

Indonesian Journal of Agrarian Law
 ISSN: 3110-6633 (Online)
 Vol. 3 Issue 3 (2026) 1663-1695
 DOI: <https://doi.org/10.15294/jal.v3i3.48367>
 Available online since: June 8, 2026



The Effectiveness Of The Implementation Of Sporadic Land Registration At The Boyolali District Land Office

Winda Agustina Damayanti¹, Ubaidillah Kamal²

¹State University of Semarang, Semarang, Indonesia
 Email Address. damayantiw681@students.unnes.ac.id

²State University of Semarang, Semarang, Indonesia
 Email Address. ubaidillahkamal@mail.unnes.ac.id

□ Corresponding email:

damayantiw681@students.unnes.ac.id

Abstract

This study examines the effectiveness of sporadic land registration services at the Boyolali District Land Office, Central Java, Indonesia. Sporadic land registration serves as the primary mechanism for communities to obtain land certificates as legal evidence of land ownership; however, its implementation has not yet achieved optimal effectiveness. The objective of this study is to analyse the implementation of sporadic land registration and identify the factors influencing its effectiveness. This research employs an empirical legal approach by combining normative analysis of

land regulations with field research through interviews with Land Office officials and direct observation of the registration process. The findings reveal that the implementation procedures generally comply with the Basic Agrarian Law and Government Regulation No. 24 of 1997. Nevertheless, the completion rate of land registration applications remains below the expected target, while the average processing time exceeds the established standard of ninety-eight working days. Using Soerjono Soekanto's theory of legal effectiveness, this study identifies several major obstacles, including the limitations of the negative publication system with positive elements, the shortage of surveyors, inadequate digital infrastructure, and low public awareness regarding land registration. The study contributes to the development of empirical legal studies by demonstrating how administrative, technological, and social factors simultaneously affect land registration effectiveness. It concludes that sporadic land registration in Boyolali Regency has not yet operated effectively and requires institutional and technological improvements. Therefore, this study recommends increasing the number of surveyors, simplifying administrative procedures, accelerating electronic land services, and strengthening public legal awareness programmes throughout the region

Keywords

sporadic land registration, legal certainty, land title certificates, Boyolali Regency, legal effectiveness.

A. Introduction

Land is one of the most important natural resources in Indonesia and holds a strategic role in economic, social, and legal aspects of society. As an agrarian country, land constitutes the primary basis of livelihood for a large portion of the population, making land-related issues highly sensitive and complex. Therefore, Article 33 paragraph (3) of the 1945 Constitution of the Republic of Indonesia mandates the state to control and regulate land for the greatest prosperity of the people. This constitutional principle was further implemented

through Law No. 5 of 1960 concerning Basic Agrarian Principles (Basic Agrarian Law/UUPA), which became the foundation of the national land law system and replaced the dualistic agrarian regulations inherited from the Dutch colonial period.¹

Legal certainty regarding land ownership can be achieved through land registration as the primary legal instrument for recognising and protecting land rights. Article 19 of the Basic Agrarian Law explicitly mandates the government to conduct land registration throughout the territory of Indonesia. This obligation is further regulated through Government Regulation No. 24 of 1997 concerning Land Registration, which replaced Government Regulation No. 10 of 1961. The regulation divides land registration into two approaches, namely systematic land registration conducted simultaneously by the government within a specific area, and sporadic land registration conducted individually at the request of rights holders. In practice, sporadic land registration has become the mechanism most frequently used by the public to obtain land certificates as legal evidence of ownership rights.

The importance of sporadic land registration lies in the issuance of land certificates that function as strong legal evidence for land rights holders. Certificates provide certainty regarding the legal status of land rights, the identity of the rights holder, and the location and boundaries of the land parcel. However, Indonesia adopts a negative publication system with positive tendencies, meaning that the state does not fully guarantee the absolute accuracy of the data recorded in land certificates.² Consequently, certificates may still be challenged by other parties if inaccuracies can be proven through legal proceedings. This condition demonstrates that effective and accurate land registration remains essential to minimise future land disputes and strengthen legal protection for certificate holders.

¹Urip Santoso, *Agrarian Law: A Comprehensive Study* (Kencana Prenada Media Group, 2012).

²Irawan Soerodjo, *Legal Certainty of Land Rights in Indonesia* (Arkola, 2003).

Previous studies have shown that sporadic land registration in Indonesia continues to face various legal, administrative, and technical challenges. Wibawa (2024) found that sporadic land certification through land conversion in Semarang Regency was constrained by infrastructure limitations, low public awareness, and perceptions that certification procedures were expensive and time-consuming.³ Nugroho, Suharno, and Dewi (2023) identified similar obstacles at the Boyolali Regency Land Office, particularly regarding incomplete administrative documents, unclear land boundaries, and difficulties in proving historical ownership of Letter C land titles.⁴ Meanwhile, Apriani and Bur (2021) argued that Indonesia's negative publication system does not yet provide absolute legal certainty for certificate holders because certificates remain vulnerable to legal disputes from third parties claiming stronger ownership rights. Similarly, Mahban, Nawi, and Arief (2024) emphasized that sporadic letters or declarations of physical possession merely constitute preliminary evidence of ownership and do not possess the same legal force as land certificates.⁵

In addition, Ramadhani (2021) stated that public reluctance to register land is mainly caused by complicated procedures, high administrative costs, and limited understanding regarding the legal benefits of land certification.⁶ Recent developments in land administration

³ Raden Ari and Setya Wibawa, 'Legal Analysis of Sporadic Land Rights Registration through Conversion in Achieving Legal Certainty in Semarang Regency: Article Abstract', *Jurnal Akta Notaris* / 3, no. 1 (2024): 50133, <https://doi.org/10.56444/aktanotaris.v3i1>.

⁴ Rio Satrio Nugroho and Nourma Dewi, 'Implementation of Initial Land Registration Based on Village Letter C Title Rights via Sale and Purchase (Case Study at the Boyolali Regency Land Deed Officer's Office)', in *Jurnal Bevinding*, vol. 01, no. 03 (2023).

⁵ M. A. Mahban et al., 'The Legal Status of the Statement of Land Possession (Sporadic) in Civil Law Evidence', *Journal of Lex Philosophy (JLP)* 5, no. 2 (2024): 1344.

⁶ Rahmat Ramadhani, *SOSEK: Journal of Social and Economic Land Registration as a Step Towards Achieving Legal Certainty Regarding Land Rights* (n.d.),

have also introduced electronic land registration services through Regulation of the Minister of Agrarian Affairs and Spatial Planning/National Land Agency No. 3 of 2023 concerning the Issuance of Electronic Documents in Land Registration Activities. This regulation aims to modernise land administration services and improve administrative efficiency through digitalisation.⁷ Furthermore, Government Regulation No. 18 of 2021 introduced an obligation for land registration within five years, creating a new regulatory dimension that requires further examination regarding its implementation in practice.⁸

Although previous studies provide important contributions to land registration studies, several limitations remain. Most studies focus only on specific types of land titles or conversion mechanisms and therefore do not comprehensively evaluate the overall effectiveness of sporadic land registration. In addition, earlier research generally adopts either normative or empirical approaches separately, without integrating both perspectives simultaneously. Previous studies have also given limited attention to the implementation of electronic land registration following ATR/BPN Regulation No. 3 of 2023, particularly in Boyolali Regency. Therefore, further research is necessary to analyse the effectiveness of sporadic land registration comprehensively within the context of recent legal and technological developments.

This study offers several scientific contributions. First, this research comprehensively analyses the effectiveness of sporadic land registration in Boyolali Regency by covering various types of land ownership and registration mechanisms.

<http://jurnal.bundamedia grup.co.id/index.php/sosek>.

⁷ Regulation of the Minister of Agrarian Affairs and Spatial Planning/Head of the National Land Agency No. 3 of 2023 concerning the Issuance of Electronic Documents in Land Registration Activities.

⁸ Regulation of the Minister of Agrarian Affairs and Spatial Planning/Head of the National Land Agency No. 3 of 2023 concerning the Issuance of Electronic Documents in Land Registration Activities.

Second, this study combines normative legal analysis with empirical legal research in order to examine the gap between legal norms (*das sollen*) and practical implementation (*das sein*). Third, this study evaluates the implementation of electronic land registration policies introduced through recent regulations, particularly ATR/BPN Regulation No. 3 of 2023, which has not been widely examined empirically in previous studies. Accordingly, this research contributes both theoretically to the development of agrarian law studies and practically to improving land registration services in Boyolali Regency.

This study aims to analyse the implementation of sporadic land registration in Boyolali Regency based on the Basic Agrarian Law and Government Regulation No. 24 of 1997, evaluate its effectiveness in providing legal certainty and legal protection for land rights holders, and identify the legal, administrative, and social obstacles affecting its implementation. Furthermore, this study seeks to formulate recommendations for improving the effectiveness of sporadic land registration services in Boyolali Regency.

Accordingly, this study addresses several main questions concerning how sporadic land registration is implemented in Boyolali Regency, the extent to which it provides legal certainty and protection for the community, and the obstacles encountered in its implementation from legal, administrative, technological, and societal perspectives.

This study employs an empirical legal approach, also known as socio-legal research, which combines a normative analysis of the relevant statutory provisions with field research.⁹ From a normative perspective, the study examines all applicable regulations relating to sporadic land registration, ranging from the Basic Agrarian Law (UUPA), Government Regulation No. 24 of 1997 and its implementing regulations, to the latest regulation in the form of Ministerial Regulation of the Ministry of Agrarian Affairs and Spatial Planning/National Land Agency (ATR/BPN) No. 3 of 2023. Meanwhile, from an

⁹ Peter Mahmud Marzuki, *Legal Research, Revised Edition* (Kencana Prenada Media Group, 2020).

empirical perspective, the primary data in this study was obtained through a series of in-depth interviews conducted directly with officials at the Boyolali District Land Affairs Office. The informants interviewed in this study were Ms Ika Ariyati, S.H., M.H., and Mr Nanang Suwasono, S.E., M.M., both of whom are officials and practitioners within the Boyolali Regency Land Office who possess the competence and in-depth understanding regarding the implementation of land registration in the region. Secondary data was collected through a literature review of books, scientific journals, and administrative documents from the Land Office.

B. The sporadic implementation of land registration in Boyolali Regency, as viewed in the light of the provisions of Law No. 5 of 1960 on the Basic Agrarian Principles Act (UUPA) and Government Regulation No. 24 of 1997 on Land Registration

The implementation of sporadic land registration in Boyolali Regency forms part of the government's efforts to establish legal certainty¹⁰ regarding land rights, as mandated by the Basic Agrarian Law and further regulated by Government Regulation No. 24 of 1997. Legally, sporadic land registration is carried out at the request of individual rights holders with the aim of obtaining a certificate as strong evidence of land ownership. In practice, the implementation in Boyolali Regency has followed the prescribed procedures, ranging from the submission of applications, verification of document completeness, measurement and mapping of land parcels, proof of rights, followed by the announcement of physical and legal data, up to the issuance of certificates. This process reflects efforts to apply the principles of land registration, such as the principles of simplicity, security, affordability, up-to-date information, and transparency.

However, in practice, a number of obstacles are still encountered that affect the effectiveness of sporadic land

¹⁰ Article 19(1) of Law No. 5 of 1960 on the Basic Provisions of Agrarian Law.

registration. Common issues include the incompleteness of the title documents held by the community, with many still relying on traditional proof of ownership such as Letter C or girik, which require further verification. Furthermore, the limited human resources, which are insufficient to cope with the high volume of applications, often lead to delays in the processing of cases, causing them to exceed the prescribed time limits. Other challenges relate to land boundaries that do not fully comply with the adversarial principle of delimitation, as well as suboptimal notification mechanisms that have the potential to give rise to disputes in the future.

Nevertheless, overall, the implementation of sporadic land registration in Boyolali Regency has shown significant progress, marked by an increase in the number of land parcels successfully registered each year. Various improvement efforts continue to be undertaken, such as enhancing service quality, utilising digital or electronic systems, and intensifying public awareness campaigns regarding the importance of land registration. Therefore, although various challenges remain, the implementation of sporadic land registration in Boyolali Regency has, in principle, proceeded in accordance with the provisions contained in the Land Law (UUPA) and Government Regulation No. 24 of 1997; however, in practice, there are still various aspects requiring further improvement and refinement so that the primary objectives of legal certainty and protection can be optimally realised.

1. The Legal Basis for the Implementation of Sporadic Land Registration

registration in Indonesia. Within this regulatory framework, sporadic land registration is defined as the recording and registration of land carried out for the first time in respect of one or more parcels of land within the jurisdiction of a village or sub-district, either individually or collectively in large numbers, initiated and requested by the rights holders or those receiving rights to the land in question.¹¹

As a regency covering an area of approximately 1,015.10 km², comprising 267 villages and urban neighbourhoods spread across 22 sub-districts, Boyolali Regency possesses considerable land potential alongside significant challenges in the administration of land registration.¹² According to data from the Boyolali Regency Land Office for 2024, the number of registered land parcels in Boyolali Regency by the end of 2023 had reached approximately 412,000 out of the total estimated number of land parcels, however, there are still tens of thousands of land parcels that remain uncertified, and the majority possess only conventional proof of ownership in the form of a Letter C, girik, or a statement of physical possession, which legally do not provide optimal legal certainty.¹³ This situation positions sporadic land registration as one of the most important instruments in efforts to accelerate land certification in Boyolali Regency.

2. Procedures for the Registration of Sporadic Land at the Boyolali Regency Land Office

Procedurally, the implementation of sporadic land registration at the Boyolali Regency Land Office follows the procedures set out in Government Regulation No. 24 of 1997 in conjunction with Regulation of the Minister of Agrarian Affairs/Head of the National Land Agency No. 3 of 1997 concerning the Implementation Provisions of Government Regulation No. 24 of 1997. The registration process begins

¹¹ Article 1, point 11 of Government Regulation No. 24 of 1997 on Land Registration.

¹² Boyolali Regency BPS, *Boyolali Regency in Figures 2024* (Boyolali Regency BPS, 2024).

¹³ Boyolali Regency Land Office, *Boyolali Regency Land Statistics 2024* (Boyolali Regency Land Office, 2024).

with the submission of an application by the applicant, accompanied by the required supporting documents, including a stamped application form, a photocopy of identification, proof of land title, a letter of recommendation from the Village Head/Lurah, proof of payment of the latest Land and Building Tax, and a statement regarding the installation of boundary markers.¹⁴

Once the application has been declared complete and accepted by the service counter, the next stage involves the surveying and mapping of the land plot, carried out by surveyors from the Boyolali Regency Land Office. The survey is carried out after the applicant has installed boundary markers for a plot of land, witnessed by an adjacent landowner, as a fulfilment of the adversarial principle of delimitation, which requires the agreement and consent of the adjacent parties in determining the boundaries of the plot of land to be registered. The results of the survey are then recorded in a survey certificate containing accurate physical data on the land parcel, which subsequently forms part of the research file for the purposes of proving rights and recording in the land register.

The stage of proving title is one of the most critical phases in the sporadic land registration process, as it is at this stage that the legal validity of the title documents submitted by the applicant is assessed. Article 24 of Government Regulation No. 24 of 1997 stipulates that, for the purposes of proving title, the applicant must submit written evidence demonstrating the existence of a right to the land in question. In practice at the Boyolali District Land Office, the most commonly submitted legal bases by applicants are village Letter C documents, deeds of sale and purchase, letters of inheritance, and statements of physical possession of a plot of land known as sporadic letters.¹⁵ Each type of

¹⁴ Section 24 in conjunction with Section 26 of Government Regulation No. 24 of 1997 in conjunction with Section 60 of Regulation of the Minister of Agrarian Affairs/Head of the National Land Agency No. 3 of 1997.

¹⁵ Boyolali Regency Land Office, *Summary of Types of Land Rights for Sporadic Land Registration Applications for 2021–2024*

legal basis has a different level of evidential strength and requires a different verification process by the Land Office.

Once the verification of rights has been completed, the physical and legal data relating to the land in question shall be published for a period of 30 days for sporadic registration, as provided for in Article 26(1) of Government Regulation No. 24 of 1997, in order to provide adequate time and opportunity for parties with a legal interest to submit objections or challenges should any discrepancies or inaccuracies in the listed data be found. This announcement process is conducted via official notice boards placed within the Land Office and the relevant Village or Sub-district Office as a means of disseminating information to the local community.¹⁶ If no objections are raised during the announcement period, the physical and legal data are validated as the basis for the registration of rights and the issuance of certificates as the final outcome of the sporadic land registration process.

In a recent development, the Boyolali Regency Land Agency has begun implementing an electronic land registration system, as mandated by Ministerial Regulation of the Ministry of Agrarian Affairs and Spatial Planning/Head of the National Land Agency No. 3 of 2023 concerning the Issuance of Electronic Documents in Land Registration Activities. Through this system, certain land documents, including electronic certificates, are being issued in stages, which is expected to improve service efficiency whilst reducing the risk of land document forgery.¹⁷

3. Data on Sporadic Land Registration Achievements in Boyolali Regency

According to summary data compiled by the Boyolali Regency Land Agency, the implementation of sporadic land

(Boyolali Regency Land Office, 2024).

¹⁶ Article 26(1) of Government Regulation No. 24 of 1997 on Land Registration.

¹⁷ Regulation of the Minister of Agrarian Affairs and Spatial Planning/Head of the National Land Agency No. 3 of 2023 concerning the Issuance of Electronic Documents in Land Registration Activities, Article 1(5).

registration has shown fluctuating trends in recent years. In 2021, the number of sporadic land registration applications received by the Boyolali Regency Land Office stood at 3,247, with a completion rate of 78.3 percent, meaning 2,542 certificates were successfully issued.¹⁸ Subsequently, in 2022, the number of applications increased to 3,891, but the completion rate fell to 71.6 percent, with 2,786 cases successfully processed in the same year. This decline was influenced by the rising number of applications, which was not fully offset by the available service capacity. As for the first half of 2024, there are still 722 cases that have not yet been resolved. This situation is not only caused by the high volume of applications but is also influenced by the incompleteness of administrative requirements on the part of the applicants. Some of the common obstacles encountered include discrepancies between personal identity and title documents, incomplete proof of Land and Building Tax (PBB) payment, the unavailability of a certificate from the village head or sub-district head, and incomplete documents regarding the heirs' consent for land acquired through inheritance. These deficiencies mean that the verification process for physical and legal data cannot proceed until all requirements are deemed complete in accordance with applicable regulations.¹⁹

Table 1. Data on the Progress of Sporadic Land Registration in Boyolali Regency (2021–2024)

Year	Number of Applications	Files Processed	Pending Cases	Completion Rate (%)	Note
2021	3,247	2,542	705	78.3%	—
2022	3,891	2,786	1,105	71.6%	↓
2023	4,103	3,044	1,059	74.2%	↑
2024 (1st half)	2,178	1,456	722	66.8%	*

Data for the first half of 2024 (January–June 2024). ↓ = decrease in completion rate; ↑ = increase.

¹⁸ Boyolali Regency Land Office, *Annual Report on Land Services 2021* (Boyolali Regency Land Office, 2021).

¹⁹ Boyolali Regency Land Office, *Annual Report on Land Services 2022* (Boyolali Regency Land Office, 2022).

The data shows that although the number of sporadic land registration applications in Boyolali Regency has continued to rise year on year, the completion rate has not yet reached the ideal figure of 100 percent completion within the same financial year. This situation indicates a gap between the service capacity of the Land Office and the public's actual need for land registration services, which ultimately results in a delay in the legal certainty that applicants should be able to enjoy immediately.

4. Compliance of Implementation with the Provisions of the UUPA (Basic Agrarian Law) and Government Regulation No. 24 of 1997

When considering the alignment between on-the-ground implementation and applicable regulatory provisions, there are several key points that need to be highlighted. Firstly, in terms of compliance with the principles of land registration, the Boyolali Regency Land Office has generally endeavoured to uphold the principles of simplicity, security, affordability, up-to-date information and transparency, as mandated by Article 2 of Government Regulation No. 24 of 1997. The implementation of a one-stop service counter, the setting of transparent non-tax state revenue (PNBP) tariffs based on Government Regulation No. 128 of 2015 concerning the Types and Tariffs of Non-Tax State Revenue Applicable to the Ministry of Agrarian Affairs and Spatial Planning/National Land Agency (ATR/BPN), and the availability of information on registration procedures accessible to the public are positive indicators of efforts to fulfil these principles.²⁰

Secondly, regarding compliance with service time standards, field research findings indicate that the processing time for sporadic land registration applications in Boyolali Regency frequently exceeds the established standards. Based on the provisions set out in Regulation of the Head of the National Land Agency No. 1 of 2010 governing Land Service Standards and Regulations, it has been stipulated that

²⁰ Government Regulation No. 128 of 2015 concerning the Types and Rates of Non-Tax State Revenue Applicable to the Ministry of Agrarian Affairs and Spatial Planning/National Land Agency.

the timeframe for completing the initial land registration process is 98 working days.

However, in practice, the processing of sporadic land registration applications in Boyolali Regency takes an average of between 120 and 180 working days, depending on the complexity of the case and the completeness of the documents submitted by the applicant.²¹ These delays occur primarily during the surveying stage and the document review stage, both of which are heavily influenced by the workload of officials and the completeness of the applicant's documents.²²

Thirdly, regarding the implementation of the provisions on the announcement of physical and legal data, the Boyolali District Land Office has fulfilled its obligation to announce such information for 30 days, as required by Article 26 of Government Regulation No. 24 of 1997. However, the effectiveness of this notification mechanism remains questionable, given that not all interested members of the public are aware of the notification, particularly those living far from the notice board or those with limited access to information. This ultimately risks undermining the function of the notification as a tool for preventing land disputes, which is one of the primary objectives of this stage.²³

Fourthly, the implementation of sporadic land registration in Boyolali Regency also continues to face challenges in terms of consistently applying the adversarial principle of boundary demarcation. The determination of land boundaries, which should be carried out with the consent of

²¹ Regulation of the Head of the National Land Agency of the Republic of Indonesia No. 1 of 2010 concerning Standards of Service and Land Administration, Annex: Types of Initial Land Registration Services (Conversion, Recognition and Affirmation of Rights).

²² Boyolali Regency Land Office, *Annual Report on Land Services 2023* (Boyolali Regency Land Office, 2023).

²³ Satrio Nugroho and Dewi, 'Implementation of Initial Land Registration Based on Letter C Village Title Rights Through Sale and Purchase (Case Study at the Boyolali Regency Land Deed Officer's Office)'.

adjacent or neighbouring landowners, is in practice often hampered by the absence or unwillingness of neighbouring landowners to witness and approve the demarcation of boundaries, meaning that the surveying process must be postponed or carried out unilaterally, which has the potential to give rise to boundary disputes in the future.

C. The effectiveness of sporadic land registration in ensuring legal certainty regarding land rights for the community in Boyolali Regency

The effectiveness of sporadic land registration in providing legal certainty regarding land rights for the community in Boyolali Regency can be examined using the theory of legal effectiveness proposed by Soerjono Soekanto, who argues that the success or failure of a law in achieving its objectives is determined by five main factors: the substance of the law itself, the law enforcement apparatus, the availability of supporting resources and facilities, public awareness and participation, and the prevailing cultural factors within the community. These five factors are interdependent and influence one another, and therefore cannot be separated when assessing the level of effectiveness of law enforcement in practice.

In the context of sporadic land registration in Boyolali Regency, assessing effectiveness cannot be limited to procedural aspects alone, such as the completion of administrative stages or the number of certificates successfully issued. Rather, a comprehensive assessment must be carried out of the quality of the registration outcomes, particularly regarding the validity of physical and legal data and the minimisation of potential future disputes. Effectiveness must also be measured by the extent to which the existing system is able to provide a sense of security, certainty and tangible legal protection for the community as land rights holders.

Furthermore, it is important to consider the extent to which implementing agencies are able to carry out their duties professionally and accountably, and are supported by adequate facilities and infrastructure. On the other hand, the level of public legal awareness is also a key indicator, given

Aspects	System	with a Positive Bias (Indonesia)
State guarantee of data accuracy	The state provides an absolute guarantee (indefeasibility of title)	No absolute guarantee; data may be corrected through legal action
Possibility of challenging a certificate	Certificates cannot be challenged once registered	Certificates may still be challenged; protected after 5 years (Article 32(2) of Government Regulation No. 24 of 1997)
<i>Level of legal certainty for rights holders</i>	<i>Very high; rights holders are fully protected against third-party claims</i>	Moderate; still vulnerable to legal challenges, particularly for land with a complex ownership history
<i>Examples of countries where the system is applied</i>	<i>Australia (Torrens System), the UK, Germany, the Netherlands</i>	Indonesia (a mixed system with positive tendencies)
<i>Implications for sporadic registration</i>	<i>Once the certificate is issued, ownership is fully guaranteed without the risk of disputes</i>	The accuracy of the registration process is crucial as the certificate remains subject to dispute

Source: Compiled from various literature sources and the provisions of Government Regulation No. 24 of 1997

2. From the Perspective of Law Enforcement Factors

The Boyolali Regency Land Office, as the implementing body for land registration, has essentially endeavoured to carry out its functions and exercise its powers to the best of its ability in accordance with the mandate set out in the applicable legislation. However, its institutional capacity is not yet fully commensurate with the scale of the tasks it must undertake. The limited number of human resources, particularly the available surveying staff, is the most prominent structural issue, and its impact is felt most directly by applicants. This situation is exacerbated by the vast coverage of the Boyolali District Land Office's operational area, which encompasses hundreds of villages and sub-districts spread across the entire district; consequently, the

ratio of survey officers to the area to be served falls far short of the ideal figure. Consequently, this situation results in the land surveying process and the resolution of land registration applications taking a relatively longer time compared to the service targets set by the Ministry of Agrarian Affairs and Spatial Planning ().

Whilst influenced by the high volume of applications, these delays also highlight the need to optimise land administration service mechanisms through the strengthening of the PTSL programme and the utilisation of digital service systems to support the acceleration of the land registration process in a more effective and integrated manner. Consequently, the implementation of land registration is expected to continue to provide legal certainty to the public in a swift, accurate and efficient manner, which ultimately becomes one of the most tangible factors in reducing the effectiveness of sporadic land registration in providing legal certainty promptly and on time to applicants.²⁶

3. In terms of infrastructure and facilities

In terms of infrastructure and facilities, the Boyolali Regency Land Office has undertaken various initiatives to improve the quality of sporadic land registration services through the use of information technology and the digitisation of land administration services. The implementation of an electronic land administration system is being rolled out in phases to support the acceleration of land administration services, including the process of sporadic land registration. It is hoped that the use of this digital system will improve service efficiency, simplify land data management, and speed up administrative processes for the public. Furthermore, the digitisation of land data also enables the public to monitor the progress of applications more transparently without having to visit the land office in person.²⁷ However, the implementation of digital land

²⁶ Soekanto, *Factors Influencing Law Enforcement*.

²⁷ Regulation of the Minister of Agrarian Affairs and Spatial Planning/Head of the National Land Agency No. 3 of 2023 on the Issuance of Electronic Documents in Land Registration Activities,

services in Boyolali Regency still faces a number of challenges, particularly limited technological infrastructure and low digital literacy among the public in some rural areas, meaning that the benefits of digital services have not yet been fully realised by all sections of society.

These findings are consistent with the results of research by Anugrahany, Rohmah, Nurstyo, and Hadji (2024), who examined the implementation of electronic land certificates in Magelang Regency and found that the level of public acceptance of electronic land certificates is significantly determined by a number of interacting variables, including the digital literacy of each individual, the affordability and ease of access to information technology infrastructure, the clarity of applicable regulations, and the effectiveness of policy dissemination to the public; thus, the success of digital land administration transformation does not solely depend on the readiness of technological infrastructure, but also on the readiness of human resources and the community's legal culture.²⁸

4. From the perspective of social and cultural factors

The level of awareness and participation of the community in Boyolali Regency in the sporadic land registration programme remains highly varied and uneven. Based on survey data conducted by the Boyolali Regency Land Office in 2023, 62.4 percent of respondents from the community whose land is not yet certified stated that they were aware of the sporadic land registration programme, yet only 38.7 percent of them expressed an interest in applying for a certificate in the near future.²⁹

From the perspective of the legal certainty it provides,

Article 1(5).

²⁸ Raden Ari and Setya Wibawa, 'Legal Analysis of the Sporadic Registration of Land Rights through Conversion in Achieving Legal Certainty in Semarang Regency: Article Abstract', *Jurnal Akta Notaris* / 3, no. 1 (2024): 50133, <https://doi.org/10.56444/aktanotaris.v3i1>.

²⁹ Boyolali Regency Land Office, Report on the Results of a Survey of Public Awareness of Land Registration in Boyolali Regency in 2023 (Boyolali Regency Land Office, 2023).

land title certificates issued through the sporadic registration process in Boyolali Regency have formally complied with the provisions of Article 32(1) of Government Regulation No. 24 of 1997, which states that a certificate constitutes strong evidence of the physical and legal data contained therein.

However, in practice, the evidential weight of the certificate which is strong but not absolute still leaves a legal loophole that has the potential to cause problems in the future.

According to data from the Boyolali District Court, between 2021 and 2023 an average of 23 land cases were heard each year, some of which were actions seeking the annulment of certificates issued through the sporadic registration mechanism. This figure indicates that although certificates have been successfully issued, the legal certainty promised is not always fully realised in practice, particularly for certificate holders whose land has a complex or overlapping ownership history.

Mahban, Nawi, and Arief (2024) assert in their research that the issue of legal certainty in sporadic land registration is not only related to the presence or absence of a certificate, but also to the accuracy of the physical and legal data contained therein.³⁰

In this regard, the quality of the measurement and data verification carried out by Land Office officials is the primary determinant of the strength of the legal protection that a certificate can provide to its holder. If the measurement process is carried out inaccurately or the legal data contained in the certificate does not correspond to the reality on the ground, then the certificate issued has the potential to become a source of new disputes in the future rather than serving as the instrument of legal certainty it is intended to be.

More specific legal protection for certificate holders is in fact provided for in Article 32(2) of Government Regulation No. 24 of 1997, which stipulates that if, within a period of

³⁰ M. A. Mahban et al., 'The Legal Status of the Statement of Land Possession (Sporadic) in Civil Law Evidence', *Journal of Lex Philosophy (JLP)* 5, no. 2 (2024): 1344.

more than five years from the date the certificate was issued, no party has lodged a written objection or brought a lawsuit before the court, the right to challenge that ownership lapses and the certificate receives stronger legal protection.³¹ This five-year protection principle is essentially an effort to compensate for the weaknesses of the negative publicity system which is applied in Indonesia from a positive perspective by providing a form of security guarantee for bona fide certificate holders. However, in practice in Boyolali Regency, there are still cases where certificates that are more than five years old are still being challenged in court, indicating that the application of this principle is not yet fully consistent and still requires strengthening in its implementation.

Taking into account the overall analysis above, it can be concluded that the effectiveness of sporadic land registration in ensuring legal certainty regarding land rights for the community in Boyolali Regency remains suboptimal. Of the five factors used as an analytical framework based on Soerjono Soekanto's theory, almost all factors indicate limitations and weaknesses that synergistically reduce the effectiveness of sporadic land registration in providing comprehensive legal certainty. The legal factor is constrained by the weakness of the negative publication system with a positive bias; the law enforcement factor is limited by a lack of human resource capacity; the infrastructure factor is uneven in the utilisation of technology; and the social and cultural factor is still influenced by low awareness of land law. Therefore, systematic, comprehensive and sustainable remedial efforts are required from various stakeholders, including the Land Office as the implementing agency, local governments as strategic partners, and the public as the primary beneficiaries targeted by this sporadic land registration programme.

³¹ Article 32(1) of Government Regulation No. 24 of 1997 on Land Registration.

D. Factors hindering the sporadic implementation of land registration in Boyolali Regency, whether from a legal or administrative perspective or in terms of public understanding

In practice, the implementation of sporadic land registration in Boyolali Regency is not without various obstacles stemming from legal and administrative aspects, as well as the level of public understanding. These obstacles are closely interlinked and mutually influential, and thus cumulatively impact the effectiveness of sporadic land registration in achieving optimal legal certainty for all sections of society in the region. From a legal perspective, obstacles may arise due to overlapping land tenure, incomplete evidence of ownership, and the persistence of unresolved agrarian disputes or conflicts. Meanwhile, from an administrative standpoint, issues often relate to limited facilities and infrastructure, relatively complex procedures, and a lack of data synchronisation between relevant agencies.

On the other hand, social factors also play a role of no less importance, particularly in relation to low levels of legal awareness, a lack of understanding regarding the importance of land registration, and the perception that the land registration process is costly and time-consuming. These conditions ultimately result in sporadic and suboptimal public participation in land registration programmes. Furthermore, these obstacles not only impact administrative aspects but also have implications for the weak legal certainty regarding the land rights held by the community.

Therefore, the identification and comprehensive understanding of these various constraints are a crucial first step towards formulating appropriate, effective and sustainable solutions. It is hoped that an in-depth analysis of the root causes of the problem will yield policy recommendations that are not only normative but also practical, thereby improving the quality of sporadic land registration and strengthening legal certainty and protection

for the wider public.

1. From a Legal Perspective

The most fundamental and structural obstacle is the inherent weakness of the 'negative publication with a positive presumption' system adopted by Indonesia in the administration of land registration. In principle, this system does not provide an absolute guarantee of the accuracy of the physical and legal data contained in the certificate; consequently, an issued certificate may at any time be challenged or subject to a request for annulment by another party who claims to have stronger rights to the land. Apriani and Bur (2021) emphasise that this 'negative publication with a positive tendency' system directly impacts the suboptimal level of legal protection and certainty that land rights holders should enjoy, as their ownership rights are not absolutely protected even though the certificate has been officially issued by the Land Office.³² This is in stark contrast to the positive registration system in force in many developed countries, where the state fully guarantees the validity of registered land data, so that the certificates issued are absolute and cannot be challenged by any party.

Another legal issue hindering the implementation of sporadic land registration in Boyolali Regency is the complexity of land title issues involving village 'Letter C' certificates, where the ownership history cannot be fully reconstructed. Many plots of land in Boyolali Regency have changed hands multiple times through inheritance, private sales, or gifts without adequate recording and documentation, resulting in a broken chain of title history that is difficult to prove legally. Nugroho, Suharno, and Dewi (2023) specifically identified in their research that the historical discontinuity in the chain of title is one of the most significant obstacles in the initial land registration process in Boyolali Regency, which often results in applications being unable to proceed further until the applicant is able to provide the necessary evidence.³³

³² Nanda Setiawan Apriani and Bur, 'Legal Certainty and Legal Protection in the Land Registration Publication System in Indonesia', *Jurnal Bina Mulia Hukum*, Vol. 5 No. 2 (2021), p. 228.

³³ Satrio Nugroho and Dewi, 'The Implementation of Initial Land

2. *From an administrative perspective*

The most common obstacle encountered in the sporadic land registration process in Boyolali Regency is the issue of incomplete or non-compliant application documents submitted by applicants. According to data from the Boyolali Regency Land Office for 2023, out of 4,103 applications received throughout 2023, 387 files or approximately 9.4 percent had to be returned to applicants for completion or correction as they did not meet the established administrative requirements. The most common types of incompleteness include discrepancies between the applicant's name on their identity documents and those on the title documents, incomplete or expired property tax payment receipts, letters of recommendation (SK) from the Village Head or Sub-district Head that do not meet the required format, and the absence of consent documents from heirs for land acquired through inheritance. These document deficiencies not only result in delays to the registration process, but also cause frustration and disappointment amongst applicants who feel they must make repeated trips to sort out their paperwork without any clear timeline.

Table 3. Breakdown of Pending Applications for 2023

Category of Obstacle	Number of Applications	Percentage (%)
Still undergoing assessment	523	49.4
Incomplete administrative documents	387	36.5
Boundary disputes/third-party objections	149	14.1
Total Pending Cases	1,059	100

Source: Boyolali District Land Office, 2023 Annual Report

Another administrative obstacle of no less significance is the issue of land boundary disputes, which frequently arise during the surveying and demarcation stages. The application of the adversarial principle of delimitation as stipulated in Article 17 in conjunction with Article 19 of

Registration Based on Village Letter C Title Rights Through Sale and Purchase (A Case Study at the Land Deed Officer's Office, Boyolali Regency).

Government Regulation No. 24 of 1997, which requires the demarcation of land boundaries to be carried out with the consent of adjacent landowners, is in practice often not fully met.³⁴ According to data from the Boyolali Regency Land Office for 2023, out of 149 application files delayed due to disputes or objections from third parties, 97 cases or approximately 65.1 percent involved disputes regarding land boundaries between the applicant and adjacent landowners.³⁵ These boundary disputes generally arise due to the absence of clear and permanent boundary markers on the ground, differing perceptions between the applicant and neighbouring landowners regarding the actual location of the boundary, or overlapping claims over part of the land plot to be registered. Resolving these boundary disputes often takes a considerable amount of time as it requires going through a mediation process or even court proceedings if the parties cannot reach an agreement through consultation.

The limited human resource capacity at the Boyolali Regency Land Office remains one of the administrative obstacles to the implementation of sporadic land registration. According to 2024 staffing data, the number of surveyors available is not yet fully commensurate with the size of the service area and the high volume of applications that need to be processed.³⁶ This situation results in the surveying process taking a relatively long time, thereby delaying the completion of land registration applications. Consequently, it is necessary to optimise land administration mechanisms by strengthening the implementation of the PTSL programme and utilising digital service systems to support the acceleration of the land

³⁴ Section 17 in conjunction with Section 19 of Government Regulation No. 24 of 1997 on Land Registration.

³⁵

³⁶ Boyolali Regency Land Office, Personnel and Human Resources Data of the Boyolali Regency Land Office for 2024 (Boyolali Regency Land Office, 2024).

registration process in a more effective and integrated manner. The accumulation of survey backlogs, which continues to grow year on year, is further exacerbating the situation, given that every year there are always applications from the previous year that have not yet been fully processed, yet a significant number of new applications must already be received.³⁷

Muhammad et al. (2022) identified that the implementation of the PTSL programme in practice faces various obstacles, including the burden of outstanding income tax (PPh) and land and building transfer tax (BPHTB) payments, the incompleteness of title documents held by the community, and the limited and uneven distribution of human resources between Java and areas outside Java, issues of absentee land, land ownership exceeding the permitted maximum limits, land left abandoned, as well as inconsistencies in the provisions regarding the publication of physical and legal data across applicable regulations, which collectively hinder efforts to accelerate land registration in Indonesia.³⁸

3. From the Perspective of Public Understanding

The belief that land ownership is sufficiently proven by conventional documents such as Letter C or girik, which have been held for generations, remains deeply ingrained in some communities in Boyolali, particularly among the older generation who have been accustomed to the traditional land ownership system for decades. Wibawa (2024) found in his research that the perception that the land registration

³⁷ Boyolali District Land Office, Summary Data on Sporadic Land Registration Applications for the First Semester of 2024 (Boyolali District Land Office, 2024).

³⁸ Muhammad, Y. F. W., Haryanto, A., & Ahmad, D. N. F. (2022). Obstacles in the Implementation of the Complete Systematic Land Registration Programme (PTSL). *Journal of Innovation and Creativity (JIKa)*, 2(1), 49–68.

process is time-consuming and involves convoluted procedures is one of the main reasons for the public's low interest in obtaining certificates, and this finding is relevant to describing similar conditions occurring in Boyolali Regency. This perception is not entirely incorrect given that the actual time taken to complete the process is indeed still far from the ideal standard; however, it also reflects a lack of public understanding regarding the long-term legal risks that may arise from the absence of a certificate as strong proof of ownership. Without a certificate, landowners lack adequate legal protection should their land be claimed by another party at some point; they cannot use their land as collateral for loans from banking institutions; and they cannot formally transfer ownership rights through legally recognised mechanisms.

In addition to these three main obstacles, there are also challenges arising from geographical and infrastructure factors that further complicate the implementation of sporadic land registration in parts of Boyolali Regency. Several villages situated on mountain slopes or in remote areas with limited accessibility present a particular challenge for surveyors in carrying out land surveys efficiently. The hilly topography and difficult terrain not only slow down the surveying process but also increase the risk of inaccuracies in the survey results, which could ultimately affect the quality of the physical data recorded in the certificates. If not anticipated through proper planning and the provision of adequate surveying equipment, these geographical obstacles have the potential to become a source of new problems that could lead to land disputes in the future.

Table 4. Factors Hindering the Implementation of Sporadic Land Registration in Boyolali Regency and Recommended Solutions

Aspect of Obstacle	Type of Obstacle	Impact	Recommended Solutions
--------------------	------------------	--------	-----------------------

strengthened to support the acceleration of land surveying and the completion of land registration. From the perspective of community empowerment, public awareness and legal education programmes on land law that reach all villages and sub-districts equitably and sustainably must be a top priority, so that public legal awareness of the importance of land certification continues to increase over time and cultural barriers that have long been obstacles can be gradually eliminated.

E. Conclusion

The implementation of sporadic land registration at the Boyolali Regency BPN Office has, procedurally, been carried out in accordance with the provisions of the Land Administration Law (UUPA) and Government Regulation No. 24 of 1997, from the submission of applications, the surveying and mapping of land parcels, the verification of rights, and the publication of physical and legal data, through to the issuance of certificates; this has been marked by a consistent year-on-year increase in the number of applications. However, its effectiveness in ensuring legal certainty regarding land rights for the community has not yet reached an optimal level. When examined through the five factors of Soerjono Soekanto's theory of legal effectiveness, there are synergistic weaknesses: from the legal factor perspective, the 'negative publication with positive effect' system adopted by Indonesia does not provide absolute assurance of the accuracy of certificate data, leaving land ownership vulnerable to legal challenges; from the law enforcement factor perspective, the limited number of surveyors, which is disproportionate to the extent of the service area, results in average completion times far exceeds the established standards; from the perspective of infrastructure, the digital infrastructure gap between urban and rural areas hinders the equitable distribution of the benefits of land digitisation; and from the perspective of society and culture, there remains a low level of public interest in obtaining certificates, as the majority still rely on

conventional documents such as Letter C or girik as proof of ownership.

In order to provide greater legal certainty and protection for land rights holders in Boyolali Regency, reform measures need to be implemented in a structured, comprehensive and sustainable manner through cooperation between the Land Office, the local government, village and sub-district officials, and the community as the primary stakeholders in land registration. From an institutional perspective, the implementation of the Comprehensive Systematic Land Registration (PTSL) programme needs to be optimised as a means of accelerating land certification, which is considered more effective than sporadic registration mechanisms, as it is carried out in an integrated and comprehensive manner within a specific area, thereby reducing the backlog of unresolved survey requests and accelerating the establishment of legal certainty regarding the community's land rights. From a regulatory perspective, the simplification of administrative requirements for communities still using traditional proof of ownership must be carried out without neglecting the principle of due diligence in the process of examining physical and legal data. Furthermore, from the perspective of community empowerment, increasing public awareness and providing legal education on land matters in an equitable and sustainable manner is a crucial step towards fostering public legal awareness regarding the urgency of land registration as a form of legal protection for land ownership rights. Consequently, it is hoped that the implementation of land registration in Boyolali Regency will be able to proceed more effectively, efficiently, and with a focus on achieving fair legal certainty for all sections of society.

F. References

- Apriani, Nanda Setiawan, and Bur. "Legal Certainty and Legal Protection in the Land Registration Publication System in Indonesia." *Jurnal Bina Mulia Hukum* 5, no. 2 (2021): 228–240.
- Ari, Raden, and Setya Wibawa. "Legal Analysis of Sporadic

Land Rights Registration Through Conversion in Achieving Legal Certainty in Semarang Regency." *Journal of Notarial Deeds* 3, no. 1 (2024): 50–133. <https://doi.org/10.56444/aktanotaris.v3i1>.

Badan Pusat Statistik Kabupaten Boyolali. *Boyolali Regency in Figures 2024*. Boyolali: BPS Kabupaten Boyolali, 2024.

Boyolali Regency Land Office. *Annual Report on Land Services 2021*. Boyolali: Boyolali Regency Land Office, 2021.

Boyolali Regency Land Office. *Annual Report on Land Services 2022*. Boyolali: Boyolali Regency Land Office, 2022.

Boyolali Regency Land Office. *Annual Report on Land Services 2023*. Boyolali: Boyolali Regency Land Office, 2023.

Boyolali Regency Land Office. *Boyolali Regency Land Statistics 2024*. Boyolali: Boyolali Regency Land Office, 2024.

Boyolali Regency Land Office. *Personnel and Human Resources Data of the Boyolali Regency Land Office for 2024*. Boyolali: Boyolali Regency Land Office, 2024.

Boyolali Regency Land Office. *Report on the Results of the Survey on Public Awareness of Land Registration in Boyolali Regency 2023*. Boyolali: Boyolali Regency Land Office, 2023.

Boyolali Regency Land Office. *Summary Data on Obstacles to the Settlement of Land Registration Applications for 2023*. Boyolali: Boyolali Regency Land Office, 2023.

Boyolali Regency Land Office. *Summary Data on Sporadic Land Registration Applications for the First Semester of 2024*. Boyolali: Boyolali Regency Land Office, 2024.

Boyolali Regency Land Office. *Summary of Types of Legal Titles for Sporadic Land Registration Applications, 2021–2024*. Boyolali: Boyolali Regency Land Office, 2024.

Government Regulation No. 10 of 1961 on Land Registration.

Government Regulation No. 18 of 2021 concerning Management Rights, Land Rights, Flat Units, and Land Registration.

Government Regulation No. 24 of 1997 on Land Registration.

- Government Regulation No. 128 of 2015 concerning Types and Rates of Non-Tax State Revenue Applicable to the Ministry of Agrarian Affairs and Spatial Planning/National Land Agency.
- Harsono, Boedi. *Indonesian Agrarian Law: The History of the Formation of the Basic Agrarian Law, Its Content and Implementation*. Jakarta: Arkola, 2003.
- Law No. 5 of 1960 on Basic Agrarian Principles.
- Mahban, M. A., S. Nawi, and A. Arief. "The Legal Status of the Land Possession Statement (Sporadic) in Civil Law Evidence." *Journal of Lex Philosophy (JLP)* 5, no. 2 (2024): 1344–1358.
- Marzuki, Peter Mahmud. *Legal Research*. Revised ed. Jakarta: Kencana Prenada Media Group, 2020.
- Mujiburohman, Dian Aries. "The Transition from Paper to Electronic: A Legal and Technical Analysis of Electronic Land Certificates." *Bhumi: Journal of Agrarian and Land Affairs* 7, no. 1 (2023): 57–71.
- Ramadhani, Rahmat. "Land Registration as a Step Towards Achieving Legal Certainty Regarding Land Rights." *SOSEK: Journal of Social and Economic*. Accessed May 25, 2026. <http://jurnal.bundamedia grup.co.id/index.php/sosek>.
- Regulation of the Minister of Agrarian Affairs and Spatial Planning/Head of the National Land Agency No. 3 of 2023 concerning the Issuance of Electronic Documents in Land Registration Activities.
- Regulation of the Minister of Agrarian Affairs and Spatial Planning/Head of the National Land Agency No. 13 of 2017 concerning Procedures for Granting, Releasing, or Transferring Ownership Rights to Residential Houses or Dwellings by Foreigners Residing in Indonesia.
- Regulation of the Minister of Agrarian Affairs/Head of the National Land Agency No. 3 of 1997 concerning the Implementation of Government Regulation No. 24 of 1997 on Land Registration.
- Santoso, Urip. *Agrarian Law: A Comprehensive Study*. Jakarta: Kencana Prenada Media Group, 2012.
- Satrio Nugroho, Rio, and Nourma Dewi. "The Implementation

of Initial Land Registration Based on a Village Letter C Title Through Sale and Purchase (A Case Study at the Boyolali Regency Land Deed Officer's Office)." *Jurnal Bevinging* 1, no. 3 (2023).

Soekanto, Soerjono. *Factors Affecting Law Enforcement*. Jakarta: Rajawali Pers, 2019.

Soemitro, Ronny Hanitijo. *Legal Research Methodology and Jurimetrics*. Jakarta: Ghalia Indonesia, 1990.

Soerodjo, Irawan. *Legal Certainty of Land Rights in Indonesia*. Jakarta: Arkola, 2003.

Sugiyono. *Quantitative, Qualitative, and R&D Research Methods*. Bandung: Alfabeta, 2013.

Acknowledgment

None

Funding Information

None

Conflicting Interest Statement

The authors state that there is no conflict of interest in the publication of this article.

Publishing Ethical and Originality Statement

All authors declared that this work is original and has never been published in any form and in any media, nor is it under consideration for publication in any journal, and all sources cited in this work refer to the basic standards of scientific citation.

Generative AI Statement

Authors must acknowledge the use of AI in their work to ensure transparency and maintain trust with their audience. As generative AI becomes an integral tool for content creation, it is crucial to disclose its involvement in the process. This helps clarify the role AI played in generating ideas, drafting text, or enhancing creativity. Acknowledging AI usage also supports ethical standards, ensuring that authorship remains clear and that credit is properly attributed. Such transparency fosters responsible AI integration and upholds the integrity of both the creative process and the final work.