

Indigenous Knowledge of Petalangan in Conserving Tesso Nilo National Park, Riau, Indonesia

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Abstract: Environmental conservation based on the Indigenous knowledge (IK) was increasing become the attention of Indonesia in line with the declining quality the environment, especially in the national park area. Tesso Nilo is one the national park conservation areas in Riau Province with an area of 38,576 ha has experienced almost 66.2% depreciation in the period 2004-2013. This study aims to explore the values of Indigenous knowledge from peoples in the region Tesso Nilo Pelalawan, Riau Province. The survey method has been used for all indigenous communities domiciled in 7 villages within the Tesso Nilo National Park. 47 respondents consisting of village head, *perbatinan*, and *tokoh adat* were determined by purposive sampling. Data were collected through *depth interview*, observation, and documentation, then analyzed descriptive-qualitative. There are nine *IK* Petalangan society in TNTN, that is *adat menyusuk kampung*, *adat menyusuk dusun*, *adat Berladang*, *adat rimbo larangan*, *adat rimbo kepungan sialang*, *adat rimbo simpanan*, *adat beramu kayu*, *adat berburu*, and *adat berikan*. It can be concluded that *IK* Petalangan community a strategic value in environmental conservation TNTN. Integration values *IK* Petalangan community into the TNTN environmental conservation micro policy is urgent in the perspective of sustainable development.

Keywords: Conservation, *Indigenous Knowledge*, Petalangan, Tesso Nilo National Park

1. Introduction

Environmental conservation based on the values of local wisdom (indigenous knowledge, IK) progressively become attention of indonesia in line with progressive quality of environment crop area of national, report of Wold Wide Fund[1], wide 10 the last year 2004-2013 have losing of its forest equal to 48.139 ha or it Tesso Nilo owning wide 83.068 ha since extension in year 2009 owning 72.720 ha forest and have experienced of losing of equal to 4.813,9 ha or 5,79% TNTN in this time which still forested remain 24.581 ha.

Community have an important role in management of TNTN. Three tribe group which compose Petalangan, Logas tanah darat, Gunung Sahilan have custom claim to natural resources area. Although their settlement beyond area proposal of Tesso Nilo, but they have interaction direct with this area. Tribe group of existing in environment of TNTN the which claiming each other custom to this area natural resources make TNTN have uncared in meaning less is getting attention in the effort continuation of and custody of environmental habitats. Its effect issue expanding TNTN have at the verge of destruction. though a lot of natural potency able to taking its benefit make importance of human life, especially society exist in this area. have ought to this TNTN taking care of by society area of TNTN because sense of belonging for the sake of have offspring continuation.

All society member have traditional ecological knowledge : old fellow, woman, men, just children only is amount of *IK* had by the individual vary. Age, education, gender, social status, and economic, everyday experience, influence from outside, responsibility and role at home and



community, profession, availability of time, and attitude of kapabilitas intellectual, degree and skill of observation, ability to wander and independence and also operation of natural energy sumber represent a number of factor which very influence IK, Firdaus[2].

Indigenous knowledge (IK) is used at the local level by communities as the basis for decisions pertaining to food security, human and animal health, education, natural resources management, and other vital activities. IK is a key element of the social capital of the poor and constitutes their main asset in their efforts to gain control of their own lives. For these reasons, the potential contribution of IK to locally managed, sustainable and cost-effective survival strategies should be promoted in the development process, Gorjestani [3].

Indigenous peoples are a group of people who have historical support and its existence is not in doubt. According to tombo they come from Johor using a boat, and open the forest in their present settlement. They became *kawula kerajaan Kampar* now better known as Pelalawan. Under the rule of the *Pelalawan Sultan* they have recognized the right to their forest territory *Hutan Tanah Perbatinan Kurang Satu Tiga Puluh*, led by an adat head known as the *batin*. The legal protection rights over customary law and customary land in the Petalangan community have received legitimacy, Tenas E [4].

One of the most important *IK* systems to be explored and developed in the Petalangan community is the traditional unique knowledge of indigenous peoples in the management of the natural environment which in this case is the TNTN area. *IK* is thought to be a very effective model in TNTN conservation, because in *IK* there are local values and wisdom. These values contain the traditional / local knowledge of the Petalangan community since ancient times, especially in preserving the forests, both the flora and fauna and the ecosystems within TNTN. This research aim to for the mengeksplorasi of value - assess indigenous knowledge of roof-gutter society residing in area of TNTN in the effort continuation of TNTN of Pelalawan regency Riau provinsi.

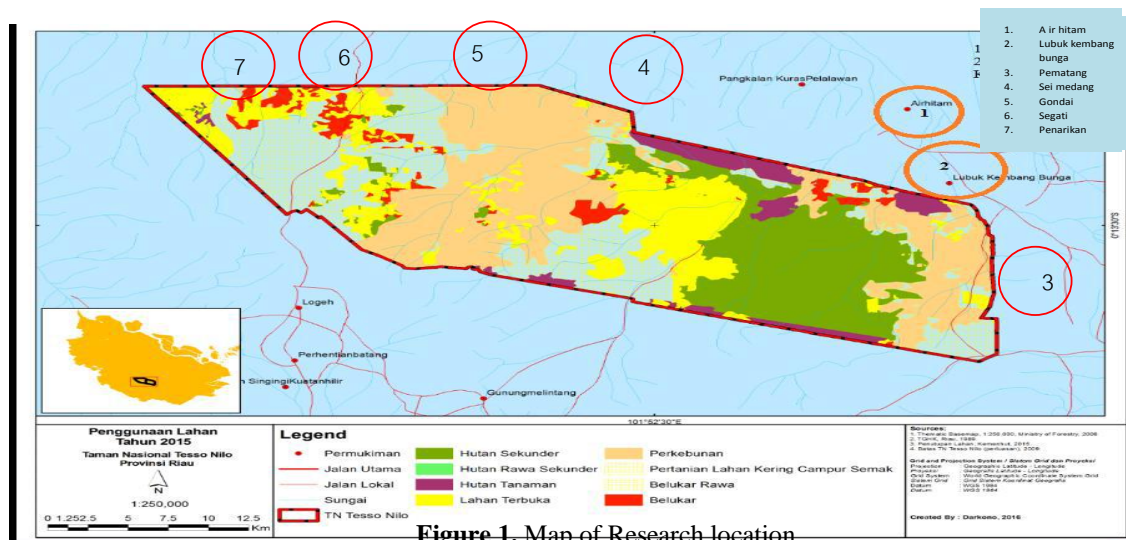


Figure 1. Map of Research location

2. Method

The determination of the respondents from the community is done by *purposive sampling* with the criteria that apatrepresents, that is the indigenous peoples and petalang community related to the utilization of TNTN pelalawan as many as 47 people in 6 pebatinan in 7 village located in TNTN. The method used in this research was survey. Data collecting to interview depth, observation, and documentation. Technique analyse data in by deskriptif-kualitatif.

3. Result.

To roof-gutter Malay society , settlement or countrified have to awaking up the full calculation , because over there they remain to and lengthen clan . Settlement awaking up with basis for custom / cultural and also trust which embracing of , later then completing with prohibition prohibit which going into effect tightly .Old people roof-gutter Malay remind " in menyusuk or membangun kampung , custom holding institute hold highing .(interview : Kijing, Batin Hitam, on 26 September 2015)

Reference above giving points what a tighten and is careful him rule of custom about developing countrified or settlement . Old fellow affirm in *adat menyusuk dusun* wearing institute hold highing , or telling if kampung will founded , regulation and custom become guidance , prohibition and prohibition order becoming hold , general consensus become base .Even in course of development of house , roof-gutter Malay society have to consider very important several things for the shake of taking care of dweller security from a having the character of mystique and also physical . start from ground construction, environmental or neighbour , land ground status and entire/all him have to get statement of custom deliberation and permit (interview elite figure Nantan , Batin hitam , on 26 september 2015)

From place facet there three land category to develop,build house among him its land construction and is rust colored , plain but heel rear , bush land , close to source of water . While land type which must avoiding among him of place bleed and sand of peat land , bird droppings land, oblique land easterly go out to sea and communal ownership land (interview : Bondo , Batin hitam elite figure on 10 december 2015) .

Andya [5] , saying that each tradition have typical kampung characteristic , identify completely cousin kampong, kampung of Sumaresmi have complete karateristik culture which enough strength earn also influencing by social environment from outside .

Doing tradition have land have value see the condition of the land do either in making countrified land, for example hilly not marshland . Besides seeing also from facet apart to deal with other countrified , apart with economic resources (place paint maintenace) , and distance with source of clean water . if condition of the land have up to standard good to making is countrified , hence study also come land.

Further *mengaji asal tanah* determines and ensures the origin of the land whether included in *tanah ulayat pebatinan / pesukuan* that will open the village or included in the land ulayat pebatinan / tribal others. When entering the communal land of other people's *pebatinan* or in a state of dispute with other parties then the land is not feasible and not be used as a village land. If included in the inner self-mortification of the soil, it should also be ascertained whether the forest is indeed intended as a forest land settlement. If you already meet the new requirements performed ritual activities called to *menengok tuah tanah*.

Activity *menengok tuah tanah* which to see situation of land forest in its communication with various being of is including occult natural being . This as according to trust and confidence in place society tradition that there is land owning tuah tanah (luck).

Ritual *sema tanah* to move supernatural beings to other places so that people who own the land avoid the disaster and are expected to bring tuah.Ini make the village Petalangan have the characteristics of care about the surrounding environment with tradition.

Aims to create a dusun dedicated to the plantation garden, as an extension of the village land, by custom used by the institution is upheld or custom and the rules become guidelines. Deliberation by way of discuss about making a village. In make the hamlet has two elements, namely 1.dusun old, 2. young hamlets, hamlets where overgrown with hard trees, hard trees as a fence between the hamlets

one with other hamlets, perennials are also defined as the fence of wildlife, fence so that people do not disturb the habitat of wild animals.

In determining the village to see some provisions, based on interviews with (Mr Kijing, Batin Hitam, on September 26, 2015) it is said that the village is an old hamlet and a young hamlet. The place grows hard trees so there is a fence between one hamlet and Other hamlets, there are old hamlets and young hamlets adar hierarchy of old hamlets and newly formed hamlet, where the village fence is defined with hard plants so that wild animals do not disturb the people of Petalangan and society also does not interfere with zoning wild animals.

Ritual *menilik tanah* to see the type and state of the soil, soil fertility, and plant species, is not justified to make a hamlet in the soil there are plants belonging to the category of abstinence forbidden to be felled, the soil that made the hamlet does not interfere with the survival of wild animals. Selanjutnya ritual Set the ground by measuring the land according to the existing community with the basis of the principle of justice, land pegging considering all the plots of land have the same type and type. The last held the division of land that has been pegged with the customary institutions through ritual or custom tradition of dug the hamlet in the lead by the mind and assisted by the man.

Shifting is done to move on a certain stretch and should not move outside the expanse, shifting cultivation is done with a period of 5 years long enough - 15 years circulation. Land that has been used will be abandoned and overgrown with shrubs to become secondary forest with the condition of hereditary fields In one family group only.

Tradition in *adat berladang*: to get rid of permits to the magical spirits of the land keepers. Make the path, make the boundary or border by cutting down small trees. *Menobas* is an activity of clearing by cutting small woods, cutting roots, Bamboo and lush clumps using a machete or an ax. Buckets are done by knocking down large woods and cutting medium-sized timbers. Midfielders set fire borders around fields to be burned or relocate so that fire does not burn elsewhere. Further Membake is The technique of burning the field, *Memoun* cleans the wood or roots that are not consumed by the fire, Mencacak bonih done the day before menugal done ritual down *mencocak bonih* by using incantation, Besiang do maintenance by making smoke burn woods for animals and animals- Creatures that are believed to exist know that there are people as its owner. Pele effort Stariandat fields experience narrowing of the land and due to the massive logging of TNTN resulting in the pattern of cultivation of cultivated land undergoes a change. It is also revealed by Asysyifa [6], that with the increase of population in the three communities elbow Dayak elephants caused the narrowness of land and declining fertility So that the pattern of cultivation of community farming is changing.

According to adat is a forest / forest that should not be destroyed .Rimba / forest that is passed down from generation to age should not have any activity including the field. Rimba also should not be used for settlements. Rimba maintained indigenous with protected from any threat from any party. Rimba larangan always has a large enough area so that thousands of hectares that are customary rights, have biodiversity. Customary leaders are responsible for the prohibition of the forest.

The extinct customary rights have made the defame of the spirit concern about the prohibition of the ban, this is different from the situation presented by Elfriandi [7], that through the cultural values of indigenous peoples Rumbio enthusiasts provide encouragement and awareness of environmental awareness *imbgho larangan* to every individual who is inside Their communities.

The *adat rimbo kepungan sialang* which is located between some farming land, as forest / *kepungan* where bee nesting in sialang tree, kind of sialang trunk is vine *rimbo kepungan sialang* which is located between some farming land, as forest / *kepungan* where bee nesting in *sialang* tree, kind of *sialang* trunk is vine stem, house of fighting and jack water consisting of child *sialang*, wood *sialang* and *sialang*. *Sialang* trees are kept by cleaning around the trees and doused with diamond water. *Sialang* bosses serve as a water source, accelerate forest conservation, food sources for the community

and potential honey economic places. A sialang can produce 200 honeybee honeycomb with 26 kg honey / beehive. Honey bee taking is done in a traditional way known as *manumbai* custom which has organization of honey bee harvesting procedure done by custom.

Utilization of forest products in TNTN by Petalangan community is very important in the sustainability of farmers' life. This dependence needs to be given a good legal reinforcement. According to Rachmawaty [8] that the functions and benefits of forests are dependent on individuals or groups of people who have an interest in forests.

Adat rimbo simpanan oriented to the management of natural resources. In certain times, the community of Petalangan provides or supplies food stocks in case of rainy season and flood. The public is prohibited from excessive storage of the forest. The management of the savannah forest designated by a single bridegroom may only manage the savings for the community in the pebantin only with the management not being undertaken in a personal way.

According to Fadhilah Amir [9], the forms of local wisdom of the community of molamahu Pulubala Gorontalo can basically be categorized in the form of local agricultural system, local food production techniques, local food production motives, processing patterns and storage of local food sources, and values / ideas (1) the community has food independence, does not depend on a single food commodity, (2) fosters the active participation of the community in the diversification of food sources that are not dependent on rice, (3) the public is open to Change, but not eliminate the tradition itself, (4) maintaining social relations through customary events.

The activities of collecting forest materials for the fulfillment of daily needs, clothing, food and medicines by way of gathering done by individual men and entourage into the forest for a day. Before *kemantan / dukun* is asked to provide clues about good days and good fortune because in concocting they face many dangerous things like tigers and other venomous animals. The customary ritual of mixing wood is done with a diamond ceremony. Concern for wood by likening wood to something sacred.

Conducting activities chasing, stalking and catching and killing the animals that exist in the jungle to make a meat or fish, done by individual or group. Extension is done by individuals or more, done at night, bringing traditional gobok / lance / rifle. Known by one person's direction. Strategy of finding traces or seeing traces of animal food to be searched. Before departing prepare to arrange the gear and recite the mantra (prayer) ask the forest dwellers to help to tame the animals. Animals hunted are usually large ones such as deer and deer. Do not hunt animals like wild pigs, other than haram wild boar also as a wild animal food in the forest like tiger for tiger ecosystem awake. Large number of extension agents are usually animals such as lindak, kancil, napuh should not be arrested because it is not sufficiently divided.

Menapak, done during the day with a large number of entourage, usually by looking for a trail that is still new by sneaking. Headed by someone who has experience in tread. Tracing is also done to search for hunted animals that have been shot dead while tearing at night by following the trail and blood splatter. Animals that do not die must also continue to be sought and should not be allowed to meet the carcass because kalua left will be believed to torture and also if not sought it will be hit by reinforcements. *Menjoat* and capture is one of the customs of hunting by trapping the animal buran. The process takes a long time with the installation of the first snares of the jarring installed and abandoned in a relatively long time. *Menjoat* is not justified in many places and in the area of pebantin only.

By *adat berburu* it is believed that it can suppress the market demand for animal meat production because only hunting animals are hunted for the needs of petalangan communities, according to PattiselanoFredy [10], that one of the causes of excessive use of wildlife hunting is increasing market demand Production of meat from animal origin.

Adat berikan is nailed to a stream. The river becomes sacral because the pulse of the life of the community of Petalangan for daily life one of them catch fish as food. Must not take the whole type of fish and is prohibited from taking small fish. The process of fishing is done by way of catching by catching fish / shrimp using a cud. Woven cane made of woven rattan, small hole made small size measurement so that small is not taken. *Sempiyai*, small fish trap, *miawai*, by holding back taju or *menaju*. *Melukah* is a fishing gear made of reed or rattan made and woven in such a way that is round and long, the front of the fish entry is made somewhat larger than the back. The backside is made somewhat closed so that the incoming fish can not get out. The length of the painting is approximately 1.25 m- 1.50 m.

In the adat berikan there is a ritual "tapa naik tapa turun" where the value in the implementation of this tradition gives a message for people to pitch fish *tapa naik* can be done fishing until tapa season down. And will wait about a year later to take a fish big enough to harvest. According to PrahamaSusyanthi [11] said in a fish harvest conducted once a year for the welfare of the local community to be fair divided by the family's head for the realization of equity as a tradition of society pangakan indarung cultural fishing in Lubuk larangan.

4. Conclusion

IK of Petalangan community has a strategic value in the perspective of the conservation of the environment TNTN. The value of *IK* is always guarded by the community of petalangan aims for the environment able to provide assurance of the implementation of values *IK* good value to all communities of petalangan and with nature. Nine value and the culture of the peasant *adat menyusuk kampung*, *adat menyusuk dusun*, *adat berladang*, *adat risa mba larangan*, *adat rimba simpanan*, *adat rimba kepungan sialang*, *adat beramu kayu*, *adat berburu*, *adat berikan* ensuring the social sustainability of the peasant society Which are inherited from the puppets left to their children and grandchildren.

Integrating the values of *IK* of Petalangan communities into the TNTN conservation micro-life policy is urgent in a sustainable development perspective. As a follow-up to the development of national identity through the revitalization of *IK* culture of Petalangan community in preserving TNTN, the understanding of the local nation's philosophy must be done through a zoning system that integrates the value of *IK* Petalangan community.

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