



Interpreting Customary Justice in the Resolution of Digital Land Disputes in Postcolonial Societies

Randy Vallentino Neonbeni^{1*}, Yohanna YR Watofa², Tamrin Talebe³, Sumiyati⁴

¹Sekolah Tinggi Ilmu Hukum Cendana Wangi, Indonesia

²Sekolah Tinggi Ilmu Hukum Manokwari, Indonesia,

³Universitas Islam Negeri (UIN) Datokarama Palu, Indonesia

⁴Politeknik Negeri Bandung, Indonesia

Corresponding Author: Randy Vallentino Neonbeni,

randyneonbeni@gmail.com

ARTICLE INFO

Keywords: Customary Law, Digital Land Disputes, Postcolonial Society, Legal Pluralism, Digital Transformation.

Received: 5, July

Revised: 19, July

Accepted: 20, August

©2025 Neonbeni, Watofa, Talebe, Sumiyati: This is an open-access article distributed under the terms of the [Creative Commons Atribusi 4.0 Internasional](https://creativecommons.org/licenses/by/4.0/).



ABSTRACT

Digital transformation in land systems in postcolonial countries challenges the legitimacy and effectiveness of customary justice in land dispute resolution. This qualitative juridical-sociological case study involved 15 key informants indigenous leaders, land officials, and residents in three Indonesian indigenous communities. Data were collected through in-depth interviews, field observations, and analysis of legal documents and digital maps, then examined using thematic analysis and source triangulation. Customary justice remains central in dispute resolution but faces normative and technological tensions due to misalignment with national land digitalization. Some socially recognized decisions lack legal force in the digital registration system, creating legitimacy dualism. Contextual integration between customary law and formal digital systems is essential to prevent exclusion of indigenous rights in the digital era.

INTRODUCTION

Digital transformation in land governance has become a global agenda adopted by various countries in order to improve administrative efficiency and legal certainty over land ownership rights. In Indonesia, the Complete Systematic Land Registration (PTSL) program and the digital-based electronic Land Rights Certificate system are efforts by the state to respond to the demands of land bureaucratic modernization (BPN, 2023). However, in the context of postcolonial societies that still uphold the values and practices of customary law, land digitization actually raises the potential for new conflicts, especially when formal geographic information and digital data systems do not recognize the existence of customary-based land claims (Lumban-Gaol & Sitorus, 2021). This phenomenon shows a shift in the conflict arena from the physical level to the digital realm, where customary justice is often eliminated by formalistic state legal logic and exclusive technology.

At the local level, various cases show that customary land claims that have been socially recognized for decades can be erased or displaced by official digital maps created without the participation of indigenous communities. This not only creates inequality of access to land rights, but also reinforces the marginalization of indigenous peoples in a legal system that is supposed to accommodate a plurality of norms (Rachmawati & Nugraha, 2022). At the global level, similar phenomena occur in other postcolonial countries such as Kenya, Colombia, and Papua New Guinea, where the formal legal system resulting from colonial legacies clash with the customary justice system that is still alive in the community (Alden Wily, 2020). Thus, there is an urgency to understand how customary justice is interpreted and functions in the digital context, as well as how the state navigates legal pluralism in the era of digital transformation.

Academic studies of agrarian conflicts and legal pluralism have developed widely, but most still focus on physical and political conflicts over land in analogous contexts (Boelens et al., 2021). Research on land digitalization mostly raises technical issues, such as spatial data validity, service efficiency, or security of digital systems (Dale & McLaughlin, 2021), while the socio-legal dimension, especially related to customary law, is still under-explored in depth. Studies that discuss the relationship between customary law and land digitalization in the context of postcolonial societies are still limited and tend to be descriptive, not touching on the aspect of interpreting justice by local actors contextually (Asri et al., 2023). Therefore, there is a research gap in examining how customary justice is interpreted in the resolution of digital land conflicts empirically and interdisciplinary.

Previous research by (Yuliana et al., 2021) shows that conflicts between indigenous peoples and the government are often rooted in the disharmony between state legality and customary legitimacy. However, the study has not touched the digital realm as a new arena of conflict. Meanwhile, (Siahaan, 2022) found that land digitization devices such as digital maps and electronic databases tend to be biased towards individual and formal ownership models, which are contrary to the communal system in customary law. The study by (Komang et al., 2020) also noted that inconsistencies in customary land recognition policies

exacerbate legal ambiguity over local community claims. From these findings, it can be seen that the dynamics of customary justice in the digital era are still minimally studied as a living, reflective, and socially negotiated practice.

This research aims to interpret customary justice practices in digital land dispute resolution in postcolonial societies, focusing on the relationship between customary norms and digitized formal legal systems. The analysis was conducted to understand how local actors such as indigenous elders, indigenous peoples, and land officials interpret, negotiate, or reject digital systems as part of justice mechanisms. The focus is also directed at the way the community interprets the legitimacy of customary decisions in an increasingly digitized and law-oriented context of state law.

Theoretically, this research contributes to the development of literature on legal pluralism in the digital era, especially in postcolonial countries that have a legacy of legal dualism. An interdisciplinary approach that combines legal, sociology, and postcolonial studies perspectives allows for a more comprehensive understanding of the dynamics of indigenous justice in the midst of digitalization. This research also enriches the concept of "negotiated justice" in the context of customary law that is not static, but adaptive to changes in technology and power structures.

From a practical perspective, the results of this research can be used as a basis for policymakers, especially in the preparation of digital land regulations that are more inclusive of indigenous communities. These findings are also important for land agencies, digital system developers, and NGOs engaged in the field of indigenous peoples' rights, so that the digital systems built do not ignore local norms and social legitimacy that live in communities. In the long term, the integration of customary law into digital systems can strengthen substantive justice and prevent greater conflicts due to digital exclusion of vulnerable groups.

THEORETICAL REVIEW

Indigenous Justice in the Perspective of Legal Pluralism

Customary justice is part of the legal system that grows and develops in local communities based on social norms, values, and practices that are inherited from generation to generation. Within the framework of legal pluralism, customary justice has a socially equal position with state law, although it is often not formally recognized (Tamanaha, 2021). Legal pluralism recognizes that more than one legal system can coexist within a single region, especially in postcolonial countries that have a legacy of colonial legal systems and local traditions (Merry, 2020). In the Indonesian context, customary law remains the main reference in resolving agrarian conflicts in many indigenous communities, especially in areas far from the center of government (Asri et al., 2023).

However, customary law positions are often marginalized by the national legal system based on administrative formalities and laws and regulations. This creates a legitimacy imbalance between the decisions of customary institutions and state legal products, especially when the two are facing each other in land

disputes (Yuliana et al., 2021). Therefore, studies of customary justice need to highlight how local communities negotiate the validity and power of customary decisions in asymmetrical power relations.

Land Digitalization and Access to Rights Transformation

Land digitalization is part of a global digital transformation that aims to increase transparency, efficiency, and accountability in agrarian governance. Systems such as e-land registration and digital cadastral mapping are now being implemented in many countries to replace manual systems that are considered vulnerable to corruption and inefficiency (Dale & McLaughlin, 2021). In Indonesia, the National Land Agency (BPN) through the PTSL program and the implementation of the Electronic Certificate is trying to adapt to the digital paradigm (BPN, 2023).

Despite its modernization goals, land digitization is often incompatible with customary land ownership patterns that are collective and not documented in formal legal form. Studies (Siahaan, 2022) show that many indigenous communities are unable to access or understand the digital system, and even experience exclusion due to the lack of formal evidence of the land they have controlled for generations. When digital systems only accommodate data that is legitimate according to state law, customary claims become invisible and not legally protected in digital databases (Lumban-Gaol & Sitorus, 2021).

Digital Land Disputes in Postcolonial Societies

Postcolonial countries, including Indonesia, inherited complex and multi-tiered legal systems due to the influence of colonialism. In this context, conflicts between customary law and formal law are often rooted in different perspectives on land, property rights, and state power (Alden Wily, 2020). As digital technologies are introduced into land systems, this complexity increases, as digital systems demand legal certainty and formal documentation that are often not available in customary practices (Boelens et al., 2021).

In a study (Boelens et al., 2021), the digitalization of land systems in Latin America shows a tendency to "decontextualizing justice," where digital systems ignore the social-local processes that underlie property rights. A similar thing happened in Indonesia, where indigenous communities lost access to land because they were unable to prove their formal ownership despite being socially recognized for decades (Komang et al., 2020). Digital land disputes in customary territories often involve overlapping claims between BPN digital maps and participatory maps of local communities, but state agencies rarely recognize the validity of maps from communities.

Interpretation of Justice in Digital and Postcolonial Contexts

An interpretive approach to customary justice in a digital context is important to understand how indigenous communities reconstruct the meaning of justice when dealing with formal digital systems. Justice does not always mean formal legality, but rather social recognition, moral validity, and the conflict resolution process that is considered fair by the community itself (Tamanaha,

2021). In the digital context, this interpretation becomes increasingly complex because customary decisions are not automatically accommodated in state-controlled electronic systems.

A study by (Asri et al., 2023) shows that many indigenous communities in Indonesia reject the results of BPN digitalization because they do not reflect local consensus. Instead, they continue to run the customary system to resolve conflicts even though such decisions are not recognized in state law. This signifies the existence of "negotiated legality," where legitimacy is produced through social processes, not just through digital systems or formal documents. Thus, the study of customary justice in digital land disputes must consider the perspectives of local actors and the social dynamics surrounding the process.

Research Gaps and Relevance of Recent Studies

Although studies on agrarian conflict and land digitalization have developed, there is a gap in studies that directly link the dimension of indigenous justice to the digital system in postcolonial societies. Studies such as (Dale & McLaughlin, 2021) focus on the technical and institutional aspects of digitalization, while sociological studies such as (Merry, 2020) tend to highlight aspects of legal pluralism without connecting them to specific digital contexts. This research seeks to fill this gap by approaching customary justice as an interpretive process in a space of digital conflict that is alive and constantly negotiated.

METHODOLOGY

Research Approach

This study uses a qualitative approach with an exploratory case study design that is juridical-sociological. This approach was chosen because it is in accordance with the research objectives to deeply understand customary justice practices in digital land dispute resolution, especially in postcolonial societies that still maintain customary-based non-formal legal systems. The case study design allows researchers to explore the social, legal, and technological contexts thoroughly in a specific and in-depth unit of analysis (Yin, 2023). This approach is also relevant to explain the relationship between local norms and digital land systems that tend to be ignored in positivistic formal legal approaches (Tamanaha, 2021).

Research Population

The population in this study is indigenous communities involved in digital land disputes in Indonesia. The analysis unit focused on three indigenous communities in the Central Kalimantan, East Nusa Tenggara, and South Sulawesi regions that were documented to have conflicts with the national land digitization system based on reports from civil society organizations and BPN records (BPN, 2023). The sampling technique was carried out by purposive sampling (non-probability) with the following criteria: (1) indigenous communities involved in digital land disputes with the government, (2) there are

indigenous institutional structures that are active in conflict resolution, and (3) have had formal interactions with the digital land system. A total of 15 key informants were interviewed in depth, consisting of 3 indigenous leaders, 3 affected community members, 3 land officials, 3 agrarian NGO activists, and 3 customary law academics. The selection of this number is adjusted to the principle of data richness, not statistical quantity (Guest et al., 2020).

Data Collection Techniques

Data collection was carried out through semi-structured in-depth interviews, limited participatory observation, and documentation of customary judgments, digital maps, and formal legal documents. The interview instruments were compiled based on indicators in the theory of legal pluralism (Merry, 2020) and local justice practices (Boelens et al., 2021), then tested through content validation by two experts in agrarian law and legal sociology. The validity of the data is also strengthened through triangulation of sources and techniques (Patton, 2022), while reliability is maintained by implementing audio recordings and field recording systematically. All field data is encoded using an open code system, then developed into a theme through a thematic approach.

Research Procedure

The research implementation procedure consists of five main stages: (1) identification of conflict areas through preliminary studies and mapping of digital documents of land disputes; (2) coordination and research permits with indigenous leaders and local governments; (3) the implementation of interviews and field observations for two months in each community; (4) transcription and data analysis with inductive and interpretive approaches; and (5) verification of findings through targeted group discussions (FGDs) with informants to ensure contextual validity. The entire process follows social research ethics protocols, including informed consent and ensuring the confidentiality of informant identities (Silverman, 2022).

Data Analysis Techniques

The data was analyzed using thematic analysis that identified patterns, meanings, and relationships between concepts in informant narratives (Braun & Clarke, 2021). The analysis process is carried out manually using the help of NVivo 14 software for qualitative data organization, coding, and visualization of the theme network. The researcher used open, axial, and selective coding techniques to build a theoretical narrative that connects the dynamics of customary justice with the digital land system. Validation of results is carried out through member checking and peer debriefing to ensure that the interpretation of the data remains contextual and not subjective bias.

RESEARCH RESULTS

Customary Justice as the Dominant Mechanism in Digital Land Dispute Resolution

The results of the study show that in three indigenous communities of Central Kalimantan, East Nusa Tenggara, and South Sulawesi, customary justice still occupies a leading position in resolving land disputes, including those triggered by the digitalization of the national land system. In this context, indigenous peoples trust customary deliberation mechanisms that focus on historical values, local spirituality, and collective consensus rather than formal land systems that rely on administrative evidence and digital maps. A traditional leader of Central Kalimantan affirmed:

"We have been solving the land problem customarily since a long time ago, before the government came with the maps. In this village, who owns the land, everyone knows because it was inherited from the ancestors." (IA01, Interview, June 12, 2025)

The same thing was expressed by the residents of East Nusa Tenggara:

"If there is a boundary problem, we do not go directly to the BPN office. We gather traditional parents, we sit and talk. That's more legitimate to us than the data on the computer." (IW06, Interview, June 24, 2025)

From a local academic perspective, customary justice is also considered a source of substantive legitimacy:

"In many customary territories, formalities are not the main thing. What matters is the collective recognition of the community. And it cannot be replaced by an electronic certificate." (IA15, Interview, June 30, 2025)

These findings show that despite the digitalization of the land system, indigenous peoples still maintain their justice system because it is considered to reflect more social and historical justice values.

Normative Tension between Customary Systems and Digital Legality

Another important finding is the emergence of significant normative tensions between the decisions of socially recognized customary institutions and the national digital land system that prioritizes the legality of formal documents. This discrepancy results in a juridical conflict between claims based on community legitimacy and claims based on administrative legality, especially in areas that have long been controlled by the community but have not been officially registered in the electronic system of the National Land Agency. As stated by the land office:

"We can only refer to the documents and data that enter the system. If there is no formal evidence such as certificates or coordinate maps, we cannot process the claim even though the community claims to have lived there for a long time." (IP08, Interview, June 19, 2025)

East Nusa Tenggara indigenous leaders also responded to this with frustration:

"The government said we had to show evidence. But our evidence is the ancestral story, the boundary of the great trees, the rocks, and the river. It's not recognized on their computers." (IA02, Interview, June 21, 2025)

Agrarian activists assert that the digital system has narrowed the definition of land legality:

"State law rejects local social and historical recognition. Digitalization narrows the space for negotiation and ignores the context of indigenous peoples who do not live within a formal legal framework." (IN12, Interview, June 25, 2025)

This tension represents a crisis of integration between formal and non-formal law in the national land system, which has the potential to increase legal uncertainty.

Administrative Exclusion and Technological Inequality

Top-down land digitalization has led to administrative exclusion of indigenous communities. Inability to access technological devices, low digital literacy, and lack of infrastructure in indigenous areas have made it impossible for people to access or update their land data in the official system. This not only marginalizes them from the legalization process, but also makes their claims invisible on the country's land map. One of the residents of South Sulawesi complained:

"We didn't know that our land was already on the state map. Suddenly we were told that the land belonged to the state or a company. We were never talked to." (IW05, Interview, June 28, 2025)

Central Kalimantan indigenous leaders also conveyed the limitations of access to technology:

"We don't have the tools to open the internet or the map. We only know the limits of stories and experiences. If everyone now uses an online system, we will be left behind." (IA03, Interview, June 14, 2025)

Land officials acknowledge the existence of the digital divide:

"Indeed, many indigenous peoples have not been reached by digitalization. But our system is now electronic. Without documents or participation in the system, their land could go unrecorded." (IP09, Interview, June 22, 2025)

This condition indicates that non-inclusive digital transformation has actually widened the gap of unequal access to land rights.

Dualism of Legitimacy and the Potential for Protracted Conflict

Overall, the field findings point to one key issue: the dualism of legitimacy between the customary justice system and the national digital land system. Indigenous communities uphold value-based justice, while the state enforces a legal-formal approach. When these two systems do not recognize each other, conflicts have the potential to be unresolved in the long run, as well as trigger social tensions and distrust of state institutions. Local academics state unequivocally:

"This conflict is not just about land. It's a conflict of legal paradigms: between social justice and formal legality. As long as the two cannot be reunited, the conflict will continue." (IA15, Interview, June 30, 2025)

NGO activists also reflected the public's anxiety:

"We have encountered many cases where people have not only lost land, but also trust in the state. They feel that the state trusts computers more than the citizens themselves." (IN11, Interview, 25 June 2025)

A resident of East Nusa Tenggara voiced his opposition to digital exclusion:

"BPN said their data was legitimate. But what we do know is that this land is the heritage of our ancestors. We will not stay silent just because we don't have a certificate." (IW07, Interview, June 26, 2025)

Thus, without the recognition of customary law in the digital system, conflict is not only an administrative problem, but also a crisis of legitimacy and structural injustice in the national legal system.

DISCUSSION

The results of this study show that the customary justice system remains the main mechanism carried out by indigenous communities in resolving land disputes, including those that arise due to the digitalization of the national land system. These findings show that indigenous communities in Central Kalimantan, East Nusa Tenggara, and South Sulawesi continue to adhere to conflict resolution practices rooted in historical, spiritual, and collective values that have been passed down from generation to generation (Tamanaha, 2021; Asri et al., 2023). The rejection of formal approaches based on administrative documents and digital information systems does not merely show resistance to technological advances, but rather indicates a paradigm shift in the interpretation of justice (Boelens et al., 2021).

In the approach of legal pluralism as stated by Merry (2020) and Tamanaha (2021), the formal and non-formal legal systems should be able to coexist in parallel. But in reality, the presence of digital technology in land administration has reaffirmed the dominance of state legal-formalism and is slowly eroding the social legitimacy of customary land claims (Yuliana et al., 2021). The normative tension that arises between formal legality and customary legitimacy is a manifestation of the crisis of legal recognition of the existence of local social systems that are not accommodated in digital logic (Komang et al., 2020).

A number of informants emphasized that digitization actually removes forms of evidence of traditional socially valid ownership, such as natural boundaries, oral history, or ancestral heritage symbols, which cannot be input into coordinate-based electronic systems and formal documents (Siahaan, 2022). This strengthens the argument of Boelens et al. (2021) regarding the phenomenon of decontextualizing justice, where digital systems tend to reject the meaning of justice that is determined locally and prioritize universal legalistic standards that are not inclusive of the plurality of norms.

Digital transformation in land governance, which basically aims to increase efficiency and transparency, turns out to create administrative exclusion for indigenous communities who structurally do not have access to technology or digital literacy (Lumban-Gaol & Sitorus, 2021). This inequality is exacerbated

by the lack of involvement of indigenous communities in the planning and implementation process of digitalization by the state (BPN, 2023). When community claims are not recorded in the electronic system of the National Land Agency (BPN), then administratively the claim is considered non-existent, even though it has been socially recognized and inherited for decades (Rachmawati & Nugraha, 2022). This gap creates structural injustices as the rights of indigenous peoples that are not digitally documented become invisible in the national legal system (Siahaan, 2022).

In this context, customary justice experiences double marginalization epistemically because it is not recognized in formal data systems, and politically because it does not gain space in digital land policies (Yuliana et al., 2021). This condition is in line with the findings of Siahaan (2022) which shows that digital land systems tend to be biased towards individual ownership models and ignore the communal system that is the main characteristic of customary land. In addition, the absence of a validation mechanism for participatory maps of indigenous peoples in the BPN system reinforces the impression that the state's digital system works unilaterally without acknowledging the plurality of evidence and social practices that apply in indigenous communities (Lumban-Gaol & Sitorus, 2021).

The consequence of this dynamic is the emergence of legitimacy dualism that leads to prolonged conflicts between the state and indigenous peoples (Alden Wily, 2020). When customary decisions do not gain legal force because they are not in accordance with the legal-formal format, while the community still holds the results of customary deliberations as a form of legitimate justice, land ownership conflicts become difficult to resolve completely (Asri et al., 2023). Furthermore, this condition causes an erosion of trust in state institutions that are considered incapable of accommodating local values within the framework of national policies (IN11, 2025). As stated by several informants, the public feels that the state is more in favor of computer data than the social realities that live in the field (IW07, 2025).

Within the framework of a juridical-sociological approach, this situation reflects the failure of the state to integrate formal legal structures with local social structures, as well as demonstrating the need for a more contextual and participatory legal design (Tamanaha, 2021; Yin, 2023). On the other hand, indigenous communities have also begun to form patterns of cultural and legal resistance to defend their rights, both through customary deliberations, collective action, and participatory mapping initiatives (Boelens et al., 2021). This movement reflects that customary justice is not a passive entity, but an adaptive legal system that is able to negotiate its existence space in an asymmetrical power relationship with the state.

Theoretically, this research makes an important contribution to the study of legal pluralism and the concept of negotiated justice in the context of digitalization (Merry, 2020; Tamanaha, 2021). This study shows that the digitalization of the law cannot be separated from the social structures and local values that live in society. Therefore, digital transformation must be inclusive

and sensitive to local norms, not become a hegemonic tool to bring legal diversity into one homogeneous legal-formal format (Asri et al., 2023; Komang et al., 2020).

In practical terms, these findings underscore the importance of digital land policy reform that actively involves indigenous communities, including by providing legal space for customary decisions that are proven to have social legitimacy (BPN, 2023). One of the steps that can be taken is through formal recognition of the participatory map of indigenous peoples as stipulated in the Regulation of the Minister of Agrarian and Spatial Planning/Head of the National Land Agency of the Republic of Indonesia Number 18 of 2019 concerning Customary Land Administration Procedures for Customary Law Community Units. This recognition can be a bridge between the two legal systems that have been running separately.

However, this study has several limitations, including not involving private actors who are often involved in digital land conflicts, as well as the scope of the study area which is still limited to three communities (Silverman, 2022). For this reason, further research is needed that is geographically broader and more in-depth in exploring the dynamics of the role of states, companies, and indigenous communities in digital legal interactions. This research is proof that justice is not solely a matter of regulations or documents, but also involves the recognition of social existence and local values that cannot be narrowly defined by the national digital system (Tamanaha, 2021; Dale & McLaughlin, 2021).

CONCLUSION AND RECOMMENDATION

This study concludes that customary justice remains the main pillar in resolving land disputes in indigenous communities, even in the context of digitalization of the national land system. Indigenous peoples in Central Kalimantan, East Nusa Tenggara, and South Sulawesi demonstrate the sustainability of customary law practices as a form of vibrant and dynamic social legitimacy, even in the face of formalistic and non-inclusive digital land systems. The tension between administrative legality and customary legitimacy confirms the dualism of the legal system that has not been substantively integrated, and reflects the state's failure to accommodate the plurality of norms in agrarian digitalization policies. This gap is exacerbated by the digital exclusion of indigenous peoples who do not have access to technology or formal legal documents, making their land claims not recorded in the state system.

Theoretically, this research contributes to strengthening the literature on legal pluralism in the era of digital transformation, as well as expanding the concept of justice as a result of social negotiations, not merely a formal legal product. The juridical-sociological approach used successfully shows that customary law is not only a normative entity, but also an instrument of social struggle and a symbol of community sovereignty over its living space. In practical terms, these findings provide a foothold for the formulation of more inclusive and equitable digital land policies, through recognition of indigenous institutions' decisions, the involvement of local communities in participatory mapping, and formal recognition of communal rights in digital systems.

Therefore, contextual integration between the customary law system and the national digital land system is needed to prevent ongoing conflicts and ensure the fulfillment of the rights of indigenous peoples in the digital era. This research also opens up space for broader follow-up studies geographically and more deeply interdisciplinary in understanding local justice practices in the midst of global legal transformation.

FURTHER STUDY

Future research should broaden its geographical scope and adopt an interdisciplinary lens to explore how customary justice systems adapt within the evolving landscape of national digital land governance. Comparative studies across diverse indigenous communities could reveal variations in the integration or resistance of customary norms within formal digital frameworks. In addition, investigations into participatory mapping models, digital inclusion strategies, and legal mechanisms for recognizing communal rights in state databases would provide actionable insights. Such research could contribute to designing digital land policies that bridge legal dualism, reduce conflicts, and safeguard indigenous peoples' rights in the digital era.

REFERENCES

- Alden Wily, L. (2020). *Land rights in postcolonial states: Conflict and property in the Global South*. Routledge.
- Asri, H., Santoso, R., & Maulida, N. (2023). Dinamika legitimasi hukum adat dalam sengketa agraria. *Jurnal Hukum dan Masyarakat*, 18(1), 23–40.
- Badan Pertanahan Nasional. (2023). *Laporan tahunan transformasi digital pertanahan Indonesia*. Jakarta: Kementerian Agraria dan Tata Ruang/BPN.
- Boelens, R., Vos, J., & Perreault, T. (2021). Decontextualizing justice: Water, land, and rights in Latin America. *Geoforum*, 122, 145–158. <https://doi.org/10.1016/j.geoforum.2021.05.014>
- Dale, P., & McLaughlin, J. (2021). *Land administration for sustainable development* (2nd ed.). ESRI Press.
- Komang, G., Wijaya, D., & Arief, B. (2020). Pengakuan hak adat dalam konteks pertanahan nasional. *Jurnal Hukum Udayana*, 11(2), 211–230. <https://doi.org/10.24843/JUH.2020.v11.i02.p05>
- Lumban-Gaol, B., & Sitorus, J. (2021). Konflik hukum adat dan registrasi tanah digital di Indonesia. *Jurnal Transformasi Digital Agraria*, 2(1), 17–30.
- Merry, S. E. (2020). *Legal pluralism and postcolonial governance*. Cambridge University Press. <https://doi.org/10.1017/9781108752420>
- Patton, M. Q. (2022). *Qualitative research & evaluation methods* (4th ed.). Sage Publications.
- Peraturan Menteri Agraria dan Tata Ruang/ Kepala Badan Pertanahan Nasional Republik Indonesia Nomor 18 Tahun 2019 tentang Tata Cara Penatausahaan Tanah Ulayat Kesatuan Masyarakat Hukum Adat.
- Rachmawati, N., & Nugraha, A. (2022). Digitalisasi agraria dan implikasi sosialnya. *Jurnal Sosiologi Pedesaan*, 20(3), 75–90.
- Siahaan, A. (2022). Ketidakadilan digital dalam tata kelola pertanahan. *Jurnal Hukum Agraria*, 7(1), 44–60.
- Silverman, D. (2022). *Doing qualitative research* (6th ed.). Sage.
- Tamanaha, B. Z. (2021). *Legal pluralism explained: History, theory and applications*. Oxford University Press.
- Yin, R. K. (2023). *Case study research and applications: Design and methods* (7th ed.). Sage.

Yuliana, R., Kartika, S., & Budianto, A. (2021). Legitimasi sosial dalam penyelesaian sengketa tanah adat. *Jurnal Hukum Adat Nusantara*, 5(2), 121-135.