



Dayak Benawan Indigenous Futures: Tropical Rainforest Knowledge in Kalimantan, Indonesia

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Abstract

This article examines the cosmology of the Indigenous Dayak Benawan people in the tropical rainforests of West Kalimantan, Indonesia, as an alternative framework for negotiating the future. Through an Indigenous ethnographic approach, this research examines how Dayak Benawan cosmological knowledge, deeply rooted in a spiritual connection with nature, serves as a guiding system for navigating social and ecological changes. Rapid development has significantly transformed our way of life, traditions, and ecological landscape. For the Dayak Benawan community, the forest is not merely a source of material sustenance but a spiritual entity that must be respected and protected. This study specifically investigates the local knowledge embedded in Dayak Benawan rituals, which carry symbolic meanings related to maintaining cosmic balance. These practices reflect the community's efforts to sustain harmony between humans, nature, and ancestral spirits while functioning as a mechanism for ecological sustainability and development (SDGs), and futurity.

Keywords: Indigenous Knowledge, Dayak Benawan, rainforest community, ecological sustainability, SDGs, Indigenous Futures, Kalimantan Indonesia

Introduction

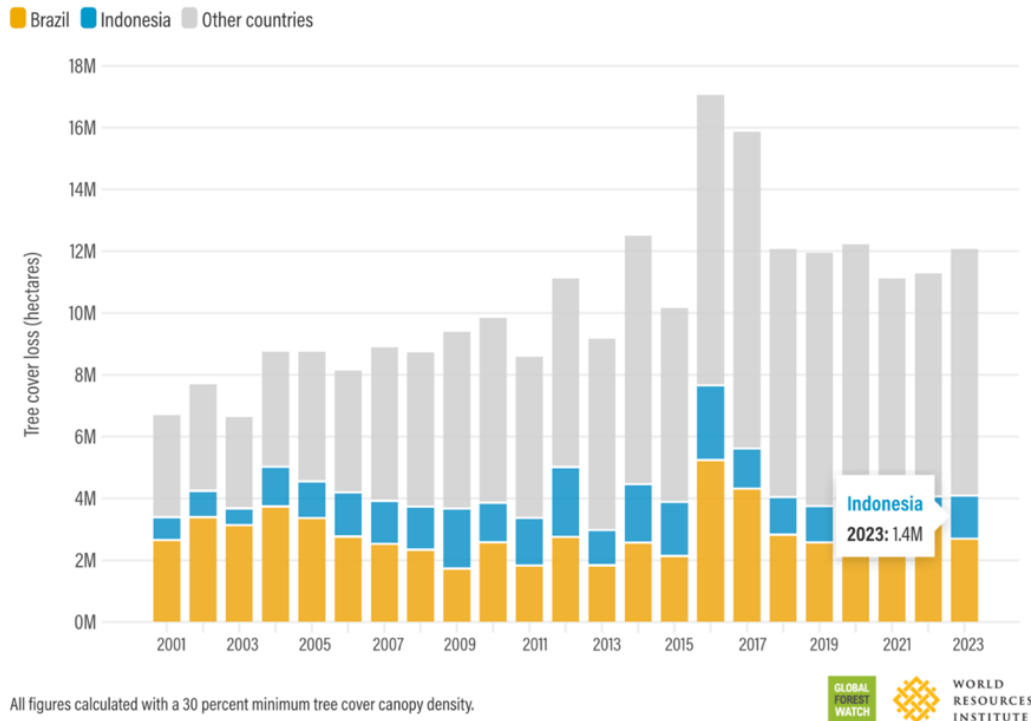
Amid the rapidly accelerating pace of global change, Indigenous communities worldwide face substantial challenges in safeguarding their identities, local knowledge, and traditional ways of life for the future (Parrotta & Agnoletti, 2012; Fernández-Llamazares et al., 2021; Makondo & Thomas, 2018; Nakashima & Krupnik, 2018). The exploitation of natural resources, climate change, and development policies that often fail to consider Indigenous interests have increasingly constrained their living spaces and jeopardized the sustainability of their ancestral heritage (Bankoff, 2013; Williams, 2012; Tsosie, 2009; Ghimire & Pimbert, 2013; Brewer, Joseph, & Warner, 2014; Hansungule & Jegede, 2014). Indigenous peoples are not only striving to uphold their existence but must also adapt to these shifts without compromising the essence of their intergenerational wisdom. Indigenous futurity is especially pronounced in the tropics given that this earthly zone supports enormous Indigenous cultural diversity and holds the greatest ecological biodiversity, while it is simultaneously undergoing rapid development and experiencing the largest extinction losses and cascading material effects of climate change (Lundberg et al., 2021, p.3).

Indigenous communities across the equatorial tropics of Indonesia face massive deforestation of their ancestral lands. Tropical rainforests have experienced a significant decline over the past decade. According to data from the World Resources Institute (Weisse & Goldman, 2024), the planet lost approximately 3.7 million hectares of primary tropical forests. In 2023 alone, Indonesia accounted for 1.4 million hectares of this loss (see Figure 1 below).

In Kalimantan on the island of Borneo, the development of the new capital city, Nusantara, along with huge areas of palm oil plantations and large-scale mining activities, has displaced vast areas of tropical rainforest, often referred to as the "lungs of the world" (Susmiyati, Harjanti, & Al Hidayah, 2023; Niko, 2024; Nadila, 2024; Sheng & Potter, 2023; Gayeau et al., 2014). On the one hand, Indigenous communities confront the pressures of land capitalization, which threatens the forest as their primary source of livelihood; on the other hand, their traditional knowledge is frequently dismissed as outdated or irrelevant in addressing modern challenges, particularly in land management (Sillitoe, 1998a; 1998b; Maweu, 2011). This tension creates a complex struggle between preserving Indigenous traditions and adapting to contemporary socio-economic developments. However, this tension also creates a false dichotomy, for Indigenous notions of sustainability, as part of sustainable development goals SDGs (United Nations,

2015), can create a new shared understanding of a better planetary future, with Indigenous futurism emphasizing ecological flourishing for generations to come.

Figure 1. Amount of Lost Tropical Rainforest



Source: Weisse & Goldman (2024).

The Dayak Benawan people are one of the many Indigenous Dayak communities of the island of Borneo, residing in the interior regions of West Kalimantan, Indonesia. The Dayak communities of Kalimantan are not only inheritors of an ancestral knowledge deeply rooted in ecological and spiritual wisdom but also face significant challenges in maintaining their existence and passing on their knowledge amid rapid modernization (Wardhani et al., 2023). The traditional knowledge of the Dayak Benawan serves as a crucial subject for understanding how Indigenous communities navigate survival, adaptation, and future progress in an ever-changing world. Their intricate understanding of forest management and the use of medicinal plants positions them as a unique model in sustainability discourse, particularly in the context of climate change.

As part of the broader Dayak community, the Dayak Benawan people possess a rich body of local knowledge deeply embedded in their spiritual and ecological connections to the rainforest, land, and water (Niko, 2019). This knowledge extends beyond mere survival

strategies, encompassing various aspects of life, including healthcare, religious rituals, and natural resource management.

This study examines how the local knowledge of the Dayak Benawan functions as an alternative approach to navigating the challenges of modernity. Specifically, it explores how their expertise in forest management and the use of medicinal plants enables the Dayak Benawan community to negotiate their future amidst the looming threat of losing their biodiverse tropical rainforest. Threats such as palm oil industry expansion, deforestation, and development policies that disregard Indigenous rights pose significant challenges to their resilience. In this context, it is crucial to position the traditional knowledge of the Dayak Benawan within the framework of ecological and Indigenous futurism, highlighting it as a viable alternative solution to the global environmental crisis.

Literature Framework

Indigenous knowledge has long been recognized as a fundamental aspect of cultural heritage and environmental sustainability among Indigenous communities in Southeast Asia (Antons, 2010; McCaskill & Rutherford, 2005; Sillitoe, 1998; Brosius, 1997). This intergenerational knowledge encompasses a deep understanding of local ecosystems, resource management, and survival strategies. Scholars have extensively explored its significance across various fields, including agriculture, food practices, healthcare, and biodiversity conservation (Lovren, 2020; Lubis, 2022; Sinthumule, 2023; Heywood, 2011; Mohd Salim et al., 2023; Ganesan et al., 2020).

Indigenous knowledge is often described as a body of wisdom, traditions, and practices developed by local communities over centuries (Semali & Kincheloe, 2002; Mazzocchi, 2006; Negari & Mishra, 2018; Briggs & Sharp, 2004). Unlike scientific knowledge, which is empirical and standardized, Indigenous knowledge is contextual, holistic, and deeply intertwined with cultural and spiritual beliefs. Berkes (2011) highlights that Indigenous knowledge systems are inherently adaptive, continuously evolving in response to environmental and social changes. They are not stuck in the past; rather, they are intergenerational and futures oriented.

One of the most significant contributions of Indigenous knowledge is its role in environmental sustainability. Research has shown that Indigenous communities have developed complex land-use strategies that effectively maintain ecological balance and biodiversity (Berkes et al., 2000; Berkes & Turner, 2006; Berkes & Berkes, 2009). For instance, shifting cultivation practices among various Indigenous groups across Southeast Asia are often misunderstood as environmentally destructive. However,

studies indicate that this method can support soil regeneration and promote sustainable land use (Bose, 2019; O'Brien, 2002; Pandey et al., 2023; Niko et al., 2024; Cairns & Garrity, 1999; Pandey, 2020).

Indigenous knowledge also plays a crucial role in traditional medicine and healthcare practices. Many Indigenous communities rely on herbal remedies and spiritual healing techniques that have been passed on through generations (Hunter et al., 2006; Kirmayer, Simpson, & Cargo, 2003; Rowkith & Bhagwan, 2020). Ethnobotanical studies reveal that a significant portion of modern pharmaceuticals have origins in traditional healing practices, thus demonstrating the importance of futurizing Indigenous medicinal knowledge. However, with the forces of globalization and modernization, the sustainability of Indigenous knowledge is increasingly at risk, raising concerns about the potential loss of traditional medical practices in the future.

Indigenous knowledge plays a vital role in understanding and developing alternatives to modern systems that often overlook ecological sustainability and the well-being of local communities. The traditional knowledge of the Dayak Benawan in West Kalimantan reflects a deep interconnection between humans and their environment, offering a distinct perspective on ecological sustainability and futurity. This aligns with international frameworks such as the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), which advocates for the protection and promotion of Indigenous knowledge systems (Wiessner, 2009); and the United Nations Development Program's emphasis on Indigenous Futures (UNDP, 2022).

Indigenous Research Methodology

This study employs an ethnographic approach to explore and analyze the local knowledge of the Dayak Benawan community by an Indigenous researcher of the community. While ethnography enables researchers to go beyond being mere external observers and instead become immersed in the social context under study (Boyle, 1994), in this context, the researcher actively engages in the daily lives of his own Dayak Benawan people, reflecting on personal experiences and social interactions that unfold throughout the research process.

The ethnographic approach allows the researcher to explore the social, cultural, and ecological dynamics that shape the local knowledge of the Dayak Benawan community. Like non-indigenous ethnographers, the Indigenous researcher resides within the community, directly experiences their way of life, and engages in daily interactions. This immersion enables a deeper understanding of how the Dayak Benawan perceive, sustain,

and transmit their traditional knowledge. The specific fieldwork for this study was conducted between April and May 2024.

Personal reflections derived from direct experiences provide a more authentic perspective in capturing the lived realities of Indigenous communities. The researcher's participation in daily activities—such as agriculture, traditional ceremonies, and medicinal practices—offers valuable empirical data on how the Dayak Benawan community manages and adapts their local knowledge within an evolving socio-environmental context.

Data for this study were collected through participatory observation and in-depth interviews with members of the Dayak Benawan community. Key informants included the *Pesirah Adat* (customary leader), prominent community figures, and the *Ketua RT* (neighborhood head) of Pejalu village. The primary focus was to document the life narratives of the Dayak Benawan people and examine how Indigenous knowledge is transmitted across generations. These narratives were then analyzed using a narrative approach, where personal accounts and lived experiences served as the foundation for understanding the relevance of local ecological knowledge as a means of negotiating the community's future.

Ecological Knowledge of Dayak Benawan

Ecological knowledge has been shaped through long-standing interactions between humans and their natural environment and is passed down across generations through oral traditions, daily practices, and spiritual rituals embedded in local belief systems. The Dayak Benawan philosophy of life is encapsulated in the expression "*betabe'k ka' Jubata, betabe'k ka' mensia, betabe'k ka' buah nalang'k*," which signifies three fundamental forms of respect: toward the Supreme Being, fellow humans, and the natural world.

Respect for the Divine, as expressed in the phrase "*betabe'k ka' Jubata*," signifies an acknowledgment of the Supreme Being's sovereignty over the earth and all its inhabitants. This principle forms the foundation of the Benawan people's spiritual beliefs and deep sense of gratitude. It reflects a profound connection to sacred values, positioning the Divine as the ultimate source of life and ecological balance. Consequently, honoring this spiritual authority is regarded as a fundamental and deeply held obligation.

Furthermore, this philosophy underscores the importance of maintaining harmonious relationships with both fellow human beings and the natural world. The principle of "*betabe'k ka' mensia*" embodies a call for mutual respect, regardless of ethnicity, religion, or social background, reflecting the Benawan community's inclusive attitude toward

human diversity. This teaching guides the Dayak Benawan people to uphold values of respect and compassion for others, transcending distinctions of religious, ethnic, or racial identity.

The phrase "*betabe'k ka' buah nalang'k*" signifies the profound respect for nature as an integral part of the Dayak Benawan way of life. Nature is not merely seen as a source of livelihood but as a sacred entity that must be preserved to ensure the well-being of both present and future generations. This perspective positions environmental stewardship as a central tenet of Dayak Benawan society, reinforcing a deep-rooted commitment to ecological sustainability.

The Indigenous knowledge of the Dayak Benawan serves not only as a guide for sustainable living but also as a symbol of harmony between social, spiritual, and ecological dimensions. This knowledge system plays a crucial role in biodiversity conservation (Gadjil et al., 1993). Without the incorporation of Indigenous knowledge, conservation efforts risk becoming merely theoretical constructs with limited practical impact.

Symbiotic Relationship with the Forest

The ecological knowledge of the Dayak Benawan is deeply rooted in their understanding of the forest and its surrounding ecosystem. As one of the oldest inhabitants of the tropical rainforests of Western Kalimantan, they possess an intricate knowledge of the flora and fauna within their environment, enabling them to utilize natural resources in a sustainable manner. For the Dayak Benawan, the forest is not merely a source of livelihood but a vital entity that must be preserved, protected, and nurtured. Their survival is intricately linked to the rainforest, as it provides essential resources such as non-timber forest products, including various edible plants and bamboo used for weaving and ritual practices (see Figures 2 & 3). Their knowledge extends beyond resource extraction to encompass ecological stewardship, ensuring that biodiversity is maintained and overexploitation is avoided. Forest plants, in particular, serve as primary sources of food, traditional medicine, and materials for spiritual rituals, reinforcing the community's commitment to ecological sustainability.

Figure 2 & 3. Forest resources provide daily food, and the forest is enriched with bamboo growth



Source: Author Documentation (2024).

The Dayak Benawan possess extensive local knowledge of the forest, which they apply in classifying agricultural land to prevent external encroachment and safeguard the sustainability of their fields. Their farmlands are located in hilly areas known as *deret*, which are considered an extension of the forest. The community meticulously protects a sacred forest known as *pengarangk tongk*, a customary forest that must remain undisturbed. Any violation of this protected area is subject to customary sanctions, underscoring its vital significance to the Dayak Benawan and their commitment to ecological preservation.

Despite its significance and sacred status, the indigenous forest of the Dayak Benawan has yet to receive official recognition as a protected area by the Indonesian government. There has been no formal geographic mapping or legal acknowledgment to safeguard this forest from potential degradation. Historically, the indigenous territory of the Dayak Benawan encompassed a much larger forested area. However, over time, land conversion for agricultural purposes—particularly for farming and rubber plantations—

has transformed portions of the forest into production zones managed by local communities.

Although portions of the land have been converted into agricultural fields and rubber plantations, this transformation has not led to environmental degradation or deforestation due to the small-scale nature of its utilization. Several studies have also indicated that rubber cultivation and traditional shifting agriculture practiced by Indigenous communities do not contribute to deforestation (Fox et al., 2014; Angelsen, 1995). The Dayak Benawan people continue to employ traditional farming systems that prioritize environmental conservation, demonstrating their deep commitment to ecological sustainability.

The Dayak Benawan community employs a forest management system that incorporates rotational land use (swidden agriculture) to ensure the natural regeneration of forests. Agriculture is a fundamental aspect of their livelihood, involving the clearing of forested land for cultivation, which, after a period of use, is later left to revert to forest. While often perceived by outsiders as inefficient, swidden agriculture is, in reality, a highly adaptive farming system suited to the ecological conditions of tropical forests. By practicing land rotation and allowing extended fallow periods, the Dayak Benawan people maintain soil fertility and minimize environmental degradation, ensuring the long-term sustainability of their agricultural practices.

This nature-derived local knowledge is closely linked to traditional agricultural techniques, particularly in determining the optimal timing for rice planting. For instance, the Dayak Benawan community relies on lunar phases as a guide, with the half-moon phase signaling the most favorable time for planting. This Indigenous knowledge represents a distinctive cultural heritage unique to specific communities, playing a crucial role in sustaining their livelihoods and ensuring long-term survival within their environment (Werren, 1991).

Betamba, Traditional Healing Practices of the Dayak Benawan

One of the highly threatened aspects of Dayak Benawan local knowledge is their traditional healing practices. They possess an in-depth understanding of various medicinal plants found in the forest (see Figure 4) and have long-established methods for processing them to treat a wide range of ailments. Indigenous healing traditions have been practiced for centuries (Kassaye et al., 2006; Oliver, 2013). Beyond serving as a practical healthcare solution, traditional medicine also reflects the community's spiritual connection with nature. Every medicinal preparation derived from the forest is

accompanied by specific rituals, performed as an expression of respect to nature spirits believed to bestow healing powers.

Figure 4. Medicinal plants, the majority of which originate from the forest



Source: Author Documentation (2024).

For the Dayak Benawan community, nature is regarded as a sacred entity closely intertwined with supernatural forces. In the *betamba* healing ritual, a *dukun* (traditional healer) seeks to establish communication with nature spirits, such as tree or river spirits, to request assistance in curing the sick. This process involves the participation of a *kebayu*, the healer's assistant, who plays a crucial role in strengthening the connection through chanting, rhythmic drumbeats, and gong sounds. The combination of music and vocal incantations creates a solemn atmosphere believed to attract the presence of these spirits, facilitating their intervention in the healing process.

Similar healing practices are also observed among other Dayak communities in Kalimantan, often conducted in natural sites deemed sacred, such as holy springs or ancestral forests (Ramadania & Arifin, 2019; Manurung et al., 2022; Anshari, 2024). This deep connection between humans and nature highlights that the natural environment is not merely a material resource but also plays a crucial spiritual role in community health and well-being (Syafitri, 2024). The Dayak Benawan perspective underscores that nature is integral to traditional healing practices, extending beyond physical remedies to encompass spiritual and emotional dimensions.

Figure 5. Rimah for ritual



Source: Author Documentation (2024).

Knowledge of traditional healing practices is passed down from older to younger generations, with community elders serving as key custodians of this wisdom. This transmission process also fosters social cohesion, as traditional healing often involves collective participation in both the treatment process and communal prayers. Healing rituals that incorporate natural elements hold significant social and cultural functions (Wallace, 2010; Loko et al., 2019). These rituals are not solely aimed at addressing

physical ailments but also serve to strengthen social bonds and reaffirm the cultural identity of the community. Through ceremonies and the recitation of sacred chants, which require collective engagement, these practices create moments of solidarity and reinforce a sense of belonging among community members.

Beyond its role in the healing process, nature serves as a vital medium for preserving cultural heritage and maintaining social harmony within the Dayak Benawan community. The integration of natural elements in healing ceremonies underscores that nature is not only valued for its physical resources but also holds deep social and spiritual significance. Consequently, these practices not only reflect cultural beliefs but also reinforce communal bonds, positioning nature as a central element in sustaining both tradition and social life.

Figure 6 & 7. *The sacred rainforest of the Dayak Benawan and Rimah for ritual*



Source: Author Documentation (2023).

Another crucial aspect of the Dayak Benawan's local knowledge is their deeply held spiritual values, particularly regarding the sacredness of nature (see Figures 6 & 7—tropical rainforests rich in biodiversity yet increasingly endangered, despite the

community's continued practice of annual forest-honoring rituals). For the Dayak Benawan people, nature is not merely a material resource but an entity imbued with spirits and spiritual power. The forest is regarded as a sacred space inhabited by ancestral spirits, and they believe it possesses healing properties. This belief guides them to treat nature with reverence and maintain its balance, ensuring that disruptions do not bring misfortune to both the environment and human life.

Healing rituals not only embody spiritual significance but also serve to strengthen social solidarity among community members. These spiritual values thus function as fundamental pillars in maintaining the balance between humans, nature, and the spiritual world while reinforcing the collective identity of the Dayak Benawan people. With the advancement of modern medicine, they have begun incorporating pharmaceutical drugs into their healthcare practices, purchasing these medications from local shops in their villages.

Indigenous communities have largely adapted to modern medical systems while continuing to practice traditional healing methods (Redvers & Blondin, 2020; Syafitri et al., 2024). However, economic constraints often limit their access to modern healthcare facilities, reinforcing their reliance on traditional medicine, which remains deeply rooted in their spiritual beliefs and ancestral connections. Despite its critical role in Indigenous healthcare practices, traditional medical knowledge has yet to be formally recognized in Indonesia's policy framework, posing a significant risk to its preservation and continuity into the future.

Negotiating Futures

The Indigenous knowledge of the Dayak Benawan people plays a crucial role in maintaining social cohesion and strengthening their collective identity. In the context of Indigenous communities that have historically coexisted with nature, such knowledge serves not only as a practical guide for survival but also as a social adhesive that reinforces solidarity and a shared sense of belonging (Smith-Morris, 2019). This knowledge encompasses agricultural practices, healthcare traditions, and religious rituals, all of which contribute to the formation of strong social bonds within the community. Such cohesion becomes increasingly vital in the face of external threats, including deforestation, marginalization, and the pressures of modernization (Niko, 2024; Abbas & Shamin, 2023).

The role of Dayak Benawan Indigenous knowledge in fostering social cohesion is evident in their traditional agricultural system. The practice of swidden agriculture is not solely

based on ecological knowledge but also relies on collective cooperation in its management. Daily rituals such as *royongk* and *pengiri* (working together selflessly) are integral to this system, where community members actively participate in land preparation, planting, and harvesting. These activities not only strengthen social bonds but also serve as a means of passing down local knowledge to newer generations. The collective engagement in agrarian practices fosters a deep sense of interdependence and solidarity among community members (Houston & Lange, 2018).

During my field research among the Dayak Benawan community, I concentrated on observing how Indigenous knowledge serves as a powerful tool for sustaining our way of life. The rainforest, as both a living space and a repository of knowledge, plays a central role in daily existence. Expertise in local flora and fauna, swidden agricultural systems, and traditional healing practices based on forest-derived herbal remedies not only fulfill basic needs but also shapes collective identity as a self-sufficient community. For the Dayak Benawan, the forest is not merely an economic resource but a sacred space that must be protected and treated with profound respect.

My experience as a son of, and as an ethnographic researcher with, the Dayak Benawan community also revealed that Indigenous knowledge is not static; rather, it is dynamic, continuously evolving through adaptation and innovation to remain relevant amid environmental and social changes. This adaptability is evident in resource management strategies, where the community integrates traditional knowledge with modern insights, particularly in agriculture and forestry. Rather than outright rejecting technological advancements, they selectively incorporate them in ways that align with local contexts while preserving the ecological balance which has been maintained for centuries. However, the large-scale deforestation of ancestral forests to make way for oil palm plantations represents a critical misstep, threatening both their ecological heritage and cultural sustainability.

The rapid environmental changes in the Dayak Benawan territory are evident in the increasing frequency of flooding. The expansion of oil palm plantations has significantly contributed to environmental degradation, as these monoculture crops are ineffective in absorbing excess water, leading to severe hydrological imbalances (Abubakar et al., 2021; Etman et al., 2024). The presence of oil palm corporations in Indonesia has also intensified conflicts between companies and Indigenous communities (Hendra et al., 2023; Tamano, 2023), often resulting in the forced displacement of Indigenous peoples from their ancestral rainforests (Chao, 2022). This displacement not only disrupts their

way of life but also threatens the survival of traditional ecological knowledge, placing it at risk of extinction in the near future.

Indigenous knowledge plays a crucial role in maintaining social cohesion and strengthening community solidarity. Traditional rituals, such as *betamba*, a healing ceremony, serve as vital mechanisms for transmitting local knowledge and spiritual values to younger generations (Niko, 2018). *Betamba* is not merely a form of physical healing but also a social mechanism that unites community members during critical life events, such as illness or other significant transitions. The collective participation in *betamba*—through prayers, the preparation of medicinal ingredients, and engagement in spiritual rituals—reinforces a sense of unity and solidarity among community members. Beyond its medical function, *betamba* embodies core values of communal support, mutual cooperation, and reverence for tradition, all of which serve as foundational elements of Dayak Benawan identity.

In this context, Dayak Benawan knowledge plays a critical role as an alternative solution amid the current global crises, particularly concerning environmental sustainability and social resilience. As the world grapples with climate change, deforestation, and biodiversity loss, the traditional knowledge preserved by the Dayak Benawan community offers an alternative perspective on sustainable environmental management. The disappearance of their forests would not only result in ecological devastation but also lead to the irreversible loss of their indigenous knowledge.

Indigenous knowledge within the community also plays a crucial role in intergenerational transmission (Kawagley, 2006). Among the Dayak Benawan, traditional healing practices are passed down through direct interaction between elders and younger generations. This knowledge is not formally taught but is instead acquired through lived experiences, as elders guide the younger members in gathering medicinal plants from the forest. This process not only ensures the continuity of local knowledge but also strengthens intergenerational bonds, fostering a deep connection between the younger generation and their ancestors through inherited wisdom. In this way, Indigenous knowledge serves as a vital instrument in preserving collective identity and ensuring the cultural sustainability of the community for future generations (Zhang & Li, 2024).

Conclusion

Amid the growing complexity of tropical rainforest degradation—leading to climate change, biodiversity loss, and socio-economic inequalities—the Indigenous knowledge of the Dayak Benawan emerges as an increasingly relevant alternative solution. These

challenges, which also affect Indigenous communities, necessitate a more sustainable, inclusive, and adaptive approach. Negotiating the future of the Dayak Benawan is about striking a balance between tradition and global change, where Indigenous knowledge plays a crucial role in sustaining both the environment and community well-being. This knowledge encompasses various aspects, from natural resource management to social governance, ensuring the resilience and continuity of their way of life.

For the Dayak Benawan community, the forest is not merely a material resource but an entity imbued with profound spiritual and symbolic significance (Niko et al., 2024). It is believed to be the dwelling place of ancestral spirits and serves as the sacred site for essential rituals. Consequently, forest conservation is regarded as a collective responsibility, engaging the entire community in its stewardship. This belief system reinforces social cohesion, as each community member assumes a role in maintaining the balance between nature and the spiritual realm. When the community unites to protect the forest from external threats—such as deforestation or plantation expansion—they are not only safeguarding their means of subsistence but also preserving their collective identity as an Indigenous society deeply interconnected with nature.

The Indigenous knowledge of the Dayak Benawan community plays a crucial role in maintaining social cohesion and reinforcing their collective identity. Through spiritual rituals and intergenerational knowledge transmission, they cultivate strong solidarity and a deep sense of communal belonging. This local knowledge serves not only as a means of physical survival but also as a socio-cultural mechanism that ensures the community's resilience in the face of external challenges. The collective identity of the Dayak Benawan is built upon the foundation of their Indigenous knowledge, which is continuously preserved and adapted, allowing them to navigate the future in a way that both upholds tradition and embraces innovation suited to contemporary needs.

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