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REGULAR RESEARCH ARTICLE

Circular Commoning: Sustaining Dayak Bahau Agency Amid Political and Ecological Change

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ABSTRACT

Swidden practices create distinctive agricultural systems deeply situated in local culture, but many of these systems are experiencing transformation and demise around the tropical world. Through varied types of commoning, however, Indigenous groups continue swidden practices as part of their identity and livelihoods. In this article, we explore how the Bahau communities in Indonesia negotiate with the state and private institutions, enabling them to maintain their agricultural traditions as fundamental to their standing as Indigenous People. We apply a commoning framework that prioritizes historical context, adaptation, and collective decision-making in managing the commons. We focus on the Bahau communities residing in the regencies of Mahakam Ulu, West Kutai, and Samarinda City in the Province of East Kalimantan, Indonesia. We conducted field observations and in-depth interviews. We found that despite fading collective labor mobilization systems and *lepo pare* (public granary) in Bahau communities, various practices persist that shape and sustain community identity, whose inherent value has influenced local state governance. The Bahau prioritize maintaining their livelihoods and exerting a sizable bargaining power over local rules and policies. This creates a circular commoning dynamic and produces a continuous cycle of commons. Such commoning stems from a commitment to traditional values, community-focused local governance, democratic and flexible decision-making, and conflict resolution aligned with customary law. The Bahau's commoning-driven adaptability in the contexts of political and ecological dynamics provides a constructive analytical framework to examine other communities that share similar principles despite the global pessimism about the resilience of Indigenous People.

KEYWORDS

Bahau; Commoning; Custom; Ritual; Swidden; Land and Natural Resources; Rural Livelihoods.

1. INTRODUCTION

"Dain, dain, beang yaung wui du ledaung du' sembaab" is a stanza from a folk song entitled *Joong Nyeloong* sung by the Bahau people when gathering. The lyrics mean *"to hold hands together in a circle under the roof."* The song is in the Long Gelaat/Lung Gliit language and sung in a large group by forming a full circle that keeps swelling as people join in. It is sung even by other Bahau subgroups who do not speak the language. It symbolizes keeping mutual interests while remaining open to other's needs as long as it does not break the communal order (Dahlan et al., 2019). It implies that people are aware of encountering friction due to different interests but somehow work to manage what is beneficial for them. Bahau's community defence mechanism is mindful of external threats as reflected by their myth of Batoq Ayau's origin (the karst landscape in Mahakam Ulu that reaches an altitude of 1570 masl) (Max, 2021).

This article aims to unveil the political-ecological factors that influence the practice of commoning among Bahau communities. Located in East Kalimantan, Indonesia, the Bahau cultural practices present an interesting case to study because it allows us to decipher how shared resources, social norms, and collective agency shape community resilience and well-being. Indeed, Indigenous Peoples around the world undergo interference in self-governance, sovereignty, loss of language, and limited participation in environmental governance, an impact of globalization and capitalism (Ford et al., 2020; Hohmann, 2019). Additionally, the dynamics of commoning are influenced by varying institutional interests and political climates, raising questions about the impact of policy changes on community forestry (Herrawan et al., 2022). In the Global South, particularly Southeast Asia, the decentralization of state authority has created opportunities for local communities to contest land access, but this often results in state-sponsored development projects that favor politico-business elites over the interests of local communities (Meckelburg & Wardana, 2023).

Figure 1. Batoq Ayau Karst, Mahakam Ulu, East Kalimantan, Indonesia [Authors' documentation, 2024]

Among the most important practices of Indigenous Peoples across Southeast Asia relates to challenges around swidden agriculture or shifting cultivation. Swidden *"...employs a natural or improved fallow phase, which is longer than [the] cultivation phase of annual crops, sufficiently long to be dominated by woody vegetation, and cleared by means of fire"* (Mertz, et al., 2009: 261). Market-based priorities and conservation enclosure importantly contributed to the demise of shifting cultivation in Southeast Asia, as Indigenous lands have been integrated into state forests or conservation areas such as national parks, which push more and more local people to seek off-farm job opportunities even beyond their villages (Cramb et al., 2009; Fox et al., 2009; Schmidt-Vogt et al., 2009). This disruption of traditional practices, through land grab, green grab, and individual acts that convert common property to private lands as took place in Vietnam (Clement & Amezaga, 2008), often entails the loss and destruction of communal lands (the commons) and the commoning practices among local and indigenous people (Sirimorok et al., 2023).

The commons encompass the complex link between place, social relations, and communal norms and interests that shape communities (Zhang & Barr, 2018; De Angelis, 2003; Nightingale, 2003; Ostrom, 1990). Commoning can be rooted in customs, which serve as shared practices that foster belonging and create frameworks for community interactions (Hufford, 2016; Wagenaar & Bartels, 2024). In agrarian communities, the dynamics of society are importantly forged through generations of collective activities. Meanwhile, the study of Bahau society is still dominated by topics

on traditional arts, such as the role of the arts studio in the persistence of traditional (Sape' Karaang) music among the Bahau community's local urban areas (Vivian & Putra, 2021). Recent Bahau research also focuses on the meaning of land according to the Catholic Church and the Bahau's tradition (Huvang et al., 2020), and the influence of ecological crisis on the relationship between humans, nature, and creators (Meko, 2022). Research on land use and conflict, as well as social forestry implementation in East Kalimantan, has largely neglected the social practices of customary communities, while recent years have seen growing academic interest in indigenous communities (Mishra et al., 2021). Thus, linking Bahau traditions through a political ecology lens presents a novel contribution.

In this paper, we delve into four sets of customs that are born from the Bahau's cultivation practices, namely, *nugal/ nguraang* (collective planting/preparation), *lepo pare* (communal granary), *pelaq dau/ daleh* (collective work), and *hudoq kawit/ hudoq pekayang* (planting/gathering rituals). These customs reflect aspects of the social practice of commoning, which involves a community's methods of sharing, distributing, and responsibly managing privately or publicly owned property (Gibson-Graham et al., 2016). Commoning starts by delving into long-term and inclusive collective actions to understand complex relations and institutions governing the commons, as well as their emerging results (Meinzen-Dick et al., 2021; Sirimorok et al., 2023). It has contributed to interdisciplinary and critical institutional theories that focus on governance, associational and voluntary actions, as well as dynamics of power relations and their historical underpinnings (Lees-Marshment et al., 2020; Partelow & Manlosa, 2023; Cleaver & de Koning, 2015). A commoning perspective pays attention to how social relationships foster trust, cooperation, and communal traditions (Fisher & Nading, 2020; Sandström et al., 2017), but also to wield power and deal with conflicts and struggle (Basurto & Lozano, 2021; Sirimorok et al., 2023). It prioritizes traditional values and may operate within social movements (Ferrando et al., 2020; Mazé et al., 2021; Sheller, 2023). Amidst anti-swidden narratives, swidden agriculture is adapting to contemporary challenges while gaining renewed attention for its potential benefits in climate change mitigation and biodiversity conservation, indicating its enduring relevance in the future (Li & Nath, 2024).

2. METHODOLOGY

2.1 Data collection

The participatory observation began informally in 2016 with our involvement in Sanggar Seni Apo Lagaan Kota Samarinda, a traditional art studio led directly by the descendants of Long Gelaat tribal nobles. Here our peers conducted research in Bahau's traditional arts and supported its documentation division. We continued with visiting the Long Tuyoq village (2016), attending *hudoq pekayang* (gathering ritual). This engagement resulted in studies of Bahau's arts and rituals (Dahlan et al., 2019), traditional beliefs (Max, 2020), traditional indigenous music (Putra et al., 2020, 2021), and myths (Max, 2021). In 2021, I (1st author) made three field visits, one week per visit, over 2 months to observe the Bahau's agricultural practices and rituals (*nguraang* and *nugal*, and *hudoq kawit*), and conducted an interview with the Chief of Long Gelaat about *pelaq dau.*

Such experience enables us to provide a relatively detailed description of relevant local and traditional practices. We conducted additional visits to Long Tuyoq and Ujoh Bilang in June 2024, as well as Long Hubung, Tering Baru, and Samarinda in July-August 2024. The data were gained through interviews during the site visits with resource persons whose roles range from Indigenous leaders, members of the

customary council, staff of the village office, and field owners. Among them, we interacted with ten women and six men between that ages of 30-80 ranging across lower to upper-middle-class groups. One thing that links them together is that they are the traditional bearers of Bahau culture. We used a hybrid ethnography approach, combining participant observation and observant participation, to explore the background of commoning practices. Hybrid ethnography provides flexibility in analytic observation, researcher's field positioning, and data compiling (Seim, 2021).

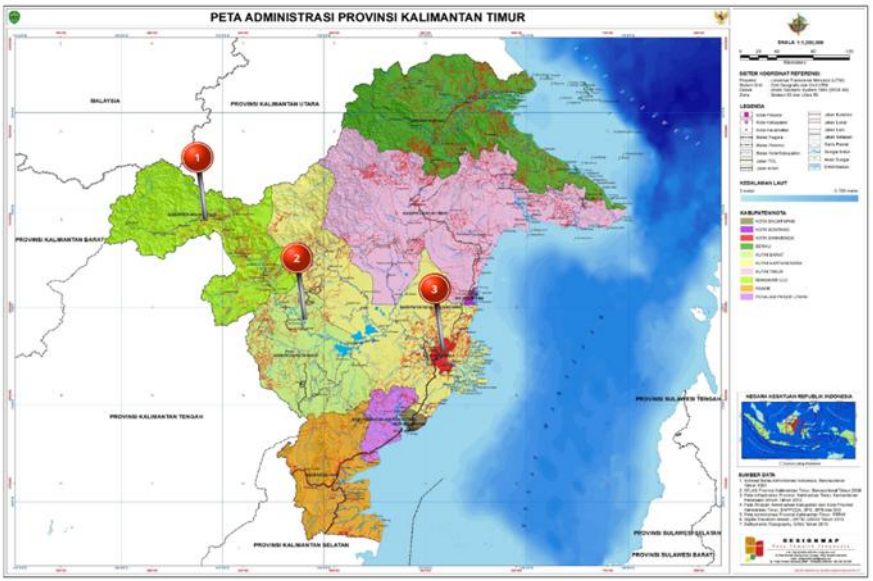

Figure 2. Research Location in East Kalimantan: (1) Mahakam Ulu Regency; (2) West Kutai Regency; (3) Samarinda City (Peta Tematik Indonesia, 2015)

We employ grounded theory that relies on actual data to understand and explain social phenomena within their contexts. This approach entails constructing concepts by direct engagement with the data and refining the theory based on empirical observations (Timonen et al., 2018). Categories of commons, though not strictly applied, became the perimeter of data collection. They are biophysical (plant, soil, water, etc.), cultural (language, sacred symbols, artworks, etc.), social (political system, education, health, etc.), and knowledge commons (indigenous ecological, scientific, and technical knowledge) (Gibson-Graham et al., 2016). In addition, at the individual and community level, we documented arrangements of rules developed to absorb individual choices into outcomes that benefit society and the environment, the communication effects on decision-making, and the relation of culture to resource use and governance (Agrawal et al., 2023).

2.2 Analytical Framework

Commoning here is understood as a social practice developed by a group of people to create, manage, and sustain shared resources (Euler, 2018; Fournier, 2013). From this vantage point, the commons are socially constructed, produced, and reproduced by commoning practices: they exist only after a group of people decides to govern them (Kamath & Dubey, 2020). The commons do not just exist out there, they go through self-organizing processes to agree on the establishment of the groups as well as subsequent rule-making and collective works. The commons are a consequence of intentional

practice. They have histories, which include the social and ecological contexts that stimulate the group to self-organize and collectively manage shared resources (Sirimorok & Rusdyanto, 2020; Sirimorok et al., 2023)

As a social form of tangible and intangible matter, commons are made of commoning where satisfying needs are met by voluntary, self-organized, inclusive activities, and conciliation of peers (Euler, 2018). The practices are influenced by socio-structural factors, and the blend of science and traditional knowledge is essential for addressing social and environmental challenges (Bhatt et al., 2024; García-López et al., 2021; Kidd, 2020; Lemke & Lofthouse, 2021; Micarelli, 2021). Commoning has perceptible patterns such as the cultivation of shared purpose and values, ritualization of togetherness, varied and free contribution and reciprocity, trust in situated knowing, preserving relationships in addressing conflicts, and peer governance (Bollier & Helfrich, 2019).

Furthermore, the commoning perspective sees that social practices are tied to power relations both within the local group and with outside forces, including the global market and the state (Basurto & Lozano, 2021; Fournier, 2013). In the context of post-colonial nations such as Indonesia, studies have identified how local communities have developed and experienced various types of relations with the market and state since before and continuing through and beyond the colonial period (Dove, 2011; Peluso & Vandergeest, 2001; Frank, 1998). The more recent developments such as modern state expansion and population growth allow for a more extensive flow of information, people, commerce, and organizations (Kottak, 1999). This tied even the most "isolated" communities to global dynamics. A commoning perspective, which pays attention to power relations surrounding the use, management, and preservation of shared resources, allows us to delve into the social-political histories and dynamics of its social practice. Especially for our purposes, the commoning perspective provides insight to analyze how the local Indigenous groups' initiatives, the collective action from below, negotiate with the state.

Meanwhile, from a state-driven perspective, the so-called "community-based resources" have become an important policy instrument for the governance of natural resources in different parts of the world (Agrawal, 2003; Bresnihan, 2016; García-López et al., 2021). Commons theories have been significant in guiding the state and international development organizations to develop these "commons projects", which include different types of decentralization programs in natural resource management (Saunders, 2014). Going through imbalanced power relations and discourses during the policy processes (Mosse, 2004), these programs often create an apolitical "institutional fix" that neglects the power relations, resulting in more marginalization than inclusion (Saunders, 2014; Agrawal & Gibson, 1999; Ferguson, 1990). It is no surprise that state programs in various kinds of decentralization of natural resource management are often considered to fail to achieve its objective of redistribution and empowerment (Fisher et al, 2019; Larson & Soto, 2008; Agrawal & Gibson, 1999). It is also implied that previous studies put more focus on the state policy and practice, as well as their consequences, with less discernible analysis on how the local people initiate their resource management while facing often adverse state programs. Hence, decentralization programs by the state need to be seen from a commoning perspective to examine how organized communities negotiate with state programs and shape outcomes.

The examination of commoning practices is an important measure not just for the indigenous groups but also for the decentralization of natural resource management, which is relatively overlooked in evaluating decentralization efforts in resource-rich nations (Sirimorok et al., 2023). To do so, we consider their historical context,

examining daily operations within groups, studying the people's interactions with the state, and analyzing the outcomes. The table below shows the framework we apply.

Table 1. Commoning Framework (Sirimorok et al., 2023)

No.	Aspect	Concerns	Goal
1	History and Context of Commoning	● Explore how people begin and sustain commoning practices historically. ● Consider structural rudiments and conditions that kindle commoning decisions. ● Inspect international, national policies, and market dynamics.	To understand commoning within broader social, political, and ecological contexts.
2	Practice of Commoning	● Explore rules, mechanisms, and power dynamics within commoning groups. ● Study benefits, responsibilities, values, and knowledge grounding commoning. ● Address conflict resolution, collective action, and adaptations.	To explain various resource types and may involve enduring or new collectives governed by commoning.
3	Commoning-State Relationships	● Review conflicts, social, and ecological outcomes. ● Consider norms, values, interests ● Explore impacts on state policies and commoning.	To examine day-to-day interactions between commoning and state entities.
4	Emerging Conditions and Results	● Assess sustainable resource use possibilities. ● Evaluate whether commoning initiatives lead to inclusive or distributive social relations. ● Consider democratic aspects.	To detect evolving power relations within and outside commoning groups.

3. RESULTS

3.1 Context of Bahau's commoning

Living in the middle-upper Mahakam River, and linguistically related to Kayanic people, the Bahau-speaking people are part of the main subgroups along with Ga'ay and Kayan. They are culturally and historically related, though they are considered to be part of Kayan-Busaang and Ga'ay (Okushima, 1999; 2021), and some of them tend to adhere to the Long Gelaat tribe (Oesterheld, 2020; Sellato, 2002). The researchers provisionally called this community the Bahau to generalize those who still conduct the traditions related to the Kayanic culture, though other sub-Kayanics like Kenyah, Kayan, and Aoheng people also exist among them, they are not the focus of this paper. The Bahau mostly spread along the mainstream of the Mahakam River, especially in the districts of Tering (West Kutai Regency), Laham, Long Hubung, Long Bagun, Long Pahangai, and Long Apari District (Mahakam Ulu Regency) (Sellato, 2002).

The Bahau rely on swidden cultivation that was formerly influenced by their semi-nomadic mobility through time (Imang et al., 2018; Terauchi & Inoue, 2016). The term 'field' in this paper refers to cultivated dry land (*ladang*). The Bahau prefer the *ladang* due to local soil and water conditions, like periodic flooding, the dense forest vegetation that provides natural composting, and the lack of flat areas resulting in efficiency compared to wet rice cultivation (Okushima, 1999). The Bahau's bond with rice cultivation is closely tied to the belief in paddy as a sacred blessing from the Apo Lagaan (place of deities). The indigenous tradition stated that Bo' Ayaq (benevolent

goddess) of Apo Lagaan, sacrificed the body of her grandchild, Hunai, whose body shattered into paddy seeds to feed humans (Widjono AMZ et al., 2019). The strong belief is manifested through rituals like *dangai*[1] and *hudoq Kawit*.

Figure 3. Paddy Seeds and Rice in a Bamboo Stick Placed in Mebaang (Flat-Surfaced gong) as a Blessing Brought by Hukang Jau Tayau La'an Tavaan Spirit in Tengaraan Hudoq Ritual [Authors' documentation, 2019]

Mahakam Ulu, named *Onderafdeeling Boven Mahakam* in the colonial era, is the youngest regency after separating from West Kutai and gaining recognition of regional autonomy by the President of Indonesia on January 11, 2013 (Prokopim Mahakam Ulu, 2017b). Mahakam Ulu covers an area of approximately 15,315 km^2 or approximately 7.26% of the East Kalimantan Province, where 88% of the administrative area is forest. The area is dominated by undulating topography ranging from gentle to steep slopes, with altitudes ranging from 0 -1,500 (masl) and slopes between 0-25%. Such topographical conditions lead to the concentration of settlements in areas along the Mahakam River watershed, where contours are relatively flatter. Mahakam Ulu has ten major rivers, and each district is traversed by two rivers. In total, there are 50 villages with 245 rivers (Prokopim Mahakam Ulu, 2017a).

Meanwhile, in West Kutai Regency, the Bahau population is concentrated in Tering (18 villages) and Long Iram District (11 villages). Tering Baru Village is located 48 km away from the capital of West Kutai Regency and covers an area of 64,08 km^2. In 2019, there was no record of harvested paddy (Badan Pusat Statistik Kabupaten Kutai Barat, 2019). In Tering Baru Village, the Bahau Village Customary Council is led by an elected chief. It was first settled by people from Central Kalimantan when the upstream areas of the Mahakam River were still in the West Kutai region before the Mahakam Ulu became a regency. By the 1900s, Catholic missions settled in Long Laham, which is now part of Mahakam Ulu Regency. Due to the challenging transportation along the Mahakam, it was determined in the 1920s that the mission's center should be moved from Laham to Tering (Schiller, 2009). A permanent post was established in Tering in 1928, including boarding schools and a dispensary run by the Franciscan Sisters of Asten (Steenbrink & Aritonang, 2008). In 1936, a sawmill in the Gruti area was built by the Catholic mission and expected to improve the welfare of the people. Education and health facilities also attracted people who originally settled in Long Isun, Lunuk River,

[1] *Dangai* ('to invite') is Bahau's ritual to celebrate life which includes naming rituals for children and wedding ceremonies.

and moved to Long Iram District, West Kutai Regency, especially to Tering Baru Village. However, the village often suffers flooding and erosion on the river bank, making it impossible to cultivate lands in a relatively extensive field.

As a newly established regency, in 2000, the West Kutai administration gave various licenses and permits to timber companies, and it also attracted interest from oil palm investors (Casson, 2006). A Tering Baru Village staff explained that the local community rejected the company's *Hak Guna Usaha*/HGU (use permit), but irresponsible village officials from Tering Lama and Tering Baru signed deals with the company from 2009 to 2014. The residents seized the company's heavy equipment as a protest to the land acquisition. The HGU holder's cessation of operations complicates land certification in these areas due to mapping challenges faced by the Indonesian National Land Office.

Samarinda, the East Kalimantan Capital City, surrounded by Kutai Kartanegara Regency, covers an area of 718,00 km^2 with the Mahakam River flowing through the city. The Bahau Busaang Customary Council also established in Samarinda City in 2021, whose concern is the customary conduct of the Bahau settling in Samarinda (Blawing, 2021). The occupations of Bahau in Samarinda are more varied but there are still traditional farmers. Their fields are in the concession area of PT. ITCI (a timber company) in Senoni Village, Sebulu District, Kutai Kartanegara Regency. The issue began in the late 1980s when locals first planted the land without knowing about it being part of the concession because they were newcomers from Mahakam Ulu. The company recognized that the Bahau community cultivated the concession land. As a result, the company and the farmers agreed that the Bahau farmers can only plant non-timber forest products (NTFP), and they weare only allowed to cultivate rice and fruits. If the company finds plants for timber products, the planted area will be taken back by the company (IG/M/-, interview, 2021).

3.2 Bahau's commoning

The traditional cultivation and the ritual that follows reflect the Bahau's respectful treatment of paddy seed and rice. Here, we look at the forms of Bahau commoning practices related to cultivation, both in their agricultural activities and rituals as the commons of Bahau people.

3.2.1 Nguraang and nugal

Nguraang (litt: preparation) and *Nugal* (litt: planting) are both carried out during the planting period in the Bahau community's shifting cultivation cycle, starting between August and November. These two activities are conducted after the land is cleared for planting. *Nguraang* is a tradition of gathering in the fields while preparing the rice seeds and tools a day before rice planting (*nugal*) day. The villagers voluntarily attended *nguraang* (AA/F/65, interview, 18/6/24).

In Long Hubung, the owners of the field we visited were in their thirties, while those who came to help were from the older generation. The villagers customarily took it upon themselves to prepare the meals and planting tools, and stayed until dinner time. The next morning, villagers from the previous day returned for *menugal*. *Nugal* or *menugal* is the actual practice of planting the rice field. After breakfast, they headed to the field that had been cleared weeks earlier. They distributed rice seeds from big sacks into *baraang pasuk* (woven rattan baskets), making them convenient to carry during the planting process. Women put seeds in the holes from behind the males, who walked in a row with *tugal* sticks to tamp the soil. Work ended normally at midday.

The traditional practice of *nugal* persists more for nurturing collectivity than profit. The field owner said that the value of the rice he would harvest is almost the same as the pig they cook during the *nguraang*. "We are delighted to continue this tradition and show appreciation to those who participate in *nugal*" (NLH, interview, 29/10/21).

During a visit to Long Tuyoq, an elderly woman farmer shared with us that when time allows, *"we support neighbors even those who do not come to us [with invitations]. It is a tradition from our parents' generation where paying money does not fit the traditional value"* (SL/F/80, interview, 19/6/24).

Figure 4. Nguraang in Long Hubung Village [Authors' documentation, 2021]

Figure 5. Menugal in Long Hubung Village [Authors' documentation, 2021]

Our observations during *nguraang* and *nugal* activities indicate several aspects that may not be verbally expressed. These factors could potentially explain why the Bahau consistently practice *nguraang* before beginning rice planting. First, multiple generations are involved, which helps the practice last. Second, traditional farming knowledge, a type of commons, is being passed on, including seed preparation, equipment preparation, *nugaal* workflow agreement, and seed planting sequence. *Nugal* passes on Bahau farming expertise, including taboos like that glutinous rice seeds are sown first because they mark a new phase. Third, ritualized togetherness and mutual benefit are recognized for face-to-face engagement and news exchange is not always possible on weekdays following the planting season when people return to their schedules.

3.2.2 Lepo pare

Lepo Pare can be translated directly as "paddy granary" which is traditionally built with wooden walls and covered with a roof, standing four feet above the ground. It stores harvested rice from the Bahau community. The collected rice is still measured in 18-

liter cans of cooking oil (14-15 kilograms). There are two storage models carried out by the Dayak Bahau community. According to a former coordinator of *Lumaq/Dumaan* Customary Affairs of the Bahau Busaang Customary Council in Samarinda, Bahau do not store paddy at home. He said that whenever they need rice, they must take a considerable amount of it from the hut in the fields (IG/M/-, interview, 19/12/21). When the *lepo pare* is full, the rice is stored at the bottom of the hut covered by wooden walls called *kelevung*. The dried rice bundles are placed in a tube-like container made of wood bark called *tebilung* to keep the seeds for the next planting period.

Figure 6. Hut in the Field in Long Hubung Village [Authors' documentation, 2021]

One respondent, IG, recounted that once there existed a communal granary in the village, which was an old tradition in Long Tuyoq, although it is no longer practiced by the local community. The communal granary practice has long been in decline. The Long Gelaat Dayak chief initiated this practice in the 1980s. In this arrangement, families with harvest surplus (they can calculate the surplus by counting the harvest) would gather the rice surplus in a local granary as a type of benefit for families with insufficient harvest. He explained that they must return the same amount of rice to ensure supply for other families (IG/M/-, interview, 19/12/21).

The chief of the Long Gelaat Dayak Tribe raised another concern about the traditional rice granaries in the Bahau community. He said that in the past, the *hipui* (nobles) had the most land compared to other families in the village. In the process, harvesting and planting in the *hipui*'s fields were carried out together by all villagers. The *hipui* family then stored the rice harvest, and later distributed the stored rice to the villagers for consumption during traditional events. The customary land order still recognizes this traditional practice today. However, He said:

> *"Since my children no longer farm, only a small area of the hipui's field is used, [only] to signal the beginning of the planting period, [after which] all villagers may plant in their fields."* (*BBB*/M/80, interview, 1/11/21)

Communal *lepo pare*, however, have not entirely disappeared. Magdalena Maria Ulo Ding, a Bahau female master ritual leader, revealed that Liu Mulang village, located adjacent to Long Tuyoq, continues to maintain a village common field, which is tilled together by all villagers under the *baharian* (daily work) system. The village collects its harvest in *lepo pare*, overseen by a paid guard, with the rice exclusively reserved for local needs and traditional ceremonies like the quinquennial *dangai*. She added, "Every village should have had *lepo pare* for its own sake. They also grind the rice and sell it

for the *nemlaai*[2] ritual in Long Tuyoq village." (MMUD/F/87, interview, 21/6/24)

Figure 7. Chief of Long Gelaat Leading Nemlaai Ritual in Long Tuyoq Village [Authors' documentation, 2024]

The *lepo pare* is more for the common good, especially for the running of traditional rituals that do not always depend on the village government funds or district government donations. In the case of the *Nemlaai* ceremony, for instance, Long Tuyoq village must purchase rice supplies from another village (Liu Mulang) in addition to using the income from common fields managed by the village *Bumdes* (Village-Owned Enterprise). The customary secretary of Long Tuyoq Village noted that the once-existing public granary is no longer practiced as villagers now keep their harvests for themselves, which affects the community's ability to use crops for traditional ceremonies and the major Christmas celebration without external funding. When asked about *Nemlaai* funding, she further shared that the committee made proposals to companies, namely PT. Paesa and PT. Modern, which are working on the road development project. She stated,

> *"The village customary institutions issued a letter about the need to collect wood for customary activities. The letter is the basis for the company to issue a work permit and report the use of fuel and operational vehicles to carry wood for traditional ceremonies. This is possible because there is an agreement between the village customary institution and the company, in which the company is obligated to support the activities of the indigenous community. The agreement was made in a meeting across customary institutions, village government, and the companies operating in the village area."* (EBJ/F/50, interview, 21/6/24)

Therefore, the persistence of *lepo pare* in a village arguably signifies not only food security but also village independence, devoid of reliance on outsiders, the government, or companies.

3.2.3 Pelaq dau and daleh

Pelaq Dau and *Daleh* are collective work systems found in Bahau's community. *Pelaq Dau* involves the community's commitment to participate in managing voluntary workers set in daily work rounds and forming a reciprocal labor system. This type of

[2] *Nemlaai* ('winning'), a masculine coming of age ritual. Long Gelat tribes, in the past, performed *nemlaai* during *Ngayau* (head hunting). It is now held once every five years to celebrate/pray for men's livelihoods, the inauguration of customary completeness.

work is performed by relatives or non-kin folks (Nanang & Inoue, 2000). A group of five to ten people support each other on diverse needs by rotating daily between households to assist with tasks like farming, home maintenance, and traditional crafting. Participation is flexible, allowing family members to substitute for the head of the household, and no cash payments are involved in this communal responsibility. The chief of Long Gelaat commented,

> *"It is a pity that pelaq dau is declining in other areas. It is beneficial especially for old widows who lack the stamina for house repairs or fieldwork because they don't have to pay neighbors. In my opinion, these traditional activities bring a sense of kinship closer together than religions do."* (BBB/M/80, interview, 1/11/2021)

On a visit to Ujoh Bilang, some women from Long Lunuk Village gathered and shared their stories. An example of *pelaq dau* was given.

> *"Now grandmothers, for example, practice it. What they do is make rattan mats,* anjats *(rattan bags), bead crafts, or cleaning the garden. It can still be done by those who do not have formal jobs scheduled on work days. While other* royong *[collective] activities can be done once or twice a week for those who have jobs such as at school or in the hospital."* (TS/F/50, group interview, 18/6/24)

Therefore, *pelaq dau* is useful for a wider range of needs and can involve people who are past their productive years, especially women. The various types of work are first agreed upon by each member and carried out in turn with all members in the houses who need help.

Meanwhile, *daleh* consists of farmers who establish a workgroup, with the main purpose to work on fields owned by the group members. The *daleh* work system closely resembles the *pelaq dau*, in that a group of individuals takes turns tending to one another's fields. The distinction lies in the fact that *daleh* is not performed for daily work. *Daleh* originally refers to fields that are lined up close to each other and owned by different individuals (LL/F/43, group interview, 18/6/24). It is based on field arrangements that farmer groups established. Now the traditional *daleh* group has been modernized as *Kelompok Tani* (farmer group) to run cultivation programs supported by the regency government. In Long Lunuk, there are several more types of communal assistance, namely: neighborhood *royong*, family *royong*, cocoa group *royong*, and royong *daleh*.

3.2.4 Hudoq kawit and hudoq pekayang

Hudoq kawit consists of a series of rituals that are held after the Bahau people finish planting the field. The ritual is conducted every year, marking the new beginning of the season in Bahau villages, where the traditional farmers practice swidden cultivation. *Hudoq kawit* follows a long-held oral tradition that tells the story of a legendary man named Paran Nyelaan Dale, who was guided by the village protector spirit called Belareq Jeheq Betuvuuq to conduct *ngawit* (litt: to seize back village prosperity) (Max, 2020). When wearing a specific costume and mask for the ritual, a person relinquishes his/her identity as he/she enters the ritual to represent a deictic figure following its name, for example, *Hukang Jau Tayau La'an Tavaan*, *Hirung Kut Naaq Basung Ledaang*, and *Hukau Lejau Belaaq* (Nugroho et al., 2022). Configured as a group dance, the ritual is still performed by the Bahau in Mahakam Ulu in every village when farmers finish *menugal*. Adjustments are made, especially in Samarinda City and Tering Baru Village in West Kutai Regency.

First, *hudoq kawit* ritual in Samarinda City, held annually by the Bahau community, serves more as an act of cultural preservation and nostalgic tradition, rather than a request for field protection (Vivian & Putra, 2021). The Bahau community residing in Samarinda who are still farming in areas outside of the city, part of *Kelompok Tani (Farmer Group) Palang Urip*, initiated this ritual. In 2015, they agreed that the ritual is conducted in a series of other traditional ceremonies, sequentially ordered as *liva tasaam, hudoq tahariq, livaa laliq, hudoq kawit, and hudoq pakoq*[3] but more complex processions can be found in other Bahau villages [AJ, M/42, interview, 30/8/2024].

Figure 8. Ngawit Ritual in Hudoq Kawit, Samarinda City, 2018 [Authors' documentation, 2018]

Due to high public interest in this ritual, *Hudoq kawit* ritual was included in the Mahakam Festival (FESMA) in 2017, 2021, and 2023. In the years when the ritual was not included in the government-organized festival, the Bahau community in Samarinda continued to perform it independently, funded by donations from community members. The daughter of Long Gelaat's Chief conducted *Liva Tasaam* and *Livaa Laliq* ceremonies at her home, which also serves as the regular traditional dance training place for the Apo Lagaan Art Studio.

Figure 9. Apo Lagaan Art Studio Lead the Hudoq Kawit in Samarinda City at the Festival Mahakam, 2023 [Authors' documentation, 2023]

[3] *Liva Tasaam* is the initiating ritual that involves all participants/committee of Hudoq Kawit in Samarinda City. *Hudoq Tahariq* is a procession of welcoming the *hudoqs*. *Liva Laliq* means to enter the ritual where only the traditional farmers prepare for the *Ngawit* ritual. *Hudoq Kawit* is the main ritual to pray for blessings in the fields (today this translates to any livelihoods). *Hudoq Pakoq* (litt: fern mask) is the closing of the whole ceremony where fern plants symbolize a cooling down or time to rest after the planting season.

Second, the *hudoq kawit* ritual has been routinely practiced since 29 October 2016 in Tering Baru by the elders' initiative. A small piece of land is made available in the front yard of the monastery and the abandoned hospital area, and with a permit from the local parish, it is planted as a rice field. Indeed, the flooding also brings damage to the local farmers' seasonal crops, which further stimulates them to look for other livelihood sources (PJN/M, Head of Tering Baru Village Bahau Customary Council, interview, 2/8/24).

> *"Starting in 2000, Tering Baru's population declined due to the sawmill's shutdown and new schools in West Kutai Regency. People left looking for jobs. Because there was only borrowed land for short-term farming and not enough for consistent revenue, farming could not be maximized. To have* hudoq kawit*, we must create a little field for the customary needs [from the borrowed land];* hudoq kawit *cannot exist without a field."* (MT/F/64, interview, 1/8/24)

Figure 10. Limited area to Plant Paddy for Hudoq Kawit Ritual Requirements in Tering Baru [Authors' documentation, 2021]

When the *Hudoq Kawit Kampung Tering Baru* was held in 2021, the West Kutai regent and Tourism Office representative expressed their support for the Bahau Indigenous community to continue to carry out traditional activities in order to attract tourists, like in Bali who live by maintaining customs and traditions. Without land availability the local government only suggested tourism, instead of orchestrating measures to restore Indigenous lands to maintain the rituals.

While showcasing *hudoq* dance and music, *hudoq pekayang* emphasizes its social purpose. It is a long-held custom for the Bahau to visit each other's field during *menugal* season but it was done spontaneously and in an unorganized fashion. However, Mr. BBB recalled that during a meeting with village heads in 1994, as the head of the Long Pahangai District Supreme Customary Council, he discussed his concerns about the fading visiting *hudoq* activities because the village host must provide accommodation during the visit. To prevent overwhelming the host village, it was agreed that each village would bring their food and drinks, a concept initially met with resistance from customary leaders due to traditional expectations, but ultimately accepted due to financial constraints. Back then, it was called *hudoq kecamatan*. *"The whole community from the districts can all gather in one place, even if it is only with some representatives from each village,"* (BBB/M/80, interview, 1/11/2021). After two years of *hudoq kecamatan*, during its turn, Data Naha Village suddenly claimed their lack of preparedness as they

were falling behind in proposing government funding. Then, in 2001, with the aid of Kutai Barat Regency funding, Long Isun Village started to host the event. The statement highlights that the primary objective is to bring together the Bahau community from multiple villages. The original objective of instilling confidence in each village's ability to host the event encountered difficulties due to the continued need for government aid.

Figure 11. Participants of Hudoq Pekayang from Long Lunuk Headed to Long Tuyoq by Boat in 2016 [Authors' documentation, 2016]

In 2014, *hudoq kecamatan* was rebranded as *hudoq pekayang* (litt: visits) to highlight the Bahau's customs of visiting other fields and to organize the activity in Long Pahangai District. With this event, according to Mr. Balereq, the traditional music and dance comes back to life and the villages grow in terms of infrastructure and awareness of tourism management. Although there is no identified record of the economic gains from the event, during a visit by the first author to *hudoq pekayang* in 2016 hosted by Long Tuyoq Village showed that trading activities were taking place around the event venue, as stalls were built and rented for selling foods, beverages, and souvenirs. In 2018, organized by the Office of Tourism, Youth, and Sports (Disparpora Mahulu) in Ujoh Bilang, Hudoq Cross Border, adapting *hudoq pekayang*, broke the record of the Indonesian Record Museum (MURI) with the largest number of dancers (Prokopim Mahakam Ulu, 2019). Long Isun Village again took place in October 2024.

Figure 12. News about the Planned Hudoq Pekayang in 2024 (Persiapan, 2024)

The annual *hudoq* dance event fosters social connections among distant Bahau villages, encourages better village organization for hosting, and provides homestay accommodations that boost local incomes. *Hudoq pekayang* has become a tourist attraction, and its ultimate purpose is to help the community prosper economically without impacting natural resources (Persiapan, 2024). The *hudoq pekayang* has gained full support from the government, albeit for different goals, namely for tourism development. The government's assurance of a schedule and budget allows every village to participate equally and reap economic benefits.

3.3 State policies and Bahau commons in Mahakam Ulu Regency

The Mahakam Ulu Regency government accommodates some Bahau agriculture practices as part of their development programs, which implies an acknowledgement that the traditional cultivation also shapes Bahau identity. The regency's official logo (Figure 13) also honors Bahau culture. *Hudoq*, the iconic mask of the Bahau people, is a focal signifier of the Bahau people's cultural identity as *hudoq* ritual marks a new beginning as it is held right at the end of the planting season. The mask, which represents a traditional farming ceremony well known to the Kayanic community, is part of the official logo of the Mahakam Ulu Regency (Oesterheld, 2020). The mask represents the traditional and artistic expressions that are deeply rooted in the culture of the Mahakam Ulu people.

Figure 13. Meaning of the Mahakam Ulu Regency Official Logo (Prokopim Mahakam Ulu, 2024)

Since Mahakam Ulu became a regency, the local government has been building roads, bridges, hospitals, schools, clean water management centers, electricity supply, and telecommunications infrastructure. Furthermore, to improve people's welfare towards food self-sufficiency, the Mahakam Ulu government considers the agricultural sector (see Figure 14), as well as plantations, fishing, forestry, and tourism to be important sectors (Prokopim Mahakam Ulu, 2023). Moreover, the programs from the local government aim to enhance the quality, production, and capability of upland rice and cocoa. These crops now serve as the primary products of Mahakam Ulu Regency.

Figure 14. Agriculture Sector Development Programs (Prokopim Mahakam Ulu, 2024, p. 40)

Program No. 1 (Figure 14) indicates government efforts to control swidden cultivation to "prevent further encroachment." The vice-regent of Mahakam Ulu said that the farmers must build *sawah* (wet rice fields) to replace *padi ladang* (upland rice). He considered the swidden method less effective and cannot fulfill the target of food security since planting and harvesting are only done once a year, while it is possible to plant wet rice fields three times. If this directive is realized, Mahulu's rice production is believed to increase (Prokopim Mahakam Ulu, 2024). The wet rice field program, however, has implementation problems because it is considered incompatible with the Bahau culture. According to BBB, "The program was also carried out in the 1980s during President Soeharto's New Order administration for food self-sufficiency, bringing cows from Java Island for plowing the soil to Long Tuyoq Village. In the end, it was useless, because the community was not familiar with the maintenance and the problem of new pests that came in, such as leafhoppers" (interview, 1/11/21). Furthermore, a mand from Long Hubung village explains:

> *"Many disagree because it is not our tradition; swidden is sufficient. Wet rice fields were established at Long Hubung Village across the Mahakam River and the results were disappointing. Ulu people tend to grow fruits and vegetables on rice fields after harvesting them, so planting rice 2-3 times a year will be less productive. If forced, the hudoq ceremony and nguraang will fade. Swidden has been here for generations and we are not used to hoeing."* (DH/M/30, interview, Long Hubung, 9/7/24)

Thus, farmers continue to implement the *nugal* tradition, as the practice holds a strong traditional value. And the government still provides funding for the traditional practice (see Figure 15 No.1). For about 3,000 farmers in 50 villages in Mahakam Ulu Regency through a program called "Agriculture Productivity and Production." The farmers are listed as extension workers who know well about each village's farming practices (Prokopim Mahakam Ulu, 2023).

Figure 15. The Regency Aids for Agriculture Productivity and Production (Prokopim Mahakam Ulu, 2024, p. 41)

Another way the local government may disrupt local agricultural traditions is by assisting cacao cultivation through the local *Kelompok Tani* (farmer group), which was

established as the government initiative to ensure the funding management and use on the ground. The community adjusts group membership by putting farmers from one *daleh* (farming area) in a group. Cocoa farming is practiced with the *royong* (collective work) but each member keeps their revenue. The average cocoa farmer group has 20 members. Once rice farming is completed, they move to the cocoa fields. Farmers seem to increasingly favor cocoa.

> *"Cocoa was first planted in rice fields as a boundary crop, but it's showing promise and people are taking it more seriously. Stores sell rice, anyway [less critical for subsistence]. But, will I still receive the 2 million (rupiah) funds if I only have a cocoa plantation and no rice field?"* (AA/F/65, interview, 18/6/24).

The government encourages each village to manage 10 hectares of public fields, mentioning that by selling the harvest they can generate village funds for road upgrades. *"By receiving 2 million (rupiah) per hectare [of cultivated field], the harvest can be used by the family who owns the land without selling it or giving it back to the government"* (LL/F/43, interview, 18/6/24). This group interview reinforced that they favor both rice cultivation and cocoa groves. Farmers reliant on government aid for upland rice are contemplating distributing the aid to cocoa plantations. They are concerned about the aid's sustainability due to its connection to a political campaign promise. Furthermore, the government's focus on enhancing food security overlooks the public granary system.

3.4 Inclusivity and the democracy of the Bahau's commons

The Bahau communities are bound by historical and kinship relations, mediated by the recognition of customary leaders and rules. The regency government passed Mahakam Ulu Regency Regulation No. 7/2018 on the Recognition, Protection, and Empowerment of Customary Law Communities and Customary Institutions. This regulation recognizes the implementation of customary law in each village and grants local people discretion to democratically enforce rules through customary institutions, resulting in the authorization, in 2019, of the Mahakam Ulu Dayak Customary Code (*Hukum Adat Dayak Mahakam Ulu*). The *hipui* (nobles) also safeguard the sovereignty of the customary council. The Bahau nobles are determined based on lineage, and their rule over an area long before the Indonesian state. Even the Mahakam Ulu government center's construction uses land donated by the ruling nobles in Ujoh Bilang Village. It is said that the *hipui* era ended during the Indonesian independence period, and the village leaders changed from *hipui* to *petinggi* (village head) and customary chief (Aliansi Masyarakat Adat Nusantara Kalimantan Timur, 2016). However, in farming, only the *hipui* can start planting rice in their fields, and the rest of the villagers may follow to plant on their fields after the ritual prerequisite has been handled by the *hipui*. More broadly, the Bahau communities in West Kutai Regency and Samarinda City, under the safeguard of their respective local regulations, continue to oversee customary institutions.

The Bahau traditionally did not require written proof of land ownership to cultivate a field. Knowledge of land ownership is passed down through stories of the *hipuis* who once cleared the land to cultivate and start a village of their own. The Bahau obey this oral tradition to avoid encroaching on other villages' land. Migrants, unfamiliar with village history, lack this knowledge, which potentially leads to land disputes (LD/M, interview, 21/6/24).

In the Mahakam Ulu Dayak Customary Code (see Figure 16), there is a chapter for each Bahau sub-ethnic group on their regulating sanctions on violations of livelihood sources, which also includes land use and occupation. In Bahau Busaang Customary

Law, for example, in Chapter 8, 12 articles outline various land and environmental violations, including land abduction, overlapping claims, illegal burning, border removal, document falsification, disputes, hunting protected species, timber misuse, toxic waste disposal, and AMDAL violations (Dewan Adat Dayak Wilayah Mahakam Ulu, 2019). In part three of the book, there are procedures for resolving customary cases (pp. 267-272). Article No. 2 outlines the principles of deliberation, consensus, fairness, honesty, and impartiality in resolving customary cases, while Article No. 10 Paragraph 2 specifies that the Customary Court can include various parties, including Dayak Indigenous people and others, accountable for customary disputes.

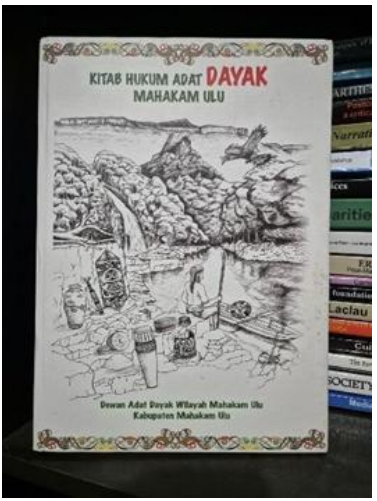

Figure 16. Mahakam Ulu Dayak Customary Code (Authors' documentation, 2024)

The sanctions are in the form of highly valued traditional items such as *tawak* (gong), *antang tali duaq* (ceramic vase with two threads of bead weave engraved), *malaat/mandau* (machete), and *inuq* (beads) that can be converted into cash as formulated by the council members. A recent case shows how a customary sanction was sentenced for 3 perpetrators of fish electrocution in the Payang River by the Ujoh Bilang Village Customary Council with the total worth of traditional items Rp 109.5 million (Figure 17). The decision was witnessed by the Mahakam Ulu government representatives, BPK (Village Consultative Body), village customary council members, and the head of the farmer group.

Customary law and traditional principles also safeguard the Tepai River forest area, as well as the watershed hydrological system in Long Tuyoq Village. It includes the area which locals describe as *tene' legaat* (shared land), *tene' pehau Loong Gliit* (land of the Long Gelaat tribe), which can be used for traditional farming by community members, and *tene' bengaiit* (protected land) where cultivation is prohibited making it a primary forest (VA/M, interview, 10/8/24). The locals and forestry enterprises do not break the customs. For instance, activities on village-owned land (*lahan desa*) are overseen by customary authorities and local public relations, hence customary regulations are applicable. A corporation might obtain a state permit, but the local community determines the method of acquisition. Insufficient compensation may render acceptance more challenging (EBJ/F/50, interview, 21/6/24).

The village also granted the Village Forest, a social forestry scheme, by the national government. It was facilitated by an NGO. However, Long Tuyoq people see legality as an administrative load, for facilitation and accountability initiatives, and expressed a

desire to legalize their customary forests (*hutan adat*) mapped according to Long Tuyoq's customary law. Although the village Land Use Plan includes traditional spatial planning, the Long Tuyoq community does not yet have Customary Law Community status, hence the Social Forestry scheme for customary forests is not yet legalized. The initiative is still hampered by regulations to determine the customary law community groups that would benefit from the *hutan adat* scheme.

Figure 17. Sanction to Fish Electrocution-Screenshots of Instagram @info.mahakam.ulu (Info Mahakam Ulu [@info.mahakam.ulu], 2024)

4. DISCUSSION

This research elucidates how the Bahau people effectively preserve their commons despite the complex interplay between political and ecological factors. The local beliefs, traditions, customs, and practices are important in understanding the commons (Wagenaar & Bartels, 2024). The geographic conditions influence the Bahau's biophysical commons, shape them to rely on swidden cultivation to grow basic foodstuff. The Bahau's biophysical commons, which include the land, the Mahakam River and its tributaries, and the forest and biodiversity unique to East Kalimantan, have shaped their reliance on shifting cultivation primarily for subsistence, as well as complementary perennial crops and hunting and gathering. While social forestry initiatives seek to merge these traditional practices with state-led efforts for conservation and sustainable resource management (Fisher et al., 2019), achieving a balance between indigenous methods and modern conservation objectives necessitates open dialogue, mutual respect, and adaptable policies (Menzies et al., 2024).

Engaging in collective practices such as the reciprocal system, individuals can foster a sense of interconnectedness and develop a genuine concern for one another that enhances solidarity. Communal assistance can also provide a platform for individuals to share knowledge and expertise, where younger individuals learn from those with greater expertise in indigenous knowledge. By utilizing voluntary labor instead of hired laborers, communities can also save costs and redirect resources to other priorities. Furthermore, engaging in collective work requires not only coordination but also commitment of all people within the community, an important aspect of Bahau practices of commoning. Indeed, *gotong royong* often produces mutual consultation and consent (Slikkerveer, 2019) in making decisions, respecting neighborhoods, and helping each other (Latifa & Mahida, 2024). The Bahau practice of *pelaq dau* and *daleh* reflects the need for fully committed members to maximize such

expected results.

The commoning practice around swidden cultivation is reflected in the *nugal* and *nguraang*. The cooperative work system shows their responsiveness and interdependence as continuous dimensions of commoning (Carter, 2023), as well as ritualized togetherness (Bollier & Helfrich, 2019). The collaborative system maintains the *pelaq dau* and *daleh* traditions, although the uses are now varied. Power relations within and external to the group influence the rules and mechanisms of the commoning (Sirimorok et al., 2023). The transition from swidden farming to cocoa cultivation along the upper Mahakam River has led to changes in labor practices, including the gradual adoption of *pelaq dau* in cacao production, but *daleh* is sustained because of the stability of harvesting practices (Takata & Inoue, 2017). While the *pelaq dau* and *daleh* work systems may have changed in recent times, the fundamental concept of reciprocal labor remains intact. The most notable change was the name modification to meet the requirements of the local state program. However, rejuvenating the concept of *pelaq dau* among the youth through a diverse range of individual and collective endeavors has the potential to significantly reduce reliance on paid work.

Meanwhile, *hudoq* as an intangible common, both as a *hudoq kawit* sacred ritual and the festival-like *hudoq pekayang*, is based on the Bahau's relationship with the land, a tangible but also "cultural and symbolic resource" (Dahlin & Fredriksson, 2017; Fredriksson, 2019; Robinson et al., 2014). The use of wooden material in the mask, banana leaves in the clothing, hornbill feathers on the head, and rice seeds in rituals are marks of their experience with the natural surroundings. To perform the *Hudoq Kawit* ritual, the Bahau will use even the smallest field, like the insistence in Tering Baru Village. Furthermore, this ritual gives the Bahau a common space in the city, where farming is scarce. Together, through this overall embodiment, the ritual disperses agency, and habitus, shaping human groups and identities through emotional attachments and shared expression (Herrmann-Pillath, 2024). This case gives more evidence to the notion that commoning is dynamically influenced by members' identities, shaping their vision and practice within a social context (Arbell, 2023; Huron, 2018). It is the community that preserves and reiterates the spiritual commons and the shared values where sustenance and well-being are drawn and sets its cultural identity (McWilliam, 2009). The *hudoq* continues to serve as a 'signifier' for shifting cultivation (the 'signified'). And a new significance emerges as the Bahau adjust to change, as in Tering Baru Village, where the need to perform *hudoq kawit* arose and a symbolic field was created to fulfil the customary condition. Meanwhile, the local livelihoods were insufficient to sustain everyday living due to limited land and frequent flooding.

Commoning is an unisolated practice (Sirimorok et al., 2023). Although the local government's main concentration centers on increasing productivity, community members assert their authority to define the common goods, and thus commoning occurs through the decisions they make and their underlying values (Leitheiser et al., 2022). Here, the Bahau people considered having wet rice fields to increase rice production is less important than the once-a-year cycle of shifting cultivation, where the *hudoq* tradition is held as a symbol of a new beginning for the Bahau. In addition, the Bahau delineate the boundaries between income from their fields and those of the village. While income from the private fields is preserved for household use, the government oversees the income from the public village farms that the community can use for public needs. This indicates that at least to date, the Bahau are not facing land insecurity to the extent that is faced by other Indonesian indigenous groups, as happened in Kajang, South Sulawesi (Fisher & Muur, 2019).

In terms of institutional arrangement (Cleaver & de Koning, 2015), there is an evident role of the collective authority of the Bahau customary institution to enforce

the customary rules. Here, to some extent, the Bahau must negotiate to transcend the essentialist 'community' perspective and build 'democratic spaces' for all, including marginalized groups (Agrawal & Gibson, 1999; Shaw, 2014; Sirimorok et al., 2023). This is most evident in the fact that all levels of society are required to obey customary laws, which regulate a monitoring system for social interactions, particularly over protected sources of livelihood such as land, forests, and rivers. Abusive power exerted on swiddeners and their resettlement by the government (Cramb et al., 2009; Fox et al., 2009) might not happen to the Bahau in Mahakam Ulu, at least after the regency achieved their administrative autonomy. So far, for the Bahau communities, their commons are protected by the strong upholding of customary law and institutions. However, commercial plantations, the western-based rule for natural conservation and privatization, and labor expansion due to landscape commodification (Cramb et al., 2009; Fox et al., 2009) present lingering threats for the relatively young Mahakam Ulu regency and its openness to various development models. In the case of Berau District, East Kalimantan, the control over swidden forest governance may fail to protect forest-dependent livelihoods due to the overwhelming expansion of industrial land uses and their associated socio-economic impacts (Thaler & Anandi, 2017). At the same time, the bureaucratic focus of NGOs on proving *adat* for land claims may inadvertently hinder local communities' efforts to protect their land from extractive industries, ultimately benefiting corporate elites at their expense (Toumbourou & Dressler, 2023). Meanwhile, a case from South Sulawesi raised hope in the way the relations between the group and the state proved that commoning may actually be applied to public goods and state programs (Sirimorok et al., 2024).

The Bahau in Mahakam Ulu are one of the indigenous communities that have relative sovereignty over their territory. Here, the leaders are Mahakam Ulu-born and supported by well-educated staff within the government. The implementation of autonomy not only follows the central government's directives but also considers the needs of the Bahau community, especially in the agriculture sector. For a democratic government, it matters whose knowledge, practices, and interests are included and made apparent (Wagenaar & Bartels, 2024). Here, the spirituality of the commoning is significant for creating and keeping the commons, as the people are spiritually dependent on objects, creatures, land, or ecologies as much as they are dependent on other people (Blencowe, 2016). These social institutions, in turn, influence the way the Bahau treat and protect their natural environment. This finding fills the need to value indigenous and local knowledge by embracing diversity in research origins and methods to enhance insights and foster transformative futures for forests and communities as the actual implementations of rules are based on different values (Arts et al., 2024; Moeliono et al., 2023).

Thus, the collective tradition of *nugal* and *nguraang*, *pelaq dau* and *daleh*, *lepo pare* can be seen as arenas for the dissemination of common knowledge about farming and resource management. As biophysical commons, the land, Mahakam River, and its tributaries, the forests, and biodiversity unique to East Kalimantan, have shaped the need for, and therefore the practices of swidden cultivation. *Hudoq kawit* & *hudoq pekayang* provide Bahau people with a common space even in urban areas to rebuild a sense of belonging and as an arena to spread cultural values, their cultural commons. The social commons are built by tribal relations and recognition for customary leaders so that customary rules are prioritized to control social relations and natural resource use inclusively and democratically. See Figure 18.

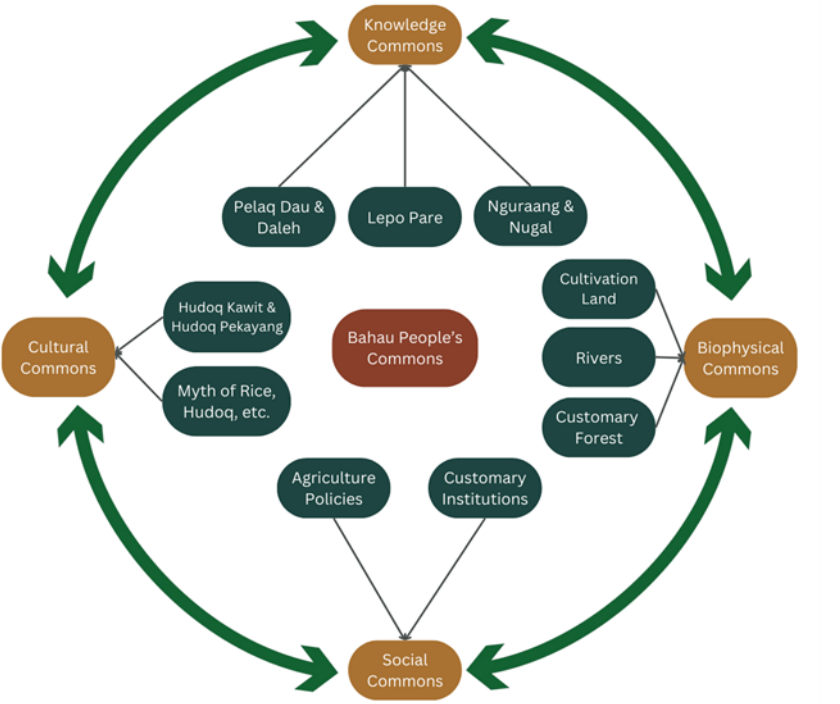

Figure 18. Circular Commoning of the Bahau People

5. CONCLUSION

The Bahau commons exhibit interconnections, forming an interconnected pattern of circular commoning. This is where one site of the commons influences the existence of the others. The Bahau people's commoning works partly due to the connections between rituals and community systems. The rituals, which go beyond mere ceremonies, play a crucial role in strengthening community ties and understanding of the environment. These rituals are closely linked to community systems that manage resources such as land, rivers, and negotiating funding. By upholding democratic principles and customary law, the Bahau maintain their cultural heritage and protect their natural environment. In sum, Bahau commoning practices weave together tradition, rituals, governance, and democratic principles. Their holistic approach not only strengthens their community but also contributes to the preservation of their surroundings. By examining Bahau commoning practices, we can gain valuable insights into indigenous groups worldwide facing similar challenges, to view their commons in a more comprehensive light. Our holistic approach to commoning, which integrates tradition, rituals, and governance, may also offer valuable lessons for social forestry initiatives that involve indigenous groups. By fostering strong community ties and respecting local customs, social forestry programs can better address the challenges faced by indigenous communities and promote sustainable forest management.

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