



Opportunity and challenge of traditional conservation development for Dayak community people in Central Kalimantan, Indonesia

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Abstract

This study aims to map the conservation efforts according to indigenous peoples and assess the extent of the opportunities and challenges of indigenous peoples' conservation development in customary forests in Kubung village of Lamandau district of Central Kalimantan province in support of conservation of natural and forest resources. The expected results of the research conducted can provide benefits and also support the form of information required in the implementation of Forestry of Central Kalimantan can be realized.

The division of Dayak Torment Kudangan Village is divided into two areas that can be managed for agriculture, plantation, hunting and searching for food/ medicine, etc., there is also protected space and cannot be disturbed at all. This protected area is a traditional conservation area according to the Tomuk Dayak community, which is: *Gopung, kekalai Batu, Bukit Kerunduhan, Hulu Ampai or Ampai Penghulu Bukit and Sungai Hulu Pangindang*. These traditional conservation areas are identical to regions that are difficult to access, have magical values or are considered haunted also have traditional functions/ benefits related to culture, economy, ecology for the local community.

Opportunities and challenges related to the existence of protected areas are more influenced by factors both internally and externally, which makes the presence of strengths and weaknesses for the sustainability of protected areas as well as opportunities and challenges that require awareness, especially people in Kubung village to be able to manage the factors in order to provide a positive benefit for the sustainability of protected areas, natural resources also for the community.

Keywords: forest, conservation, traditional, Central Kalimantan

1. Introduction

Traditional efforts by communities to defend natural resources and forests rarely receive the attention and appreciation from outsiders, including from the government as conservation action agents. This is because sometimes conservation and forestry activists are trapped in the status of the area as well as the definition of conservation itself ^[1]. It is, therefore, necessary to undertake various efforts to identify and describe what actions of indigenous peoples or traditional societies to safeguard and conserve their forestry resources that are hereditary for sustainability and benefit both ecologically, economically and socially. It is essential to conduct an in-depth study of the traditional practices of communities in the management of natural and forest resources. This provides an opportunity for positive efforts in conserving and maintaining ecological stability in indigenous peoples, in this case in the Dayak Tomunt customary community in Lamandau district of Central Kalimantan.

This study aims to map the conservation efforts according to indigenous peoples and assess the extent of the opportunities and challenges of indigenous peoples' conservation development in customary forests in Kubung village of Lamandau district of Central Kalimantan province in support of conservation of natural resources and forests.

The expected outcome of the research is to provide benefits and also support the form of information needed to realize the implementation of Forestry of Central Kalimantan.

Indigenous peoples are a group of people who live together in one region and have a relationship of attachment as one descendant. Forests, land, rivers, and mountains have their affection to them. Forests are not just as an ecosystem where plants can be used for the benefit of humans, but the wood is a symbol of self-esteem ^[2].

The division of forest areas also forms part of forest management by indigenous peoples. The division of this area has various functions, such as areas devoted to agricultural activities, hunting areas and forbidden areas and so on depending on the local wisdom of each indigenous community ^[3]. These areas are used by their functions, and the agricultural regions should be used only for agricultural activities, and so are hunting areas. Forbidden areas are usually not to be disturbed due to the existence of historical sites within the forest area. But other functions of this area as well as conservation areas, keeping the springs or slope areas to avoid landslides in the rainy season.

2. Materials and methods

This research was conducted in villages in rural Kubung Lamandau District Central Kalimantan province.

This study uses survey method that the research took a sample of the population and using questionnaires as the principal means of collecting data ^[4]. The samples in this study based on the number of samples in the field is by using purposive sampling (determination society deliberately, with the goal of

some respondents who were vital informants, both community leaders, traditional leaders, and village officials are also several other informants were deemed necessary as well as rural communities including women.

The research data will be collected differentiated based on source data required, namely:

- Observation, this stage is a data collection activities undertaken by direct observation in the field, so it can be described in a factual, accurate and detailed on the state of the ground, human business as well as the context in which the activities were.
- Interviews and FGDs (*focus group* discussion), a data collection activities conducted by posing questions to respondents to some issues according to the indicators to be achieved from this study. The number of respondents is not following the public response present. Also, simultaneously FGD is implemented to identify the opportunities and challenges of communities in natural resource management and to be awake and sustainable forests.
- Study the documentation, is the primary activity, due to the collection of the results of research that has been done already widely available at the same study site. It is crucial to obtain the data written through books, pictures, photographs or the like to support the data collected through observation and questionnaires.

Data analysis technique used is the technique of descriptive data analysis in the form of a picture can be explained from the answers that respondents, then also associated with secondary data from the literature that could be the socio-cultural background of society, socio-economic, compiled from reports that there are relevant to this study.

3. Results & Discussion

3.1 Traditional knowledge in forest management and the land of Dayak Tomunt

Forest presence has a considerable influence on the Dayak

Tomunt as the forest is a source of food and livelihood. The main livelihood of the Dayak Tomunt community is with farming in the surrounding forest. Besides, using forests is vital in the daily life of the community, among others: as a place to look for rattan and saddle wood, a source of meat from hunting, a place for searching honey, wood forest used as a building material, looking for bark which is usually still often found as material for making custom clothing, custom hats as well as pharmaceuticals and others.

Most of the people's needs are supplied from forests, including the spiritual need for traditional Dayak religions known as *Kaharingan*. Forests have magical and religious significance for the adherents of this belief as ceremonies and prayers of hope (celebration) is submitted to the forces of nature (forest). There is a particular shaman who is responsible for giving the respect and prepare offerings in the woods, called *Pebantan*. It is believed that respect for nature will result in the balance of the Dayak Tomunt community life cosmos ^[5].

In practice in everyday life, the mention of the level of the forest can be distinguished according to the age of the wood called *rimbo* (forest). There are two Rimbo's namely *Rimbo Baling Bakab* and *Rimbo Ransapan*.

1. *Baling Rimbo Bakab* is still virgin forest, very nice and had never been disturbed for hundreds of years old which is equal to primary forest. Characteristics of vegetation are large logs, and rare bamboo trees are found.
2. *Rimbo Ransapan* is the forest that has already been cut / former cultivated, but the wood grows again, also known as *Babas*. There are two babas namely: one with lots of wood in the size of gong ± 50cm in diameter after abandoned for at least three years of farming and young Babas which is a new land completed for cultivation.

Here are the restrictions on traditional indigenous life and death related to the protection and preservation of individual species categorized as the implementation or application of the conservation activities of the native version of Dayak Tomunt.

Table 1: Prohibition on the indigenous and traditional living dead

Prohibition on life customary	The ban on dead customary
1) Ban for people who are pregnant not to eat turtles, bears, and pangolins. Prospective mothers and fathers are not allowed to kill an animal of any kind, much less to hunt because it is forbidden, fear will be hit to the child at birth.	2) Must not seek shoots even though it's a vegetable since people breathed last until the time of burial. So if from the dead to be buried is 14 days, so as long those days are forbidden / not allowed to take bamboo shoots in the forest
3) During pregnancy and to give birth mother and husband also should not eat chicken and even eggs, let alone to eat, should not be holding any. To remove these restrictions, after the birth family has to implement a custom called <i>Purih</i> whose function is to remove these restrictions.	4) Should not be working in the fields when anyone dies, especially on days when the man had died, and the day in which the dead were buried. That goes for those who know the information but for those not know, and already in the field, it should be fine
5) In the process of farming, especially in the open field, there should not be any animals who are victims or killed or injured in any method or stages of agriculture because it is believed to bring bad luck. So, Dayak Tomunt's extreme caution happen when working in their fields, both in the process of cutting, to burn even during harvest.	6) For a family who died, one of the clan should not eat deer, elk, jackfruit, guava and coconut (coconut milk to a vegetable stir-fry). If there is a violation, that anyone eats reindeer (for example), then the dead bodies will cause a stench.

Dayak Tomunt divide areas into two namely areas that are maintained and managed for community life support such as farming areas, hunting and honey gathering, vineyards fruit, rubber plantations and community gardens. Next is the area

that should not / cannot be cultivated whereby in these areas typically are considered to have magical powers and physically is steep to be cultivated due to a lot of rocks, big trees, lots of bamboo, roots hanging grow so close that it is

difficult to pass. This area is also characterized by the presence of wild animals often trusted by the people as the incarnation of supernatural beings/ ghost/demon guarding at the venue.

Here is a region protected in the view of the indigenous community.

1. **Gupung:** is natural forest and never bypassed by society. In Kubung there are many Gopung that features can be seen from various woods that has already hundred years old and no trace of cutting/logging found. Besides this Gopung region should not be managed both for farming and others because they can get unlucky because it was believed that the spirit is guarding this place.
2. **Kekalai:** stone is a stone shaped hill and surrounded by thick bushes making humans and animals are too hard to pass through. This stone gives a sign for the farming season by displaying specific colors. When it's time to burn the glow of the fire is presented and the harvest season is marked with yellow color. Sometimes there are signs in the form of gong sounds which indicates that the next harvest will be successful (sounds rhythm to the music of the death). However, if the drum sounds (sounds of the wedding) it signifies the harvest will be less enjoyable.
3. **Kerunduhan hill:** a lot of fruit trees such as durian and rambutan are found here. In the bottom of the cliff are found bones of animals that had accumulated so that the public believes that there is a nest of leopard in the middle of the cliffs in the Kerunduhan hill. On the hill, there is also a stone called *Tanggobenyawai* namely the stones where plants like bonsai (ornamentals) grow with three kinds of flowers (three colors namely yellow, red and purple). The plant is flowering coincidentally with paddy season. This plant only grows in places of *Tanggobenyawai* only and are not found in other areas, also could not survive if cultivated outside these locations.
4. **Ampai or Bukit Hulu Penghuluan Ampai:** in this area, there is a tree called *Tampang Ngampai* in the form of large timber as a place for harvesting the honey tree). The wood trunk diameter is of more than 10m2. This tree can accommodate up to 200 bee nests and even thousands. Harvesting is divided on the base of the limb direction. If the branch points to Kubung, then the nest's honey belongs to Kubung's people.
5. **Upper River Pangidang:** in this area, there is land called the land *pangidangan ruruh* (landslide) - a flat land which now becomes a lake. The area cannot be used for farming, but there are many growing rattan and other plants that can be utilized by people for the needs of the community.

The region is believed can expose to bad luck in the form of pain or even to death and for the healing to be in a particular way ritualized at locations interrupted by the ill person. The population of indigenous peoples is different in each region. The land where they live and the natural resources they rely on are inseparable because they relate to identity and culture. For indigenous peoples, conservation and biodiversity are concepts not isolated or fragmented but integrated into life. They see protected areas as an integral part, part of landscapes where they live in (i.e., holy places, barn for games, etc.).

Strong adat institutions escort the existence of the area that is considered protected in the village of Kubung wherein the community of Dayak Tomunt is known *Mantir Puluhan* - the chosen person who helped the head of the village and served as messenger having a high place and position in the community *Mantir Puluhan* has shaman assistant designated according to each ability to namely:

1. Shaman *Sesilih* can tell stories (the indigenous language) and led the prayer.
2. Shaman *Pebantan* is the prayer leader to the religion of *Kaharingan* and those who know the rituals of indigenous and terms including offerings if carrying out a ceremony.
3. The healer for a treatment ceremony consists of *Pulin* which is a healing ceremony by summoning visible spirits in helping the healing of a sick person, an ordinary shaman who understands herbal / traditional medicines and *dukun beranak* (Village Midwife).

While *mantir* task now is handling all matters relating to the community and uphold indigenous settlement to the case of mild to complex, to be able to make wise decisions, leading the wedding custom events.

Local management and local knowledge of the community that is familiar with the ecosystem in the context of the welfare of forest resources become the most efficient and sustainable development procedure. Local interest is how they conserve natural resources for future generations. In many cases, indigenous peoples restrict harvesting and hunting through customary law, and it is capable of establishing reserves and protecting lands in usual territories ^[6].

3.2 Opportunities and Challenges of Traditional Villages Conservation

The internal factors may be described as follows:

1. As a force, people still hold their customs and culture in managing and utilizing natural resources. Up to now the local people's knowledge and belief in the existence of taboos and prohibitions in specific areas and the consequences if violations are still held firmly from generation to generation. This is a significant factor in determining the sustainability and sustainability of the protected areas or their traditional conservation areas.
2. Secure commitment from village government and community leaders to safeguard and protect the region from undesirable extractive efforts. Society can be its strength in stemming the efforts of others who want to dredge the natural resources of Kubung village. This commitment was reinforced by the efforts of the village government to build alliances with advocacy assistance with several NGOs such as Walhi Central Kalimantan, including mapping the customs territory of Kubung village as a claim to their village territory with borders so as not to be abused by outsiders.
3. Increase in the population will have consequences of more land demand for swidden areas. This becomes a dilemma to avoid protected areas being the target or target of expansion of fields and gardens. Currently, this has not happened yet, but there will be a possibility that could happen in the future, and this should have started to be considered as something that could weaken the community in protecting their traditional conservation area.

The external factor could be an opportunity and a threat to the sustainability of the management of indigenous territories of Dayak Tomunt community in Kubung.

1. Status of forest area based on Spatial Plan of Lamandau District (that Kubung village area is included in Protected Forest Area status. The state of this area could be an opportunity to strengthen the protection of the traditional conservation area of Kubung village community.
2. The regent's decree assigned to Delang District as a center for tourism development in Lamandau Regency also affected the existence of protected areas in Kubung village. This condition can be an opportunity and even a threat to the sustainability of traditional conservation areas in the village of Kubung. Opportunities because when there is a policy from the local government for a region that is focused on tourism, then other licensing opportunities such as oil palm or mine expansion can be out of the domestic government policy and of course this will have a positive impact on the sustainability of customary territory in Kubung village. However, if tourism with less management takes into account, the effects of tourism activities can be a threat to protected areas. If there is no right management, there will be negative impacts of tourism activities on natural resources, intellectual property and traditional wisdom. Also social and cultural effects will occur due to the influx of outsiders (migrants/tourists) to the Kubung village area.
3. The inter-provincial boundary between West Kalimantan and Central Kalimantan (including Kubung village area) remains unclear and may have an impact on outside efforts to exploit the Kubung village area.

So far there is no particular management where only the annual rituals are performed by the shaman *Pebantan* by preparing offerings at specific points in protected areas. Accessibility in areas far from residential areas and tending to be closer to the border of West Kalimantan makes it challenging to monitor and supervise the traditional conservation areas. This leads to hunting, exploitation of natural resources, the harvesting of non-timber forest products by outsiders, and there has been an attempt to open the area from companies that will build Industrial Plantation Forest in the border area.

The limited knowledge of advocacy to defend customary territorial claims is still so weak that the villagers of Kubung still need support and assistance from institutions outside village institutions to be confident in defending their usual territories. With the knowledge and traditional wisdom of the community for the management of their region, it should still be supported by an understanding of the law and the existing legislation system in Indonesia to strengthen them.

4. Conclusions

From the discussion on this research, it can be drawn some conclusions as follows:

1. Natural resources and forests are a critical area for the Dayak Tomunt customary community in Kubung village, Delang district of Lamandau regency because the people's life is still highly dependent on natural resources and forest. Not only as the fulfillment of the needs of daily life, natural resources and forests also have religious and

mystical values that bind the community through their customs and culture. Traditional knowledge is reflected on how the Dayak Tomunt traditional society treats forests and land in their daily lives, from how to extract and process natural products, prohibitions or restrictions to kill/consume certain species at certain moments until the rituals are performed with activities of respect for nature.

2. The division of Dayak Tomunt is divided into two areas that can be managed for agriculture, plantation, hunting and searching for food/medicine etc. and the protected area cannot be disturbed at all. This protected area is a traditional conservation area according to the Tomuk Dayak community, which is: *Gopung, Kekalai Rock, Kerunduhan Hill, Hulu Ampai* or *Bukit Penghuluan Ampai*, and *Hulu Sungai Pangindang*. These traditional conservation areas are identical to regions that are difficult to access, have magical values or are considered haunted also have traditional functions/benefits related to culture, economy, ecology for the local community.
3. In the management of protected areas there is no unique institution, but to manage the magical value and minimize the possibility of adverse things that occur due to the disturbance in the protected area is usually held ritual by *Dukun Pebantan* the traditional leaders of *Kaharingan* religion who understand about items considered to be mystical.
4. Opportunities and challenges associated with the existence of protected areas are more influenced by factors both internally and externally. This makes the strengths and weaknesses for the sustainability of the protected areas as well as opportunities and challenges that require awareness, especially the people in Kubung village to be able to manage these factors to provide positive benefits for the sustainability of protected areas, natural resources also for the community.

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