

Lands, Indigenous Community and the Future of Sustainable Community Development: Dayak Community in Ensaid Panjang, Sintang, West Kalimantan

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Abstract : The objective of this paper is to analyze the relationship between forest and indigenous community in Kalimantan Island, and how local institution was build to maintain the harmonious relationship between human and environment in Dayak community. This paper will describing some important external factor which are contribute to the changes of socio-cultural aspect of recent Dayak community in Ensaid Panjang. Result of the study shows that external aspects significantly influence the living system of indigenous community in Ensaid Panjang, and it is potently disturb the survival of the indigenous community to the future. The central government policy contribute significantly to the indigenous system. Forest disturbance and changes in long house (*Rumah Betang*) culture and tradition has been influence the community status. Transmigration programs has introduced new culture to the indigenous community in Ensaid Panjang, while central government in land ownership has decrease the access of indigenous community to forest resources. The introduction of recent oil palm plantation has been identified contributes to the decrease of forest.

Keywords: *Indigenous Community, Deforestation, Forest Conservation, Land Policy*

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I. INTRODUCTION

Recently attention to the sustainability of indigenous and local community throughout the world has been flourished as an impact of serious problems faced indigenous community. Scholars point out that the sustainability of indigenous community is at critical point. There are numerous reasons has been proposed as a basic argument for indigenous and local community throughout the worlds. Human right perhaps is the fundamental issues arising from the intensive discussion about the sustainability of the indigenous community [1] [2].

The protection of indigenous community throughout the worlds is important for future scientific research development in numerous fields, including agriculture, medical, environmental management and other field. Scholar point out that indigenous community rich in term of traditional knowledge [3]. Many of them has been documented and developed to support modern science and technology. Numerous medical plant and health community techniques has been discovered from indigenous community. These lead to the development of new drug and health treatment. Indigenous community throughout the world also has excellent methodology to uses natural resources sustainably. It has been known that spiritual aspect of indigenous community ensure the sustainable uses of natural resources [4] [5]. This is become the key for the sustainable living system of many indigenous community in tropical forest

Dayak community in Ensaid Panjang, Sintang- West Kalimantan, represent one of the common community situation dilemma in modern era, especially when modern technology and political stress exist in the community. As stated by numerous authors, many indigenous community in modern nation and state has been marginalized by the governmental policy. The issues of the sustainability of indigenous community was reduced by assimilation, integration and modernization. Scholars point out that there are some misunderstanding on the development of indigenous community. Indigenous community has been viewed as a target community for development (i.e. modernization). Many indigenous system has been changed and new system has been

introduced. Importantly, there are some systematic separation between indigenous community with their natural habitat [6] [7]. The natural habitat often claimed by central government as a nation territory, and indigenous community should be followed the state role [8]. This paper aims to describes the relationship between forest and indigenous community in Kalimantan Island, and how local institution was build to maintain the harmonious relationship between human and environment in Dayak community. secondly, we describe some important external factor which are contribute to the changes of socio-cultural aspect of recent Dayak community in Ensaid Panjang.

II. METHODS

Field survey was done in Ensaid Panjang village, Sintang. Administratively, Ansaid Panjang belongs to Kelam Permai sub-district, Sintang district, West Kalimantan Province. The village covers an area of 4905.75 hectares. The distance from capital city of Sintang is 58 km and distance from Pontianak is 478 km.

Field observation was done in Ensaid Panjang through the participative observations. Author joint to daily activity of local community. An interviews with some villagers were implemented to get a basic information regarding issues of externalities among local community in Ensaid Panjang. In this research, the issues discussed during the interview were includes impact of transmigration, governmental policy in forest management, issues on oil palm plantation in EnsaidPpanjang area. The interviews methods was done through the Dayak's culture, including getting permission before conducting interviews. Data was recorded and stored in recorder. A secondary data related to the objectives of the study was generated from Sintang regency office. Additional data was obtained from literature survey such as internet sources and research report. Data were analyzed descriptively.

III. RESULT AND DISCUSSION

Forest and indigenous community in Kalimantan Island

Kalimantan island has been known for its huge bio-resources which are play an important role in global and local development. The abundance resources of Kalimantan Island has been become the interested factors for numerous people to have access to Kalimantan's resources. Kalimantan is not the lands without people. The island is home to numerous indigenous people who has property right to the land and resources which are distributed in all part of the island [9].

Dayak people is one of the indigenous community in Kalimantan Islands. Previously, it is believed that Dayak distribute in the coastal area of Kalimantan Island. The next introduction of Malay community in Kalimantan push Dayak move to the hearth of Kalimantan Island. Recently, Dayak community live and distribute mostly in the centre of the island. Few community found in coastal area as a indigenous community territory. Recent coastal area of Kalimantan Island is dominated by Malay, Javanese, Bugis, Madurese and other area of Indonesia [10].

There are some theory regarding the origins of Dayak in Kalimantan, but many scholars agree that Dayak origins from Yunan, China. Dayak believed as one the first human group lives in Kalimantan Island. Recent classification of Dayak community was difficult to completed because there are numerous aspect regarding the similarity and dissimilarity among Dayak community. There are however, a big community of Dayak sub-group, namely Iban, Ngaju, Apo Kayan, Punan, Ot Danum [11] [12]. Many scholar reported that Dayak live in harmony with their environment through indigenous knowledge of the community. Indigenous knowledge has been recognized contribute to the sustainability of resources and therefore ensure the sustainability of Dayak community in the heart of Kalimantan islands. Indigenous knowledge has been implemented in numerous activity in the daily life of Dayak, ranging from hunting, collecting natural resources in tropical forest to the agriculture practices. Each group of Dayak has its claimed land called *tanah adat*, in which people can access the land and its resources [13].

Forest is important resources for Dayak [9] [13] [14], including Dayak community in Ensaid Panjang. forest not only important in socio-economic aspect of community in Ensaid Panjang. Forest also important in the sustainability of culture, tradition and belief system. The local people use plant for numerous aspect, including medical, food and building materials. Forest contain wood, bamboo, rattan, medical plant, and natural dyes for traditional woven fabric. Wood and numerous material to build long house (*rumah betang*) also extracted from forest. Forest also provides livestock for community. Land, river and forest is not only important aspect for the daily life of Dayak community. It is also the identity of Dayak community in Kalimantan. These landscape component is not only important for economical purposes, but also contribute role as part for spiritual, cultural and social aspect of the Dayak's daily life.

Local institution and community services

Dayak community socio-culturally has developed system to organize community as a part of the strategy and adaptation to ensure and enhance the sustainability of the community. In many case, the indigenous community organization is not similar with the modern state organizations. The indigenous community often claimed a particular area as the community territory, in which member of the clan or group can access the resources into territory. In Indonesia, the land territory of local community which are organized following the local regulation was called *tanah adat* or *hutan adat*. Traditional activity such as hunting, collecting food, farming and other activity permitted in the area following the indigenous roles called *hukum adat*. Land territory and its border of the group often informed from generation to next generation by oral tradition [14].

The traditional power system in Dayak community was set up based on traditional and local regulation called *adat*. The power authority was hold by the older which are considered by the community as person with long experiences, has high spiritual experiences, has knowledge and has special ability. Many community relationship's role and procedure that are related to ownership and social relationship was controlled by *adat* law. *Adat* law is the important guidance for community [15]. Head of *adat* is the persons who has authority in solving problem. Any decision which are concluded was considered using legal and ritual aspect. The legal aspect include the punishment, while the rituals includes the recovery of human relationship. the prohibition aspect of the daily lives, the *taboo* or *mali*, was implemented under the role of head of long house (*kepala rumah tangga betang* or *puun rumah*). The community health aspect was the responsibility of *semanang*, the shamans with specific ability to communicate with the supernatural aspect in Dayak belief system.

Long house contribute significantly in Dayak culture. Recently, however, numerous external aspect contribute to the decrease of longhouse culture. Numerous cultural aspects and tradition in long house has been decrease, and some activity has disappears. Some activity has been received less attention, and many practical works and activities was preferred than cultural related activity. Some family member in longhouse has been escape from long house. Miss understanding about long house between young generation of Dayak contribute to the negative perception to live in long house. Living in communal house has been viewed as aspect that limit the freedom.

Recently, numerous external aspect has been identified to important agent of changes in social and ecological aspects. Dayak community in Kalimantan has been experienced rapid social ecological changes caused by external factors. the political and economical aspect seems to be the trigger for the later environmental aspect as a threats to the Dayak community in Kalimantan.

Lands and agrarian reform

Indonesian government plays an important role in the ownership status of lands in Dayak community. The tenurial right of many indigenous community in Indonesia has decrease administratively by the several regulation (ie.: UU no. 5 year 1960 about agrarian principles and regulation and UU no. 5 year 1974 about principles of governance). These regulation instruments become the legal claim of central government to control all land in Indonesian territory. Governmental claim to the indigenous lands lead to the numerous negative impact to the community. It is not only become barrier for community to access resources on the communality lands, but it is also create the social crisis and unequal justice. The implementation of such law becomes important instrument to destroy land ownership and its indigenous knowledge in lands and space management.

The implementation of law influence some basic agricultural activity. Traditionally, for a long time many indigenous community in Kalimantan practicing slash and burn agriculture, in which the ownership of lands has developed by the interaction between lands and human. A particular family who are practicing slash and burn agriculture sustainably continuing their control to the lands. It is become the fundamental principles of slash and burn land area under particular family. There are no legal formal of the lands. The community agreement of the lands was based on the relationship between man and the lands. In such a case, indigenous role which has been accepted by community seems to be able to maintain the harmonious relationship among community in lands ownership. Conflict of the lands ownership was solved by traditional law (*hukum adat*). Socio-culturally, these system able to maintain the stability of land ownership. Scholars point out that slash and burn agriculture which are widely implemented by indigenous community. Slash and burn is the traditional practicing which are claimed as unsustainable agriculture practice. The practice also stated as a factors for forest degradation. In the small levels, however, slash and burn is the sustainable agriculture practices [14] [17].

The community ownership to the land therefore informal rather than formal. It is therefore become the weaknesses of many local community against the establishment and expansion of the private plantation on the lands which are claimed by indigenous community with its traditional land ownership system. In the absent of legal formal status, it is easy for legal claim by central government through the national land regulation (ie.

Indonesian law number no. 5 year 1960 (agrarian principles and regulation) and Indonesian law number 5 year 1974) to occupy indigenous community territory. Further conflict often occurs between local community, investors and government. the long lands and territory conflict, however, disadvantageous for local community[18].

In case of Dayak community, forest claimed by government and implementation of agrarian roles has been identified as crucial aspect in limiting numerous socio-cultural aspect of Dayak in Ensaed Panjang. Principally, this phenomena contribute to the decrease of community organization under longhouse system. In many case, forest as a habitat of Dayak community has been transferred as a state forest [19]. In 2000, through the decree of ministry of forestry and plantation (SK Menhutbun no. 259/kpts-ii 2000 date 23 Augusts 2000), the forest area of Bukit Rentap (750 hectare) was declared as protected forest (*hutan lindung, hutan negara*). By the declaration, traditional access of forest by local community was decreased, and any activity in forest area considered as illegal activity with potential punishment.

Conflict and critic evolved as a respond of the forest management system. A negotiation was made through the introduction of forest village concept. In this concept, there are temporal community right and access to the forest. This status was given by central government to the village organization. In legal aspect, this concept was implemented through the law no. 41 year 1999 about forestry. In fact, however, the implementation was fail and the contribution to the local prosperity was questionable [20].

A long struggle against injustice on land occupation has been promoted and championed by local people group assisted by numerous NGOs. The judicial review by Indonesian constitutional court through the decree of *Mahkamah Konstitusi* (MK) no. 35 year 2012 open new opportunities for the legal formal aspect of *hutan adat* as an integral part of the indigenous community.

Transmigration program

The transmigration program is one of the important program of Indonesian government to distribute people from densely populated area (i.e. Java and Bali Island) to the area with low density of population [21]. Historical reviews found that first transmigration program has initiated by Dutch colonial government in 1905. In this era, people from Java was transferred to Sumatra as one of the accessible island. Literature data shows that approximately 27,000 people were transferred from Java to Sumatra yearly during 1905. The next program, as part of the first president of Indonesia Mr. Soekarno, people from densely populated area from Java and Bali was transferred to Kalimantan and some area in Indonesia with low population density. Kalimantan island is one of the target for population distribution because the island offer opportunities for people redistribution, rich in natural resources and in the perspective of population density many of the area still low [22]. The colonization of non Dayak community in the territory of Dayak has possibility to implement because, according to the Indonesian government law, all of the land area inside Indonesia territory belong to the Indonesian government. There are no land under ownership of particular community (i.e. *tanah adat*).

Recent Ensaed Panjang is the target of past transmigration programs. In the past, there are two periods of Javanese transferred to Ensaed Panjang. First group was comes from Ngawi (East Java), and the latter come from Jember (East Java). In the past, there are 8 spot area of people from Java. In order to provides lands for settlement and agriculture. some patch of forest was cleared at 1981, and land was distributed to the new comer. in 1983, the area beyond long house of Dayak community in Ensaed Panjang was opened as a sites for transmigration program. Some infrastructure was established, including road, house and general social infrastructure. The establishment of new road provides economical benefits for indigenous community, particularly to transfer forest and agricultural product as economic commodity to the nearest town. The new settlement system by establishing independent house was introduces, especially to provides settlement of Javanese people. The important aspect of the transmigration program is re-settlement of indigenous community into new houses which area provided by government through transmigration program. Some member of local community, however, move from long house to independent house.

Impact of the transmigration can be identified from the interaction between Javanese and indigenous community in agricultural aspect. There are transfer technology and seeds introduction to the Dayak community. Rubber was introduced by Javanese to indigenous community. As far, the rubber plantation is one of the main income among family member in Dayak community in Ensaed Panjang. Other impact of transmigration is decreasing tropical forest. Scholars has evaluated the transmigration program in Indonesia, especially in the aspect of social and environmental impact to the destination area. Transmigration in Indonesia is one of the contributor for the forest degradation [21] [23].

Mining

Lands of Kalimantan islands rich in term of mineral and sources of energy. Among the mining activity, gold and coal mining is the common mining activity. Gold mining often operated by local community in small scale mining, while coal mining was operated by big company. Mining potentially and actually contribute to the

environmental degradation [24]. The mercury contamination is often reported as one of the crucial impact of mining activity which are significantly cause human health [25].

Many sites in Kalimantan islands has been identified contain a gold deposit. Gold mining activity increase as a respond of the good price of gold in the market. Mining significantly increase miner income. Scholars state that the economic benefits of gold mining includes miner ability to by motorbike, house, renovation and car. Miner also able to buy television, parabola antenna and many electronic devises which are important to open community remoteness from information aspect [26]. Environmental impact of mining to human health, however, is important. in such a case, mercury often accumulated in the fish body which are consumed by local people. Coal mining recently become main issues in Kalimantan because its activity contributes significantly in local economic and cultural aspect. Coal mining in the perspective of environmental also contribute to the massif degradation of tropical forest ecosystem in Kalimantan island.

As far, there are no mining area in Ensaid Panjang and its surrounding area. There are some basic reason for the absent of mining. It is including poor data on land characteristic, especially in term of gold and coal deposit content. Secondly, Ensaid Panjang and its surrounding area relatively located at the remotes area in Kalimantan, in which it is not allowed for developed infrastructure for mining. There are, however, still potential threats of illegal mining in Ensaid Panjang area. While it is recently less identified, there are still opportunities for mining resources.

Deforestation

Deforestation is crucial issues for the sustainability of indigenous community in Kalimantan island. Scholars point out that tropical forest is home to the Dayak community. For a long time the dependency of Dayak to forest produce the harmonious relationship between human and nature. Deforestation mainly caused by massive logging and clearing forest area to provides space for palm oil cultivation.

There are illegal logging found in Ensaid Panjang, but it is still not in massif disturbance. *Adat* role seems still effective to protect massif forest disturbance. There are some attempt by forest company to exploit forest, but there are community rejection. as far, a strategy protected is proposing the remaining forest as *hutan adat*.

Interaction with Javanese has been changes a tradition a system of farming. In some case, the common work in farming was replaced by economic transactional system. Indigenous community has been accepting the modern technology and green revolution through the introduction of superior seeds, chemical fertilizer, chemical herbicides, insecticides and rodenticides.

Oil palm

Indonesia has ambitious target as a main exporter courtiers in oil palm product. Forest to support Ensaid Panjang community has been under threats of the forest changes to be oil palm plantation. The big company of oil palm factory has been expanding their activity to open new area for plantation, and has been concert forest into plantation in some area. The private company has argumentation that they working the state land. In such a case, central government seems to be passive to control the private palm oil plantation. The informal leader of Dayak argues that it is dangerous for Dayak community sustainability because community can not separated from forest, and it is significantly decrease the cultural aspect of long house. There are also perspective that palm oil plantation provides more benefits than other business. The adat also be identified strong to protect forest degradation. It is especially important because long house mostly depend on the forest. As far, the palm oil plantation can be said fail to support indigenous community prosperity. The existence of oil palm also identified as driven actor for reduction of society cultural cohesion. It is occur because there some group agree with oil palm plantation, but other group disagree with the oil palm plantation [28].

Forest and indigenous community access to forest

Recently, the Dayak community in Ensaid Panjang has been influenced by changes of forest status. Today, Dayak community in Ensaid Panjang should be able to develop the adaptation with modernization and technology. The community should be able to survive from numerous pressures. Pressure has been identified come from governmental policy, forest company, investor and immigrant that are interest to forest resources. recent major changes of the landscape structure in tropical forest in Ensaid Panjang was influenced by external factor.

Recent community in Ensaid Panjang was organized into settle community and there are no more nomadic live. However, the community still has close relationship with forest. Limit of the forest uses, however, related to the regulation of forest management and the forest-village management border in Ensaid Panjang. This lead to the decrease of traditional agricultural practices, particularly slash and burn agriculture. There are also shorten cycle in rotation system in agriculture. In the past, there 7 year for the recovery time of land after crops harvesting. It is ecologically important to recover soil physical and chemical improvement. Recently,

however, there are no times for the recovery. Impact to the soil is significant, soil fertility was decreased [16] [17]. This influence the productivity of crops, and in many cases it is not sufficient to support community in Ensaid Panjang.

Cultivating rubber has been viewed as an important agriculture farming, especially to increase family earning. According to local community, cultivating rubber able to increase economic earning significantly, and it is easy to get money from rubber trading. There are also rubber collector in the villages. The existence of rubber collector is make it sassier in rubber trading. This is lead to the wide rubber plantation in the local orchards. Rubber cultivation is common among Dayak community in Kalimantan and rubber become the principal tree species in Dayak's garden [29]

Indonesian government intensively try to changes slash and burn agricultural practices in Ensaid Panjang through the establishment of wet paddy field. during 2016-2017, there are 70 hectare of lands has cleared to provide paddy field. There are also assistance to the local community to improve farmer capability to cultivate rice following green revolution technological principles. Problems, however, related to the irrigation system and fertilizer distribution to the farmer. As a result, the spirit of local community in Ensaid Panjang to implement intensive rice cultivation decrease, and recently many rice field become abandoned lands,

The phenomena in Ensaid Panjang show that the disturbance of human-nature relationship influence the significant threats to the sustainability of identity, cultural and social aspect of community. It is significantly found in Ensaid Panjang. Form Dayak community perspectives in long house system, farming in upland area with sustainable slash and burn approach is crucial to enhance the sustainability of community. Living in long house is the cultural and social representation of the harmonious living in the worlds. Farming following long house principles and guideline is important to enhance the community sustainability. Changes of the tradition is the crucial aspect to the sustainability of community in Ensaid Panjang.

IV. CONCLUSION

Dayak community in Ensaid Panjang, Sintang, has been influenced by numerous external aspect which area contribute to the future of community. Past central government program to transfer people from densely populated island in Indonesia to Kalimantan has influenced significant socio-cultural changes among indigenous community in Ensaid Panjang. Interaction among new comer and indigenous community has occurred and agricultural technology has transferred. Recent indigenous community in Ensaid Panjang has cultivated rubber intensively, and slash and burn agricultural practices has been reduced. the reduction of slash and burn agriculture also triggered by the government policy in land ownership. In the new forest policy, all of the land belong to the nation and access to the forest has been permitted with specific regulation. These aspect reduce the access of dayak in ensaid panjang to numerous forest resources. Recent oil palm plantation expansion also become the crucial aspect to the forest degradation.

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