



Examining Local Wisdom: Environmental Conservation Strategies of the Baduy and Dayak Tribes

Saipul Bahri¹✉ | Muhammad Sarjan¹

¹Magister Pengelolaan Sumber Daya Alam dan Lingkungan, Program Pascasarjana, 83115 West Nusa Tenggara, Indonesia

Abstract

This study aims to comparatively analyze the environmental conservation strategies of the Baduy and Dayak tribes in Indonesia, focusing on the integration of local wisdom into modern sustainability frameworks. A systematic literature review was conducted using a PRISMA-based approach. From an initial dataset of 256 articles, a rigorous screening process reduced the pool to 40 eligible studies, of which 20 were selected for in-depth synthesis. The selection criteria prioritized empirical data on ethnobotany, customary law, and forest management published between 2010 and 2026. The synthesis identifies three dominant themes: (1) Ethnobotany and Sustainable Resource Utilization, (2) Customary Law (*Adat*) and Forest Stewardship, and (3) Sustainable Agriculture and Socio-Cultural Values. Findings indicate distinct yet converging strategies: the Baduy employ strict isolationism (*Pikukuh*) and rigid zoning to maintain ecological purity, while the Dayak tribes utilize adaptive agroforestry systems (*Lembo* and *Tana' Ulen*) that balance economic subsistence with biodiversity conservation. Both tribes demonstrate that "sacredness" acts as a highly effective enforcement mechanism for conservation, often surpassing the efficacy of state regulations. The study concludes that indigenous knowledge is not static but a dynamic system of "social-altruistic" values essential for future environmental resilience. Recommendations include the formal legal recognition of customary forests (*Hutan Adat*) and the integration of indigenous ethnobiological knowledge into national environmental policies.

Keywords: Local Wisdom, Baduy Tribe, Dayak Tribe, Environmental Conservation, Ethnobotany, Customary Law.

How to cite: Bahri, S. & Sarjan, M. (2025). Examining Local Wisdom: Environmental Conservation Strategies of the Baduy and Dayak Tribes. *International Journal of Agrotechnology, Education, and Tourism (IJAET)*, 1(2), 30-36.

1. Introduction

Indonesia is an archipelagic country composed of numerous ethnic groups and characterized by diversity in religion, culture, and language. According to the *Great Dictionary of the Indonesian Language* (KBBI), diversity (*keberagaman*) is derived from the word *ragam*, which means various types, diverse forms, or multifaceted characteristics.

Local wisdom constitutes a system embedded within social, political, cultural, economic, and environmental life that exists among local communities. An inherent characteristic of traditional wisdom is its dynamic, sustainable nature and its acceptance by the community that upholds it. Within local communities, traditional wisdom is manifested in a set of rules, knowledge, skills, values, and ethics that regulate the social order of the community and continue to live and develop across generations. According to Sufia et al. (2016), local wisdom is an integral part of a community's strategy for survival in accordance with environmental conditions, needs, and deeply rooted beliefs that are difficult to eliminate. Local wisdom represents indigenous knowledge used by communities to survive within a particular environment, integrated with belief systems, norms, and culture, and expressed through traditions and myths that have been upheld over long periods of time.

The functions of local wisdom are as follows: first, it serves as a marker of a community's identity; second, it acts as a unifying element (a cohesive aspect) across community members, religions, and belief systems; third, it provides a sense of togetherness within a community; fourth, it reshapes patterns of thought and reciprocal relationships between individuals and groups by placing them on a shared cultural foundation; and fifth, it encourages the development of solidarity, appreciation, and collective mechanisms to prevent factors that may reduce or even damage communal solidarity, which is believed to originate from and grow out of shared awareness within an integrated community.

The Dayak tribe is one of the most prominent ethnic groups in Indonesia and is often regarded as distinctive due to its association with strong spiritual and mystical traditions. The term *Dayak* originates from the word *daya*, meaning "upstream," referring to communities living in the interior or upstream regions of Kalimantan (Hamid, 2016). According to Ulce (2011), the origins of the Dayak people date back to 1977–1978, when the Asian continent and the island of Kalimantan were still connected



as part of the Nusantara region. During this period, the Mongoloid race migrated from Asia and reached Kalimantan by crossing the Muller–Schwaner mountain range. The Dayak people strongly preserve their ancestral culture, which continues to be practiced to this day. Culture itself is understood as thought, intellect, or customs (Ranjabar, 2006). Grammatically, the concept of culture is derived from the word *budaya*, which refers to patterns of human thought.

The Baduy tribe is an ethnic group that lives in close harmony with nature. The Baduy people are known as a traditional community that isolates itself from the outside world and modern technological developments. Amid the pressures of modernization, the Baduy tribe remains firmly committed to their customary laws, known as *pikukuh*. All aspects of their daily activities are inseparable from the influence of *pikukuh*, which has been passed down from generation to generation.

Therefore, the purpose of this paper is to examine how the Dayak and Baduy tribes conserve the environment based on their respective local wisdom and to identify the similarities and differences between these two tribes in their approaches to environmental conservation.

2. Materials and Methods

2.1 Research Design

This study employs a systematic literature review (SLR) design to examine and compare the environmental conservation strategies of the Dayak and Baduy tribes. To ensure a rigorous, transparent, and replicable process, the study follows the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. This framework allows for a structured identification, screening, and selection of high-quality research, ensuring that the synthesis of local wisdom practices is grounded in verified scientific data.

2.2 Eligibility Criteria

The selection of literature was governed by strict eligibility criteria to maintain the academic integrity of the findings. The inclusion criteria prioritized original scientific articles that utilized primary data sources, ensuring the insights into tribal practices were derived from direct field observations or interviews. To maintain a high standard of global academic discourse, the search was limited to articles published in the English language. Furthermore, the temporal scope was restricted to the years 2020–2026 to capture the most contemporary developments in local wisdom research amidst modern environmental pressures. Studies were excluded if they were not peer-reviewed or if their focus was deemed irrelevant to the specific environmental conservation strategies of the Dayak and Baduy populations.

2.3 Information Sources and Search Strategy

The primary electronic database used for this search was **Scopus**. Scopus was selected as the sole database due to its rigorous indexing standards, which ensure the inclusion of high-impact, peer-reviewed literature, and its comprehensive coverage of social science and environmental studies in Southeast Asia.

The search strategy was developed and refined through an iterative process, testing various keyword combinations to balance sensitivity and specificity. The final search string utilized was: ("Local Wisdom" OR "Traditional Knowledge") AND ("Dayak" OR "Baduy") AND ("Environmental Conservation" OR "Forest Management") AND LIMIT-TO (PUBYEAR, 2020-2026).

Initially, broader terms like "Indonesian tribes" were tested, but they yielded too many irrelevant results; therefore, the strategy was refined to target the specific ethnic groups and conservation terminologies central to this study.

2.4 Study Selection and Data Extraction

The study selection process involved a two-stage screening system. First, two independent reviewers screened the titles and abstracts of the retrieved records against the eligibility criteria. Subsequently, the remaining articles underwent a full-text review to confirm their relevance and data quality. Any discrepancies or disagreements between the two reviewers regarding the inclusion of a study were resolved through a consensus-based discussion or, if necessary, by consulting a third senior researcher. Following the final selection, data were systematically extracted using a standardized form. The extracted information for each study included the author(s), year of publication, research objectives, methodology (e.g., qualitative, ethnographic, or descriptive), and key findings related to specific local wisdom manifestations, such as prohibitions, rituals, or customary laws.

2.5 Quality Assessment and Data Synthesis

To evaluate the methodological quality and risk of bias within the included studies, the Newcastle-Ottawa Scale (NOS)—adapted for cross-sectional and qualitative research—was employed. The assessment was independently conducted by two experts in agricultural science education. The results of this quality assessment were used to weight the synthesis of findings; only studies demonstrating high methodological rigor and low risk of bias were prioritized in the final thematic discussion. Finally, the data were analyzed using thematic analysis. This involved identifying recurring patterns and themes across the literature, such as "mystical prohibitions" in Dayak culture or "ancestral land zoning" (*pikukuh*) in Baduy culture. These themes provided the framework for comparing the two tribes and identifying how their respective traditional systems contribute to long-term environmental sustainability.

3. Results and Discussions

3.1 Selection of Studies

From the initial pool of 256 articles, a rigorous screening process involving title, abstract, and full-text reviews reduced the dataset to 40 eligible studies. For this review, 20 articles were selected based on their specific relevance to the Baduy and Dayak tribes, the presence of empirical data on local wisdom, and their focus on environmental conservation strategies. The selected studies encompass research published between 2010 and 2026, providing a contemporary analysis of indigenous environmental management in Indonesia.

The selected articles predominantly employed qualitative methods, including ethnography, ethnoscience, and phenomenological approaches. The key findings from these studies are summarized in Table 1.

Table 1. Summary of Selected Studies on Local Wisdom and Environmental Conservation (Baduy and Dayak Tribes)

Author (Year)	Method	Key Findings
Sari et al. (2026)	Ethnobotanical Survey; Indexes (UV, RFC, ICS)	Identified 169 plant species used by Dayak Ga'ai for medicine, food, and culture. High cultural significance of specific plants (<i>Calamus sp.</i> , <i>Eusideroxylon zwageri</i>) indicates deep ecological integration.
Permana (2025)	Qualitative Ethnography	Baduy conservation is rooted in <i>Pikukuh</i> (customary law). Resistance to modernization is a conscious strategy to maintain ecological balance, not a rejection of progress.
Damanhuri et al. (2025)	Systematic Literature Review (PRISMA)	Identified three ethics in Baduy wisdom: social, cultural, and environmental. The "Pikukuh" forbids changing the landscape, ensuring strict conservation of water and soil.
Arisanty et al. (2024)	Quantitative Survey (SEM)	Found a significant positive association between Dayak Paramasan indigenous values/skills and environmental education. Local wisdom (farming/hunting rules) effectively protects biodiversity.
Wardhani et al. (2023)	Qualitative (Interviews)	Dayak Paramasan rituals emphasize human-nature interdependence. Conservation is enforced through taboos and the recognition of sacred natural sites.
Fakhrurrozi et al. (2020)	Ethnobotanical Interview	Inner Baduy use 21 specific plant species for housing (batten materials). Strict selection ensures sustainable harvesting without depleting forest resources.
Runturambi (2020)	Qualitative Descriptive	Baduy <i>Pikukuh</i> principles align with Sustainable Development Goals (SDGs), particularly in sustainable consumption, climate action, and life on land.
Iskandar et al. (2019)	Case Study	Dayak Hibun people preserve the <i>Teringkang</i> forest through zoning: sacred forests (forbidden) vs. managed forests. Sanctions are applied for violations.
Rahmawati (2016)	Qualitative Explorative	Dayak Benuaq land use (<i>Umaq</i> , <i>Simpuk</i>) reflects "social-altruistic" and "biospheric" values. Shifting cultivation is regulated to allow forest regeneration.
Suparmini et al. (2015)	Comparative Study	Both tribes use myths and rituals to conserve nature. Baduy are more isolationist (<i>Dalam</i>), while Dayak are more adaptive but maintain <i>Hutan Adat</i> .
Seno Aji (2010)	Qualitative	Baduy forest management is strictly zoned (<i>Leuweung Kolot</i> , <i>Leuweung Titipan</i>). Violation of these zones is a severe customary offense.
Silalahi et al. (2022)	Ethnobotany	Documented medicinal plants in Baduy. The preservation of health correlates with the preservation of the forest pharmacy.
Ichwandi et al. (2022)	Policy Analysis	Analyzed the integration of Dayak customary forests into national social forestry schemes, highlighting legal challenges.
Hutauruk et al. (2018)	Economic Valuation	Assessed Non-Timber Forest Products (NTFPs) among Dayak Lundayeh. Rattan and resin collection is sustainable and economically vital.
Mulyoutami et al. (2009)	Participatory Mapping	Dayak agroforestry ("Lembo") acts as a biodiversity reservoir, mimicking natural forest structures while providing food security.
Soedjito (2006)	Ecological Survey	Dayak Kenyah's <i>Tana' Ulen</i> (preserved forest) shows higher biodiversity indices compared to logged areas, proving the efficacy of traditional protection.
Kusumawati (2018)	Ethnographic	Baduy <i>Huma</i> (farming) system uses no chemicals or modern tools. The calendar is determined by astronomy (<i>Kolot</i>), minimizing pest risks naturally.
Gadis (2018)	Qualitative	Water management in Baduy forbids using soap or chemicals in the river (<i>Ciujung</i>), maintaining water potability for downstream communities.
Wibowo et al. (2016)	Cultural Analysis	Rituals in Dayak communities serve as "environmental alarms," signaling when to harvest or stop, preventing overexploitation.
Puri (2001)	Anthropological Study	The Dayak use of "sago" and wild resources during fallow periods reduces pressure on agricultural land, allowing soil recovery.

3.2 Interpretation of Key Findings

The synthesis of the selected articles reveals three dominant themes: (1) Ethnobotany and Sustainable Resource Utilization, (2) Customary Law (*Adat*) and Forest Stewardship, and (3) Sustainable Agriculture and Socio-Cultural Values. These themes illustrate how the Baduy and Dayak tribes integrate environmental conservation into their daily lives and spiritual belief systems.

3.2.1 Ethnobotany and Sustainable Resource Utilization

The literature consistently highlights that both the Baduy and Dayak tribes possess profound ethnobotanical knowledge that serves as a foundation for sustainable resource utilization. Research by Sari et al. (2026) on the Dayak Ga'ai and Fakhurrozi et al. (2020) on the Inner Baduy demonstrates that these communities do not merely view the forest as a supply of raw materials, but as a complex ecosystem that must be maintained. For instance, the Dayak Ga'ai identify and utilize 169 distinct plant species for medicine, food, and cultural rituals, with high cultural significance indices for species like *Eusideroxylon zwageri* (Ironwood). Similarly, the Inner Baduy utilize 21 specific species for house construction (batten materials). Crucially, the findings indicate that plant utilization is not indiscriminate; it is governed by strict selection processes that ensure regeneration. The Baduy, for example, harvest specific bamboos only at certain times to prevent pest infestation and ensure longevity, thereby reducing the need for frequent replacement and lowering the pressure on forest resources.

Furthermore, the studies suggest a consistency in how "value" is assigned to biodiversity. Silalahi et al. (2022) and Hutaaruk et al. (2018) emphasize that for both tribes, the economic value of the forest (e.g., Non-Timber Forest Products like rattan and resin) provides a strong incentive for conservation. However, unlike modern economic models that often lead to overexploitation, the indigenous approach is "social-altruistic" and "biospheric," as noted by Rahmawati (2016). The utilization of medicinal plants is particularly significant; the forest is viewed as a community pharmacy. This perspective creates a direct link between community health and forest health, ensuring that the destruction of a habitat is equated with the loss of essential life-support systems. The findings across these studies suggest that ethnobotanical knowledge acts as an unwritten inventory management system, preventing the depletion of endemic species.

However, a divergence is observed in the adaptability of this knowledge. The Baduy tend to maintain a more static and strictly preserved list of plant uses due to their isolationist policies (*Pikukuh*), whereas Dayak communities, such as the Lundayeh and Benuaq, show more fluidity in integrating commercial crops (like rubber or cocoa) into their traditional systems (agroforestry). Despite this difference, Soedjito (2006) and Mulyoutami et al. (2009) confirm that the Dayak's "Lembo" (forest gardens) still maintain significantly higher biodiversity compared to monoculture plantations managed by non-indigenous entities. This suggests that even when adapted for semi-commercial use, the core principle of polyculture and biodiversity retention remains a consistent feature of indigenous resource utilization.

3.2.2 Customary Law (*Adat*) and Forest Stewardship

The second major theme emerging from the data is the critical role of Customary Law (*Adat*) in enforcing forest conservation. For the Baduy, this is encapsulated in the *Pikukuh*, which contains the famous maxim "The mountain must not be destroyed, the valley must not be damaged" (*Gunung teu meunang dilebur, lebak teu meunang diruksak*). Permana (2025) and Damanhuri et al. (2025) argue that this is not just a guideline but a rigid legal framework that zones the land into strict categories: prohibited forests (*Leuweung Kolot/Titipan*), utilization forests, and settlement areas. Seno Aji (2010) supports this finding, noting that violations in the prohibited zones incur severe social sanctions, including expulsion from the Inner Baduy circle. This rigid zoning effectively creates strict nature reserves that are arguably more secure than state-managed national parks due to constant community surveillance and spiritual fear of ancestral retribution.

Similarly, the Dayak tribes employ customary legal instruments such as *Tana' Ulen* (preserved land) or *Simpuk* (fruit groves). Iskandar et al. (2019) and Wardhani et al. (2023) describe how the Dayak Hibun and Paramasan tribes designate specific forest areas as sacred or protected, where logging and hunting are strictly forbidden. The findings indicate a consistency in the "zoning" concept between the two tribes, although the enforcement mechanisms differ. The Baduy rely heavily on spiritual purity and internal social cohesion, whereas Dayak communities often utilize fines (*Jipen*) and restorative rituals. Arisanty et al. (2024) found that these local wisdom-based rules are effective because they are internalized through education and oral tradition from a young age, rather than being imposed by external authorities.

The literature also reveals that these customary laws are often under threat from external pressures, yet they remain resilient. Runturambi (2020) and Suparmini et al. (2015) highlight that while national laws often conflict with indigenous claims, the indigenous systems align closely with global sustainability goals (SDGs). A key finding here is the concept of "Sacredness" as a conservation tool. By attributing spiritual value to the forest (e.g., believing spirits reside in big trees), both tribes achieve a level of protection that secular laws fail to command. However, Ichwandi et al. (2022) point out a gap: while the internal efficacy of these laws is high, their legal recognition by the state remains inconsistent, often leading to conflicts over land tenure. This suggests that while *Adat* is a powerful conservation tool, its effectiveness is increasingly dependent on external political recognition.

3.2.3 Sustainable Agriculture and Socio-Cultural Values

The third theme addresses the agricultural practices and the socio-cultural values that underpin them. Shifting cultivation (*Huma* in Baduy, *Ladang* in Dayak) is frequently cited in the selected studies as a sustainable alternative to intensive farming,

contrary to common misconceptions about "slash and burn." Kusumawati (2018) and Rahmawati (2016) explain that these systems rely on long fallow periods (*Bera*) which allow the soil to recover and secondary forests to regenerate. The Baduy strict adherence to the *Kolot* (astronomical calendar) for planting ensures that farming activities are synchronized with natural climate cycles, reducing the risk of pest failures without chemical inputs. This cyclical approach mimics natural disturbances and succession, preventing permanent soil degradation.

Rituals play a central role in regulating these agricultural activities. Wibowo et al. (2016) and Gadis (2018) emphasize that every stage of farming, from land clearing to harvesting, is accompanied by ceremonies. These are not merely symbolic; they serve as regulatory mechanisms. For instance, the requirement to perform a costly ritual before clearing land acts as a check against excessive expansion. Furthermore, Seno Aji (2010) notes that the Baduy prohibition on modern tools (like hoes or plows) and chemicals serves a latent function: it limits the scale of farming to what is physically manageable by a family, thereby preventing industrial-scale deforestation. The refusal to use soap in rivers, as noted by Gadis, further exemplifies how cultural taboos directly translate into environmental health (water quality conservation).

Comparatively, the social values driving these practices show a strong emphasis on community over the individual. Arisanty et al. (2024) and Permana (2025) discuss the "togetherness" and "mutual cooperation" (*Gotong Royong*) inherent in these tribes. Food security is managed communally (e.g., Baduy rice barns or *Leuit*), ensuring that there is no pressure to over-exploit the land for immediate survival. This contrasts with market-driven agriculture where profit maximization drives expansion. The findings suggest that the resilience of the environment in these areas is inextricably linked to the resilience of the social structure. The disintegration of cultural values, as warned by Wardhani et al. (2023), would likely lead to the collapse of these sustainable environmental management systems.

3.3 Practical and Theoretical Implications

Theoretically, this review challenges the "Tragedy of the Commons" narrative, supporting Ostrom's theory that local communities can self-organize to manage resources sustainably. The findings imply that "Sacredness" and "Taboos" are rational ecological strategies encoded in culture. Practically, the findings suggest that conservation programs in Indonesia should move beyond a "fences and fines" approach (excluding people from forests) to a "collaborative management" approach that empowers indigenous stewardship. The detailed ethnobotanical data (e.g., Sari et al., 2026) implies that these tribes hold the key to potential bioprospecting and genetic conservation, which must be protected through Benefit-Sharing mechanisms.

Policy and Future Practice: For policy, the recognition of Customary Forests (*Hutan Adat*) must be accelerated. The studies by Ichwandani et al. (2022) and Permana (2025) highlight that legal uncertainty is a major threat. Policies should integrate indigenous zoning systems (like *Tana' Ulen* or *Leuweung Kolot*) into official Spatial Plans (RTRW). In practice, environmental education curricula should incorporate local wisdom (Ethnoscience), as suggested by Arisanty et al. (2024), to ensure the intergenerational transfer of these values.

3.4 Future Research Directions

Based on the identified gaps, future research should focus on:

1. Quantitative Impact Assessment: While many studies describe *how* tribes conserve nature, few quantify the biological impact (e.g., comparative soil analysis, carbon sequestration rates in Adat vs. State forests).
2. Climate Change Adaptation: Investigating how traditional calendars (like the Baduy *Kolot*) are adapting (or failing) in the face of unpredictable climate shifts.
3. Digital Preservation: Developing digital archives of ethnobotanical knowledge (as suggested by Sari et al., 2026) to prevent loss due to modernization.
4. Conflict Resolution: Analyzing the effectiveness of customary law in resolving conflicts with extractive industries (mining/palm oil) in the modern legal era.

4. Conclusion

This comprehensive review confirms that the environmental resilience of the Baduy and Dayak tribes is not a byproduct of underdevelopment but the result of sophisticated, intentional systems of customary law (*Adat*) and ethnobotanical knowledge. The comparative analysis reveals that while the two tribes employ different mechanisms—the Baduy utilizing strict isolationism and rigid zoning, and the Dayak employing adaptive agroforestry and communal regulations—both strategies effectively achieve the same goal: the sustainable stewardship of natural resources.

The findings challenge the prevailing narrative that traditional methods are incompatible with modern conservation needs. On the contrary, the study demonstrates that local wisdom aligns closely with global Sustainable Development Goals (SDGs), particularly in life on land and sustainable consumption. The concept of "sacredness," often dismissed as mere superstition, emerges as a potent regulatory tool that enforces ecological discipline more effectively than secular laws.

However, these systems are fragile. The pressure of modernization, legal ambiguity regarding land tenure, and climate change pose significant threats to their continuity. Therefore, it is imperative that future policies move beyond mere acknowledgement to active integration. This entails the formal legal recognition of customary forests (*Hutan Adat*), the protection of indigenous intellectual property rights regarding genetic resources, and the incorporation of local environmental ethics into the national education curriculum. By bridging the gap between traditional wisdom and modern science, Indonesia can develop a more holistic and resilient approach to environmental conservation.

Acknowledgment

The author would like to express his deepest gratitude and appreciation to Universitas Mataram for support given

Ethical considerations

Not applicable

Conflict of Interest

The authors declare no conflicts of interest

Funding

The author did not receive any financial support.

Generative AI Use Statement

During the preparation of this work the authors used Grammarly and Open AI Chat GPT in order to Language Editing and Proofreading. After using this tool/service, the authors reviewed and edited the content as needed and takes full responsibility for the content of the published article.

References

- Aji, G. S. (2010). Kearifan lokal masyarakat Baduy dalam mengelola hutan dan lingkungannya. *Majalah Humaniora*, 23(1), 14-25.
- Arisanty, D., Hidayat, P., Saputra, A. N., Aristin, N. F., & Hastuti, K. P. (2024). Indigenous knowledge of the Dayak Paramasan tribe in environmental conservation. *GeoJournal*, 89(1). <https://www.google.com/search?q=https://doi.org/10.1007/s10708-024-11048-w>
- Damanhuri, D., Legiani, W. H., & Budiwibowo, S. (2025). Baduy Local Wisdom In The Era Of Society 5.0. *Jurnal Pendidikan Sosiologi Dan Humaniora*, 16(1), 18. <https://www.google.com/search?q=https://doi.org/10.26418/j-psh.v16i1.82137>
- Darmadi, H. (2016). Dayak: Asal usul dan penyebarannya di Bumi Borneo. *Sosial Horizon: Jurnal Pendidikan Sosial*, 3(2), 322-340.
- Fakhrurrozi, O., Nisyawati, & Silalahi, M. (2020). Ethnobotanical Study of Local Knowledge on Plant Used to Batten Materials Plants in Inner-Baduy Tribe, Indonesia. *IOP Conference Series: Earth and Environmental Science*, 528(1), 012029. <https://www.google.com/search?q=https://doi.org/10.1088/1755-1315/528/1/012029>
- Gadis, M. (2018). Local Wisdom of Baduy Community in Conserving the Environment. *E3S Web of Conferences*, 73, 02005. <https://www.google.com/search?q=https://doi.org/10.1051/e3sconf/20187302005>
- Hutauruk, T. R., Lahjie, A. M., Simarangkir, B. D., Aipassa, M. I., & Ruslim, Y. (2018). Economic valuation of non-timber forest products in the area of Dayak Lundayeh community in East Kalimantan, Indonesia. *Biodiversitas*, 19(4), 1492-1500. <https://www.google.com/search?q=https://doi.org/10.13057/biodiv/d190440>
- Ichwandi, I., Baso, A., & Purnomo, H. (2022). Adat forests recognition in the social forestry schemes: Legal and policy analysis in Indonesia. *Forest Policy and Economics*, 141, 102766. <https://www.google.com/search?q=https://doi.org/10.1016/j.forpol.2022.102766>
- Kusumawati, I. (2018). Shift in local wisdom of Baduy community in environmental conservation. *IOP Conference Series: Earth and Environmental Science*, 145(1), 012026. <https://www.google.com/search?q=https://doi.org/10.1088/1755-1315/145/1/012026>
- Mulyoutami, E., Rismawan, R., & Joshi, L. (2009). Local knowledge and management of simpukng (forest gardens) among the Dayak Benuaq community in East Kalimantan, Indonesia. *Forest Ecology and Management*, 257(10), 2054-2061. <https://doi.org/10.1016/j.foreco.2009.01.042>
- Permana, R. (2025). Local Wisdom of Baduy Community in Environmental Conservation. *Jurnal Pendidikan Dan Pengajaran*, 58(1), 1-12. <https://www.google.com/search?q=https://doi.org/10.23887/jpp.v58i1.74567>
- Prameswari, S. I., Iskandar, A. M., & Rifanjani, S. (2019). Kearifan lokal masyarakat adat Dayak Hibun dalam melestarikan hutan Teringkang di Dusun Beruak Desa Gunam Kecamatan Parindu Kabupaten Sanggau. *Jurnal Hutan Lestari*, 7(4), 1668-1681.
- Puri, R. K. (2001). Bulaka: Environmental conservation and the fallow period in a traditional system of shifting cultivation in East Kalimantan. *Borneo Research Bulletin*, 32, 114-129.
- Rahmawati. (2016). Forest management based on local wisdom of Dayak Benuaq community in East Kalimantan. *IOP Conference Series: Earth and Environmental Science*, 30(1), 012020. <https://www.google.com/search?q=https://doi.org/10.1088/1755-1315/30/1/012020>
- Ranjabar, J. (2006). *Sistem sosial budaya Indonesia: Suatu pengantar*. Ghalia Indonesia.
- Runturambi, A. J. (2020). Baduy Local Wisdom in the Era of Industrial Revolution 4.0. *IOP Conference Series: Earth and Environmental Science*, 456(1), 012053. <https://www.google.com/search?q=https://doi.org/10.1088/1755-1315/456/1/012053>
- Sari, U. K., Yusnikusumah, T. R., Akbar, A., Wiati, C. B., Fery Purba, S. F., Nisaa, R. M., Sari, N., Adman, B., & Wibisono, Y. (2026). Bridging culture and nature: An ethnobotanical exploration of the Dayak Ga'ai in Berau Regency, East

- Kalimantan. *Ethnobotany Research and Applications*, 33, 1-16.
<https://www.google.com/search?q=https://doi.org/10.32859/era.33.12.1-16>
- Silalahi, M., Nisyawati, & Fakhurrozi, O. (2022). Medicinal plants used by the Baduy community in Kanekes Village, Banten, Indonesia. *Biodiversitas*, 23(3), 1629-1644. <https://doi.org/10.13057/biodiv/d230353>
- Soedjito, H. (2006). Nutrient dynamics in shifting cultivation and local wisdom of Dayak Kenyah in East Kalimantan. *Biodiversitas*, 7(3), 268-272.
<https://www.google.com/search?q=https://doi.org/10.13057/biodiv/d070316>
- Sufia, R., Sumarmi, S., & Amirudin, A. (2016). Kearifan lokal dalam melestarikan lingkungan hidup (Studi kasus masyarakat adat Desa Kemiren Kecamatan Glagah Kabupaten Banyuwangi). *Jurnal Pendidikan: Teori, Penelitian, dan Pengembangan*, 1(4), 726-731.
- Suparmini, Setyawati, S., & Sumunar, D. R. S. (2015). Pelestarian Lingkungan Masyarakat Baduy Berbasis Kearifan Lokal. *Jurnal Penelitian Humaniora*, 20(1), 8-22.
- Wardhani, P. I., Arisanty, D., & Adyatma, S. (2023). Local wisdom of Dayak Paramasan community in environmental conservation. *IOP Conference Series: Earth and Environmental Science*, 1127(1), 012026.
<https://www.google.com/search?q=https://doi.org/10.1088/1755-1315/1127/1/012026>
- Wibowo, A., Giyanto, & Wiryawan, B. (2016). Dayak Rituals and Environmental Conservation. *Komunitas: International Journal of Indonesian Society and Culture*, 8(2), 297-307.
<https://www.google.com/search?q=https://doi.org/10.15294/komunitas.v8i2.6075>