

Local Wisdom of Sentani and Dayak Deyah Communities in Creating Food Security

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Abstract: *This study discusses two groups of indigenous people who use local wisdom to maintain customary land, namely Dayak Deyah indigenous people in Gunung Riut Village, Halong District, Tabalong Regency, South Kalimantan, and Customary Communities around Lake Sentani, Jayapura district. Both of these traditional groups have difference staple foods. Rice is the food of the Dayak Deyah indigenous group, while the Indigenous Group around Lake Sentani is Sago. Most of the Dayak Deyah people live in farming with a system of shifting cultivation or land which is a local wisdom for generations. The method used is qualitative to gather information about local wisdom issues closely related to natural resource management and the environment. This method is based on data or information in the form of detailed description of the situation, event, actor and observed behaviour. Data collected through observation, in-depth interviews, and observation. Observations were made to collect data related to work activities in both Indigenous Communities. The finding of this research is that the local wisdom of indigenous people in creating food security is increasingly eroded by the times. Various government policies prioritize development outcomes rather than maintaining local wisdom of indigenous peoples. Preservation efforts can occur because of the support and cooperation with various parties including the community, the state government and regional governments. These factors are economic factors and cultural factors.*

Keywords: Local wisdoms, Food Security, Dayak Deyah, Sentani Customary Communities

1. Introduction

Customary territories contain agrarian resources in the form of land and a variety of natural resources, an inseparable part of the lives of indigenous peoples. However, these customary territories are now controlled by the government in the form of land use rights, building rights, forest concessions and so on. Indigenous peoples are conquered by a licensing system that eliminates basic rights, and causes poverty and food insecurity. Although generally the community is still live remote area, they have the rights to be recognized as citizens and protected by the government for their existence and freedom to live in their traditional values.

The existence and role of indigenous peoples in sustainable natural resource management systems has not received attention and a place in the national development planning and utilization system. Koentjaraningrat, et al. (1993) and Safa'at, R (2013) note that accelerated development has caused many indigenous groups to lose access to natural resources such as forests, coastal areas, and oceans and land which weakens the institutions and laws of local indigenous peoples. The reason is that indigenous peoples are not involved in decision making.

The problems faced by indigenous peoples regions in Indonesia are different. Form one region to others. However Safa'at, R (2013) identifies the existence of fundamental similarities amongst them as minority population groups, that is, life experiences of being oppressed, exploited and excluded for such a long time, by other population groups that are majority and dominant. These indigenous peoples are becoming a minority not merely because of their small population but are mainly derived from their condition as a population group that has a specific ideology, socio-cultural system, and socio-political system that is specific and locally specific, both built on the similarity of living areas together

from generation to generation (territorial basis) or for the common ancestry (blood relations) or a combination of the two.

The indigenous people's leans their live on Ulayat land is a communal land that be registered in the name of one or several parties only. Syahyuti (2006) mentioned that the nature of land ownership in indigenous peoples at least has at least four main characteristics according to customary law, namely the absence of absolute ownership, tenure that is inclusive, prohibition to sell and buy land (even for land that has been controlled by the land private), and more respect for humans and their work than land. These four characteristics are interrelated, which is based on the basic paradigm that actually land is a unique resource unlike other economic resources. Because the amount is limited, the land must be used fairly, and must be able to provide prosperity for all people on earth.

In the last decade the term food sovereignty is frequently appears in Indonesia. However, the term food sovereignty itself is often exchanged, even misinterpreted with the term food security which is conceptually different. In addition to being sovereign in determining food policy, food sovereignty also emphasizes the prioritization of domestic production by optimally utilizing local resources and wisdom. Sulis, S (2012) states that this reminds us that food is one of the basic problems of national life, so that poor food security may impact on economic-political, justice, and human rights issues. Availability, affordability, equity, and food security are indeed dimensions of food security. Food sovereignty covers a much broader aspect than food security. The aspects of democracy, participation, the right to determine, and the right to food trade are important aspects of food sovereignty, including the availability, affordability, equity, and food security. While Clay, E (2002) notes that basically, food security is a phenomenon related to individuals. The main focus is the nutritional status of each household member, and the risk of

adequate status is not achieved. Useful definition is that food security exists when everyone, at all times, has physical, social and economic access to adequate, safe and nutritious food that meets their food needs and food preferences for an active and healthy life. Household food security is the application of this concept to the family level, with individuals in the household as the focus of attention.

Meanwhile, the Declaration of Nyéléni, the first global forum on food sovereignty, Mali, 2007 stated "Food sovereignty is the right of people to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and they are right to define their own food and agriculture systems. It puts the aspirations and needs of those who produce, distribute and consume food at the heart of food systems and policies rather than the demands of markets and corporations".

Food sovereignty is a movement that grew from below, from farmers, fishermen, indigenous peoples and farm workers who were most affected by global hunger and poverty. Food sovereignty is more than just having enough food to meet physical needs. This confirms that people must reclaim their power in the food system by rebuilding relations between people and land, and between food providers and those who eat. First framed by the La Via Campesina international peasant movement at the World Food Summit in 1996, food sovereignty is rooted in the ongoing global struggle for control of food, land, water and livelihoods.

This study discusses two groups of indigenous people who use local wisdom to maintain customary land, namely Dayak Deyah indigenous people in Gunung Riut Village, Halong District, Tabalong Regency, South Kalimantan, and Customary Communities in the Lake Sentani range, Jayapura district. Both of these traditional groups have differences in staple foods. Rice is the staple food of the Dayak Deyah indigenous group, while the Indigenous Group around is Sago. Most of the Dayak Deyah people live in farming with a system of shifting cultivation or land which is a local wisdom for generations.

Papuans, especially around Lake Sentani, depend on Sago. They finance the living needs of the Sago Forest. Hijjang, P; Ismail, A; Marhadi, A; Abdi K. Frank, Fredrik Sokoy, F and Idris, U (2018) The results showed that the lake is the source of life for them, so they protect the lake by utilizing natural resources with traditional rituals. They are made to consecrate the place in the context of ongoing maintenance and management. The indigenous Sentani people still have a conservative culture in the management and use of natural resources. *First* they have a range zone made for humans and not humans (ancestors) *Second*, there is human meaning for ancestors in nature. Suang wood (*Xanthostemon sp.*) is used as a pillar for the stage, they consider to be a human incarnation. Therefore, the harvest ceremony begins with asking permission from wood dwellers so that wood is easier to cut. After logging, the loggers ask that the creature that lives in the wood out of the log so that lighter wood is brought. *Third*, while itself is a community of fishermen and sago gatherers who do not depend on the garden (the garden as an alternative) food provider. *Fourth*, they actively participate in protecting conservation areas because they are

seen as sacred areas. Fifth, the collection of timber and sago forest products is only limited to the necessities of life. For example, only wood with a small diameter and as much as one house needs, whereas for sago only matured sago can be harvested.

2. Methods

The method used is qualitative to collect information about local wisdom issues closely related to the management of natural resources and the environment. Management of shifting plantations among Dayak Deyah indigenous people in Gunung Riut Village, Halong District, Tabalong Regency, South Kalimantan. It is compared to Sago forest management in Yoboi and Kwadeware Sentani, Jayapura district.

This method is based on data or information in the form of detailed description of the situation, event, actor and observed behaviour. Data collected through observation, in-depth interviews, and observation. Observations were made to collect data related to work activities in both Indigenous Communities. This observation was made by settling down and staying for some time in Gunung Riut Village and Around Lake Sentani. In-depth interviews were conducted to gather information from informants from the Indigenous Community and the people involved in the event.

Direct interviews were conducted to collect perceptions of village level stakeholders. However, the choice of person for each interview is determined using the 'snowball method'. In this method, the interview partner is then chosen by considering recommendations from the former interview partner. Research data and information collected were then analysed descriptively and qualitatively.

3. Results and Discussion

Every community or tribe has different eating habits. Suhardjo. (1989) states that the need for food is not the only impetus to overcome hunger, in addition there are physiological needs, such as the fulfilment of nutrition also affects. Each stratum or social group of society has its own pattern in obtaining, using, and evaluating food that is a characteristic of their respective strata or social group. This causes increasingly diverse consumption of staple foods.

They develop various staple foods such as sago, corn, cassava, and sweet potatoes. Various types of plants that grow and are available throughout the year in various land conditions and seasons. Since long time ago the villagers have traditionally been accustomed to utilizing these diverse food sources as a basis for meeting basic daily food needs as well as snacks. Witoro (2003) notes that food diversity also contains diversity of nutrients, even among food plants that have medicinal properties. This local food system is the mainstay to ensure the fulfilment of food needs and overcome hunger or food crisis. The various potentials contained in the local food system are very likely to be able to overcome food problems at the community level. Community-based food systems have an important role in ensuring the fulfilment of food needs. Community-based food systems offer people an opportunity where they can increase their income, livelihoods, and capacity to produce,

and fundamentally a field road where they can guarantee their food security in the future.

Local wisdom is a form of cultural heritage that has been developing for a long time. Local wisdom is born from the thoughts and values that a society believes in nature and its environment. In local wisdom contained the values, norms, belief systems, and ideas of the local community. Therefore local wisdom in each region is different. It is closely related to the management of natural resources and the environment. Society has its own perspective on nature and its environment. They develop their own ways to maintain the balance of nature and the environment in order to meet their needs. Management of natural resources and the environment through the development of local wisdom has its own advantages. In addition to maintaining the balance of natural resources and the environment, the culture of the local community can be preserved. But over time the position of local wisdom has increasingly been marginalized. Recently, local wisdom experiences challenges, including rapid technological development followed by excessive adoption of technology without maintaining local knowledge.

Excessive use of technology can damage the balance of nature and the environment. Many people do not realize the true essence of local wisdom and leave the habits that have been built for a long time by their ancestors. Activities to reduce local wisdom to the next generation to manage natural resources and the environment have faded and even abandoned. However, the local wisdom of the indigenous people has been eroded by the presence of mining companies that carry out activities around Gunung Riut village, Halong Tabalong regency.

The Dayak Deyah people still use their local wisdom in farming activities with shifting cultivation. They use the jungle that is most suitable for shifting cultivation in opening a land for farming (*behuma*). Shifting cultivation method involve clearing of plot of land by cutting off trees and burning tem. It helps to eliminate weeds, insect and other germs effecting the soil. Shifting cultivation allows for farming areas which dense vegetatis, low soil nutrients content, uncontrollable pest. They are not arbitrarily cut off trees the Dayak Deyah hold a ceremony to ask permission to nature and also to the ancestors led by a Temenggung or the Head of Customs from the village so that their efforts are successful and blessed.

They grow rice alternately using a 3-4 year rotation to return to the first land. How to plant rice According to the rice planted with a hole in the ground, directly planted (sowed a few grains) No need to be watered, and after being planted just leave the land uncovered and that will close the planting hole is with rain water, then planting is done when the rainy season around the month September to December.

When the rain season comes the fields were planted and waited until the harvest time, they will return to the field they first opened field after 10-20 years. In this system, forests are cut down and burned in the dry season to be cleansed and fertilized which are then intended for cultivation activities. Cleared land is then planted for one

year or more with rice or other crops during the rainy season and then left for a long period to allow natural succession to produce secondary forest.

For indigenous Papuans, sago has many functions. Economically, sago starch is their main food and a source of income. Sago is also commonly used in traditional ceremonies. Besides starch, other parts of sago have many functions. Stems can make walls, floors or become firewood. Leaves can be woven into roofs, walls and goods storage containers. Its function is that for daily life the community makes the existence of the sago village attached to the village especially the adapt village.

Lake Sentani people never plant sago trees, because they grow well in the sago forests. For the people of Sentani sago is not only a main food source for people in Papua, but sago is their main source of income. Many communities around Sentani Lake depend on Sago for their lives. Through sago, Papuans, especially around Lake Sentani, pay their living needs from the Sago Forest. As Uncle Bob said, a resident of Kampung Yoboi:

"We live from Sago. For us, sago is not just a food source. Sago is used in various traditional ceremonies. From Sago I send my children to school until they become a Bachelor. Many residents of Kampung Yoboi become Indonesian Armed Force, Police and Government employees. They are schools whose money is from the sale of sago."

Although Sago is valuable economically and culturally, Sentani people do not maintain sago forests as intensively as people do farming. They maintain the sustainability of the sago forest by harvesting sago trees that are ready to be logged. Another case is experienced by the indigenous Dayak Deyah community in Gunung Riut Village. They initially began to live in several agriculture fields, such as planting several types of plants, vegetables including perennials. They also raise several farm animals. Outside of these activities, when there are no routine activities, they use forest products to meet the needs of their families. Other activities are hunting, fishing and others.

During the planting period rice does not need to be treated or flowed with water as is the case with the pattern of planting in rice field like in Java, rice fields are visited only every 2-3 weeks even up to 1-2 months and to clean if there is grass that disturbs the process of rice grow. Agricultural land does not have to be flat and levelled and tidied like in Java, but agricultural land here can be in the form of steep mountain slopes, in the middle of the forest that has been cleared (cut down) mostly rubber forest, and near bushes, does not require neatly arranged irrigation, only relying on rain water, rice even though only at the beginning and at the end is exposed to rain water can still grow and harvest well, but rice cannot be harvested only if it is planted until the harvest is not exposed to water at all (long enough dry seasons etc.), so here it is very easy to caring for rice plants. The types of rice planted are rice / seed from generation to generation with the name:

- 1) Mayas (smallest and fragrantseed),
- 2) Tempukung,
- 3) Gedagai,

- 4) Jala Ulin,
- 5) Sundu,
- 6) Kelapa (larger sheeds)
- 7) Sticky rice Tite Aroking and Jalur Briwik

This tribe has run the sustainability of agriculture because they allow land restoration. From this it can be seen that the Dayak teach for their children and grandchildren are not greedy, preserving nature and the sustainability of agriculture. The Dayaks are so familiar with nature that their lives are almost inseparable from nature and they also uphold the values of their ancestors' beliefs.

There are almost no pest Pests, because the Dayak tribe is still thick with spiritual things in the form of rituals to start planting events, according to the informants to keep the rice fields from being disturbed by pests, according to the informants also often happens as in Java (rats, birds, etc.) still exist but they only eat outside of the area of rice / paddy fields, for example in addition to planting rice farmers also plant other crops besides rice such as fruits, vegetables, these are disturbed and eaten by pests such as birds, broccoli, and the like, while the land / land for planting rice is never fertilized at all, fertilizer relies on the rest of the burning.

The Sentani people apparently believe that the future of sago as a local food is largely determined by the local community and the government. More clearly Local Communities as Determinants of Sago's Future, Sago Traditions and Local Wisdom, Community-Based Sago Policy, Management and Development of Sago. The ritual of eating sago aims at a sense of brotherhood because the Papuan community used to depend heavily on sago plants, especially swamp areas as its main food. Sago crops that are suitable for harvest are usually around ten to 15 years.

One sago tree can produce 8-10 25 kg sacks. Each household takes 1-2 sacks and the rest is usually sold to the market at a price of around 150-250 thousand rupiah each sack. However, the selling price of raw sago and rice is not too far away. The selling price of raw sago or wet sago which was used as an ingredient made papeda sold for ID\$ 200 thousand in a 15 kg sack that measures the weight of his own sag could reach 40 kg. While rice, he said, in 15 kg sacks, the price is ID\$ 120 thousand. Sago, according to Odoafi Yanto, processed sago plants have been spread nationally; this can be seen and interpreted in the symbols that exist in sago flour packaging in the form of images or buildings such as temples, etc.

An Odoafi (Big man) is obliged to save more sago for the needs - needs of his citizens who lack food in the future, Odoafi sago is obtained from the garden of an Odoafi which is owned for generations. Sago is not only consumed by the community but also for traditional ceremonies that require sago as one of the conditions. One of the requirements to be an Odoafi is to have a sago garden whose extent has been traditionally determined.

Gratitude in the form of ritual or commonly called the sago caterpillar party is not only carried out after the harvest of the sago caterpillar but also carried out before the harvest.

Before harvest some of the designated people see a sago tree that is ready to be harvested. If sago cannot be used as flour then it is put to mold and as a place for sago worms.

In the traditional Sentani community there is a slogan that cut 1 sago tree then plant 10 trees, this means that the preservation of sago trees has existed since ancient times by their ancestors. The attention of the government has not been maximized to sustain the sago plant / forest preservation; this can be seen from the many native sago lands, especially around Sentani Lake, which have become several settlements. The relationship with the current conditions regarding the preservation of Sago as the main food based on local wisdom for the younger generation, according to Odoafi Bernard, has been pursued early on with the introduction of insights on the origin of early life with sago consumption. but along with the development of time, it is rare for native sons if they have gone out to seek knowledge and gain new insights to go back to his hometown to preserve the Sago custom, but according to Bernard Odoafi that the elderly, are not reluctant to keep instilling their ancestral values in existence sago and its philosophy in the area to the younger generation.

In addition to technological developments, the challenge faced by local wisdom is increasing population growth. The existence of high food needs requires people to increase their production to meet those needs, so as to modernize agriculture. This requires the community to abandon the local wisdom they have that is no longer able to support people's lives and change their mind set to exploit nature. Therefore, efforts are needed to preserve local wisdom in order to manage natural resources and the environment.

Efforts that can be made are through increasing the ability of the community to filter various incoming technologies that maintain the balance of nature and the environment and adapt to the local wisdom of the community. Then it can be done by changing the mind set of society from a mechanical mind set to a holistic mind set to not exploit nature. Then by enforcing the community to be aware of the importance of managing natural resources and the environment owned by each region and preserving local wisdom that actually has its own uniqueness and contains the values of beliefs and norms that are believed by a community. This is where the role of young people, who will take over the baton in preserving various indigenous wisdoms. For this reason, there are two things that must be done in the agrarian reform program. The first is to reorganize the legal politics of the land system in Indonesia. Various land policies that are no longer in accordance with current conditions must be revoked and replaced with policies that are relevant to the current situation. This new law must refer to article 33 of the 1945 Constitution.

4. Conclusion

Local wisdom of the indigenous people in creating food security has been increasingly eroded by the times. Various government policies prioritize development outcomes rather than maintaining local wisdom of indigenous peoples. Preservation efforts can occur because of the support and cooperation with various parties including the community,

the state government and regional governments. These factors are economic factors and cultural factors. Sago is a source of income for farmers, but they also maintain traditions or customs to preserve their local wisdom. That tradition is an ancestral inheritance for them as children and grandchildren. To maintain the local wisdom of indigenous peoples in terms of food security, the need for laws and regulations that can provide protection for the indigenous wisdom of local people in supporting their activities in creating food security as well as real efforts by the central and regional governments in maintaining the local wisdom of indigenous peoples.

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