International Journal of Education, Vocational and Social Science
https://e-journal.citakonsulindo.or.id/index.php/IJEVSS
E-ISSN : 2963 4954
IJEVSS

The Socio-Cultural of the Tiong Bu'u Village Community around the KPHL Unit XII Batu Rook, Indonesia

Awaluddin Aziz[1]
[1]KPHL Unit XII Batu Rook, Indonesia
Aris Pudji Hadi[2]
[2]KPHL Unit XII Batu Rook, Indonesia
Muhammad Furkan[3]
[3]KPHL Unit XII Batu Rook, Indonesia
Karmilasanti[4]
[4]National Research and Innovation Agency, Indonesia
Nurfadhilah Yusuf[5]
[5]Hasanuddin University, Indonesia

Corresponding Author: awaluddinaziz96@gmail.com

Abstract

The Forest Management Unit (KPH) plays a crucial role in the context of national forestry development. The Protected Forest Management Unit (KPHL) Unit XII Batu Rook will be encouraged to become operational. The activity of Social and Cultural Inventory in and around the KPHL area aims to obtain data and information used for long-term, medium-term, and short-term strategic planning and policy formulation. This research utilizes both qualitative and quantitative methods. The collected data includes village history, settlements and land use, community systems and structures, community interactions with forest areas, threats and pressures, as well as opportunities and community support for forest existence. Based on the inventory results, the majority of Tiong Bu'u Village is forest area. The indigenous people of Tiong Bu'u Village have a high dependence on the forest, not only for farming but also for both wood and non-wood forest products for their personal needs and cultural traditions. The community in Tiong Bu'u Village lacks hierarchical and social structures that bind community life. The majority of the population possesses local wisdom in utilizing, conserving, and sustaining the forest. The high dependence of the community on the forest indicates to KPHL Unit XII Batu Rook the importance of engaging the community in forest management through partnership schemes or towards the formation of

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

community empowerment blocs.

Keywords: Forest Management Unit, Social Culture, Forest Area

INTRODUCTION

Law No. 41 of 1999 concerning Forestry mandates the management of forest resources through four main efforts: 1) forest planning, 2) forest management, 3) research and development, education and training, as well as extension services, and 4) supervision and control in order to achieve sustainable forest management and maintain the balance of production, ecological aspects, and provide maximum benefits for community welfare. To ensure efficient and sustainable forest management, the establishment of forest management areas at the provincial, district/city, and management unit levels is mandated, which is subsequently referred to as Forest Management Units (KPH).

As on-site forest managers, Forest Management Units (KPH) play a crucial role in the national forestry development context. The mandate and strategic role have positioned KPH development as one of the national priorities, which was subsequently translated into the Ministry of Forestry's Strategic Plan (Renstra) for the period 2010-2014. The primary performance indicator is the issuance of the Minister of Forestry's Decree regarding the designation of KPH areas throughout Indonesia and the operation of 120 KPHs, covering 20% of the designated KPH areas (Dephut, 2010).

The Protected Forest Management Unit (KPHL) Unit XII Batu Rook, located in Mahakam Ulu Regency, East Kalimantan Province, is one of those being encouraged to become operational as a Forest Management Unit (KPH). Based on this initiative, Biogeophysical Inventory and Social-Cultural Inventory activities are conducted within and around the area of the Protected Forest Management Unit (KPHL) Unit XII Batu Rook to facilitate Forest Land Management and KPH Management Plan. In this context, the Social-Cultural Inventory within and around the forest area aims to assess the social-cultural conditions and potentials of the community within and around the Forest Management Unit (KPH) area as the basis for drafting the Long-Term Forest Management Plan (RPHJP) of the Protected Forest Management Unit (KPHL) Unit XII Batu Rook for the next 10 years.

The objective of the Social-Cultural Inventory activity within and around the area of the Protected Forest Management Unit (KPHL) Unit XII Batu Rook is to obtain data and information

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

used as a basis for the planning and formulation of long-term, medium-term, and short-term strategic policies. This is in accordance with the level and depth of field inventory conducted, specifically regarding social-cultural information about the community within and around the area of the Protected Forest Management Unit (KPHL) Unit XII Batu Rook.

METHODOLOGY

The types of data collected in the social-cultural inventory activity consist of Primary data and Secondary data. According to Riadi (2016), Primary data refers to information obtained directly through interviews with key informants and respondents, as well as through questionnaire completion. On the other hand, Secondary data refers to information obtained from literature available at government institutions at the district/city, sub-district, and village levels, as well as from private entities. The collected data in this study includes village history, settlements, and land use in the village area (before and after the designation of forest areas), as well as data on community systems and structures. Additionally, field inspections (forest area/KPH) are necessary to observe the condition of the forest around settlements and to assess the extent/nature of interaction between the community and the forest area, as well as to identify potential threats/pressures on the forest area and opportunities such as community support for the existence of the forest area.

Data collection employs both qualitative and quantitative methods. Qualitative method is descriptive and analytical in nature, aimed at describing and elaborating on events, phenomena, and social situations under study (Waruwu, 2023). Qualitative method in this research is used to obtain data on perceptions and to explore land ownership history, community empowerment policies, community interactions with forest resources, area conflicts, and utilization of forest resources by both the community and the government. To obtain such data, four data collection techniques are utilized: literature review, observation, interviews, and focused group discussions. The data collection method for interviews employs two techniques: firstly, the open interview technique conducted in village offices, eateries, places of worship, village offices, transportation terminals, or markets with unfocused topics. This open interview technique is used for data comparison or cross-checking with key informants. Secondly, in-depth interviews are conducted with key informants such as village heads, customary leaders, and community figures represented by teachers, religious leaders, or youth figures using interview guidelines, with a total of 5 (five) informants in each sampled village.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

Additionally, this research also utilizes Quantitative method. Quantitative method is a research approach that utilizes numerical data and exact science to address research hypotheses (Waruwu, 2023). In this research, quantitative method is employed to determine the level of community welfare based on livelihood sources and the economic potential of the community. Quantitative method is also utilized to ascertain the level of community dependence on forest areas. Data collection is conducted using questionnaires with respondents as the source of information. The number of respondents in each sampled village is 10 (Ten) individuals. Respondent selection is based on considerations of the types of livelihoods in the community, such as plantation farmers, field farmers, rice farmers, livestock breeders, traders, fishermen, employees, and civil servants/military/police personnel. The gathered data and information are then tabulated and analyzed using both qualitative and quantitative methods.

RESULTS AND DISCUSSION

The History of Tiong Bu'u Village

The history of Tiong Bu'u Village began with the gathering of various ethnic groups, including the Semukung, Hangai, and Auva ethnicities. They then established the village for the first time, named Noha Buan Olli. The inhabitants of Tiong Bu'u belong to the Aoheng tribe, known for their tough character akin to ironwood. This trait led the Bahau Busang tribe to nickname them "Penihing" due to the resilient nature of the Aoheng people.

During the Dutch colonial era, Tiong Bu'u Village, located on the banks of the Mahakam River, had its center of activities in the area of Akeng Noha. During that time, inter-tribal warfare (known as "ngayau" in the Aoheng language, meaning guerrilla warfare) frequently occurred. At one point, Akeng Noha Village was attacked by the Iban (Hivan) tribe from Sarawak, East Malaysia. They raided the Mahakam River by crossing the upper borders of the Mahakam River. In retaliation, the Aoheng tribe conducted a ngayau against the Hivan tribe. The onslaught from the Hivan tribe, known as "Sorong Hivan" in the Aoheng language, involved a massive invasion. However, upon arriving at Akeng Noha Village, the Hivan attackers found the village deserted as the residents had already been informed of their impending arrival. Under the leadership of the tribal chief, the people of Akeng Noha Village fled to the upstream area of the Seratah River, a tributary of the Mahakam River.

According to local folklore, some villagers of Akeng Noha Village were abandoned due to one of them being blind and another being lame. They were hidden in rolled-up mats. Finding the

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

village deserted, the Hivan invaders set fire to Akeng Noha Village, along with the two individuals hidden in the mats. The village was completely consumed by fire. After some time of seeking refuge and feeling safe from the Hivan invaders, the inhabitants of Akeng Noha returned to an area along the Mahakam River, known as Tiong Bu'u, located approximately +1 kilometer from the former Akeng Noha Village downstream to the east. The name of Akeng Noha Village was then changed to Tiong Bu'u Village. However, due to the frequent occurrences of ngayau in the village, Tiong Bu'u Village was relocated upstream to the mouth of the Ka'ai River, about 1.5 kilometers west, adjacent to the former Akeng Noha Village that was previously burned by the Hivan invaders. At that time, the village's name was changed again to Long Ka'ai Village.

In the village of Long Ka'ai, the tradition of headhunting and tribal warfare still occurs frequently. To anticipate enemy attacks, the Dutch government built a defensive fortress in Long Ka'ai. The village lived in a peaceful and tranquil condition, reaching its peak under the leadership of Bayo Nalau. After Bayo Nalau's passing, Long Ka'ai was led by Sufii Nyangun Aran and subsequently relocated to the former site of the village of Tiong Bu'u, eastward downstream. The village's name was then changed to Tiong Bu'u, reflecting its new location.

In 1973, under the leadership of Chief Paulus Baing Kaya and Sufii Nyangun Aran, the village of Tiong Bu'u was relocated once again to the former site of the village of Akeng Noha, which had been burned down by the sorong Hivan, approximately one kilometer westward upstream. The village's name was changed back to Akeng Noha. In 1981, Akeng Noha was relocated again to be closer to the Long Apari Subdistrict Capital under the leadership of Chief Paulus Baing Kaya. The village's name was officially confirmed as Tiong Bu'u by that chief and remains so until now.

Settlements and Land Use

Tiong Bu'u is one of the villages located in Long Apari Subdistrict, Mahakam Ulu District, East Kalimantan, with a population of 632 individuals, consisting of 318 males and 314 females, distributed across 171 Family Cards (KK) divided into 3 (three) Neighborhood Associations (RT). The indicative area of the village is approximately 42,481 hectares. The majority of the village's territory is forested, harboring forestry potential that can be developed into productive forests. Geographically, Tiong Bu'u is situated in a mountainous/hilly area, with 25 mountains/hills within its territory. The average elevation of the village is over 100 meters above sea level, with an average slope of 30%. The mountains in the Mahakam Ulu region are formed due to geological

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

events such as folding and earth insertions, resulting in their linear alignment parallel to the coastline.



Figure 1. Map of Tiong Bu'u Village Settlements

Overall, the arrangement of Tiong Bu'u Village is quite well-organized, as depicted in Figure 1. It is evident that the residential areas in Tiong Bu'u are scattered, resulting in good access roads to public facilities. Based on the Village Building Function Map of Tiong Bu'u, the distribution of buildings in the village can be considered good. This can be observed from the scattered settlements across various areas of the village, rather than being concentrated in one central point. The residential area of Tiong Bu'u Village covers 50% of the indicative village area, with 10% designated for public facilities and government infrastructure. The settlement pattern of Tiong Bu'u Village tends to lean towards the riverbanks rather than the hilly areas. This is because, besides seeking flatter terrain, the residents also consider the need for clean water as a vital aspect of life and transportation to inter-district villages and the district capital. This is consistent with the findings of Seioanto (2019), which indicate that dispersed settlement patterns are often found in highland areas (mountains) due to the presence of communities seeking habitable areas. The residents establish scattered settlements in search of flat, relatively safe, and morphologically even terrain.

Land use is the manifestation of land coverage in a specific form of land utilization (Mariati, Y., et al., 2022). According to G. Kertasapoetra (1985), customary rights are rights held by a legal entity (village, tribe), where the members of the community (legal entity) have the right to control the land, which is regulated by the head of the community (tribal chief/village head concerned).

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

Land use and customary rights in Tiong Bu'u Village can be seen in the table below:

Table 1. Land Use and Customary Rights in Tiong Bu'u Village

Number	Land Use Types	Area (hectares)
A. Land Use		
1.	Settlement	± 21.240
2.	Indicative Village Area	42.481
3.	Rice fields	-
4.	Shifting cultivation (mountain rice)	± 180 – 204
5.	Plantation (perennial crops)	-
6.	Bushes (former cultivation areas)	-
7.	Grassland	-
8.	Community forest/People's Plantation Forest	-
9.	Forest	
10.	Swamp	-
11.	Others	-
B. Tanah Adat/Hak Ulayat		
1.	Existence of customary land	Yes
2.	Extent of customary land	Equal to the indicative area of the village
3.	Are there maps/sketches of the customary territory?	Yes
4.	Is there approval from the Government?	Not yet available
	Total	**-**

Source: Processed data from social and cultural analysis, 2023

Community System and Structure

The community of Tiong Bu'u Village does not have hierarchical and binding social structures in their community life. Local wisdom in social life is only utilized in farming, forest clearing, and various traditional activities in the village. In selecting village leaders (head/village chief), democracy is practiced and adheres to the current governing regulations.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

The governance system in the village adheres to a democratic system, where the village chief/leader is elected every 5 (five) years. The appointment of the village secretary is designated and approved by the district government. The appointment of sub-village heads/sub-neighborhood chiefs is made by the village chief/leader and later confirmed by the Sub-District Head/Village Chief, which is then reported to the District Head. Customary law is mainly applied to activities such as forest clearing for cultivation, seasonal calendars, utilization of forest products, wedding ceremonies, and community dispute resolution.

Social-Economic Conditions of the Community

The utilization of forest products in and around the area of KPHL Unit XII Batu Rook over the past 3 years (Table 2) is still focused on several commodities, including timber, latex, forest fruits, rattan, medicinal plants, wild betel leaf, ant nests, agarwood, game animals, honey, mushrooms, bird nests, and birds. However, the frequency of usage is limited, with only a few types being commonly utilized, such as timber, rattan, agarwood, and game animals. Others are becoming increasingly rare, with some no longer being used at all. This is attributed to the fact that the utilization of forest products by the community of Tiong Bu'u Village heavily considers the ease of access to the locations where these forest products can be obtained.

The forest product, particularly timber, remains widely utilized by the community of Tiong Bu'u Village, with almost all households using wood as a construction material for their homes. The types of wood commonly used include red meranti, kapur, and ironwood (ulin). Non-Timber Forest Products (NTFPs) such as rattan, honey, agarwood, bird nests, medicinal plants, wild betel leaf, ant nests, mushrooms, and others have experienced a decline in their population in the forest. However, rattan, medicinal plants, and agarwood are still frequently utilized in significant quantities, particularly because rattan is used as a material for crafts, and natural agarwood found in the forest is still commonly harvested for sale. Moreover, there is still a considerable availability of medicinal plants, reflecting the community's continued reliance on forest plants for herbal/natural medicine. The utilization of medicinal plants is maintained due to the lack of healthcare facilities or medical professionals in every village. As a result, the availability of chemical drugs or generic medicines has not been able to fully meet the healthcare needs of the Tiong Bu'u community, prompting them to rely on herbal medicine sourced from the forest.

Table 2. Utilization of Forest Products in Tiong Bu'u Village

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

Forest Product Type	Yes (people)	No (people)	Frequency	Volume	Self-Use/Sale/Other Needs Remarks	Description
Wood	15	0	Frequent	2 – 10 m^3 /household	Used for personal use (building/repairing houses)	Meranti merah, Kapur dan Ulin
Latex	3	12	Rare	Few	Used for boat putty	Damar mata kucing
Bark	-	-	-	-	-	-
Fruits	15	0	Every fruit season	2 sacks	Eaten personally, if abundant some are sold	Durian, Langsat, Rambutan, Lai, Cempedak, dan Ihau
Rotan	5	10	Frequent	Maximum of 10 meters	Used personally and for other purposes, with more for sale	Rotan species; Segah, Jahab, Pulud Merah dan Putih
Medicinal Plants	5	10	Frequent	A few, for example, 5-10 leaves	Used personally	Traditionally used types (Daun Ulin, Bajakah, Akar Kuning and so on)
Wild Betel Leaf	5	10	Few and rare	5 – 10 leaves of sirih forest	Used personally and some are sold	The ones sold are usually cultivated wild betel leaves
Ant's Nest	3	12	Few and rare	Indeterminate	Used personally and some are sold	Sold because there is demand from buyers
Gaharu	5	10	Frequent	Indeterminate	Sold	There is plenty of agarwood in the forest but to

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

Forest Product Type	Yes (people)	No (people)	Frequency	Volume	Self-Use/Sale/Other Needs Remarks	Description
						extract agarwood with the inoculation to be utilized is very difficult to find
Fauna	4	11	Frequent	maximum 1-3 heads	For personal consumption	Pigs, Pelanduk, Kijang dan Rusa
Honey	3	12	Jarang	1-2 liter	For personal consumption and sale	Forest honey is still abundant, but the community lacks interest in collecting it
Mushrooms	4	11	Sedikit dan jarang	maximuml 20 kg	For sale and personal consumption	Black mushrooms
Bird Nests	5	10	Sedikit dan jarang	Indeterminate	For sale	No special bird's nest places are made; the bird's nests found are natural ones located in caves around the village
Birds	1	14	Jarang dan sedikit	1-2 heads	Kept as a hobby	Burung Enggang
Bamboo	1	14	Jarang dan sedikit	1-2 bamboo	For personal consumption	Not utilized, but left as is
Others (Fish)	2	14	Cukup	1-10	For personal	Patin, Puyu

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

Forest Product Type	Yes (people)	No (people)	Frequency	Volume	Self-Use/Sale/Other Needs Remarks	Description
			tersedia	kg	consumption, if obtained in abundance then sold	

Source: Interviews with Respondents in Tiong Bu'u Village, Year 2023

Meanwhile, according to Table 3, the household welfare of the community has shown varying trends over the years. A significant portion indicates improvement (increase) in welfare, while others report no change (remained the same as the previous year), and some mention a decline in the welfare of the community in recent years. One crucial aspect that should receive government attention is the development of rural communities (both indigenous and migrant populations) in terms of improving farm yields and their marketing, as well as providing training for forest product processing such as weaving and derivative products from rattan, including their marketing. The level of dependency of the community on the distribution of forest resources in the village remains very high (dependency on land).

The level of welfare in the community of Tiong Bu'u varies considerably. The assessment of the household welfare development over the past 3 years indicates that 49.4% reported an improvement compared to the previous year, 73.6% reported no change, 33.8% reported the same decline, and 12.1% reported a worsening situation. These results suggest that the welfare of the community over the past 3 years has not undergone significant changes, as the highest percentage falls under the category of no change (73.6%).

Table 3. Description of Household Welfare in Tiong Bu'u Village

Assessment of Household Welfare Development in the Last 3 Years	Better	Same good	Same bad	Worse
1. Household income	5	5	2	3
2. Quality of staple food	2	10	3	0
3. Quality of side dishes	2	7	6	0
4. Ability to purchase food	0	5	5	5
5. Housing condition	0	12	3	0

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

6. Health condition of household members	4	11	0	0
7. Accessibility to healthcare and family planning services	3	5	5	2
8. Ability to purchase generic medicines	10	5	0	0
9. Ease of enrolling children in elementary school	7	8	0	0
10. Ease of enrolling children in junior high school	5	5	5	0
11. Ease of enrolling children in senior high school	5	5	3	2
12. Ease of enrolling children in higher education institutions	4	2	7	2
13. Sense of security from criminal activities	10	5	0	0

Source: Interviews with Respondents in Tiong Bu'u Village, Year 2023

Institutional, Social, Economic, and Cultural Organizations Influencing the Forest

The presence of social, economic, and cultural institutions within the village of Tiong Bu'u directly and indirectly influences the management and existence of the forest itself. Generally, the greatest challenge in maintaining the presence of the forest lies in the opening of new fields or land by the local community for the establishment of new farms or gardens. However, the community still engages in land clearing through mutual cooperation and considers the capabilities of the community groups themselves.

Table 4. Types of Social and Cultural Activities and Their Frequencies in Tiong Bu'u Village

No	Activities	Frequensi	Number of Residents Involved
1.	Land clearing	Once a year	2 – 10 Households (5 – 60 people)
2.	Land cleaning	Once a year	2 – 10 Households (5 – 60 people)
3.	Single planting activity	Once a year	2 – 6 Households (5 - 30 people)
4.	Weeding activity	Once a year	2 – 3 Households (5 - 10 people)
5.	Harvesting activity	Once a year	2 – 3 Households (5 - 10 people)
6.	Wedding celebrations	Average of 4 times a year	10 – 20 people

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

No	Activities	Frequensi	Number of Residents Involved
7.	Mutual cooperation activities	± 12 times/years	10 – 20 people

Source: Interview results in Tiong Bu'u Village, Year 2023

Land Needs of the Community

From the interview results with respondents, each Head of Household in the village of Tiong Bu'u, whose livelihood is farming, typically owns between 2 to 4 hectares, with a maximum of 5 hectares per household/group. Land surveys are conducted in March-April. Forest clearing takes place from May to August, including cutting, felling, burning, and cleaning, which lasts for approximately 2 to 3 months. Then, planting/seed planting and weeding/cleaning are carried out from September to October. Further weeding/cleaning occurs from November to December, followed by harvest preparation in January. Rice harvesting takes place in February-March. On average, the harvest yields 50-180 cans per year from private fields. Meanwhile, the rice harvest from communal fields (10-hectare program) can reach up to 350 cans. This program has been running for approximately 3 years since 2021. The yield from these rice fields is only sufficient for daily consumption. Most of the community never sells the harvest, and if the harvest is good, they will store it for emergencies during times of scarcity. Below is a table showing the land utilization for farming in the village of Tiong Bu'u.

Table 5. Utilization of forest land for farming in Tiong Bu'u Village

Number	Aspek Pemanfaatan	Description/Area
1.	Number of farmers each year (average over the past 3 years)	± 90 – 102 Households
2.	Number of fields and area of new fields created per year/household	Per household ranges from 1 - 2 ha, averaging 2 ha/household
3.	Average area of new fields per year for the entire village	180 - 204 hectare/years
4.	Average area of fields in primary forests	-
5.	Tools used (axe/machete/chainsaw/etc.)	Cangkul, Kapak, Parang, Linggis, Chainsaw, Grass cutter machine

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

Number	Aspek Pemanfaatan	Description/Area
6.	Main crops planted in the fields	Mountain rice
7.	Estimated yield per hectare/year	180 cans/ha/year
8.	Number of years each field is planted	Maximum 3 planting seasons for mountain rice then interspersed with fruit and timber trees
9.	Are the old fields planted with tree crops?	Yes, fruit and timber/tree crops
10.	Types of tree crops planted	Fruit trees (durian, langsat, rambutan, lai, petai, and cocoa) and timber/tree crops (arao and meranti)
11.	Field rotation (are the old fields replanted?)	Yes, replanted and left for 2 rotations (maximum 3 times)
12.	Estimated current area of old fields	± 800 – 1.200 Hectares

Source: Monograph and social-economic-cultural data processing, year2023

Opportunities/Support for Forest Management

Based on the field inventory results, the majority of the community in the village of Tiong Bu'u shows interest in forestry/agricultural ventures, particularly in cultivating cocoa, alongside their primary activity of rice farming. Currently, there are no other forestry ventures undertaken due to the lack of intensive government assistance. Cocoa has become the community's preferred commodity, with the hope of increasing family income through the sale of cocoa harvests, although its distribution has mainly been through intermediaries in the form of dried cocoa beans. Tiong Bu'u Village is one of the largest cocoa-producing villages in Long Apari District. On average, households in Tiong Bu'u Village own cocoa plantations covering approximately 1 hectare per household, yielding around 20-50 kg/ha of cocoa beans. It is estimated that the total area of cocoa plantations in the village is around 180 hectares.

According to Mr. Baing Kaya, the traditional leader, the history of cocoa cultivation in Tiong Bu'u Village began when he brought cocoa seeds from Malaysia. Initially, cocoa was planted solely for ornamental purposes by the traditional leaders. Some accounts suggest that cocoa seeds were brought from Long Iram Seberang in the form of raw beans, which were then germinated and planted. However, the results were not optimal due to the unclear origin of the seeds. The initial cocoa planting started around 1996 with approximately 5 trees, and by 2010, Farmer Groups were

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

established, comprising 5 groups for plantations, 2 for livestock, and 1 for women farmers. Over time, by the year 2014, one Farmer Group, namely Pesekaten Murip Farmer Group, achieved success, covering a total area of 21 hectares with 21 members. From 2016 to 2020, the program continued, with the Pesekaten Murip Farmer Group receiving assistance in the form of a mini cocoa factory from DKPP (local government fund). However, the factory has not been operational due to funding constraints. In 2019, there was training provided by the village government, but it was not successful, possibly due to lack of enthusiasm among the community, compounded by marketing issues and fluctuating prices.

The residents of Tiong Bu'u started cocoa cultivation out of their own initiative without basic knowledge (without proper care incentives and not using planting distances). Although the Penabulu Foundation has provided cocoa assistance, cocoa is still considered a side activity and has not yet become a primary source of income. Another opportunity besides cocoa development that the village leaders of Tiong Bu'u are hopeful about is the development of environmental services, namely the development of natural tourism potentials such as river rafting, waterfalls, and ancient graves.

Community Dependency on Forest Existence

The village of Tiong Bu'u, in conducting the Social and Cultural Inventory of the community within/around the management area of KPHL Unit XII Batu Rook, predominantly exhibits local wisdom in utilizing, preserving, and sustaining the existence of the forest. In their daily lives, the local political conditions of the community do not directly influence the presence of the forest itself. The people are accustomed to relying on and living in harmony with nature. The community's high dependence on the forest's existence serves as an indicator for KPHL Unit XII Batu Rook to engage the community in forest management within the KPHL Batu Rook management area through partnership schemes with the community or towards the formation of community empowerment blocks located around/within the forest area itself. The local wisdom of the people of Tiong Bu'u in utilizing and preserving the forest is very high. Although there are still shifting cultivation activities, the community still considers security aspects and adheres to the timing of land clearing (seasonal calendar) that has been passed down through generations.

The forms of local community wisdom in the vicinity of the forest area are as follows:

1. Knowledge of the farming system: Farming activities are the main agricultural activities carried out by the community. As a community of farmers, those who have long inhabited the forest

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

area have good knowledge of farming patterns, including estimates of the rainy or dry seasons. This local knowledge will determine the types of activities that the community will engage in throughout the year. During the dry season, community activities are busy with land preparation activities such as land allocation, clearing, and tree felling. Meanwhile, when the dry season transitions to the rainy season, land preparation processes must be completed because planting rice must begin until the harvest season. Land clearing based on the level of ability commonly practiced in Tiong Bu'u Village is through a mutual aid system (5-10 households). Although private fields are still started and worked on by each family member of the respective households, at certain stages, farming activities are obligatory to be done collectively and determined by custom, namely planting and harvesting.

2. Knowledge of the benefits of medicinal plants: As a community residing within the forest area, the local population is undoubtedly knowledgeable about the types of plants that can be utilized to meet their daily needs. This knowledge of plant species is passed down through generations, acquired from their life experiences living alongside the forest. Based on interviews conducted, the utilization of plants by the Tiong Bu'u community is aimed at fulfilling daily food sources, for ritual/customary activities, for medicinal purposes, as building materials, and for earning cash. Some types of medicinal plants are still used by the community for everyday treatment, including pasak bumi and bajakah, or other known varieties with medicinal properties. At times, the people of Tiong Bu'u Village do not have access to chemical medications from health workers, such as from health centers and integrated health posts. Thus, the existence of local knowledge on the use of medicinal plants greatly assists the community in improving their health in a simple manner.
3. Norms and customary rules that are still in effect: The community of Tiong Bu'u Village still upholds the values of customary norms and rules that have been established and agreed upon until now, which are still maintained and serve as guidelines in daily life. Based on observations, the norms and rules that apply in the life of the Tiong Bu'u Village community consist of both written and unwritten rules. The written rules come in the form of Village Regulations, while the unwritten rules comprise customary rules believed in and adhered to by them. These values are derived from ancestors and then passed down orally to the next generation, with their heirs not passively accepting them but able to modify them, adding or subtracting, so that what is called wisdom applies situationally.

CONCLUSION

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

Conclusion of the Social and Cultural Inventory of Tiong Bu'u Village is as follows:

1. Tiong Bu'u Village is one of the villages in the Long Apari District, Mahakam Ulu Regency, East Kalimantan Province, with a long history in its formation process due to inter-tribal conflicts. In 1981, the name Tiong Bu'u Village was established after several changes in name and leadership. The majority of Tiong Bu'u Village's territory consists of forest areas. The settlement pattern of Tiong Bu'u Village residents tends to be located closer to the riverbanks rather than the hilly areas, considering the need for clean water as a means of livelihood and transportation to inter-district villages and the district capital.
2. The people of Tiong Bu'u Village do not have hierarchical and binding social structures in their community life. Local wisdom in social life is only used in farming activities, forest clearing, and various customary activities in the village.
3. The dependency of the Tiong Bu'u Village community on the forest remains high because almost all residents initially opened their fields from secondary dry land forest areas, which will be inherited from generation to generation. Moreover, the community is highly reliant on both wood and non-wood forest products, which they still utilize for personal needs and their cultural customs.
4. Household welfare of the community has mostly reported changes towards improvement (increasing) over the years, with some stating no change (same as the previous year), and others mentioning a decline in recent years. However, the welfare of the community over the past 3 years has not significantly changed, as the highest percentage is in the category of the same (73.6%).
5. There are several opportunities for forest management in the village, such as cocoa commodity. Tiong Bu'u Village is one of the largest cocoa-producing villages in the Long Apari District. On average, residents of Tiong Bu'u Village have cocoa gardens covering an area of 1 ha/household, producing approximately 20-50 kg/Ha of cocoa beans. It is estimated that the total area is around 180 ha. Another opportunity besides cocoa development is the development of environmental services, such as the potential for ecotourism, including whitewater rafting, waterfalls, and ancient graves.
6. The majority of the community possesses local wisdom in utilizing, preserving, and maintaining the existence of the forest. In daily life, local political conditions do not directly influence the existence of the forest itself. The community's high dependence on the forest's existence serves as an indicator for the KPHL Unit XII Batu Rook to encourage community forest

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

management within the Batu Rook FMU through partnership schemes with the community or by directing towards the formation of community empowerment blocks located around or within the forest area itself. The village residents still utilize and uphold local wisdom, such as knowledge of the farming system, knowledge of the benefits of medicinal plants, as well as norms and customary rules that are still strongly maintained.

RECOMMENDATIONS

1. There is a need for socialization by relevant agencies to the selected village communities (ground level) regarding the presence of the KPHL Unit XII Batu Rook, specifically about its role, function, and benefits, so that the community can feel the benefits of the presence of the Batu Rook FMU in the surrounding area.
2. It is necessary to improve assistance to communities around the forest, especially on how to utilize forest land properly, involving communities around the forest in forest area utilization schemes to improve the standard of living of the people
3. The KPHL Unit XII Batu Rook needs to conduct more in-depth Social and Cultural Inventory activities around the FMU area, both for villages that have been inventoried and those that have not, so that future work programs or activity plans can be beneficial to the community.
4. There is a need to increase the availability of adequate data and information related to the KPHL Unit XII Batu Rook with complete, fast, and transparent information to the public. This includes gathering aspirations from the community regarding future forest management with the aim of maintaining forest sustainability.
5. Enhancing the active role of the community in forest management to improve community welfare and forest sustainability.
6. There is a need for innovation from local government and/or the KPHL Unit XII Batu Rook to rebuild community interest in developing businesses in the forestry sector such as cocoa, coffee, and other forestry crops, as well as assisting communities in increasing the productivity of cocoa or coffee that has been planted so that these businesses can be developed and become the main source of income for communities around the forest area.
7. With the establishment of the KPHL Unit XII Batu Rook, it is expected to provide direct benefits to the community, especially in improving the standard of living of the people in various sectors such as the economy, health, and services.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

8. There is a need for an inventory of the forest area and the status of forest areas around Tiong Bu'u Village in the last 3 years, along with information on the extent and condition of farming, whether there have been significant changes in terms of quantity and area with the increase in the population or number of households.

REFERENCES

Analysis of the Human Development Index of Mahakam Ulu Regency in 2022. West Kutai District Central Statistics Agency. Sendawar 2022.

Edi Riadi. 2011. Statistical Research Analysis Manual And IBM SPSS. Yogyakarta.

G. Kertasapoetra., R. G Kartasapoetra., AG. Kartasapoetra., A. Setiady. 1985. Land Law, Assurance of the Basic Agrarian Law for Successful Land Utilization. Jakarta: Bina aksara.

Mahakam Ulu in Figures 2023. West Kutai District Central Statistics Agency. Sendawar. February 2023.

Mariati, Y., Widiati, W.Y and Halik, G. 2022. Analysis of Land Use Change in the Tanggul Watershed Using Remote Sensing. [Journal of Civil and Environmental Engineering]. Vol.6, No.2, 2022, pp.153-162.

Minister of Forestry Decree, SK.674/Menhut-II/2011 concerning the Determination of the Protected Forest Management Unit (KPHL) and the Production Forest Management Unit (KPHP) in East Kalimantan Province, December. 2011.

Director General of Forestry and Environmental Planning Regulation, P.1/PKTL/IPSDH/PLA.1/1/2017 concerning Technical Guidelines for Forest Inventory and Socio-Cultural Communities in Protected Forest Management Units (KPHL) and Production Forest Management Units (KPHP). January. 2017.

Changes to the Medium-Term Development Plan of Mahakam Ulu Regency 2016-2021. Mahakam Ulu Government. Ujoh Bilang 2018.

Determination of the Final Draft of the Work Plan of Mahakam Ulu Local Government. Final Draft of the RKPD of Mahakam Ulu Regency for the Year 2022. Ujoh Bilang, July 26, 2021.

Profile of Tiong Bu'u Village, Long Apari Subdistrict, Mahakam Ulu Regency, 2017.

Setianto, H and Murjainah. 2019. Relationship of Settlement Distribution Patterns with Groundwater Quality in Plaju Subdistrict, Palembang City. [Geography Journal]. Vol. 16 (1) (2019). pp. 60-71.

Waruwu, M. 2023. Educational Research Approach: Qualitative Research Method, Quantitative

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License

Research Method, and Mixed Method Research Method. [Tambusai Education Journal]. Volume 7 Number 1 Year 2023. Pages 2896-2910.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-Share Alike 4.0 International License