







# THE CREATIVITY OF IBAN SUB-ETHNIC GROUP OF DAYAK PEOPLE COMMUNITY IN MAINTAINING AND PRESERVING CUSTOMARY FORESTS IN SUNGAI UTIK HAMLET, BATU LINTANG VILLAGE, KAPUAS HULU REGENCY, WEST BORNEO

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**Abstract.** This study aims to analyze the creativity of the Iban sub-ethnic group of Dayak people community in Sungai Utik Hamlet, Batu Lintang Village, Kapuas Hulu Regency, West Borneo, in maintaining and preserving customary forests from the perspective of Earth ethics theory and Weberian social actions. The research model used community-based participatory research which consists of four phases, namely: 1) building basic principles and concepts of the research; 2) research planning; 3) information collection and analysis; and 4) action on findings. The results of the research showed that the community has creativity in managing customary forests, by communities while maintaining integrity, stability, and beauty. The motives for social actions to preserve customary forests were viewed from Max Weber's theory, namely: 1) traditional actions – communities want to preserve customary forests for generations; 2) effective actions – customary forests were believed to be blood, breath, and considered as the father and mother of the community; 3) instrumental rationality – it can be seen that the central, regional, and traditional heads and Iban sub-ethnic group of Dayak people community strongly support the process of implementing customary forest management traditions; and 4) rationality of values – indigenous peoples had obtained an example of knowledge of integrity, stability, and beauty in customary forest management from their ancestors. Research findings show that the Iban sub-ethnic group of Dayak people community has a genius local concept in customary forest management. Knowledge and values applied in the creativity of customary forest management become an example of life values that are very meaningful and useful for indigenous peoples in understanding forest ecology. Future research still needs to increase creativity in customary forest management.

**Keywords:** customary forests, Earth ethics, Iban sub-ethnic group of Dayak people community, indigenous peoples, social action.

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## 1. Introduction

Forest areas in Indonesia play a crucial role in maintaining key ecological functions, such as water source storage and soil fertility regulation, which provide irreplaceable benefits to society (Suharyani et al., 2016). Good water systems from forests also provide a vital buffer for economic sectors, including agriculture, fisheries, livestock, manufacturing, and service industries. Conversely, forest degradation can have serious impacts with disasters such as

floods, erosion, landslides, droughts, and global warming, which can significantly reduce productivity and increase the risk of human, plant, and animal disease outbreaks (Kanta Kafle, 2017; Mandić et al., 2019). For this reason, forest conservation efforts in Indonesia have involved the application of long-established customary law, as seen in customary forest management practices in various regions, such as Metulang, Kayan Selatan, Malinau, Indonesia, and Tapang Semadak, Sekadau Hilir, Sekadau, Indonesia, as well as the regulation of timber forest product utilisation business permits by customary law communities in Papua (province), Indonesia (Rismi Juniarti et al., 2016; Situmorang & Fogar Susilowati, 2020; Deki Subiakto & Bakrie, 2015). The application of customary law has become an integral part of maintaining forest sustainability and conservation in Indonesia.

Various studies have been conducted related to community creativity in customary forest management. As has been done by some authors (Rismi Juniarti et al., 2016), people in Tapang Semadak village have been guarding their forests through six local customs and tree-cutting bans and are further strengthened by their belief in indigenous myths and rituals. Meanwhile, sustainable use of forest resources through customary law has been carried out by the Meratus Dayak community who are still old today (Masagung, 2019). In line with Januariawan (2021), the people of Penglipuran, Bangli Regency, Bali, Indonesia, strive to maintain the tradition of protecting the forest and its environment through the enforcement of customary laws rooted in Hindu religious beliefs. Furthermore, the Kenyah people of Umo' Longh sub-ethnic has banned activities that can damage the forest through customary law and implemented the customary ceremonial Mekanyahu before cutting ironwood trees (Riyan Noor Utari et al., 2021).

This research makes an important contribution to science in various fields, including local wisdom, customary law, natural resource management, and environmental conservation. The results reveal that community creativity in customary forest management, as seen in the practices of the Iban sub-ethnic group of Dayak people community (hereinafter: Dayak Iban community), can be a valuable alternative in preserving the environment and biodiversity. This culturally-based customary forest management not only reflects rich local wisdom and customary law, but also provides a deeper understanding of how to maintain ecosystem balance and manage natural resources sustainably. This research has significant relevance in efforts to maintain and preserve customary forests, especially in the context of the creativity of the Dayak Iban community in Sungai Utik Hamlet. The objectives of this study include understanding the forms of community creativity in preserving customary forests as well as Weberian social action perspective in explaining the creativity of the Dayak Iban community in protecting their customary forests.

## **2. Cultural creativity, customary forest protection, and ecology**

### **2.1. Cultural creativity**

The existence of culture greatly influences creativity, while culture can be interpreted as a general expression of humanity and its expression of creativity. Culture is related to meaning, knowledge, talent, industry, civilization, and values (Chen, 2021). Culture-based creativity has the capacity to break conventions, the usual way of thinking, to enable the development of

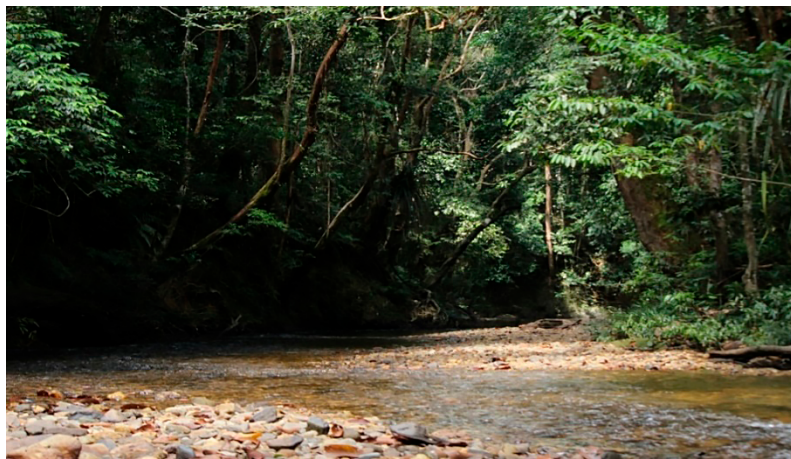
new visions, and ideas or products (Szostak, 2023; Zosh et al., 2017). Meanwhile, Rudowicz (2003) stated that creativity is a product of the interaction of individuals and social-cultural systems and emerges as a much more complex phenomenon than from an individualistic perspective. According to de Dreu (2010), the output of creativity is new and useful insights, ideas, products, and problem solutions derived from flexible information processing (cognitive flexibility). Furthermore, some authors (Glaveanu et al., 2020) argued that culture is not something that is external to oneself or static, but that it can shape minds and societies by offering the symbolic resources necessary to understand, think, remember, imagine, and ultimately, create a creative action. So, culture and creativity are interconnected and cannot be separated.

Creativity can also be interpreted as the process of producing ideas or solutions that must not only be original but also must be able to solve problems used in the development of a product or service (Awan et al., 2019). In addition to flexibility, creativity also relies on two dimensions, namely; originality and effectiveness. The dimension of originality concerns the novelty or novelty of a given solution (Acar et al., 2017), while the effectiveness dimension concerns the practicality of ideas in solving problems (Corazza, 2016).

Cultural creativity in Indonesia is reflected in the efforts to preserve the Saluan ethnic culture in Nam Bo Luang, San Pa Tong district, Chiang Mai province, Thailand, described by Kaso and Falimu (2022), where the community preserves traditions such as *umapos* (distinguished guest welcome dance), *gambus*, *karambangan*, and *saluan's* traditional games with cultural creativity that allows this culture to remain alive today. In addition, as stated by some authors (Nurwani et al., 2020), in Minangkabau people, the *ratok awak* tradition that laments culture has been transformed into a performing art that combines aesthetic meaning, education, imagination, expressive creativity, creation, and appreciation, explaining that cultural transformation activities into performing arts are an important form of cultural creativity. On the other hand, the Dayak Iban community also demonstrate their cultural creativity in protecting the environment by relying on natural resources and traditional local wisdom, combining innovative practices with cultural values and traditional knowledge for environmental conservation.

## 2.2. Creativity in customary forest protection

Community creativity to protect customary forests has been carried out by the Dayak people community of Central Kalimantan, Indonesia (Usop, 2020), where the Pahewan forest, which is considered a sacred area, is used as a basis for protecting the forest from damage by avoiding *pali* (forest destruction). A different opinion was expressed by Reski et al. (2017), the community of Pacekke Village, Barru Regency, South Sulawesi, Indonesia, who adopted the concept of forest conservation through agroforestry and wise management of non-timber forest products. Community creativity includes efforts such as reforestation and forest conservation to reduce flooding. Thus, creativity in indigenous forest protection can be defined as the ability to create new and extraordinary things, which is influenced by the culture and mindset of individuals and society as a whole (Flood & Phillips, 2007; Okpara, 2007). Meanwhile, the clear condition of Sungai Utik Hamlet can be seen in Figure 1.



**Figure 1.** Part of the Forest in Sungai Utik Hamlet, Batu Lintang Village, Kapuas Hulu Regency, West Borneo (source: created by authors)

The Dayak Iban community of Sungai Utik Hamlet is known for their creativity in protecting their customary forests by combining traditional knowledge and modern technology. They guard the forest from deforestation and degradation with innovative methods that reflect cultural values and community participation. This approach is in line with the Malaysian practice known as *molong*, as mentioned by Nadzirah Hosen, Hitoshi Nakamura, and Amran Hamzah (2020), which encourages the preservation of resources for future generations. So, in 2008, the Dayak Iban community received an ecolabel certificate in sustainable forest management from Indonesian Ecolabelling Institute, Indonesia, and Indigenous Peoples Alliance of the Archipelago, Indonesia. Furthermore, the Dayak Iban community also received the Equator Prize (Pahlevi, 2020).

### 2.3. Ecological creativity

The concept of ecological creativity highlights the importance of environmental context in an individual's creative process. Creative individuals typically seek out environments that support their creativity, identify creative potential in their surroundings, and create new environments that facilitate creativity, for themselves and others. This concept also relates to the ability to generate new and useful ideas to support environmental sustainability. Creativity in the environment refers to original and useful ideas to realize environmental sustainability (Cheng, 2018; Natsoulas, 2013; Withagen & van der Kamp, 2018). The ecological creativity approach aims to sustainably protect the environment with an emphasis on good governance and views the Earth as one living entity. The air is its lungs, rivers are its blood system, rocks are its bones, and trees and plants in the forest are its skin. So the forest is an important part that must be preserved. The symbiotic relationship between humans and Mother Earth must be respected and supported by the business and government sectors (Rubio-Arostegui et al., 2016; Yue & Lei, 2018; Zhang & Hudtohan, 2021).

### 3. Methodology

This research used a community-based participatory research (CBPR) model. The CBPR is research that provides space for local wisdom as the knowledge that can be used to obtain solutions in exploring knowledge and maximize the use of research results for the community (Jason & Glenwick, 2016). The CBPR activities according to some authors (Susilawaty et al., 2016), consisted of four phases, namely: 1) building the basic principles and concepts of research; 2) research planning; 3) information collection and analysis; 4) action on findings. Every phase or stage of research always involves the community. This research also implements four main principles when conducting research with the community, namely: 1) the principle of respecting human dignity and dignity; 2) principles of respecting the privacy and confidentiality of research; 3) principles of justice and inclusivity; 4) the principle of taking into account the benefits and disadvantages caused.

Data collection was carried out by interview, observation, and document techniques. The data obtained came from in-depth interviews with indigenous and community leaders. References to the creativity of the Dayak Iban community are still minimal, so interviews with actors or indigenous leaders directly are the right technique to obtain accurate and valid data. The data analysis technique in this study uses descriptive analysis, namely: 1) data collection; 2) data reduction; 3) data presentation; 4) conclusion (verification).

### 4. Empirical findings

#### 4.1. A form of cultural creativity, preservation of customary forests, and ecology

Culture-based creativity, expressed in artistic or cultural production, is spontaneous, intuitive, singular, and humanized (Kacerauskas, 2020; Ronchi, 2019). This cultural creativity is also a driver of green innovation that can improve social and economic performance through the development of environmentally friendly products and processes (Awan et al., 2019). A concrete example of cultural creativity in protecting the environment is seen in the Dayak Iban community, where they believe that the forest, which is managed and utilized as a gift from Jubata (God), has a central role in their lives. The close relationship between the community and the forest is reflected in customary ritual practices that connect humans with nature and in philosophical views on natural resource management (Indradi, 2006).

The Dayak Iban community has a smart local concept of customary forest management, dividing it into three parts – *kampung taruh*, *kampung galao*, and *kampung endor kerja* – and expanding the forest to preserve the customary forest. In line with some authors (Al-Mikhlaifi, 2022), communities have a creative ability to design solutions to environmental challenges. This creativity is reflected in the community's relationship with natural resources, such as managing forest land for intercropping, fulfilling water needs, and fishing grounds (Titis Nuraini & Dwi Siswoko, 2015). Local wisdom in forest land absorption includes a variety of systems, such as *umai* (forest areas designated as field areas), cutting trees, hunting, *damun* (areas of former fields whose ownership nature is individual and can be inherited), *tanah mali* (the length of forest that cannot be cleared for cultivation; everything in it must not be taken

away), *kampung puang* (forests collectively owned by the Dayak Iban community), *pendam* (for burial), *pengayut aek* (forests are designated and managed as a source of spring water), hills, saving forest, *redas* (area designated for gardens (vegetable crops), *tapang manye* (the honey tree is the individual ownership of the inventor of the tree and can be inherited), *tanah kerapa* (wetland or swampland areas that are usually also designated as payak umai cultivation), and *tanah endor nampok* (sacred territory for asceticism), all of which demonstrate cultural creativity in maintaining environmental sustainability.

Community interaction with customary forests in the form of local wisdom has a positive impact on their sustainability, which can be seen from the division of customary forest areas to maintain a balance between humans and nature (customary forests). These findings are in line with the results of interviews with *Dominika* (Keling Menua Tourism Awareness Group), the emotional connection between the residents of Sungai Utik Hamlet and the surrounding forest is very close. We were born and raised in forests and nature. Forests and nature give



**Figure 2.** Interview with the Iban sub-ethnic group of Dayak people community (source: created by authors)

**Table 1.** Forms of cultural creativity in protecting customary forests (source: created by authors)

| No. | Forms of cultural creativity in protecting customary forests                | Information  |
|-----|---|--|
| 1.  | Customary forest with religious mystique                                    | Perform traditional rituals that reflect the special relationship between humans and nature. These include <i>ngintu aging</i> , <i>bumai</i> , house making, <i>tanah mali</i> , and <i>kampung mali</i> . These rituals reflect their philosophy of managing natural resources for their well-being. |
| 2.  | Caring through customary forest management                                  | The Iban sub-ethnic group of Dayak people community (hereinafter: Dayak Iban community) divides its customary forest into three parts, namely: 1) <i>kampung taruh</i> (customary protected forest); 2) <i>kampung galao</i> (forest reserve); 3) <i>kampung endor kerja</i> (production forest).      |
| 3.  | The motives and goals of the Dayak Iban community in managing forests exist | Their motives and goals in managing customary forests are moral objects and moral communities, namely with respect for other creatures as fellow biotic communities, and also has utilized customary forests while maintaining the integrity, stability, and beauty of their customary forests.        |



life and also show the world. We grew up with a culture whose life depended on the forest. Our parents taught *babas* (jungle) as our *apai* (father), the soil as our *inai* (mother), and *ae* (water) as our blood. The forest is our father, who provides everything, like a supermarket. In line with Bandi known as Apay Janggut (the leader of *radakng Menua* Sungai Utik Hamlet). Figure 2 is a researcher interview with the Dayak Iban community.

Researchers interacted with the community in the longhouse (*rumah panjai*) to understand how they maintain the customary forest, the findings of which are in line with the theory of land ethics outlined by (Keraf, 2010). The community has utilized customary forests while maintaining integrity, stability, and beauty. The form of cultural creativity can be seen in Table 1.

#### 4.2. Crackdown on the creativity of the Iban sub-ethnic group of Dayak people community from the perspective of Weberian social actions

The creativity of the Dayak Iban community in protecting the customary forest is an achievement that should be appreciated. The best way to understand groups is to appreciate the distinctive forms of action that characterise them (Jones et al., 2009). As stated by Glăveanu (2015), creativity can be in the form of ideas and actions. Meanwhile, creative actions can shape the self, others, and the environment (Kagan & Hahn, 2011). In this case, indigenous peoples' actions are reflected in their deeply held cultural and sustainability values (Supraja, 2012; Turner, 2009). The creativity of Dayak Iban community to preserve customary forests from the perspective of Webberian social action can be seen in Table 2.

**Table 2.** The creativity of the Iban sub-ethnic group of Dayak people community to conserve customary forests in the perspective of Weberian social action (source: created by authors)

| No. | The creativity of Iban sub-ethnic group of Dayak people community to preserve customary forests in the perspective of Weberian social action | Information   |
|-----|--|---|
| 1.  | Traditional actions  | The Iban sub-ethnic group of Dayak people community (hereinafter: Dayak Iban community) wants to preserve customary forests that have been passed down for generations.   |
| 2.  | Affective action   | Customary forests are believed to be their blood and breath. Customary forests are the father and mother of the in Sungai Utik Hamlet, Batu Lintang Village, Kapuas Hulu Regency, West Borneo, community.                             |
| 3.  | Instrumental rationality   | Rationally, the Dayak Iban community can protect customary forests because they have strong human resources.  |
| 4.  | Value rationality  | The Dayak Iban community draw on valuable knowledge from the past to form important values in forest ecology. They have inherited an understanding of the integrity, stability and beauty of indigenous forests from their ancestors. |

## 5. Traditional actions

In the traditional action type, actions are determined by habits that have been rooted for generations and preserved from one generation to the next. A sustainable indigenous forest cannot be separated from the habit of protecting the forest that has been taught for generations. Everything is readily available in the forest and nature. This opinion is in line with Boonpracha (2022), that creative product design is influenced by human culture and creativity.

Local wisdom in maintaining customary forests is also reflected in the community's philosophy, namely *Beduruk ngupas tanah ngau ngupas ae* in the Iban language which means mutual cooperation to clean land and water. Interestingly, while cleaning the road to the water source (*indai*) (Figure 3) in the Iban language which means mothers harvest forest products (Figure 4) such as rattan, *umbut*, a type of wood sap that can be used to light a fire, and pandan to make wicker (Figure 5).

Traditional actions in local wisdom to protect customary forests are also reflected in the use of customary forests such as the use of wood in customary forests for making



**Figure 3.** Mutual cooperation cleans soil and water (source: created by authors)



**Figure 4.** Women harvesting forest products (source: created by authors)





**Figure 5.** The creativity of the Iban sub-ethnic group of Dayak people community in making mats from pandan leaves, weaving with natural dyes, and bags from rattan and bark (source: created by authors)

houses and farming. Based on the results of an interview with Janggut (traditional leader) said that:

"The Sungai Utik people have a unique approach to the use of natural resources. They utilize the vast land and timber-rich forests to build houses and fences to the best of their ability, without worrying about wood shortages. In fact, they keep a natural nursery center on the hilltop to ensure the dispersal of seeds by the wind, so that nature continues to flourish".

From the explanation above, it can be concluded that the practice of managing land, forests, and natural resources for the community is inseparable from the value system and rules of life in the socio-cultural order, which in turn becomes a source of wisdom in maintaining the balance of the cosmos.

## 6. Discussion

Efforts to preserve customary forest areas are always related to the use of water, forests, and land or fields. As well as the preservation of the Sepan area in Kahayan Hulu is carried out by the Dayak Iban community of Central Borneo, where the area is used as a gathering place for animals around the Sepan forest because, in the Sepan area, there is a source of spring water that comes out of the ground. The water turned out to contain mineral salts needed by these animals (Usop, 2020). Furthermore, according to Sinapoy (2018), the existence of the Moronene tribe in Rawa Aopa Watumohai National Park is done wisely and only to maintain and meet the needs of daily life with the knowledge of local wisdom obtained from their ancestors. Sustainable use of customary forests is carried out in line with the activities of the community.

Based on the explanation above, it shows that the community already has a creative mind in managing forests. They not only passively receive an inheritance that determines

their actions. A creative society is able to change and restructure a space or region so that it has high civilizational value and can create prosperity for the people who have occupied the area (Kovács, 2023; Szostak, 2023). Success in managing forests cannot be separated from the creativity of individuals in the community. To bring out culture-based creativity requires a personal ability to think laterally or not linearly, and be imaginative (Ronchi, 2019). Regarding management in customary forest management, and these rules are still adhered to today: 1) technical skills related to the use of customary forests while maintaining the integrity, stability, and beauty; 2) social environment (social context primarily through education and learning that encourages, and rewards creativity as well as an economy that invests in culture and culture-based creativity).

Community creativity in preserving customary forests is included in creative ecology. According to Howkins (2010), who proposes four aspects of ecological thinking relevant to creativity and innovation: 1) diversity; 2) change; 3) learning; 4) adaptation. The aspects in question, namely: 1) diversity, customary forests have a diversity of flora and fauna; 2) change, the community experiences changes in customary rules and regulations that keep up with the times; 3) learning, that education about forest management continues to be passed on to the next generation, 4) adaptation, customary forest management has experienced the times but still maintains integrity, stability, and the beauty of its customary forest.

Social actions taken by the community in preserving the above forests are a high activity in protecting the environment. As developed by some authors (Glaveanu et al., 2020), creativity in traditional (socially recognized) activities such as science, invention, design, or art, society itself *i.e.*, establishes, maintains, and constantly renews communal life so that it falls within the realm of creativity. Matching Rubio-Arostegui et al. (2016), creativity as a result of the interaction between cultures, people who bring novelty to the symbolic field, and the environment of legitimacy drawn up by experts is endowed with symbolic capital, which labels and recognizes innovations. Community social action to conserve customary forests is part of creative ecology in the context of sustainable development, raised by Kačerauskas (2015). The concept of creative ecology is a novelty in sustainable environmental development. Ecology became a problem after human creation invaded the human and natural environment in ways that threatened and jeopardized the basis for sustainable development (Ricciardi et al., 2022). The peculiarities of creative ecology are characteristic of postmodern, postindustrial, post-rational, post-democratic, post-economic, and post-capitalistic creative societies. A creative society has characteristics such as outstandingness, creative living, and casual work relations (Kačerauskas, 2015). Creative ecology comes from deep ecological roots. Although creative ecologists contemplate human ecosystems, they are generally based on ecosystems in the natural environment. Creative ecology is a part of the contemporary creative economy where the welfare of mankind cannot be separated from the welfare of nature (Dobson et al., 2021).

## 7. Conclusions

The Dayak Iban community has developed local practices and concepts that are effective in maintaining the sustainability of their customary forests. Recommendations given regarding

community creativity in protecting customary forests are: 1) increasing community participation in customary forest management; 2) strengthening the monitoring system and customary law enforcement; 3) developing technology according to local values; 4) encouraging cooperation with other parties; 5) increasing community understanding of the importance of protecting customary forests as cultural heritage and valuable natural resources; 6) education and training for communities related to customary forest management techniques that are sustainable and can generate better economic benefits for them should be improved.

The implications of this research allow indigenous peoples to analyze the participation and recognition of the Dayak Iban community together to be able to manage forests sustainably. Therefore, the participation of academics through research institutions can promote the local wisdom of indigenous peoples to be developed and passed on to the younger generation. Finally, education and training for indigenous peoples in the context of cultural inheritance enable sustainable development through indigenous peoples' creative efforts, which facilitate community personalization. In particular, knowledge and values applied in customary forest management become an example and values of life that are very meaningful and useful for indigenous peoples in understanding sustainable forest ecology.

We recommend that in the future needs to be a more in-depth study regarding the exploration and identification of cultural mitigation through traditional ceremonies, gender equality, and endemic biodiversity in traditional forests in the Dayak Iban community by other researchers or ourselves.

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