



Analysis Of Perceptions Of Ptsl Benefits From Economic, Social/Legal, And Environmental Aspects In Seluma Regency

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ABSTRACT

This study aims to analyze the perceived benefits of PTSL in Seluma Regency, Bengkulu Province. Seluma Regency is the largest in Bengkulu Province but also has the smallest number of registered and mapped land parcels. This research uses a descriptive research approach. The Analytical Hierarchy Process (AHP) method was used to determine the priority benefits of PTSL. The results of this study show that the benefits of economic aspects are ranked first with a weight of (0.596) with a sequence of sub-criteria namely Access to Capital / Banking Credit (0.546), Increased Land Value (0.250), Investment in Land (0.120), and Increased BPHTB Revenue (0.120). The benefits of social/legal aspects are ranked second with a weight of (0.287) with a sequence of sub-criteria namely Preventing Conflict Disputes over Land (0.626) and Legal Protection of Land Rights (0.374) and finally the benefits of environmental aspects with a weight of (0.117) with a sequence of sub-criteria of Food Land Function Change (0.761) and Deforestation (0.239).

INTRODUCTION

Land constitutes a strategic and finite resource that plays a vital role in human life as both a space for habitation and a means of livelihood. Consequently, demand for land continues to increase in line with population growth, while its availability remains relatively constant. According to resource and population theories, this condition tends to intensify competition over land control and utilization (Blum et al., 2013). In the Indonesian, land management and tenure are regulated through the agrarian legal framework to ensure legal certainty and justice, as stipulated in Law Number 5 of 1960 on Basic Agrarian Principles (UUPA), which distinguishes land status into state land and land subject to rights. Furthermore, land rights are classified into permanent and temporary rights. Permanent land rights, as regulated under Article 16 paragraph (1) of the UUPA, include ownership rights, cultivation rights, building use rights, use

rights, lease rights, land clearing rights, and forest product harvesting rights. These rights function as legal instruments to regulate sustainable land use and to prevent agrarian conflicts.

Article 33 paragraph (3) of Law Number 5 of 1960 affirms that land, water, and natural resources contained therein are controlled by the state and utilized to the greatest extent for the welfare of the people. Accordingly, the state possesses constitutional authority to regulate, manage, and ensure legal certainty over land tenure and utilization. This principle serves as the normative foundation of national land policy, which is oriented not only toward administrative order but also toward fulfilling pragmatic needs of development and economic growth. Within this framework, land registration is positioned as a primary legal instrument to realize legal certainty through the clear and measurable determination of location, boundaries, and area of land parcels, thereby providing strong legal protection for land rights.

Theoretically, legal certainty over land rights has a positive correlation with increased economic activity, as land is regarded as a factor of production and an economic asset that can be utilized for investment, access to capital, and business development. This perspective is consistent with the people-centered economic paradigm that emphasizes strengthening local economic bases through productive economic activities and micro, small, and medium enterprises (Suwignyo, 2019; Mundayat et al., 2022). Accordingly, the government has promoted the acceleration of nationally strategic, village- and urban ward-based programs, one of which is the Complete Systematic Land Registration Program (PTSL), launched in 2016. The Complete Systematic Land Registration program aims to accelerate the certification of all land parcels in Indonesia in response to the previously slow pace of land registration, while also serving as a public policy instrument to expand community access to economic opportunities and to enhance land value.

Land registration initiatives in Indonesia initially began with the National Agrarian Operations Project based on the Decree of the Minister of Home Affairs Number 189 of 1981. However, by 2016, land certification had reached only approximately 44% of the total land parcels nationwide. This condition prompted the government to initiate the Complete Systematic Land Registration program in 2015 as an effort to accelerate land registration while simultaneously realizing a unified national land map, targeting all uncertified land parcels within a village or urban ward. As a nationally strategic program, the implementation of Complete Systematic Land Registration program by the Ministry of Agrarian Affairs and Spatial Planning/National Land Agency (ATR/BPN) demonstrated significant progress during the periods 2015–2019 and 2019–2024, resulting in a substantial increase in land certificate ownership among the public.

Land certification contributes to the strengthening of land-based economic activities through, inter alia, the use of land as collateral for credit, increased land lease and sale transactions, investment, tax revenues and non-tax state revenues, as well as rising land values that influence regional economic growth, where land is viewed as both a factor of production and a macroeconomic policy instrument. The implementation of Complete Systematic Land Registration program is driven by the persistently high number of unregistered land parcels; as of 2023, only approximately 93.89 million land parcels had been registered out of an estimated 126 million nationwide, with 89.44 million land certificates issued (ATR/BPN Statistics, 2023). In the legal framework, a land certificate is defined as proof of land rights recorded in the land book, as stipulated in Government Regulation Number 24 of 1997. The determination of PTSL targets, including in Bengkulu Province, adopts a top-down planning approach, whereby national targets are translated into regional activity plans to support the achievement of national land registration objectives. The initial targets set for Bengkulu Province are presented in the following table.

Table 1 Complete Systematic Land Registration Program (PTSL) Targets of Bengkulu Province, 2020–2023

No	Regency/City	2020 Initial	2020 Final	2021 Initial	2021 Final	2022 Initial	2022 Final	2023 Initial	2023 Final
1	Seluma Regency	3.000	1.450	4.354	4.354	8.400	3.852	2.100	1.500
2	Bengkulu City	3.000	1.200	4.228	2.600	7.540	1.940	1.000	1.000
3	Central Bengkulu Regency	2.750	1.500	3.238	3.238	2.500	2.000	2.500	1.250
4	South Bengkulu Regency	6.000	2.900	4.602	4.406	7.500	2.320	4.500	2.000
5	North Bengkulu Regency	4.500	2.500	3.234	3.234	3.600	1.310	3.238	2.415
6	Rejang Lebong Regency	2.250	1.206	3.013	2.950	5.900	1.267	2.500	1.500
7	Lebong Regency	6.250	2.288	6.011	5.698	7.400	2.775	1.000	1.000
8	Kaur Regency	6.000	2.900	3.795	3.682	7.500	2.300	2.500	1.865
9	Mukomuko Regency	3.000	1.500	4.417	4.417	6.240	3.062	4.000	2.000
10	Kepahiang Regency	2.750	1.346	3.108	2.719	3.200	1.700	3.000	1.500
	BENGKULU PROVINCE	39.500	18.790	40.000	37.298	51.380	22.526	26.338	16.030

Source: PTSL Dashboard of statistik.atrbpn.go.id, processed data.

Based on Table 1 the implementation targets of the Complete Systematic Land Registration program in Bengkulu Province during the 2020–2023 period exhibit a consistent trend of evaluation and downward revision from year to year. In the 2020 fiscal year, the reduction in targets was primarily influenced by the global crisis caused by the Coronavirus Disease 2019 (COVID-19) pandemic, which necessitated the enforcement of Large-Scale Social Restrictions (ala Besar/PSBB) and directly affected the performance and realization of the Complete Systematic Land Registration program.

Furthermore, in the 2021 fiscal year, the decrease in Complete Systematic Land Registration program targets and budget allocations was closely related to the implementation of Government Regulation Number 43 of 2020, amending Government Regulation Number 23 of 2020, which governs the execution of the National Economic Recovery Program. This policy prompted the reallocation of budgets from National Strategic Programs, including Complete Systematic Land Registration, to support fund placements in the banking sector for credit restructuring and the provision of additional financing for micro, small, and medium enterprises as well as cooperatives.

Despite the gradual improvement of pandemic conditions, in the 2022 and 2023 fiscal years land offices across Bengkulu Province continued to propose reductions in Complete Systematic Land Registration targets, indicating the persistence of structural and implementation challenges in the systematic and comprehensive execution of land registration programs at the regional level.

Table 2 Number of Issued Land Certificates in Bengkulu Province, 2020–2023

No	Regency/City	2020	2021	2022	2023
1	Seluma Regency	111.116	115.838	120.597	122.425
2	Bengkulu City	122.258	127.817	132.203	136.659
3	Central Bengkulu Regency	61.206	63.947	67.613	69.583
4	South Bengkulu Regency	68.102	72.337	76.749	79.920
5	North Bengkulu Regency	162.798	167.848	169.957	172.587
6	Rejang Lebong Regency	95.306	100.380	103.305	105.778
7	Lebong Regency	32.460	37.636	41.828	43.349
8	Kaur Regency	46.404	52.015	54.978	57.516
9	Mukomuko Regency	93.551	103.548	103.596	106.986
10	Kepahiang Regency	51.172	54.914	57.761	59.302
BENGKULU PROVINCE		844.373	896.280	928.587	954.105
INDONESIA		71.983.090	79.038.222	84.475.781	89.444.576

Source: Dashboard of statistik.atrbpn.go.id

Based on Table 2 the number of land certificates issued represents the cumulative output of various registration schemes, including government programs such as National Agrarian Operations Project, Complete Systematic Land Registration Program, and Regional Agrarian Operations Project, as well as individual land registration undertaken independently by the community. The increase in the number of certificates recorded from 2020 to 2023 demonstrates a relatively slow growth trend, with the average annual increment of only around 1%. For instance, in 2023 the increase in the number of certificates in Seluma Regency amounted to merely 1,828 certificates compared to the previous year, and a similar pattern is observed across other regencies and municipalities in Bengkulu Province.

This condition indicates that the level of land certification achievement in Bengkulu Province remains relatively low, despite substantial empirical evidence suggesting that land certification has positive effects on household income, local economic growth, and the prevention of land-related conflicts and crimes. The limited achievement reflects the persistently low level of public interest and enthusiasm, particularly in Seluma Regency, to formally register land ownership. This situation is closely associated with the low level of land-related literacy among rural communities, the minimal role of village authorities in providing education on the functions and benefits of land certificates, and prevailing misconceptions that regard tax-related documents such as the Land and Building Tax Due Notification (SPPT-PBB) as legally binding proof of land ownership. These conditions are further exacerbated by limited access to valid and verifiable information, resulting in diverse public perceptions regarding the urgency of land certification.

On the other hand, although Seluma Regency ranks as the fourth largest regency in Bengkulu Province in terms of land area—after North Bengkulu, Mukomuko, and Kaur Regencies—the proportion of land parcels that have been registered and mapped in Seluma remains among the lowest, ranking eighth out of ten regencies/municipalities in the province. A detailed comparison between total land area based on data from the Central Statistics Agency (BPS) and registered land area recorded in the Ministry of Agrarian Affairs and Spatial Planning/National Land Agency (ATR/BPN) dashboard is presented in the following table.

Table 3 Comparison of Regency/City Area in Bengkulu Province (BPS) And Registered Area in the ATR/BPN Dashboard

Regency/City	Area (BPS)	Registered Area ATR/BPN	%
Bengkulu City	15.031	14.504	96,49
North Bengkulu	448.199	404.315	90,21
South Bengkulu	122.021	104.190	85,39
Central Bengkulu	113.230	81.038	71,57
Mukomuko	413.860	290.009	70,07
Kepahiang	74.939	52.318	69,81
Rejang Lebong	154.899	101.053	65,24
Seluma	243.281	157.837	64,88
Kaur	260.891	119.138	45,67
Lebong	166.662	52.484	31,49
BENGKULU PROVINCE	2.013.013	1.376.887	68,4

Source: BPS and the Statistical Dashboard ATR/BPN

The Complete Systematic Land Registration Program, which produces land title certificates as its primary output, constitutes a strategic solution for accelerating the registration of all unregistered land parcels in Seluma Regency. This program delivers multidimensional benefits encompassing economic, social/legal, and environmental aspects. Nevertheless, following its implementation, continuous review and evaluation are required to optimize the function, utility, and overall benefits of land title certificates, while simultaneously supporting the effective implementation of the national Agrarian Reform program through the Asset Access scheme.

Against this background, it is necessary to conduct research to examine the benefits of the Complete Systematic Land Registration Program, particularly in terms of its economic impacts, including land-based investment, access to banking capital and credit, increases in land value, and growth in Land and Building Rights Acquisition Duty revenues. From the social and legal perspective, the program contributes to strengthening legal protection of land rights and preventing land disputes and conflicts. Furthermore, from the environmental perspective, Complete Systematic Land Registration Program is associated with issues of land-use change and deforestation. Through a comprehensive understanding of these benefits, it is expected that communities in Seluma Regency will develop greater awareness of the importance of the Complete Systematic Land Registration Program and similar initiatives aimed at formalizing land ownership, which in turn can generate substantial socio-economic and legal advantages for local communities.

LITERATURE REVIEW

Land is a fundamental asset and a major source of wealth, contributing between 50 and 75 percent of national wealth in many developing countries (Bell, 2006). More than 20 percent of a country's Gross Domestic Product (GDP) is estimated to originate from land-related sectors, including property and construction, which underpin a substantial share of economic activity. Beyond its economic significance, land serves as a basic human necessity, supporting housing, food production, and clothing, thereby highlighting the critical role of land use and land management in sustaining livelihoods and economic development.

Theoretical discussions on land resources have existed since the nineteenth century. One of the earliest scholars to formulate a theory of land value was David Ricardo (1821) in his seminal work *Principles of Political Economy and Taxation*. Ricardo's theory focuses on land rent, which is determined by differences in soil fertility, while largely neglecting the role of location relative to urban centers. This land resource theory was later developed by Johann Heinrich von

Thünen, a German economist, through his work *Der isolierte Staat in Beziehung auf Landwirtschaft*, commonly known as the von Thünen theory (1826). Von Thünen's framework emphasizes spatial differences in agricultural land use based on variations in land rent.

According to this theory, land located closer to markets commands higher rent, whereas land situated farther from market centers tends to have lower rent. In economic theory, land is considered a factor of production that cannot be created by humans but is essential for producing other goods (Damayanti & Syah, 2009). From a geographical perspective, land is a heterogeneous resource with distinct physical characteristics, locations, and compositions, resulting in differences in land use across areas (Sukanto & Karseno, 1994). Land valuation in property research refers to the process of determining the value of land whether market value, investment value, insurance value, or other forms of value at a specific valuation date. According to the American Institute of Real Estate Appraisers (Wolcott, 1987), property value can be estimated using three main approaches: the market data comparison approach, the cost approach, and the income approach.

According to Philip Kotler (2006), perceived benefits are formed through a process by which individuals select, organize, and interpret information inputs to create meaningful representations. In the context of land certificates, an individual's perception is shaped by prior familiarity and experience. Individuals who have previously encountered or utilized land certificates tend to possess a clear perception of their benefits, whereas those without such exposure may lack any perception, rendering land certificates unfamiliar to them. Thus, perceptions of land certificates are initially developed through direct experience in obtaining or using them. The concept of people-centered economics refers to an economic approach that emphasizes active community participation and involvement in the management, utilization, and ownership of land resources. This approach focuses on empowering local communities including micro, small, and medium enterprises, farmers, fishers, and indigenous groups in governing and benefiting from their land resources. Its primary objectives are to promote social justice, sustainable development, and equitable economic distribution.

In practice, people-centered economics entails community participation in land-related decision-making processes, such as the formulation of agrarian policies, the regulation of land access and use, land redistribution for social purposes, and the development of land-based economic activities by local communities. By strengthening community roles in land-based economic systems, this approach seeks to reduce socio-economic disparities and foster more inclusive, sustainable, and democratic land governance. The Complete Systematic Land Registration (PTSL) program, implemented by the Ministry of Agrarian Affairs and Spatial Planning/National Land Agency, targets the registration and certification of 126 million land parcels in Indonesia by 2025. The program was rolled out incrementally, with annual targets increasing from 5 million parcels in 2017 to 10 million parcels per year through 2025. This accelerated approach represents a significant policy shift, as prior land registration practices conducted at a slow and consistent pace would have required an estimated 160 years to achieve full national coverage. PTSL thus reflects a strategic intervention aimed at overcoming structural inefficiencies in land administration and strengthening tenure security.

A study by Sirait, Nazer, and Azheri (2020), entitled *Land Certification of the Complete Systematic Land Registration Program: Description and Benefits*, employs a qualitative approach by collecting data from beneficiaries of the PTSL land certification program in Bintan Regency. The findings indicate that some community members still incurred costs during the certification process because they did not manage the procedures independently, largely due to limited participation in program socialization activities. Nevertheless, certificate recipients experienced several benefits, including increased tenure security and a reduced risk of land disputes following certification. Additional benefits included improved land use practices, leading to more productive utilization of land.

METHODS

This study adopts a qualitative descriptive approach aimed at describing and analyzing perceptions of the benefits of the Complete Systematic Land Registration Program (Program Pendaftaran Tanah Sistematis Lengkap – PTSL) from economic, socio-legal, and environmental perspectives in Seluma Regency, Bengkulu Province. This approach was selected because it enables the researcher to systematically examine the phenomenon based on the perceptions of actors directly involved in program implementation, without manipulating the research variables. The study utilizes primary data collected through structured questionnaires developed according to the hierarchy of PTSL benefits. The respondents consisted of 17 individuals, comprising 14 village heads from villages participating in the PTSL program and 3 officials from the Seluma Regency Land Office. Respondents were selected using a purposive sampling method, taking into account their direct involvement in the implementation and supervision of the PTSL program, thereby ensuring that the information obtained was relevant to the research objectives.

Data analysis was conducted using the Analytic Hierarchy Process (AHP) method. AHP was chosen because it is capable of accommodating multicriteria decision-making and systematically integrating subjective judgments in a measurable manner. The analytical stages included the construction of the decision hierarchy, pairwise comparisons among criteria and sub-criteria, calculation of priority weights, and consistency ratio testing. All computations were performed using Expert Choice software. The consistency ratio was used as an indicator of the validity and reliability of respondents' judgments, with the requirement that the ratio falls within acceptable tolerance limits as recommended in the AHP methodology developed by (Saaty, 1993). The results of the priority analysis of the criteria and sub-criteria of the benefits of the Complete Systematic Land Registration Program (PTSL) in Seluma Regency, Bengkulu Province, using the Analytical Hierarchy Process (AHP) method, indicate that the benefits of PTSL are perceived hierarchically. The economic aspect emerges as the top priority, followed by the socio-legal aspect and the environmental aspect. This pattern reflects an orientation toward the utilization of PTSL that remains predominantly focused on improving economic welfare, although socio-legal and environmental considerations continue to form part of the policy framework.

The dominance of the economic aspect, with a priority weight of 0.596, is consistent with asset-based economic theory, which positions land as both a factor of production and a form of financial collateral. Land certification enhances the community's ability to access formal financial institutions, thereby creating opportunities for financing productive activities and strengthening local economic dynamics. These findings are in line with previous studies demonstrating that asset legalization contributes to increased household income and economic stability. Within the context of national policy, PTSL supports the Economic Equity Policy (*Kebijakan Pemerataan Ekonomi*, KPE) through the optimization of land utilization based on the legal recognition of land rights. At the sub-criteria level, access to capital or bank credit ranks first with a weight of 0.546. Land certificates are perceived as formal collateral that enhances financial institutions' confidence in communities as borrowers. In Seluma Regency, the increasing trend in mortgage-right (*hak tanggungan*) transactions reflects the utilization of land certificates as credit collateral. This condition demonstrates that PTSL plays a role in expanding financial inclusion and promoting productive investment at the local level. The sub-criterion of increased land value ranks second with a weight of 0.250. Legal certainty of land ownership encourages an increase in the economic value of land, as certified land is perceived as more secure and possesses higher liquidity in market transactions. Although the available land value data remain aggregated and do not yet fully represent spatial variations across Seluma Regency, the observed upward trend in land values reinforces the role of land certification as a key determinant of land asset value.

Land investment ranks third with a weight of 0.120. Land ownership certificates function not only as instruments for credit collateral but also as relatively stable long-term investment

assets. Land scarcity and population growth contribute to the tendency for land values to appreciate over time. In Seluma Regency, the presence of substantial areas under Cultivation Rights (*Hak Guna Usaha*, HGU) and Building Use Rights (*Hak Guna Bangunan*, HGB) indicates that land is utilized as a strategic asset by both individuals and legal entities, while simultaneously reducing the risk of ownership disputes. Fiscal contributions through increased revenue from the Land and Building Rights Acquisition Duty (*Bea Perolehan Hak atas Tanah dan Bangunan*, BPHTB) rank next with a weight of 0.084. Although this is not the primary benefit, the findings indicate that PTSL has the potential to strengthen local fiscal capacity through increased legalization of land transactions, while still considering community protection mechanisms, particularly through provisions on non-taxable acquisition value thresholds.

The socio-legal aspect ranks second with a weight of 0.287. From this perspective, land certification through PTSL functions as an instrument for dispute prevention and the protection of land rights. The sub-criterion of preventing land conflicts holds the highest priority with a weight of 0.626, indicating that legal certainty regarding land ownership and boundaries significantly reduces the potential for conflicts among individuals as well as between groups. This finding is particularly relevant to the context of Seluma Regency, which, as of 2023, continues to face a number of land-related cases. The sub-criterion of legal protection of land rights carries a weight of 0.374, underscoring the role of PTSL in strengthening the community's sense of security in utilizing their land. Legal certainty enhances social stability and creates a more conducive investment climate by reducing transaction costs and increasing transparency in the land market. Accordingly, PTSL contributes to greater efficiency in land markets while simultaneously supporting the objectives of agrarian reform oriented toward social justice.

The environmental aspect ranks last with a weight of 0.117. Respondents' perceptions indicate that PTSL has implications for land-use change and deforestation. The sub-criterion of conversion of agricultural land receives the highest weight at 0.761, suggesting that the legalization of land ownership may encourage more intensive land use, while simultaneously posing potential pressures on environmental sustainability and the social structure of rural communities. In Seluma Regency, land-use conversion has also affected changes in farmers' income sources and social conditions. The sub-criterion of deforestation, with a weight of 0.239, reflects increasing pressure on forest cover due to rising demand for land for settlements and economic activities. This finding underscores the need for the implementation of PTSL to be integrated with spatial planning and environmental protection policies, so that the optimization of land use does not generate significant environmental externalities. Such policy integration is a critical prerequisite for the sustainability of PTSL, ensuring that the economic and social benefits generated remain aligned with sustainable development objectives.

RESULTS

The results from the 17 respondents regarding the criteria used to analyze the benefits of the PTSL program—namely economic benefits, socio-legal benefits, and environmental benefits—processed using Expert Choice version 11, are presented in the following table:

Table 4 AHP-Based Criteria Weight Matrix of Economic, Socio-Legal, and Environmental Benefits of the PTSL Program

Number	Criteria	Eigen Vector	Rank	Inkonsistensi
1	Economic Benefits	0,596	1	0,02
2	Socio-Legal Benefits	0,287	2	
3	Environmental Benefits	0,117	3	

Source: Data Processed, 2024

Based on Table 4 which presents the combined results of the 17 respondents at the pairwise comparison stage, the economic benefit criterion ranked first with a priority weight of 0.596. This was followed by the socio-legal benefit criterion in second place with a priority weight of 0.287, while the environmental benefit criterion ranked last with a priority weight of 0.117. The consistency ratio (CR) obtained was 0.02; therefore, the respondents' judgments are considered consistent, as the CR value of 0.02 is less than or equal to the acceptable threshold of 0.1.

Economic Aspect Benefits

Based on Table 2 which presents the combined results of the 17 respondents at the pairwise comparison stage, the sub-criterion of access to capital/bank credit ranks first with a priority weight of 0.546. This is followed by increased land value in second place with a priority weight of 0.250, land investment in third place with a weight of 0.120, and increased BPHTB revenue in the last position with a weight of 0.084. The resulting consistency ratio (CR) is 0.02; therefore, the respondents' judgments are considered consistent, as the CR value of 0.02 is less than or equal to the acceptable threshold of 0.1. At the sub-criteria level, access to capital or bank credit received the highest weight, reflecting the role of land certificates as formal collateral within the financial system. This aspect is considered the most significant because it is directly associated with improving the economic capacity of the community, particularly through increased access to financing and the enhancement of land asset value.

Table 5 AHP-Based Weight Calculation Matrix of Economic Benefit Sub-Criteria

Number	Criteria	Eigen Vector	Rank	Inkonsistensi
1	Investment in Land	0,120	3	0,02
2	Access to Capital/Bank Credit	0,546	1	
3	Land Value/Price Increase	0,250	2	
4	Increase in BPHTB Revenue	0,084	4	

Source: Data Processed, 2024

Socio-Legal Aspect Benefits

Based on Table 6 which presents the combined results of the 17 respondents at the pairwise comparison stage, the sub-criterion of preventing land disputes and conflicts ranks first with a priority weight of 0.626, followed by legal protection of land rights in second place with a weight of 0.374. The resulting consistency ratio (CR) is 0.00; therefore, the respondents' judgments are considered fully consistent, as the CR value of 0.00 is less than or equal to the acceptable threshold of 0.1.

Table 6 AHP-Based Weight Calculation Matrix of Socio-Legal Sub-Criteria

Number	Criteria	Eigen Vector	Rank	Inkonsistensi
1	Legal Protection of Land Rights	0,374	2	0,00
2	Preventing Land Conflict Disputes	0,626	1	

Source: Data Processed, 2024

The socio-legal aspect ranks second with a weight of 0.287. The prevention of land disputes and conflicts emerges as the dominant sub-criterion within this aspect, indicating that the legal formalization of land rights contributes to social stability and legal certainty. This finding reflects the role of land certification in providing legal assurance and mitigating the potential for land-related disputes and conflicts.

Environmental Aspect Benefits

Based on Table 6 which presents the combined results of the 17 respondents at the pairwise comparison stage, the sub-criterion of land-use conversion ranks first with a priority weight of 0.761, followed by deforestation in second place with a weight of 0.239. The resulting consistency ratio (CR) is 0.00; therefore, the respondents' judgments are considered fully consistent, as the CR value of 0.00 is less than or equal to the acceptable threshold of 0.1.

Table 6 AHP-Based Weight Calculation Matrix of Environmental Sub-Criteria

Number	Criteria	Eigen Vector	Rank	Inkonsistensi
1	Land Conversion	0,761	1	0,00
2	Deforestation	0,239	2	

Source: Data Processed, 2024

The sub-criterion of land-use conversion receives a higher weight than deforestation, indicating that respondents are aware of the environmental implications of increased land legality and intensified land utilization. Although it is not the primary priority, this aspect remains relevant in the context of the sustainable implementation of PTSL.

DISCUSSION

The results of the priority analysis of the criteria and sub-criteria of the benefits of the Complete Systematic Land Registration Program (PTSL) in Seluma Regency, Bengkulu Province, using the Analytical Hierarchy Process (AHP) method, indicate that the benefits of PTSL are perceived hierarchically.

The economic aspect emerges as the top priority, followed by the socio-legal aspect and the environmental aspect. This pattern reflects an orientation toward the utilization of PTSL that remains predominantly focused on improving economic welfare, although socio-legal and environmental considerations continue to form part of the policy framework. The dominance of the economic aspect, with a priority weight of 0.596, is consistent with asset-based economic theory, which positions land as both a factor of production and a form of financial collateral. Land certification enhances the community's ability to access formal financial institutions, thereby creating opportunities for financing productive activities and strengthening local economic dynamics.

These findings are in line with previous studies demonstrating that asset legalization contributes to increased household income and economic stability. Within the context of national policy, PTSL supports the Economic Equity Policy (Kebijakan Pemerataan Ekonomi, KPE) through the optimization of land utilization based on the legal recognition of land rights.

At the sub-criteria level, access to capital or bank credit ranks first with a weight of 0.546. Land certificates are perceived as formal collateral that enhances financial institutions' confidence in communities as borrowers. In Seluma Regency, the increasing trend in mortgage-right (hak tanggungan) transactions reflects the utilization of land certificates as credit collateral.

This condition demonstrates that PTSL plays a role in expanding financial inclusion and promoting productive investment at the local level. The sub-criterion of increased land value ranks second with a weight of 0.250.

Legal certainty of land ownership encourages an increase in the economic value of land, as certified land is perceived as more secure and possesses higher liquidity in market transactions. Although the available land value data remain aggregated and do not yet fully represent spatial variations across Seluma Regency, the observed upward trend in land values reinforces the role of land certification as a key determinant of land asset value.

Land investment ranks third with a weight of 0.120. Land ownership certificates function not only as instruments for credit collateral but also as relatively stable long-term investment assets. Land scarcity and population growth contribute to the tendency for land values to appreciate over time. In Seluma Regency, the presence of substantial areas under Cultivation Rights (Hak Guna Usaha, HGU) and Building Use Rights (Hak Guna Bangunan, HGB) indicates that land is utilized as a strategic asset by both individuals and legal entities, while simultaneously reducing the risk of ownership disputes.

Fiscal contributions through increased revenue from the Land and Building Rights Acquisition Duty (Bea Perolehan Hak atas Tanah dan Bangunan, BPHTB) rank next with a weight of 0.084. Although this is not the primary benefit, the findings indicate that PTSL has the potential to strengthen local fiscal capacity through increased legalization of land transactions, while still considering community protection mechanisms, particularly through provisions on non-taxable acquisition value thresholds.

The socio-legal aspect ranks second with a weight of 0.287. From this perspective, land certification through PTSL functions as an instrument for dispute prevention and the protection of land rights. The sub-criterion of preventing land conflicts holds the highest priority with a weight of 0.626, indicating that legal certainty regarding land ownership and boundaries significantly reduces the potential for conflicts among individuals as well as between groups. This finding is particularly relevant to the context of Seluma Regency, which, as of 2023, continues to face a number of land-related cases.

The sub-criterion of legal protection of land rights carries a weight of 0.374, underscoring the role of PTSL in strengthening the community's sense of security in utilizing their land. Legal certainty enhances social stability and creates a more conducive investment climate by reducing transaction costs and increasing transparency in the land market. Accordingly, PTSL contributes to greater efficiency in land markets while simultaneously supporting the objectives of agrarian reform oriented toward social justice. The environmental aspect ranks last with a weight of 0.117. Respondents' perceptions indicate that PTSL has implications for land-use change and deforestation.

The sub-criterion of conversion of agricultural land receives the highest weight at 0.761, suggesting that the legalization of land ownership may encourage more intensive land use, while simultaneously posing potential pressures on environmental sustainability and the social structure of rural communities.

In Seluma Regency, land-use conversion has also affected changes in farmers' income sources and social conditions. The sub-criterion of deforestation, with a weight of 0.239, reflects increasing pressure on forest cover due to rising demand for land for settlements and economic activities.

This finding underscores the need for the implementation of PTSL to be integrated with spatial planning and environmental protection policies, so that the optimization of land use does not generate significant environmental externalities. Such policy integration is a critical prerequisite for the sustainability of PTSL, ensuring that the economic and social benefits generated remain aligned with sustainable development objectives.

CONCLUSION

From the results of the research that has been conducted, conclusions can be drawn from the PTSL benefit perception analysis in Kabupaten Seluma, Province, using the Analytical Hierarchy Process (AHP) model with the following details:

1. At the criteria level, it was found that the benefits of the economic aspect rank first in the perception of PTSL benefits with a priority weight of 0.596. Next, the benefits in the social/legal aspect rank second in the perception of PTSL benefits with a weight of 0.287. And the benefits of the environmental aspect rank third in the perception of PTSL benefits with a weight of 0.117. With a consistency ratio value of 0.02, this assessment is considered consistent.
2. At the sub-criteria level, from the three benefit perceptions, namely economic benefits, social/legal benefits, and environmental benefits, the results of the sub-criteria analysis show that access to capital/credit is ranked first with a weight of 0.325, followed by conflict reduction with a weight of 0.180. The third sub-criteria is the increase in land value with a weight of 0.149, ranked fourth is legal protection of land rights with a weight of 0.107, ranked fifth is the conversion of agricultural land with a weight of 0.089, ranked sixth is investment in land with a weight of 0.072, ranked seventh is the increase in BPHTB revenue with a weight of 0.050, and in eighth place is deforestation with a weight of 0.028. With a consistency ratio value of 0.02, this assessment is considered consistent.

Land certificates originating from the PTSL program have proven to be beneficial in the economic aspects of the community. These land certificates have become a gateway to community access to capital for obtaining loans from banks by using their land certificates as collateral. These land certificates clearly make access to capital easier compared to land that has not yet been certified, because from the credit side, land that is already certified has more certain legal guarantees compared to land that has not yet been certified. Land certificates, which form the basis for increasing land value, also make the land's value higher, increase investment in land, and increase the receipt of BPHTB (Land and Building Rights Acquisition Duty) accepted by the Regional Government due to the increase in land certification. On the other hand, the PTSL program also becomes one of the national programs in preventing disputes and conflicts that often occur in the community, and the certificate becomes a legal protection for land rights owned by the people.

LIMITATION

Based on the results of the research conducted, the limitations of this study are:

1. The respondents used in this study consisted of only 14 villages out of a total of 182 villages and 22 sub-districts in Seluma Regency, Bengkulu Province, which is still considered insufficient for research purposes. It is recommended that future research increase the number of respondents, as well as include respondents from community leaders and local government agencies that have interests related to land certification activities.
2. Furthermore, the sample of respondents does not fully represent the beneficiaries or recipients of land certificates from the PTSL program; in this study, they are represented only by the village heads, who are also part of the program implementers in reality.

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