

Environmental Education: The Philosophical Value of the Dayak Iban Community to Overcome the Problem of Environmental Damage

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Abstract

Natural resource exploitation and environmental issues have escalated into a global environmental crisis, posing serious threats to the sustainability of human life and development. One indigenous community that actively resists environmental degradation is the Dayak Iban people. This community has long managed its own customary forest, located in the Sungai Utik area of West Kalimantan, Indonesia. In response to environmental destruction, the Dayak Iban community of Sungai Utik has demonstrated remarkable efforts in forest conservation. Their success was internationally recognized when they received the Equator Prize in New York in 2019 for protecting their territory from encroachment and the expansion of extractive industries. In 2023, they were also honored with the 4th Gulbenkian Prize for Humanity in Lisbon, which acknowledged their outstanding commitment to local action and community-based initiatives that support forest preservation and ecosystem restoration. This research is a type of qualitative research that is a literature study. The problems in this study are 1) How do Dayak Iban people view the environment?, 2) How do Dayak Iban people manage the environment?. The results were 1) The Dayak Iban people hold the view that the forest is our father, the land is our mother, and the water is our blood. 2) Dayak Iban people use the slash-and-burn method, the ash from the burning process would be used as fertilizer and mineral resources for the plants, the clusters will decide to shift their land after 5-10 years.

Keywords: Dayak Iban, environment, philosophical value

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Introduction

Today, we are increasingly exposed to news, both locally and globally, about the environmental crisis that poses a serious threat to humanity. Ironically, much of this environmental degradation and the resulting natural disasters such as landslides, floods, air pollution, and forest fires are driven by human activities. This situation reflects a growing apathy among people toward environmental conditions that should be protected and sustained. Naess (1973, as cited in Sukarna, 2021) outlines three fundamental theories regarding human interaction with the natural environment: Anthropocentrism, Biocentrism, and Ecocentrism. These perspectives influence how individuals and societies perceive and treat nature. In Indonesia, extensive environmental damage is caused by human activities, particularly the destruction of tropical forests due to the mining industry a global phenomenon. According to (Maus et al., 2022), 52% of the world's mining areas are concentrated in just six countries: Russia, China, Australia, the United States, Indonesia, and Brazil. Another 21 countries account for 39% of mining areas, while the remaining 118 countries make up only 9% of the total.

Yakin (2017, as cited in Wahyuni & Suranto, 2021) notes that deforestation caused by the mining industry in Indonesia peaked between 2010 and 2014 and continues to this day. Deforestation refers to the decline of forest areas due to land conversion for infrastructure, settlements, agriculture, mining, and plantations. This deforestation is often linked to illegal logging and forest fires, both of which endanger ecosystems and contribute to global warming (Syah, 2017). The conversion of forestland to non-forest land significantly accelerates global warming, primarily through the increased occurrence of forest fires. Global warming has become a critical issue driven by economic activities that neglect environmental consequences, leading to a steady rise in global temperatures in recent years (Prakoso et al., 2019). According to Greenpeace, Indonesia ranks as the third-largest contributor to global carbon emissions, after the United States and China, with around 80% of these emissions resulting from forest burning. In addition to its environmental impact, forest burning poses serious health risks, including prolonged respiratory illnesses (Han et al., 2019).

Natural resources and environmental issues have escalated into a global crisis that significantly affects the sustainability of human life and development. To avert further environmental degradation, it is essential to foster a love for the environment from an early age among future generations. Ecologically, living organisms and abiotic elements are interconnected with one another. Naess (1998, as cited in Ohoiwutun, 2022) stating that the current environmental crisis can be overcome by changing the anthropocentric perspective and behavior of human beings into a more ecological interpretation. The current global environmental crisis can be traced to a fundamental philosophical misunderstanding regarding humanity's relationship with nature and its role within the broader ecosystem. This distorted perception has led to inappropriate and harmful behaviors toward the environment. Humans often misinterpret nature and mistakenly place themselves above or apart from it, rather than recognizing their integral connection to it. This philosophical misjudgment lies at the root of many environmental disasters we face today. In the field of environmental management, the prevailing anthropocentric worldview that humans are separate from and superior to nature results in the failure to understand that ecological harm ultimately harms humanity itself. Environmental crises are therefore deeply rooted in human behaviors shaped by this anthropocentric philosophy. Such behaviors are characterized by exploitation and destruction, driven by short-term human interests and a disregard for long-term environmental consequences.

Environmental issues, however, are not only scientific or technological problems are also closely tied to cultural practices and local wisdom. Long before the emergence of formal environmental movements, many indigenous communities already possessed systems of local wisdom that contributed significantly to environmental stewardship. Wibowo et al., (2012) highlight the existence of myths, rituals, and wise sayings intimately connected to nature that has historically regulated human interaction with the environment. Local wisdom can be understood as community-rooted knowledge, filled with values of wisdom, virtue, and sustainability, which are upheld and passed down through generations. A compelling example of such environmental philosophy can be found in the Dayak Iban people. The Dayak Iban, one of the largest ethnic groups in Borneo, are found primarily in the northwestern regions of Kalimantan, as well as in parts of Malaysia and Brunei Darussalam (Darmadi, 2017). According to Leo et al., (2021), the Dayak people continue to value forests not only for their ecological benefits such as clean air and water from ecosystem services but also for their cultural and spiritual significance. As forest dwellers, the Iban people rely heavily on forest resources for their livelihoods and well-being. They possess a rich body of traditional ecological knowledge and customary laws related to forest management, which have been preserved and practiced through generations and remain relevant today.

Iban culture is deeply shaped by nature and represents the result of both assimilation and acculturation with various other cultures. Tugang & Kiyai Keai, (2022) explain that Iban culture consists of tangible cultural artifacts and intangible heritage, both of which are strongly linked to the cultural legacy of the Iban people today. Tangible cultural artifacts, which encompass physical items related to cultural practices, often carry specific functions and taboos. These artifacts are passed down from generation to generation, becoming an inseparable part of Iban custom and tradition. Nature serves as both the inspiration and source of materials for the creation of these cultural objects. As a result, many Iban artifacts maintain a strong connection to the natural environment. This cultural continuity, shaped over centuries by the ancestors of the Iban community, plays a vital role in defining the Iban identity.

Methodology

This study employs a literature review as its primary research method. According to (Sugiyono, 2019), a literature review involves theoretical analysis and the examination of references related to values, culture, and norms within the social context under investigation. In this case, the study focuses on collecting and analyzing secondary sources such as books, academic journals, and articles from mass media that pertain to the Dayak Iban community, environmental issues, and philosophical values.

As a type of qualitative research, the literature review does not involve fieldwork or direct interaction with respondents. Instead, the data is derived entirely from librarybased sources. The researchers systematically select relevant literature, read and interpret the contents, and then organize and process the findings to support the research objectives. The goal is to construct a comprehensive understanding of the Dayak Iban's environmental philosophy and cultural values based on existing scholarly and credible literature.

Results and Discussion

Dayak Iban Tribe

The Dayak Iban are one of the largest ethnic groups in Borneo spread across the Northwest region of Kalimantan, including Malaysia and Brunei Darussalam (Darmadi, 2017). Leo et al., (2021) stated that Dayak people still consider the presence of forests essential for their health (clean air and water from the provisioning of ecosystem services), cultural, and spiritual aspects. The Iban people recognized as forest dwellers, rely heavily on the resources provided by the forest. They possess a wealth of traditional knowledge and customary laws related to the management of their ancestral forests and the resources they yield. This traditional knowledge has been transmitted through generations and remains viable today. The indigenous Dayak Iban people in Indonesia already have their own customary forest, precisely in the Sungai Utik Hamlet Area, which is 846 kilometers from Pontianak, the capital of West Kalimantan and still has to travel 75 kilometers towards Lanjak. The customary forest belonging to the Iban community in Sungai Utik Hamlet is the first customary forest area in Kapuas Hulu Regency, West Kalimantan, which received recognition from the Government of Indonesia through Decree Minister of Environment and Forestry No. SK.3238/MENLHK-PSKL/PKTHA/PSL.1/5/2020, issued in May 2020. Government recognition provides rights and claims to communities to use and maintain natural resources in customary forests, which is expected to be carried out in a sustainable manner. The Dayak Iban community, the longhouse of Sungai Utik, had won the Equator Prize organized by the United Nations Development Programme Agency in New York, United States in 2019. They are considered successful in protecting their territory from the threat of encroachment and expansion of extractive investment. In addition, they also received the 4th Gulbenkian Prize for Humanity award from the Calouste Gulbenkian Foundation in Lisbon, Portugal in 2023, along with two other award recipients from Cameroon and Brazil. The award was given in recognition of the extraordinary commitment to local action and community-based movements, which support forest protection and ecosystem restoration.

Figure 1

Documentation of 4th Gulbenkian Prize for Humanity Award



Source: Izzah (2023)

The Iban people practice annual cultivation to grow food crops, particularly rice, glutinous rice, and various vegetables such as potatoes, eggplants, cucumbers, and others. These crops

are cultivated primarily for subsistence and are usually sufficient to meet the needs of each household for an entire year, depending on the harvest. Much of Iban tradition draws inspiration from the forest. This is evident in their handicrafts and traditional arts, where tattoo patterns often reflect forest species such as eggplant flowers, *engkabang* (illipe nuts), and *gerama* (a type of vine). Similarly, Iban textile designs and weaving crafts incorporate natural motifs, further demonstrating the community's deep connection to and dependence on forest ecosystems. Rituals play a central role in Iban cultural and spiritual life, serving as a means of communication with the spirits of ancestors. These rituals are integrated into daily and seasonal activities, such as land clearing for cultivation, planting, harvesting, and other important ceremonies. Nyuak and Dunn (1906, as cited in Leo et al., 2021) explain that rituals can serve multiple purposes: to offer sustenance to nature, to seek permission and protection from ancestors and *Betara* (a term for God in Iban tradition), and to celebrate events such as the harvest festival known as *Gawai Dayak*.

Cultural and spiritual values, along with environmental awareness, are passed down to the younger generation through *traditional schools*. These schools teach children farming techniques, how to identify and sustainably use forest resources, and how to engage with their cultural heritage through singing, dancing, weaving, and ritual practices. Additionally, oral storytelling is used to transmit the history and ancestral knowledge of the Iban community from generation to generation.

Figure 2

Documentation of Dayak Iban Tribe



Source: Verducci (2018)

The Iban people in Sungai Utik have the view that “the forest is our father, the land is our mother, and the water is our blood.” The forest is our father, which means the forest is the primary livelihood resource, the land is our mother, which means the ground is where all cultivated plants grow. Water is our blood means that the water resource is essential to support life; there is no life without water (Leo et al., 2022). Therefore, the Dayak Iban community highly upholds the value of loving the environment, one of the ways is to replant various types of useful fruit trees and various types of perennials in former fields. The forest resource management system has proven to be able to contribute to and preserve forest resources, besides that in utilizing the forest as a field area, the equipment used only relies on axes and machetes.

Customary Forest Management

By preserving traditional knowledge, the Iban community of Sungai Utik has successfully sustained its way of life and adapted to the demands of the modern era. The introduction of modern forest management practices can be beneficial, provided they do not conflict with the community's traditional knowledge and customary laws. For example, ecotourism initiatives may involve external stakeholders such as government agencies, which can offer support in the form of training, capacity building, funding, and other resources necessary to implement such programs. However, the local community must remain the primary initiator and decision-maker, as the rightful custodian of their ancestral land.

Integrating traditional and modern forest management approaches has the potential to enhance forest protection, conserve natural resources, and significantly improve the well-being of the Iban people (Leo et al., 2021). In Sungai Utik, the community has classified their customary forest into distinct zones, including production forest (*Damun*), protected forest, sacred forest or cemetery area, old longhouse sites (*Tembawai/Tembawang*), and cultivated land.

The sacred forest and *Tembawai* are considered spiritual spaces where ancestral spirits reside. Cutting down trees in these areas is strictly prohibited, although food gathering and hunting are still permitted within sustainable limits. In the production forest (*Damun*), each family cluster is allowed to cut down a maximum of 15 trees per year, with a replanting obligation of two trees for every one felled. The harvested wood is strictly for personal use such as firewood, tools, or building materials and may not be sold to external parties. Additionally, hunting of protected or sacred wildlife species including hornbills, orangutans, and other specified animals is strictly forbidden. Violations of these customary laws are subject to traditional sanctions and fines, ensuring community compliance and long-term ecological sustainability.

Figure 3

Documentation of Sungai Utik Customary Forest



Source: Leo et al. (2021)

The swidden cultivation system, which has been practiced for centuries, has proven effective in ensuring food security and resilience within the Iban community through a Community Supported Agriculture (CSA) model. The community engages in one main cultivation cycle each year, primarily growing rice, glutinous rice, and various vegetables such as potatoes,

eggplants, and cucumbers. These crops are cultivated solely for subsistence purposes, typically sufficient to meet each household's annual food needs, depending on the harvest outcome. Each family cluster manages between 1 to 3 hectares of land, depending on their capacity to maintain and cultivate it. The land is cleared using a slash-and-burn method, where only a small, designated area is burned. This process is initiated with traditional rituals and is carefully monitored to prevent the fire from spreading beyond the established boundaries. The resulting ash serves as a natural fertilizer and a mineral source for the soil.

Once the nutrient concentration from the ash diminishes and becomes inadequate for continued cultivation, the cluster will shift to a new plot of land. Typically, previously used land is allowed to lie fallow for 5–10 years, enabling natural regeneration through the growth of shrubs and trees. This rotational system helps restore soil fertility over time. The farming season usually begins between August and September, with harvests occurring from February to May, culminating in the Gawai Dayak festival in June to celebrate the harvest through rituals and cultural ceremonies.

Conclusions

The Dayak Iban people embrace a deeply rooted environmental philosophy expressed in their belief that “the forest is our father, the land is our mother, and the water is our blood.” This worldview fosters a profound respect for nature and drives sustainable land-use practices. Their commitment to environmental stewardship is reflected in their habit of replanting fruit trees and perennial plants in old cultivation areas to enrich the land for future use. Rice and glutinous rice remain the staple crops of their agricultural system, while other vegetables such as potatoes, eggplants, and cucumbers serve as dietary complements. The quantity of these crops, grown and consumed exclusively within the community, generally sustains each household for an entire year under normal harvest conditions. The slash and burn method, as practiced by the Iban, is not a destructive activity but a regulated, ritual-based form of land management. The ash produced during this process functions as a vital organic fertilizer, supporting healthy crop growth. The rotational cultivation cycle, which includes long fallow periods of 5–10 years, ensures that the land naturally replenishes its nutrients, enabling sustainable agricultural productivity for generations to come.

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