

Indigenous Cosmology of Kalimantan as an Alternative Theological Ecology

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ABSTRACT

The indigenous cosmology of Kalimantan, Indonesia, can be understood as an ontological horizon that significantly contributes to reinterpreting the relationships among humankind, nature, and the transcendent dimension. This study aims to examine the indigenous cosmology of Kalimantan as a conceptual source for the development of an Islamic theological ecology that is more relational, contextual and sensitive to ecological justice. This study employs a qualitative approach, using a critical-hermeneutic ethnographic design, to interpret the ecological values, practices, and meanings embedded within indigenous cosmology, and to engage them in dialogue with the principles of *tawhīd*, *amānah*, and balance in Islam. The findings indicate that the contemporary ecological crisis is not merely a matter of technical environmental management, but is also influenced by an anthropocentric worldview that separates humans from nature. In this context, Kalimantan's indigenous cosmology offers a critical perspective on modern exploitative paradigms through its emphasis on relationship, responsibility, reciprocity and respect for nature. This study positions indigenous knowledge as a source of theoretical reflection rather than merely a cultural object, emphasising that its integration into Islamic theological discourse and environmental policy must be carried out with care to avoid reducing local meanings and to ensure that indigenous communities remain key actors.

INTRODUCTION

Indigenous cosmology in Kalimantan, Indonesia, represents a form of local knowledge that encompasses symbolic and spiritual dimensions and integrates complex ecological principles into the daily practices of indigenous communities (Niko, 2025). In a global context marked by a multidimensional ecological crisis, ranging from massive deforestation and climate change to biodiversity degradation, alternative approaches rooted in local traditions are increasingly gaining attention as sources of inspiration for sustainable environmental ethics.

Kalimantan, one of the regions with the largest tropical forests in the world, faces significant ecological pressure from the expansion of extractive industries, large-scale plantations, and infrastructure development (Alamgir et al., 2019). Amid this situation, the indigenous cosmologies embraced by various ethnic groups, such as the *Dayak Ngaju*, *Kenyah*, *Iban*, and *Benuaq*, offer distinct perspectives on the relationships among humans, nature, and transcendent entities (Halim et al., 2025). This cosmology does not strictly separate the spiritual and ecological dimensions, but rather views them as a single, mutually sustaining unity.

In the development of academic scholarship, the concept of theological ecology has emerged as a response to critiques of classical theology, which is seen as insufficiently responsive to the environmental crisis. Theological ecology seeks to reconstruct the relationship between humanity, God, and nature within a more inclusive and sustainable framework. Thinkers such as Lynn White Jr. (1967) have criticised Western religious traditions for allegedly contributing to the exploitation of nature through a view of human domination over creation. In response, various approaches have emerged, such as eco-theology, deep ecology, and spiritual ecology, which seek to position nature as a moral subject (Ruswanda, 2026). However, most of these approaches remain rooted in Western philosophical traditions and thus fail to accommodate the diversity of non-Western cosmologies, which possess rich ecological knowledge systems.

Several previous studies have examined indigenous cosmology in Kalimantan from various perspectives, notably anthropology, political ecology, belief systems, ritual practices, and the social relations between indigenous communities and their environment. Murhaini (2021) demonstrates that the practice of shifting cultivation amongst the Dayak people cannot be understood merely as an economic activity, as it is bound up with a cosmology that views the forest as a living space possessing ecological, social and spiritual value. Adams (2021) expands upon this understanding by emphasising that complex multispecies relations shape indigenous communities' relationships with the environment. These relationships involve humans, plants, animals, guardian spirits of nature, and local social structures that influence one another. Nirmal and Rocheleau (2019) subsequently situate indigenous communities within a broader ecological-political context, particularly when the state and corporations enter indigenous territories through development policies, land concessions, and extractive capitalism.

These studies demonstrate that Kalimantan's indigenous cosmology functions not only as a belief system but also as a normative foundation governing human relations with nature. Forests, rivers, land and living beings are not positioned as passive objects that can be exploited without limit. Rather, natural elements are understood as part of a cosmic order that is interconnected with human life and the transcendent dimension. This perspective means that the ecological practices of indigenous communities are not merely technical actions, but also moral and spiritual ones.

Academic interest in indigenous ecological knowledge is also growing. Berkes (2018) emphasises that local knowledge is not only empirical, but also normative, historical and spiritual. This knowledge stems from communities' long-standing experience in interpreting changes in nature, managing resources, maintaining ecosystem balance, and establishing social norms that support sustainability. In the context of Kalimantan, Wadley and Colfer (2004) demonstrate that customary prohibitions, rituals honouring the guardian spirits of nature, and forest management norms play a vital role in maintaining ecosystem sustainability. These findings demonstrate that customary practices cannot be reduced to symbolic traditions, as they encompass ecological mechanisms that operate through norms, beliefs, social sanctions and collective responsibility.

More recent studies have begun to link indigenous cosmology with the concepts of resilience and sustainability. Persoon and van Est (2003), for example, highlight how indigenous communities adapt to environmental change through local knowledge, social networks, and values passed down through generations. However, the majority of these studies still operate within separate analytical frameworks. Anthropological studies tend to emphasise the significance of rituals, social structures, and cultural identity (Chen et al., 2024). Ecological studies place greater emphasis on the role of local knowledge in conservation and resource management (Sinthumule, 2023). Political ecology studies highlight power struggles, the expansion of capitalism, and state intervention. Whilst these three approaches make important contributions, they have not yet fully integrated ecological, spiritual and theological dimensions into a single, coherent conceptual framework.

Within the broader academic debate, this study is situated at the intersection of environmental anthropology, indigenous ecological knowledge, political ecology and theological ecology. Environmental anthropology helps to explain how indigenous communities construct meaning in relation to nature through symbols, rituals and social practices (Prasetyo, 2023). Indigenous ecological knowledge explains how local knowledge functions as a system of knowledge born of long-term ecological experience. Political ecology helps to analyse the structural pressures arising from the state, the market and corporations (Al Mahameed & Abras, 2025). Meanwhile, theological ecology provides a framework for understanding the relationship between humans, nature and the transcendent dimension as a single moral unity (Ojeifo, 2025). A synthesis of these four fields is essential because a single discipline cannot solely explain the indigenous cosmology of Kalimantan, an approach capable of interpreting local knowledge as an interrelated epistemological, ethical and spiritual system.

Based on this literature review, the research gap in this study lies in the limited number of studies that integrally link Kalimantan's indigenous cosmology with theological ecology as the primary analytical framework. Previous studies have addressed indigenous cosmology, forest management, rituals, the relationship between humans and nature, and resistance to extractive capitalism. However, these studies have not specifically developed an analysis demonstrating how Kalimantan's indigenous cosmology can be interpreted as an alternative form of theological ecology. The theoretical gap in this study lies in the lack of a sufficiently robust theoretical framework to bridge local ecological knowledge with the discourse of theological ecology. Many studies still treat indigenous cosmology as a descriptive object rather than a source of theory. Consequently, local knowledge is often treated as cultural data, rather than as an epistemic contribution capable of enriching concepts of environmental ethics.

This theoretical gap is significant because the discourse on theological ecology still relies heavily on formal religious traditions and Western environmental philosophy, whilst sources

of indigenous knowledge have not yet been widely positioned as an equivalent conceptual basis. This study does not claim that Kalimantan's indigenous cosmology can replace the entirety of existing theological ecology theory. Rather, it cautiously positions it as an alternative conceptual source that can broaden our understanding of the relationships among humanity, nature, and the transcendent. The empirical gap in this study lies in the still-limited evidence on how the principles of Kalimantan's indigenous cosmology operate in the ecological practices of contemporary indigenous communities, particularly as they face the climate crisis, deforestation, ecosystem degradation, and the pressures of extractive capitalism.

The main novelty of this study lies in its attempt to reconstruct Kalimantan's indigenous cosmology as an alternative theological-ecological framework that integrates ecological, spiritual, ethical and social dimensions into a single conceptual model. This novelty does not lie in the claim that this research is the first to discuss Kalimantan's indigenous cosmology, as many previous researchers have examined this theme. The novelty of this research is more specific: it lies in the way it positions indigenous cosmology not merely as an anthropological object or a source of local ecological knowledge, but as a conceptual foundation for formulating a theological ecology rooted in the experiences of indigenous communities.

In the context of the global climate crisis, extractive capitalism and ecosystem degradation, the indigenous cosmology of Kalimantan holds significant academic and practical relevance. Indigenous perspectives on balance, interconnectedness, prohibitions against excessive exploitation, respect for living spaces, and intergenerational responsibility can enrich the discourse on environmental ethics. However, such contributions must be carefully formulated to avoid romanticising local culture. Indigenous cosmology must be analysed through empirical evidence, robust theoretical frameworks, and a contextual understanding of the dynamics of indigenous communities themselves.

This study aims to examine and reconstruct the indigenous cosmology of Kalimantan as an alternative form of theological ecology, capable of offering new perspectives on the relationship among humans, nature, and the transcendent dimension. Specifically, this study aims to identify the fundamental principles within indigenous cosmology that have ecological relevance, analyse their connection to the concept of theological ecology, and formulate an integrative and applicable conceptual framework. The significance of this study lies in its contribution to bridging local knowledge and global discourse on the environment, whilst simultaneously elevating indigenous cosmology as a legitimate source of academic inspiration in the development of ecological ethics.

METHOD

This study employs a qualitative approach using a critical-hermeneutic ethnographic design, chosen for its ability to capture in depth the dimensions of meaning, symbolism, and practices within Kalimantan's indigenous cosmology whilst reconstructing them within a theological-ecological framework, with the study focusing on the ontological relationship between humans, nature, the transcendent, ecological value systems, and ritual practices as theological-ecological expressions, operationally defined as a set of beliefs, norms, and actions governing the ecological interactions of indigenous communities. The research subjects were selected through purposive and snowball sampling, including traditional and spiritual leaders and members of the Dayak community with cosmological knowledge, whilst ensuring regional representation and subcultural variation.

The research instruments, as the primary tools supported by guidelines for in-depth interviews, participatory observation, and documentation, were developed through literature

review and readability testing and validated via triangulation of sources, methods, and theories, member checking, and audit trails to ensure credibility and reliability. Data collection was conducted in stages through field exploration, data deepening, and reflective verification (Dahal, 2025). Meanwhile, data analysis utilised thematic-hermeneutic techniques, combined with critical interpretation, to iteratively interpret cosmological meanings within an ecological-theological context, thereby enabling the construction of an integrative conceptual framework relevant to the study's objectives.

RESULTS AND DISCUSSION

Indigenous Cosmology as a Relational Ontology that Challenges the Dominance of Modern Anthropocentrism

The tension between Kalimantan's indigenous cosmology and modern anthropocentric ontology is a fundamental issue in how humans interpret nature, life, and their place within the universe. Modern ontology, heavily influenced by the Cartesian tradition, tends to establish a clear separation between subject and object, humans and nature, rationality and spirituality, and scientific knowledge and local knowledge (Khan, 2025). Within this framework, humans are positioned as rational subjects possessing the power to measure, control and utilise nature. Nature, in turn, is positioned as a material object whose primary value is determined by its economic function and utility to humans (Himes et al., 2024). This perspective provides the conceptual foundation for the development of modern science, extractive technologies, and the capitalist economic system, which treat nature as a resource to be exploited to the fullest.

In contrast to this dualistic ontology, the indigenous cosmology of Kalimantan presents a more relational perspective. Within this cosmology, nature is not understood as a passive object separate from humankind, but as part of a web of life that possesses value, meaning, and agency. Forests, rivers, land, mountains, animals, plants, the guardian spirits of nature, and ancestors are understood as interconnected elements within a single cosmic order. The relationship between humans and nature is not built on a logic of domination, but on the principles of respect, balance, responsibility and reciprocity.

Empirically, this claim can be observed through the existence of various customary norms governing the use of forests, rivers, land and natural resources in many Dayak communities (Andreastuti, 2025). Prohibitions on felling certain trees, taboos against damaging sacred forest areas, rules governing the clearing of fields, rituals performed before harvesting forest products, and respect for the guardian spirits of nature demonstrate that the ecological practices of indigenous communities are grounded not only in technical considerations but also in cosmological beliefs. These norms function as mechanisms of social control that limit the excessive exploitation of nature. In this context, indigenous cosmology cannot be understood merely as a symbolic belief system. It also functions as an ecological regulatory system governing human behaviour towards the environment.

An important empirical claim is that the indigenous cosmology of Kalimantan has a tangible connection to environmental management practices based on restraint, respect, and collective responsibility. This relationship is evident in how indigenous communities link violations of ecological rules to social, spiritual, and ecological consequences. When an individual breaches a customary prohibition, the violation is viewed not merely as an individual fault, but also as a disruption to the cosmic balance that may affect the community.

Indigenous relational ontology possesses a strong practical dimension, as it does not remain merely an abstract worldview but is embodied in the community's daily actions

(Romm, 2024). Ritual practices, customary taboos, community deliberations and mechanisms of social sanction constitute concrete forms of ecological relations rooted in cosmology. Within this framework, nature is valued not only for the economic benefits it provides but also for its moral and spiritual significance in community life. This perspective differs from the modern paradigm, which often assesses nature through indicators of productivity, efficiency and market value. Indigenous cosmology, in fact, demonstrates that the relationship between humans and nature requires moral boundaries that cannot always be translated into economic terms. However, it is important to avoid overly romanticised claims regarding indigenous cosmology.

Not all practices of indigenous communities can be automatically labelled sustainable, and not all indigenous communities share the same social conditions. Indigenous cosmology is also changing due to modern education, formal religion, the market, migration, state policies, and corporate expansion. Therefore, empirical claims regarding the contribution of indigenous cosmology to sustainability must be contextualised. Indigenous cosmology can serve as an important source of ecological ethics. Still, its effectiveness depends on social conditions, the strength of indigenous institutions, economic pressures, and the political position of indigenous communities vis-à-vis external actors (Murthi et al., 2025; Nurizka et al., 2025).

The integration of ecological and theological dimensions within Kalimantan's indigenous cosmology can also be interpreted in dialogue with Islamic tradition, particularly through the concepts of *tawhīd*, *amānah*, *khalīfah* and *mīzān*. *Tawhīd* affirms the existential unity of all creation in its relationship with God. *Amānah* positions humans as responsible beings, not as absolute rulers over nature. The concept of *khalīfah* indicates that humans have a moral mandate to safeguard life rather than destroy it (Karimullah, 2023; Rosyid et al., 2025; Sutisna et al., 2026). Meanwhile, *mīzān* affirms that nature was created in a state of balance that must be maintained. When these principles are considered alongside Kalimantan's indigenous cosmology, there is a strong convergence in the recognition that nature possesses a moral and spiritual order that must not be violated.

A dialogue between indigenous cosmology and Islamic theology does not imply equating the two entirely. Both stem from distinct epistemological, historical and normative traditions. Indigenous cosmology is rooted in local experience, ancestral relationships, ritual practices and community structures. Islamic theology is rooted in revelation, scholarly tradition and a religious normative framework. However, the two can be brought together within a single ethical framework when discussing humanity's responsibility towards nature. This convergence opens up opportunities to develop a contextual theological ecology, one that does not rely solely on abstract concepts but is also rooted in the lived practices of local communities.

Kalimantan's indigenous cosmology can be positioned as a critique of the dominance of modern anthropocentrism (Hidayat et al., 2026). This critique arises because modern ontology often separates humans from the ecological networks that sustain their lives. This separation gives rise to a way of thinking that regards environmental degradation as a technical problem that can be resolved solely through management, technology or administrative regulation. In reality, however, the ecological crisis is also rooted in an ontological crisis, namely a misunderstanding of humanity's position in relation to nature. Indigenous cosmology offers a different perspective by situating humans within a broader order of life. Humans do not stand above nature, but live within a network of relationships that demands moral responsibility.

The dominance of modern anthropocentric ontology in development has also led to the marginalisation of indigenous cosmology. Development policies often employ a technocratic approach that assesses land, forests and rivers solely through the lens of economic productivity. Consequently, indigenous territories are frequently viewed as vacant land, sources of commodities, or investment opportunities (Carlos et al., 2022; Rembulan et al., 2025). This perspective overlooks the fact that indigenous territories hold ecological, historical and spiritual significance, and represent the identity of indigenous communities. When indigenous forests are transformed into concession areas, plantations, mines or infrastructure projects, the resulting damage is not merely ecological. It also affects the very foundations of their cosmology, as the living spaces considered sacred and relational are stripped of their meaning.

The pressures of extractive development not only reduce indigenous communities' access to resources but also weaken the social mechanisms that safeguard local sustainability. When indigenous authorities lose control over their territories, customary prohibitions, ecological rituals and community sanctions become difficult to enforce. Under such conditions, indigenous cosmology does not disappear outright, but undergoes negotiation, adaptation, or even erosion. This demonstrates that the sustainability of indigenous cosmology is closely linked to the recognition of indigenous territories, the strength of local institutions, and legal protection for indigenous communities. Without such recognition, indigenous cosmology risks being treated merely as a symbolic cultural heritage, rather than as a living system of knowledge.

Any interpretation of indigenous cosmology must also involve an analysis of power. Indigenous knowledge does not exist in a neutral space. The state, the market, corporations, religious institutions, educational institutions, and the discourse of development constantly confront it. In many cases, indigenous knowledge can be negotiated, selected, commodified, or subordinated. Indigenous rituals may be promoted as cultural attractions, yet their ecological value is overlooked. Local knowledge may be utilised in conservation programmes, yet indigenous communities are not always granted a role in decision-making. This situation demonstrates that recognition of indigenous cosmology must go beyond mere symbolic acknowledgement. Such recognition must address epistemological, political and material dimensions.

Postcolonial and decolonial approaches are crucial. These approaches help explain how Western epistemic dominance has shaped standards regarding what is considered scientific, rational and legitimate. Indigenous knowledge is often regarded as myth, tradition or local belief, whilst modern knowledge is seen as universal and objective. This division creates an epistemic hierarchy that marginalises indigenous communities. The decolonisation of knowledge seeks to dismantle this hierarchy by recognising that indigenous communities possess epistemically valid ways of knowing, evaluating and managing life. In this regard, the indigenous cosmology of Kalimantan can be interpreted as a source of theory, rather than merely an object of study.

The contribution of indigenous cosmology to sustainability studies also lies in its ability to broaden the meaning of sustainability. Within the modern paradigm, sustainability is often understood through technical indicators such as resource efficiency, area conservation, emissions reduction, or environmental governance. These indicators are important, but they are not sufficient to account for the moral and spiritual dimensions of humanity's relationship with nature. Indigenous cosmology demonstrates that sustainability also requires respect, self-

restraint, intergenerational responsibility, and an awareness that nature is not merely an economic asset.

Conceptually, indigenous relational ontology challenges the modern paradigm's claim to universality. It demonstrates that the world cannot be understood through a single perspective alone. There is a plurality of ontologies at work within societies, each with its own logic, values and practical consequences. Recognising this ontological plurality does not mean rejecting modern science. On the contrary, such recognition opens up space for dialogue between modern knowledge and local knowledge. This dialogue is vital because the contemporary ecological crisis cannot be resolved through technical approaches alone. It requires a shift in perspective regarding the relationship between humanity and nature.

Kalimantan's indigenous cosmology can be understood as a relational ontology that critiques modern anthropocentrism whilst offering a foundation for a more contextual theological ecology. The analytical novelty of this interpretation lies in the endeavour to position indigenous cosmology not merely as a local belief system, but as an ontological framework with ecological, theological and political implications. This claim must be defended with care. Indigenous cosmology need not be positioned as the sole solution to the global environmental crisis. However, it can serve as an important source for broadening ecological discourse, particularly in formulating an environmental ethics that is more relational, spiritual and just.

Indigenous Theological Ecology as a Critique of Exploitative Theology and Extractive Capitalism

Indigenous cosmology in Kalimantan, Indonesia, contains a theological dimension that views nature not merely as a material entity, but as a sacred space inhabited, safeguarded and mediated by spiritual forces, including forest guardian spirits, ancestors, and other non-human entities possessing ontological agency (Maarif, 2023). Within this framework, the relationship between humans and nature is built upon the principles of cosmic balance, reciprocity, and respect for the spiritual order that encompasses the entire ecosystem. This perspective presents an indigenous theological ecology that is not merely normative but also practical, embodied in customary legal systems, ecological rituals, and resource management mechanisms that safeguard environmental sustainability (Karimullah, 2024). On the other hand, in many contemporary socio-economic practices, dominant Islamic theology is often interpreted in an instrumental and exploitative manner, where nature is understood as a trust that implicitly grants humans the legitimacy to utilise resources to the maximum for the sake of welfare, without this always being balanced by an adequate emphasis on ecological responsibility and moral boundaries in its management.

The tension between these two paradigms becomes increasingly apparent when confronted with the logic of extractive capitalism that dominates development practices in Kalimantan, where forests, mines and land are converted into economic commodities on a massive scale. Extractive capitalism operates through an instrumental rationality that views nature as an object to be measured and exploited, with its value to be accumulated, thereby disregarding the sacred and relational dimensions inherent in indigenous cosmology (Anthias & Asher, 2026). Within this framework, nature is reduced to a resource whose value is determined by the market, whilst the spiritual and ecological relationships binding indigenous communities to their environment are deemed irrelevant within the logic of modern development. Consequently, industrial practices such as open-pit mining, the expansion of monoculture plantations, and large-scale infrastructure development often clash directly with

customary law and local cosmology, not only leading to social conflict but also to irreversible ecological damage.

From an Islamic perspective, there is a strong theological foundation for building a sustainable ecological ethic, particularly through the concepts of *tawhīd*, *khalīfah*, *amānah*, and *mīzān*, which emphasise the unity of creation, human responsibility, and the importance of maintaining balance (Hamdan, 2026). However, in historical and contemporary practice, these concepts are often reduced to justifying human domination over nature, thereby neglecting their relational dimensions and inherent ecological responsibilities. In this regard, dialogue between indigenous theological ecology and Islamic theology is crucial for reconstructing a more holistic theological understanding, in which humanity is no longer positioned as an absolute ruler, but as part of a web of existence that must maintain harmony with all of creation. Kalimantan's indigenous cosmology can enrich Islamic theology by introducing a concrete relational perspective, in which nature is understood as a subject possessing intrinsic value and a spiritual dimension, so that any form of exploitation exceeding its limits may be viewed as a violation of the divine trust (Insani & Karimullah, 2023).

The conflict between indigenous value systems and extractive capitalism also reveals an epistemological clash between local knowledge, rooted in experience, symbols and spirituality, and modern rationality, which is based on economic calculation and efficiency. In many cases, development policies grounded in capitalist logic not only disregard indigenous cosmology but also actively delegitimise this knowledge system by dismissing it as irrational or unscientific. This creates epistemic marginalisation of indigenous communities, which in turn weakens their position in the struggle for rights to land and natural resources. In this context, indigenous theological ecology functions not only as a critique of ecological exploitation but also as a form of epistemic resistance that challenges the dominance of modern knowledge and opens up space for a plurality of ways of understanding the relationship between humans and nature (Purba et al., 2025).

The debate over grounding public policy and state law in indigenous theological ecology reflects the complexity of integrating local values into a modern, universal, and secular legal system (Arifuddin et al., 2025; Insani et al., 2024; Rohmawati et al., 2025). Supporters argue that the values of the sacredness of nature, whether within indigenous cosmology or the principles of Islamic theology, can provide a strong moral foundation for more just and sustainable environmental regulation (Bonang et al., 2026). They emphasise that without integrating the ethical and spiritual dimensions, environmental policy tends to be technocratic and incapable of fundamentally changing exploitative behaviour. Conversely, the sceptical camp questions how concepts such as forest guardian spirits, cosmic balance, or the sacredness of nature can be translated into operational legal language, given that the modern legal system demands certainty, generalisation, and neutrality towards various belief systems.

The main challenge in this context lies in the epistemological translation process: how to articulate sacred concepts as normative principles that can be integrated into policy without reducing their original meaning. One approach that can be employed is to identify universal values contained within indigenous cosmology and Islamic theology, such as respect for life, responsibility towards the environment, and the importance of maintaining balance, and then translate these into legal principles such as ecosystem protection, recognition of indigenous peoples' rights, and restrictions on resource exploitation (Malik et al., 2025). In this regard, hermeneutic and transdisciplinary approaches are crucial for bridging the gap between the symbolic language of indigenous cosmology and the rational language of modern law, thereby enabling constructive dialogue between various knowledge systems.

The limitations of comparative studies between Islamic theology, indigenous cosmology, and global environmental theology also pose a barrier to developing a more comprehensive and inclusive conceptual framework (A et al., 2025; Rifa'i et al., 2025). Although various approaches within global eco-theology emphasise the importance of harmonious relations between humans and nature, the relationship between these concepts and local traditions in Indonesia has yet to be explored in depth (Karimullah et al., 2025). However, such comparative studies are vital to demonstrate that the values embedded in indigenous theological ecology are not merely particularistic but also resonate with various global intellectual traditions that seek to address the ecological crisis. Thus, integrating indigenous cosmology, Islamic theology, and global eco-theology can yield a synthesis that is both theoretically stronger and more practically relevant.

Indigenous theological ecology in Kalimantan can be understood as a fundamental critique of the modern development paradigm based on unlimited exploitation, whilst also serving as an alternative source for formulating more sustainable environmental ethics and policies. This critique not only highlights the failure of economic and political systems to manage resources fairly but also reveals the ontological and theological roots of the ecological crisis currently being faced. By positioning nature as a sacred entity to be respected, indigenous theological ecology calls for a reconstruction of humanity's perspective on the world, shifting from a paradigm of domination to one of relationship, inclusion, and justice.

The Politics of Knowledge and the Struggle for Legitimacy of Indigenous Cosmology in Global Discourse

Within the dynamics of global knowledge production, which is increasingly interconnected yet remains hierarchical, the indigenous cosmology of Kalimantan occupies a problematic position, situated on the periphery of an epistemic structure dominated by modern Western traditions and, in certain contexts, also by formulations of Islamic theology that have become institutionalised within academic and policy frameworks (Darmawan, 2024). This marginalisation is not merely representational but also structural, as it concerns the mechanisms of knowledge validation, the distribution of scientific authority, and access to the spaces of discourse production that determine what is recognised as legitimate knowledge. Under such conditions, indigenous cosmologies are often reduced to mere folklore, oral traditions, or local wisdom that is contextual and particular, without recognition as an epistemological system possessing internal coherence, ontological validity, and theoretical contributions on a par with other traditions of knowledge. This reduction reflects what decolonial thinkers refer to as epistemic inequality, namely a situation in which one system of knowledge dominates and defines standards of truth, whilst other systems of knowledge are subordinated or ignored.

This epistemic inequality is rooted in the long history of colonialism and modernity, which have shaped the global hierarchy of knowledge, in which Western epistemology is positioned as universal, rational, and scientific, whilst local knowledge is viewed as irrational, traditional, and unsystematic. In the Indonesian context, this dynamic is complicated by interaction with Islamic epistemology, which, whilst possessing critical potential towards Western modernity, in practice can also function as a structure of domination when institutionalised as theological orthodoxy that leaves little room for cosmological plurality. In many cases, indigenous cosmology must contend not only with the hegemony of Western knowledge but also with the formalisation of Islamic theology, which often evaluates indigenous practices through normative criteria that are not always compatible with the

ontological and symbolic structures of indigenous communities. Consequently, indigenous cosmology finds itself in a dual position as the other within two epistemic fields simultaneously, namely the West and normative Islam, both of which have the potential to reduce the complexity and legitimacy of indigenous knowledge.

This issue becomes increasingly complex when linked to the practice of knowledge extraction that frequently occurs in academic research and development projects. In many cases, elements of indigenous cosmology, such as knowledge of forest management, systems of natural classification, or ecological ritual practices, are appropriated and utilised without adequate recognition of their source, and without providing fair benefits to the communities of origin (Congretel & Pinton, 2020). This practice reflects not only the material exploitation of natural resources but also the epistemic exploitation of local knowledge, a phenomenon some scholars term epistemic extractivism. Within this framework, indigenous knowledge is treated as raw data that can be processed and incorporated into modern scientific frameworks, whilst the surrounding social, spiritual, and cosmological contexts are ignored or simplified. Consequently, knowledge is decontextualised, erasing its original meaning and weakening indigenous communities' position as subjects of knowledge.

In global discourse, the debate over the legitimacy of indigenous cosmologies is becoming increasingly prominent, particularly in relation to efforts to decolonise knowledge and recognise epistemological pluralism (Tym, 2024). Decolonial advocates argue that indigenous knowledge systems, including the cosmology of Kalimantan, must be recognised as epistemologies of equal standing, possessing their own internal logic, methodologies, and criteria of truth. They emphasise the importance of dismantling entrenched hierarchies of knowledge and opening space for an equal dialogue among various epistemic traditions, including Islam, in a more contextual and inclusive form. From this perspective, recognition of indigenous cosmology is not merely a matter of representation, but also of epistemic justice, namely, the right of communities to determine for themselves how they understand the world and to contribute to global knowledge production.

The universalist camp maintains that knowledge to be integrated into global discourse must meet uniform standards of scientific validity, such as objectivity, replicability, and generalisability (Linhart, 2025). From this perspective, indigenous cosmologies are considered difficult to operationalise within a scientific framework due to their contextual, symbolic nature and their often non-empirically verifiable nature in a positivist sense (Tym, 2024). This argument raises a fundamental tension between the need for consistent scientific standards and the recognition of diverse ways of knowing. In this context, a critical question arises, whether scientific standards themselves are neutral and universal, or rather a historical product of specific epistemological traditions that are not always compatible with other knowledge systems.

Another, no less significant, controversy concerns efforts to integrate indigenous knowledge into global systems, including within the broader framework of Islamic theology. On the one hand, this integration can be seen as a strategic step to enhance the legitimacy of indigenous cosmology by articulating it in a language that is understandable and acceptable within academic and policy forums. In the Islamic context, for example, values embedded in indigenous cosmology, such as cosmic balance, respect for nature, and spiritual relations with the environment, can be linked to concepts like *tawhīd*, *amānah*, and *mīzān*, thereby yielding a more contextually grounded theological synthesis (Karimullah, 2025). However, there is concern that this integration process may lead to the domestication of indigenous knowledge,

in which certain elements are selected and adapted to the dominant framework, whilst other incompatible aspects are ignored or eliminated.

This concern reflects a dilemma between visibility and autonomy, in which increased recognition often comes at the cost of epistemological integrity. In many cases, indigenous knowledge integrated into global systems undergoes significant transformation, losing its original complexity and dynamics. This raises questions about who holds the authority to represent indigenous cosmologies, and how to ensure that the process of epistemic translation does not become a new form of knowledge colonisation. In this context, participatory and collaborative approaches are crucial, in which indigenous communities are not merely objects of study but active subjects in the production and dissemination of knowledge.

In global practice, there are various examples demonstrating how indigenous cosmologies are beginning to gain recognition in policy and law, albeit in limited and often compromising forms. In some Latin American countries, such as Bolivia and Ecuador, concepts derived from indigenous cosmologies, such as *buen vivir* and the rights of nature, have been incorporated into their constitutions, reflecting efforts to acknowledge ontological pluralism within the modern state (Carvalho de Mello, 2026). Meanwhile, in New Zealand, the recognition of the Whanganui River as a legal entity with specific rights demonstrates how the concept of the sacredness of nature can be translated into legal language without entirely erasing its cosmological meaning (Charpleix, 2018). However, these examples also show that the integration process is never neutral; rather, it always involves negotiation, compromise, and sometimes conflict between various interests and value systems.

In the Indonesian context, efforts to recognise indigenous cosmology in policy still face various challenges, including limitations in the legal framework that protects indigenous communities' rights and the dominance of a development paradigm oriented towards economic growth. Although there are initiatives to integrate local wisdom into environmental management, the approaches used are often instrumental, valuing indigenous knowledge only insofar as it supports development objectives rather than as an epistemological system with intrinsic value. Therefore, a more fundamental transformation is needed in how knowledge is understood and managed, one that not only recognises diversity but also creates space for equal dialogue among various epistemological traditions.

CONCLUSION

Kalimantan's indigenous cosmology can be understood as a relational ontology that poses a critical challenge to the dominance of anthropocentric perspectives in the management of nature. This cosmology demonstrates that the relationships between humans, nature, ancestors and the spiritual dimension do not exist in isolation, but are interconnected within indigenous practices that emphasise balance, responsibility and respect for nature. In dialogue with Islamic theology, the principles of *tawhīd*, *amānah* and *mīzān* can be used to interpret these ecological values more contextually without equating the two entirely. This study makes a theoretical contribution to broadening the discourse on theological ecology by recognising indigenous knowledge as a legitimate epistemological source, whilst also offering practical implications for the importance of recognising customary law in environmental policy. However, these findings still need to be tested through cross-community and cross-regional empirical studies to better understand their conceptual relevance, without reducing the complexity of indigenous cosmology.

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