LSD status.

Stage of process	Main actor	Information checked	LSD / zoning information effectively used	Typical outcome in problematic cases
Registration at Land Office	Land Office (Kantor Pertanahan)	Authenticity of deed, conformity with registry, tax evidence	LSD data not fully integrated into registration workflow	Transfer recorded, new certificate issued in buyer's name.
Application for building permit	Urban planning / spatial planning office	Spatial plan (RTRW/RDTR), LSD maps, technical building requirements	Comprehensive check of zoning and LSD status	Permit refused if land categorized as agricultural/LSD green zone.

This table shows that LSD and zoning information are more fully used at the permitting stage than during the land transfer and registration stages, generating temporal and institutional asymmetry that is detrimental to buyers.

Table 2. Types of Conflicts Arising from LSD Designation in Urban Areas.

Type of conflict	Description	Typical actors involved	Documented or inferred consequences
Overlap of LSD with non-agricultural land	Land already used or planned for housing or other non-agricultural purposes is included in LSD polygons.	Landowners, developers, ATR/BPN, regional governments	Requests for exclusion from LSD, disputes over legality of development, need for compensation or map revision.
Inconsistent information between Land Office and spatial planning office	Land certificate and registration process do not reveal LSD/agricultural status, but spatial planning office applies LSD restrictions.	Buyers, PPAT, Land Office, urban planning office	Building permit refusals, claims of legal uncertainty and potential liability issues.
Misalignment between factual land use and LSD mapping	Satellite-based LSD mapping does not reflect current land use (e.g., built-up areas classified as protected rice fields).	Landowners, local communities, ATR/BPN, verification teams	Need for field verification and map updates; temporary freeze on permits, uncertainty regarding future status.

These conflict types highlight that the issue is not only legal but also technical and administrative, involving mapping accuracy and inter-agency coordination.

Table 3. Legal Protection Mechanisms Identified in Literature

Mechanism	Legal / policy basis	Beneficiary	Limitations in practice
Exclusion of non-rice field or legally developed land from LSD	Ministerial decrees and recommendations allowing developers with complete legal status to request exclusion from LSD. bmcktr.sumbarprov.go+1	Developers and landowners whose non-agricultural land is included in LSD	Requires application and central approval; may be time-consuming and uncertain; not automatically available to small individual buyers. bmcktr.sumbarprov.go+1
Compensation or restitution for land wrongly included in LSD	Provisions linked to UUPA allowing compensation in case of expropriation or undue restriction. review-unes+1	Landowners whose land use is severely restricted by LSD designation	Implementation depends on budget and policy priorities; may be difficult to access for routine transactional conflicts. review-unes+1
Revision of spatial plans or LSD maps	Processes for updating RTRW and LSD maps based on factual verification. ekon.go+3	Broader public, including urban landowners	Slow and cyclical; may not address individual permit refusals in a timely manner. ekon.go+2

The qualitative data suggest that, although some mechanisms exist to mitigate the impact of LSD designation on non-agricultural land or previously developed areas, these mechanisms are not easily accessible or sufficiently responsive to the specific problems faced by buyers who discover the LSD status of their land only at the permitting stage.

The findings indicate that the current state of LSD-PPAT synchronization undermines the key principles of legal certainty and the protection of bona fide purchasers. Buyers who rely on valid land certificates and formal registration processes reasonably expect that any significant restrictions on land use, such as an agricultural or protected rice field designation, will be disclosed during due diligence or reflected in the certificate or related documents. When such information emerges only at the building permit stage, the buyer's reliance interest is frustrated, and the integrity of the land registration system is questioned.

Simultaneously, the State's obligation to protect agricultural land and ensure food security remains a compelling public interest, which justifies restrictions on land use through instruments such as LSD. Therefore, the challenge is not to abolish LSD but to integrate it coherently into the land administration chain so that transactions on LSD-affected land are either prevented, clearly conditioned, or accompanied by adequate information and compensation.

Discussion

From a doctrinal perspective, land registration in Indonesia is intended to provide legal certainty and publicity regarding land rights, while spatial planning and agricultural land protection laws impose limitations on land use. In principle, these systems should be complementary: land registration records indicate who holds which rights, while spatial plans and LSD maps indicate the permissible uses of those rights. However, the lack of systematic integration, both technically and procedurally, means that PPAT and the Land Office may complete a transfer of title without fully considering LSD-based use restrictions, and buyers may be unaware of these restrictions until they seek to exercise their rights through development (Krisnantoro, 2024).

This problem can be conceptualized as a failure of information flow and risk allocation. Information about LSD and zoning exists within the spatial planning and agricultural protection subsystems but is not consistently transmitted to or demanded by the land registration subsystem at key decision points. Consequently, the risk that land is subject to LSD-based restrictions is effectively borne by the buyer, who discovers the restriction only

after the transaction, even though the State already possesses the relevant information (Irawan & Wibisono, 2025).

From the perspective of legal protection, this situation raises questions about whether the state has fulfilled its obligation to provide transparent and accessible information on land status and whether PPAT, as a public official, has adequately performed its duty to ensure that the deed reflects the true legal condition of the land. Some authors argue that PPAT's due-diligence obligations should evolve to include checks against spatial planning and LSD databases, especially in urban areas where the probability of overlapping designations is high. Integrating such checks into PPAT's standard procedures would help shift risk allocation, ensuring that LSD restrictions are identified and disclosed before the transaction is finalized.

The empirical data also reveal that the LSD designation itself is not flawless and may mistakenly include non-agricultural or already developed land, especially when mapping relies heavily on satellite imagery without sufficient ground verification. This technical imperfection underscores the need for robust review and correction mechanisms, as well as temporary protective measures that avoid unduly penalizing landowners whose parcels are wrongly classified. In urban contexts, where agricultural parcels may be interspersed with built-up areas and development pressures are strong, a more dynamic and context-sensitive approach to LSD may be warranted, including a periodic review of urban agricultural designations and more flexible instruments for reclassification (Paudel et al., 2025).

Balancing the public interest in food security and environmental protection with the rights and expectations of urban landowners requires policy recalibration. One possible direction is to prioritize the protection of agricultural land in areas where agricultural use remains viable and strategically important, while allowing for the controlled reclassification of isolated or marginal agricultural plots embedded in the urban fabric, subject to compensatory measures such as the creation of substitute agricultural land elsewhere. Simultaneously, where land is retained as LSD within urban areas, its status and restrictions must be clearly and proactively communicated to potential buyers, developers, and PPATs to avoid the post-transaction surprises documented in this study.

Several measures can be proposed based on this analysis in terms of concrete legal and administrative reforms. First, a mandatory pre-registration check of LSD and zoning status should be integrated into the Land Office's procedures for processing title transfers, with the result clearly indicated in the registration record and, where feasible, annotated on the land certificate itself. If a parcel is located in an LSD or agricultural zone where building permits are restricted or prohibited, this information should be explicitly disclosed to the parties before the registration is completed.

Second, PPATs should be required through regulations and professional guidelines to consult up-to-date spatial and LSD information when preparing deeds for land in urban and peri-urban areas, and to include a clause in the deed that records the known spatial status of the land. This would create an incentive for PPATs to internalize spatial information into their due diligence and would provide buyers with documented evidence of the land's status at the time of the transaction, which could be relevant for later disputes or claims for compensation.

Third, the mechanisms for reviewing and revising LSD designations should be made more accessible to individual buyers, not just large developers. Current practice, as reported in some regions, allows developers with complete legal status over non-rice field land to apply for exclusion from the LSD, but similar procedures could be extended or adapted for small landowners who find their urban plots within LSD polygons. Clear criteria and transparent procedures for such reviews, including time limits for administrative decisions, would help reduce uncertainty and provide meaningful remedies.

Fourth, where the State's own mapping errors or delayed information sharing have caused substantive harm to buyers, such as long-term inability to build on land acquired in good faith, consideration should be given to compensation or other forms of restitution, in line with the principles recognized in the Basic Agrarian Law and agricultural land protection law. This reinforces the principle that the burdens of public policy should not fall disproportionately on individuals who have relied on official records and procedures (Chintya Kurniawati et al., 2025).

Finally, broader governance reforms are required to enhance data integration among land administration, spatial planning, and sectoral information systems. This includes developing shared geospatial platforms that

allow PPATs, Land Offices, and planning authorities to access the same authoritative datasets on LSD and zoning in real time, as well as establishing protocols for regular updates and inter-agency communication when maps and designations change. Such integration would not only reduce conflicts related to LSD but also strengthen overall land governance and contribute to more transparent and predictable urban development in the long run.

Within this broader reform agenda, the specific problem highlighted by this article is the issuance of PPAT deeds and land certificates without disclosure of LSD status, followed by building permit refusals, which serves as a concrete illustration of the costs of fragmented governance. Addressing it effectively requires not only technical fixes but also a normative commitment to legal certainty, fairness in the distribution of burdens, and the integration of land use and land rights policy in a way that reflects the complex realities of urbanization in Indonesia. From a doctrinal perspective, land registration in Indonesia is intended to provide legal certainty and publicity regarding the rights to land, while spatial planning law and agricultural land protection law impose limitations on how land may be used. In principle, these systems should be complementary: land registration records indicate who holds which rights, while spatial plans and LSD maps indicate the permissible uses of those rights. However, the lack of systematic integration, both technically and procedurally, means that PPAT and the Land Office may complete a transfer of title without fully considering LSD-based use restrictions, and buyers may be unaware of these restrictions until they seek to exercise their rights through development.

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CONCLUSION

This study shows that the lack of synchronization between LSD data and PPAT deeds in urban land transactions creates significant administrative constraints, most notably the refusal of building permits on land that has been validly transferred and registered. The analysis reveals a structural disconnect between the systems of agricultural land protection and spatial planning, on the one hand, and land registration and PPAT practice, on the other, which undermines legal certainty and the protection of bona fide purchasers. [insert figure] While instruments such as Law No. 41 of 2009 and LSD designation play an essential role in safeguarding food crops, farmland, and national food security, their effectiveness depends on being coherently integrated into the land administration chain and clearly communicated to all stakeholders. Therefore, this study argues for regulatory and institutional reforms that make LSD and zoning checks mandatory in PPAT and Land Office procedures, enhance the accessibility of review and reclassification mechanisms for urban agricultural plots, and provide appropriate remedies where mapping errors or information gaps have harmed buyers. Ultimately, ensuring legal protection and certainty for objects of sale and purchase in urban areas requires a systematic reconsideration of agricultural land designations within cities and stronger integration of spatial and land rights governance. By aligning these systems, Indonesia can better balance the imperatives of food security with the realities of urban development, thereby promoting a more just and sustainable land regime for future generations.

ACKNOWLEDGEMENT

The authors express their deepest gratitude to Almighty God for His blessings and guidance throughout this study. Sincere appreciation is extended to the Faculty of Law, Universitas Pamulang for providing institutional support. The authors also thank their colleagues and peers for their valuable input, constructive discussions, and

encouragement. Finally, we express heartfelt gratitude to our families for their unwavering support and understanding during the completion of this work.

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