
Strengthening Indigenous Knowledge in Environmental Preservation: Studies in Society Petalangan Pelalawan

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Abstract. Encroachment, Tesso Nilo National Park (TNNP) in Pelalawan Riau Province which is phenomenal in recent years is one example of human greed for natural resources as opposed to the concept of sustainable development at the expense of a conservation ethic. TNNP encroachment has occurred since 1992 are spread along the road corridor and the centers of settlement. The occurrence of the above phenomenon is certainly very detrimental to the communities in the region, especially the threat of extinction in the values of public knowledge (indigenous knowledge). This study aims to analyze the role of the community Petalangan in practicing law and the values indigenous indigenous knowledge and strengthening of knowledge in environmental conservation in Region TNNP. The study concluded there are at least three groups of tribal society, which Petalangan, Logas Tanah Darat, and Mount Sahilan inhabiting and claiming to be the manager of the natural resources in TNNP were among those competing, thus becoming a potential threat to the sustainability of the forest area. Community who will be disappointed as they wished to benefit from the presence of TNNP, because of distrust of the manager and will be a threat to the collaborative management for creating social inequalities between communities. Need to do a variety of real effort, especially for people Petalangan in preserving indigenous knowledge TNNP through which they profess, because it was found there are nine indigenous knowledge with the potential to be used for the preservation of the environment based on local wisdom.

Keywords: Indigenous knowledge, TNNP, forest sustainability, social inequalities

1. Introduction

A wealth of natural resources (NR) Indonesia faces severe extinction. Extinction does not only occur in open areas, but has entered the conservation areas of indigenous peoples. This resulted in the form of the threat of extinction in the values of public knowledge (indigenous knowledge) (Moniaga, 2002). Encroachment, Tesso Nilo National Park (TNNP) in Riau Province which is phenomenal in recent years is one example of human greed over natural resources is contrary to the concept of sustainable development at the expense of a conservation ethic.

This encroachment has taken place since 1992, which spread along the road corridor and the centers of settlement (Arifin, 2015). The wide reach 28606.08 ha, or 34.5% of the TNNP. Four loci widest is Corridor PT. RAPP (Riau Andalan Pulp and Paper), Ukui-Gondai (8242.34 ha), Kuala Onangan Toro Jaya (7769.27 ha), Bagan Limau (3852.21 ha), and Toro Makmur (2,440 Ha). In the last 10 years (2004-2013), TNNP has lost its forest cover of 48 139 ha, or 66.16%. That is TNNP which has an area of 83 068 ha since expansion in 2009, has 72 720 ha of forest cover and has experienced a loss of 4813.9 ha or 5.79% per year. This data is equivalent to 13 football fields per day (the size of a football field 110 mx 90 m).

Society plays an important role in the management of TNNP. Three ethnic groups comprising Petalangan, Logas Tanah Darat and Mount Sahilan have customary claims over natural resources in the region. Although the settlement they are outside the proposed Tesso Nilo, but they interact directly with the region. Community ethnic groups that exist in the Park collaborative environment mutually customary claims to natural resources of this region makes TNNP has been neglected in the sense that received less attention in the conservation and maintenance of habitats. As a result, a growing issue of TNNP was on the verge of extinction. While many natural potential that can be taken advantage for the benefit of human life, especially the communities that exist around the region. (Zulhelmi, 2017) Scientific attitude is a complex thing involving all aspects of human psychology including cognitive, affective and psychomotor.

The above phenomenon is certainly very harmful to society Petalangan and TNNP Region itself. Because it needs no real efforts should be made particularly for people living in preserving TNNP Petalangan through IK which is owned Petalangan society. For example, people who feel the benefits of a society that is on good terms with the park administration, community belonging to the Association of Honey Tesso Nilo Flying Squad / Ecotourism. The majority of people upset with the presence of National Parks and feel the presence of TNNP bring harm to the community because it can not control the elephants so destructive oil palm plantations and prohibited from taking wood as indigenous people did before TNNP formed. Community who will be disappointed as they wished to benefit from the presence of TNNP, because of distrust of the manager and will be a threat to the collaborative management for social gap created between people (Arifin, 2015).

Based on the uniqueness and all the potential possessed by TNNP, then it should all parties to give serious attention to the preservation of TNNP with all the potential in it. Especially Petalangan people who live and adapt to the environment and this TNNP region to explore and empower local wisdom and the so-called indigenous knowledge (IK), which is indigenous knowledge that can be developed as a model in preserving TNNP. (Latifah 2018) The main aspect was crucial and it emphasize the development and challenges of today's dynamic educational changes and demand teachers make a totally paradigm shift towards upbringing quality in their teaching strategy.

All members of the community have traditional ecological knowledge: the elderly, women, men, children only the quantity of IK owned by the individual varies. Age, education, gender, social and economic status, daily experiences, outside influences, roles and responsibilities in the home and community, profession, availability of time, attitudes and capabilities of the intellectual, the degree of curiosity and observation skills, ability to wander and independence and control over natural resources are a number of factors that influence the IK (Eden, 2009).

IK systems are also dynamic in which knowledge is also increasing continuously. Each system will also innovate and internalized, use, and adapt to external knowledge appropriate to the local situation (Rip & Laredo, 2008). Those values are stored role in culture written or unwritten as expressed in stories, songs, proverbs, dances, myths, cultural values, beliefs, rituals, community laws, local language, taxonomy, agricultural practices. IK be shared and communicated orally, with typical examples, and through culture. Traditional forms of communication and organization are vital in the decision making process at the local level and for the preservation, development and dissemination of IK. (Kamaruddin, 2018) Teaching and learning experience on campus or school tend to be just as the transfer of knowledge and information from a professor or teacher to the learner. How to determine the success of the acquisition of knowledge and information is done through tests that tend to memorize.

Natural resource management systems that have been developed indigenous and local communities, has long been an estuary that is oriented towards the welfare of indigenous / local, always puts a

sustainable community participation (sustainability). In adapting to the environment, community groups develop as a result of abstraction environmental wisdom of experience to manage the environment. Social capital is usually a very deep meaning wisdom and closely associated with the cultural institutions, particularly institutions of trust (faith) and customary laws which are sometimes tinged with spells. (Ardianto, 2019) In order to maximize the achievement of learning achievement is to increase the involvement or activities of students in the learning process. Therefore, teachers are required to be more innovative and productive in learning in class, so that maximum learning outcomes are obtained in all subjects.

But this time, the system is experiencing external pressures, among other things due to the non-recognition of the existence of indigenous and local communities in their natural resource management systems, and natural resources management policy which is based on the concept of the right to control the state. These pressures led to indigenous and local communities who actually is the owner, manager, as well as guards and custodians of natural resources, become alienated ditanahnya own. This happens because of the limited public access to natural resources. (Diarni, 2018) Learning achievement is always associated with student learning outcomes. Learning achievement is a benchmark to know the success of students in the learning process at a certain time and expressed in the form of value. Students who have high learning achievement can be said that he has succeeded in learning. Learning achievement is a blend of ability, soft skills, interests, talents, facilities, motivation, the ability of educators, attention, study habits, and also learning environment are interconnected and affect the pattern behavior of every student.

Indigenous knowledge at local level by the public as the basis for decisions regarding food security, human and animal health, education, natural resource management, and other vital activities. IK is a key element of the social capital of the poor and it is their main asset in their efforts to control their own lives. For this reason, the potential contribution of IK to the survival strategies locally managed, sustainable and cost-effective should be promoted in the development process (Gorjestani, 2000).

One of the IK system that is very important to continue to be explored and developed in the community Petalangan is unique traditional knowledge of indigenous peoples in the management of the natural environment in this case is TNNP region. IK is suspected as a model that is very effective in the preservation TNNP, because there is a role in IK values and local wisdom. These values contain the knowledge of indigenous / local communities Petalangan since ancient times, especially in the forest preserve, both flora and fauna and ecosystems that exist in TNNP.

2. Methodology

This study intends to find out for sure about the values held by the public IK Petalangan the potential to be used for the preparation of the design of conservation strategies based on local wisdom. Research relating to the culture of an activity forming and mengabtraksikan understanding of rational empirical cultural phenomenon both conceptions, values, habits, patterns of interaction, the historical aspect, biography, text media, films, theater (art), as well as various forms of cultural phenomena (Maryaeni, 2008). To inventory a variety of aspects of life related to values, as well as members of the community know Petalangan most play a role in the practice the values of IK in the community, and understand the pattern of application of the values IK Petalangan Society in the preservation of ecosystems in Region TNNP descriptively qualitative. According Suharsimi (1995), is to provide a qualitative descriptive analysis of the variables studied predicate according to the actual conditions, the title given in the form of ratings that are comparable to or on the basis of desired conditions. The scope of the research includes aspects of knowledge, social, cultural, ecological, and economic. Analysis and design of management is based on primary data and secondary data obtained from the field survey

reinforced by the opinions of experts or experts in the field. qualitative descriptive analysis is give a title to the variables examined in accordance with the actual conditions, the title given in the form of ratings that are comparable to or on the basis of desired conditions. The scope of the research includes aspects of knowledge, social, cultural, ecological, and economic. Analysis and design of management is based on primary data and secondary data obtained from the field survey reinforced by the opinions of experts or experts in the field. qualitative descriptive analysis is give a title to the variables examined in accordance with the actual conditions, the title given in the form of ratings that are comparable to or on the basis of desired conditions. The scope of the research includes aspects of knowledge, social, cultural, ecological, and economic. Analysis and design of management is based on primary data and secondary data obtained from the field survey reinforced by the opinions of experts or experts in the field.

3. Result and Discussion

Role of Civil Society in the practice Indigenius Petalangan Knowledge-Based Environment

Kinship system

People who have a relationship ancestry and blood relationship is called kinship. In short, we can also mention that kinship as a system of relationships based on marriage and descent (D. Sinaga, W. Siagian, K, Nadeak, 1988). In the general classification, the kinship system is divided into two, namely patrilineal and matrilineal. Ie a person enters a patrilineal kinship group follows the lineage of male parent (father), while matrilineal kinship group one follows the lineage of her parents (mother).

Kinship system prevailing in society embrace Petalangan patrilinear system, meaning that a child born will dibangsakan to his father's tribe. Besides, the system daily life of men and women is limited. A man and a woman can not hold meetings in places that are considered hidden as in the halls of the market, the fields, on roads that are considered quiet nature alone and they are not a tribe.

Forms of social relationship is established based on gender differences. Men and women visible in public life Petalangan. Men deemed to have been destined to be a strong leader, a bold, while women are destined to be led, weak and timid. The views given to men and women in modern life is seen as a matter of gender inequality that led to the role of women is very limited. Women were given the opportunity to take care of the problems in the domestic sphere while men take care of and work on public spaces that require wisdom, strength, and courage.

The main principle Petalangan people perceive and relate among others to inculcate "cognate and Semoyang". Planting of these principles causes the bonds between them actually brothers. For mutual respect among communities, both with the seadat or with outsiders, they are cultivating an attitude of "that old respected, peer valued and cherished young ones".

That is why people who are young in the older greet never mentioned the name, even older people is very seldom mention people who are younger. Habits greeted by name only occurs with peers. But when peers or younger already elder in customs, in the sense given the mandate in office customary devices, such person will be addressed by calling the customary title.

Furthermore, in social life, Petalangan indigenous people occupying a territory that each pebatinan has its own territory. The region is commonly called communal land. In arrangements known customary usage of environment-related utilization. This is because historically formerly Petalangan public recognition of their rights over forest areas by the government of the Sultanate Palalawan. They were

given authority in forest management called Tanah Perbatinan Forest Less than One Thirty, led by a community leader known as Inner.

At this time Petalangan society at least they have 29 Pebatinan, namely:

Table 1. Names Batin in the Community Petalangan

No.	Name Inner Petalangan	No.	Name Inner Petalangan
1	Monti inner King	16	Inner country.
2	Muncak inner Rantau.	17	Tuk Batin Ajo Bilang youngest.
3	Inner White.	18	Inner Pelabi.
4	Inner Black.	19	Mudo inner ledge.
5	Inner Causeway.	20	Antan inner-antan Diajo.
6	Mr. inner Apuh.	21	Inner Gengeng.
7	Mudo inner Genduang.	22	Inner Gasip.
8	Sengiri inner Komang.	23	New Rantau inner.
9	Inner Bunut.	24	Inner Mudo.
10	inner Telayap	25	New inner (Bau).
11	Inner Sungai Buluh.	26	Large inner panghulu.
12	Tomo inner Umbrella.	27	Inner offense.
13	Inner Badu Ondo	28	Inner Kerinci.
15	Sulo inner sea	29	inner Panduk

Institutional structure

Society is a unity of human life which are interconnected with each other continuously bound by habit and collective identity. Community life can be regarded as a social system because in society there are elements of the social system. Broadly speaking, the elements of the social system in the community are the ones who are interdependent among each other within a whole.

In the dependence of a set of integrated human beings that are more lasting and stable. During each individual in society is still interdependent and still have the same attitude and balance, then during the same elements of the social system to function. While specifically and in detail, the social system in society is the state, the role of the social differences of the individuals that are interconnected in a social structure

Tribe Leader Petalangan among others duke, Batin, Monti and Dubalang. Each leader has the right and authority of customary law, such as processing, management of indigenous territories. This led the birth history is inseparable from Patih nan A stick, at first there were only Patih tribal leadership, the Inner and Dubalang but seeing increasingly widespread nature more and more so the duke volunteered to form Monti and Penghuku under the leadership of the inner and pesukuan region. To understand how the leadership structure Petalangan society, presented the following chart plot

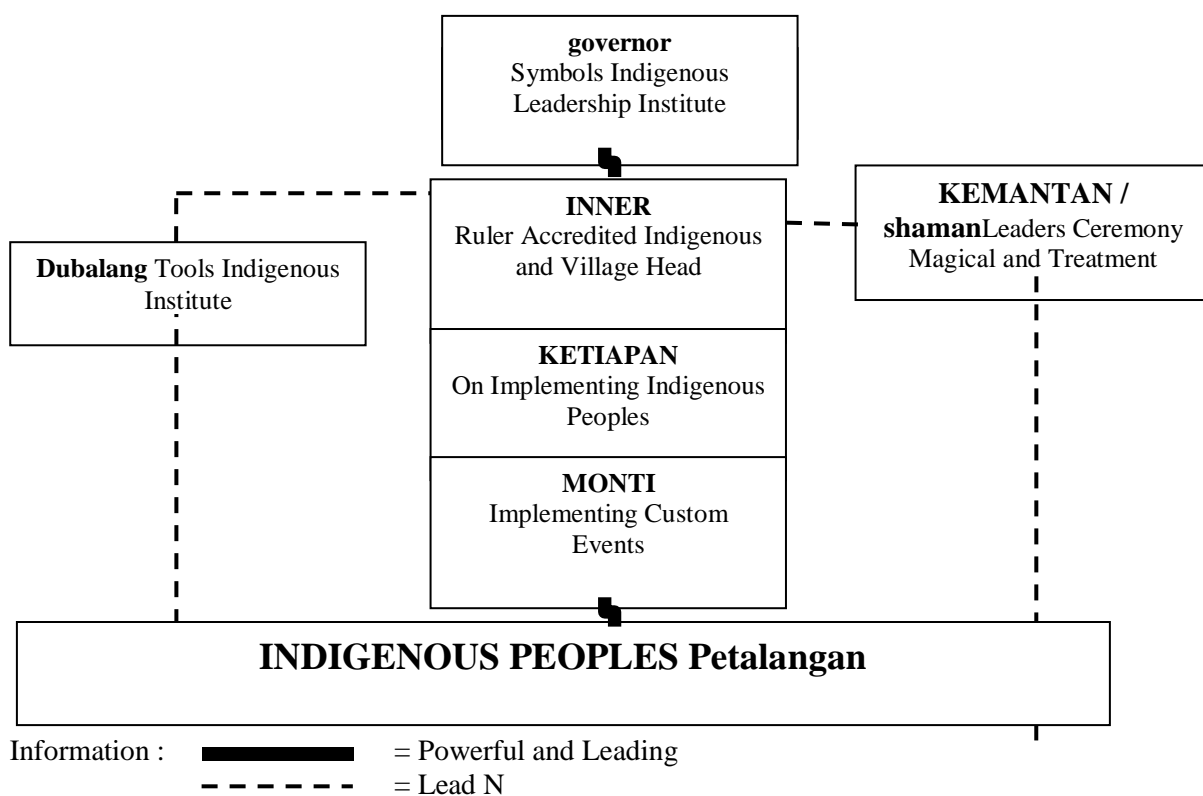


Figure 1. Structure of the Community Petalangan

Custom structure as described above is still functioning and role, but there are some things already experienced a change of power. Petalangan inner society has a high status or position, respected and be a role model for the local community. Go where asked return place to share the news. Maxim will be high above shows the position and role of the mind itself in society Petalangan. In other words the mind is also called "unbiased", where used as a point of reference, ask for advice and trustworthy place, a place to seek advice on various issues.

Old people usually say "like a pile of flotsam bays, headlands meeting place like the wind, his place studied, the establishment of a place to ask" or said also "shoot fish nets meeting place, the long-winged berambai wide, calm berths, teduhnya place to stop". Through expression, proverb proverb above-sudahh clear of the high position in society Petalangan mind, which serve as a reference bain Petalangan community as a place to ask questions, and solve problems.

In a society Petalangan Batin has a function to keep the lands which became a sign of manliness Petalangan a tribal society. There are also the basis for a mind to keep the communal land is based Tombo pesukuan that contains the history of communal land and boundaries In the normative role of the mind in the inheritance can be seen in the expression of the following: Noble people landless indigenous Customary land inheritance Land cornerstone Land for sale hereditary abstinence pledge. Land abstinence tampered soil destroyed abstinence would be wasted if there is customary to wear, if its laws were staying there. The phrase above explains the value of the inheritance, either property or possessions pusako cornerstone, and the duty batinlah to run all things concerned with treasures.

Adan and customary leadership shifts that occur in society Petalangan already appeared along with the development of increasingly faster times, especially with diberlakukannya Undang No. 5 of 1979 on Pemerintahanhan village (although this Act was later replaced by Law No. 22 / 1999 and then revised

again to Law No.32 / 2004), the Act have greatly reduced role as chairman of the Inner indigenous and community leaders Petalangan. Nevertheless Batin in society Petalangan remain up and running with its function. Tribal communities have a hierarchy and structure Petalangan clear customs, and run entirely by people Petalangan which still adheres to the old step or public belief in myths.

Social relationship between inner-prince, pesukuan with each other is a relationship of mutual respect and respect. A mind that one would not intervene in the care of the issues contained in the other inner, as well as one tribe mamak tu nor interfere in the domestic affairs of other pesukuan unless the request is justified by custom

There is no difference in the inner group or community of ethnic groups from one another. Overall the existing inner-pengulu put a mind as balancing social relations between pebatinan- kepenghuluan Said Rajo youngest title. Said Rajo main function youngest to organize the inner powers of the overall relationship.

Patterns of community life based on tribal groups, not limiting the space for pesukuannya members, because they hold mutual respect. The awareness that they are cognate and semoyang also foster the attitude of helping and solidarity among people. Solidarity, and mutual help that can be seen when the child wedding events nephew in a tribe, then all the indigenous peoples will contribute according to their respective capabilities.

Against immigrants, Petalangan The real society is open, if there are immigrants who want to work and become permanent residents, people should in customs will notify the requirements to settle in the village. conditions must be fulfilled that is concerning the manner, as the saying goes custom requires, in which the earth underfoot there to uphold the sky, where the water in the inlet there twigs break. This means that immigrants who want to settle should follow local customs rules, and if the wealth of the business must also infuse some of his wealth in the village.

The position of immigrants could also be a local indigenous people with the condition of immigrants seeking Mamak tribe. looking mamak tantamount tribe surrendered to enter the tribe led by mamak particular tribe. Especially for indigenous migrants different resamnya with indigenous Petalangan system that has the intent to marry the niece of indigenous children Petalangan required to seek Mamak tribe. This is required so that weddings can be held by custom. broader usefulness of immigrants entered the tribe than as a recognition that the person concerned is already a nephew of children in indigenous communities, as well as simplify the way interact and socialize within the social order prevailing daily

Petalangan adult person there must be live and settle in the place of others. Nephew to children who choose to live in the land of the (overseas) other than implanted as a rule given to newcomers to the village, too, should humble attitude that followed the customary phrase, sitting under -Under, shower in downstream activities. The phrase is reminiscent to act out themselves as immigrants, do not be puffed up and arrogant in the land.

Order of social relations in Petalangan perbatinan indigenous peoples have a clear objective, namely the creation of mutual understanding life. If someone in a position of social contacts have understood each, the next hope will be exchanged in the form of emotional and did not rule in material form. Someone in the hierarchy under the honor and respect the hierarchy of the above are implicitly expected that the above hierarchy of rewards in the form of affection and other help in life. Instead, someone who in the hierarchy of age or seniority is based on, will provide assistance / aid and affection in which it holds, in the hope someone who hierarchy are below it will show some respect and appreciate.

Customary Law and Sanctions

Customary law in general is an unwritten law in the legislative regulations (unstatutory law) includes regulations are adhered to by the community life based on the belief that it has the legal power peratutran. The principle holds very strong customary for people Petalangan and tend to reject foreign cultures, narrative Inner Black "let the child die do not die of indigenous origin". That is still a strong insistence on holding customary for people Petalangan.

Customs and rules become a symbol for the community Petalangan in performing customs and cultures including when solving problems in communities Petalangan. The birth of a customary rule rests on the similarities and understanding tiered rose stepped down (hereditary) of ancestral Petalangan Society. Customary laws and sanctions can be seen in Table 2 below.

Table 2. Indigenous Peoples Law and Sanctions Petalangan

Customary Law and Sanctions	type any misunderstanding	Materials and tools In Adat Sanctions
Light	➤ Establishing settlements, hamlets, building, planting (occupied) land without the permission of that has such indigenous leader, mind.	➤ Bowl 2 pieces ➤ betel nut ➤ Plate 6 pieces ➤ Rice ➤ chicken ➤ Kois (Keris / Weapons)
lightweight Sodang	➤ Burning deliberately did not produce fruit crops like: meranti, fowl, kempas, Kulim, hoods, medang, sanduk-sanduk, etc.	➤ 3 bowls of fruit ➤ Plate 6 pieces ➤ betel nut ➤ Rice ➤ Chicken ➤ Kois (Keris / Weapons)
Sodang Petamo	➤ Stealing plants produce fruit ➤ Burning Tree durian, kedondong, and kepayang ➤ Stealing, toppling and burn plants that do not produce fruit ➤ Stealing fruits	➤ Bowl 4 pieces ➤ Plate 18 pieces ➤ Rice 10 Kg or 3 bushels ➤ Chicken (according to ability) ➤ Kois (Keris / Weapons)
Sodang Keduo	➤ Burning or toppling trees and kepayang kedondong or hit another tree uprooted ➤ Hunting animals is prohibited customary ➤ Poisoning fish without permission	➤ Bowls 6 pieces ➤ Plate 23 pieces ➤ betel nut ➤ Chicken ➤ Fabrics 36 sheets ➤ Kois (Keris / Weapons) ➤ silver bracelet
Boat (weight) Petamo	➤ Stealing, cutting, pick up and ruin in the jungles of the ban.	➤ Money 12 million plus trees beehive
Boat (weight) Keduo	➤ Stealing, Cut and take the tree sialang	➤ White cloth along the tree beehive ➤ Kobau or 7 Goats

The existence of customary law is very important and recognized, but there is a trend in the development of an understanding of the common law increasingly lost in the community even in communities where customary law it grows and develops. Similar conditions are no exception to the customs and traditions and customary laws on Petalangan society. The existence of many factors that

cause it to happen even in the midst of society Petalangan. The provisions of this law can not change it envisaged Batin "who menconcang in concang, who killed killed" in consideration of the growing world crowded and expanding the law ditetapkanlah levels. The highest penalty is a penalty indigenous indigenous boat and as low as a light sentence. The rules are made by the community in addition to a written Petalangan also exist in the form of petatah-proverb, customs passed on through petatah-proverb akan delivered when the custom event commemorated / nephew played to children. Customary law that regulated in writing that is related to the management of natural resources such as forests and land.

Plants that bear fruit or not regulated in legal sanctions customary for plants that produce fruit already clearly regulated by customs, prohibitions that is if you want the fruit of plants of the plant must ask permission from the owner, should not be cut down, burned about plants , Plants that do not produce much fruit is also found in the forest area Petelangan society, this plant produces both high economic value used for the construction of houses, the customs, and sold. Although it grows wild in the wild, but if it is included in the community forest area Petalangan obligatory maintained.

The loss of forest land, for the people Petalangan not only mean the loss of livelihoods and livelihood, but more fundamental is the loss of cultural resources. Source activities of customs and traditions, a source of pride and self-esteem, and even loss of identity and a part of themselves. Therefore, the concept of traditional beliefs, nature is a symbol of themselves and where they get different types of materials for ceremonial purposes of treatment and so on.

This has so far hardly been noticed let alone understood by outsiders. People who do not appreciate the culture Petalangan people always assume that forest land is only helpful when processed are made gardens, fields, and so on, namely economic interests alone. In fact, for the people Petalangan forest land were not solely to meet the needs of the outward life, but also a source of inner life's necessities. In fact, the example of forest land used as a source of philosophical and moral reference of their lives. They own a customs provisions for permanent sustainment of the natural world, they have proved for hundreds of years.

The tradition of shifting cultivation carried Petalangan society often made scapegoats because they destroy the forest land and habitats, but in fact they are profoundly mistaken assumption. For the people Petalangan, shifting cultivation area where it is set up according to their custom, so berpindahan it is not out of the boundaries that have been established custom. In the area that they move the circulation occurs between 5- 10 years. Farming area reserved for the so-called farmlands. Efendi (2008) says, every member of the public is prohibited from making a field outside that area, even a violation will be punished according to the provisions of the local customary law. It is thus clear that the community is not forest destroyer Petalangan ground, in fact they even land forest savior,

One form of customary norms protect TNNP is through traditional sanctions. The term penalty Petalangan customary in society has been known since time immemorial that customary sanctions is something that is not considered taboo or forbidden. Although traditional sanctions has been known since time immemorial, but in practice the customary Tombo wisely said. "There is no betimbangan ado wrong, Beutang Bebayo, One Spot dimuntaan, One pushes in turn" (No one who is not taken into account, if there is a debt to be paid, one regurgitated meal, one take-refundable). Someone might not traditional sanctions imposed if the person is the first time make mistakes and type of error is not fatal and ignorance him against such a case.

Norms are rules or guidelines in the activity. Norma is a measure used by the public whether the action taken by a person or group of people is an act that a reasonable and acceptable due to the expectations of the majority of citizens or an act in defiance because it does not correspond with the expectations of the majority of citizens (Gander, 2009), Through environmental sustainability norms

protected and excessive exploitation of nature. Through social norms are encouraged, taught and are taught how to establish a harmonious relationship with nature and other creatures.

The application of sanctions has been carried out against the indigenous in one case as stated Shyam (2013), based on consensus judgment of inner and traditional leaders Petalangan community in 2006 had imposed sanctions on a company Rp. 150,000,000 (One Hundred Fifty Million) after the company cutting some trees that are in the area beehive Petalangan society. Before the sanctions taken against the offender must first be investigated by the Batin.

According to the Inner Bunut, breach divides into two categories, namely (1) The violations committed by individual (2) violations committed by Pebatitan (institutional). Individual violations are violations committed by someone and no one told him to commit the offense. While violations in pebatitan category (institutions) are violations committed by a person or persons who commanded by one pebatitan or other institutions by both the inner as well as by the other institutions.

The vetting process for violation of the provisions of TNNP. First, starting from the identification of the offender, whether the facilities are individual or pebatitan. Both what reason someone / pebatitan abuse. Third, what kind of offense. Fourth, what kind of offense. Fifth, the type of sanction given to the pelangar. Sixth, who its witnesses.

Strengthening Strategy Values Indigenous Knowledge-Based Society Environmental Petalangan

Strengthening Cognitive Domains

Strengthening cognitive strategy is strengthening indigenous knowledge (IK) community Petalangan environmental based first and most dominating is to provide counseling, especially for indigenous menyusuk villages, indigenous menyusuk hamlet, traditional farming, indigenous Rimbo siege beehive, custom Rimbo deposits, indigenous provide. Extension in the general sense is a social science that studies the system and the process of change in individuals and communities so as to realize a better change as expected.

Several strategies that can be done in the form of counseling IK Petalangan indigenous communities menyusuk village, hamlet menyusuk customary, traditional farming, traditional beehive siege Rimbo, Rimbo customs deposits, provide in preserving indigenous TNNP. Individually, extension strategies relate directly or indirectly to target individually. This strategy is very effective because the target can directly solve the problem with the special guidance of extension IK indigenous communities form menyusuk Petalangan village, hamlet menyusuk customary, traditional farming, traditional beehive siege Rimbo, Rimbo customs deposits, provide in preserving indigenous TNNP. Only drawback of this strategy is in terms of objectives achieved, less effective because of the limited range of extension agents to visit and guide individual targets,

As a group, the agent associated with the target group counseling. This strategy is quite effective because the target is guided and directed to conduct a more productive activities on the basis of cooperation counseling IK society Petalangan form of customary menyusuk villages, indigenous menyusuk hamlet, traditional farming, indigenous Rimbo siege beehive, custom Rimbo deposits, indigenous provide in preserving TNNP. In the group approach the many benefits that can be taken, aside from the information transfer occurs also exchange views and experiences among target extension in the group. As well as allow for feedback and interaction groups provide an opportunity to exchange experiences and influences on behavior and norm of its members. The weakness of this method is the difficulty in coordinating the target due to geographic factors and activity targets. One

effective way to approach the group is with the lecture method. This method is suitable for people who have high or low levels of knowledge.

Increased Realm Affective

Strengthening the affective is the strategy of strengthening the values of IK next Petalangan society. This strategy by providing the strengthening of culture to local communities of indigenous character *menyusuk* village, *hamlet* *menyusuk* customary, traditional farming, traditional *ban Rimbo*, *Rimbo* *siege* *beehive* custom, custom wood *beramu*, indigenous provide. By way of building community identity, culture Build and make local regulations that protect the public in preserving TNNP Palalawan so that the values of the local culture is the identity of the people Petalangan as part of the global community can be recognized.

Development efforts Petalangan community identity, including appreciation in the value of culture and language, the values of social solidarity, kinship and love for community culture Petalangan must be properly managed by indigenous peoples Petalangan. Culture IK society Petalangan the customs *menyusuk* villages, indigenous *menyusuk* *hamlet*, traditional farming, indigenous *Rimbo* *ban*, custom *Rimbo* *siege* *beehive*, custom *beramu* wood, indigenous provide in preserving TNNP more suitable to the character increasingly hard to find, while the global culture more easily penetrate , During this time caught by a lifestyle that leads to westernization and not modern lifestyles. Therefore, the national identity as the value of community identity should be built firmly and deeply internalized. The trick,

It should be understood, the values of local wisdom of IK communities Petalangan the customs *menyusuk* villages, indigenous *menyusuk* *hamlet*, traditional farming, indigenous *Rimbo* *ban*, custom *Rimbo* *siege* *beehive*, custom *beramu* wood, indigenous provide in preserving TNNP not the value of obsolete outdated so abandoned, but can synergize with universal values and modern values that brought globalization. Globalization is an inevitable must be anticipated by strengthening the cultural development of character identity and local knowledge that serve as the foundation in the preparation of the strategy in the preservation and development of culture. Efforts to strengthen regional identity can be done through the cultivation of cultural values and historical camaraderie among residents. Therefore

Strengthening Sphere Psychomotor

Strengthening psychomotor is another important strategy in strengthening the values of IK Petalangan Society. The strengthening of this strategy by providing custom training *menyusuk* villages, traditional farming, traditional *ban Rimbo* and *Rimbo* traditional *beehive* *siege*. This is because the training has been proven as an effort to change people's behavior. The goal is to determine the holding of training variables Petalangan IK society which is a condition of causality in changes in behavior he termed the "behavior modification". This is consistent with the interests Skinner (1977) against the manipulation and control of behavior. He assumes that all behavior can be modified and have certain laws with their reinforcement. The basic principles of operant conditioning is that behavior is determined by its consequences. A person does not behave in a random habit, but people behave to achieve the desired goal.

Through experience, the goal is attainable if someone behaves in a certain way. IK Indigenous customary Petalangan form *menyusuk* villages, traditional farming, traditional *ban Rimbo*, *Rimbo* traditional *beehive* *siege* could be established, *disebutsebagai* (*shaping*). Someone tried to control others by operant conditioning techniques sometimes it is important to use the procedures of *shaping* (*forming*) to produce the desired response. *Shaping* involves the strengthening of a set of behaviors

that are intended to be learned. If the slow emergence of the desired behavior, then the response is similar to the desired response, at least in part been positively reinforced. Gradually strengthening the criteria for switching from the original response toward the desired response.

From the description it can be said that the training of hem-value IK Petalangan community development program is a series of attitudes, knowledge or abilities / skills systematically designed and tailored to the person's duties or position. The training is designed based approach to systems that are interconnected with each other to achieve the goal.

4. Conclusion

Found nine Indigenous Knowledge (IK) community Petalangan in the TNNP Palalawan the potential to be used for the preservation of the environment based on local wisdom, namely: 1) the customary menyusuk village, 2) customs menyusuk hamlet, 3) custom farming, 4) indigenous jungle ban, 5) Rimbo customary siege beehive, 6) indigenous jungle deposits, 7) traditional wooden beramu, 8) customary hunting, 9) customary provide. The role of customs in the practice of law and the values of IK-based environmental conservation can be reflected in the kinship system that is still awake, ethnic groups which are still recognized by the community with pebatinan structure still in use. However, legal provisions and sanctions are customary and traditional symbolic approach has begun to fade due to the lack of government regulation to strengthen traditional institutions and customary norms so that sanctions can be enforced.

References

- Arifin, AR, 2015. The role of the State Policy Against Forest Protection To Suppress The rate of deforestation is Tesso Nilo National Park. Riau University
- Ardianto, Susilawati and Rasmiwetti 2019 Development of Guided Inquiry-Based Chemical Handout in Buffer Solution Materials for Senior High School. *Journal of Educational Sciences Vol. 3 No. 3 (Sept, 2019) 364–376*
- Tesso Nilo National Park Authority. 2012. Tesso Nilo National Park. Pangkalan Kerinci Riau
- Bayu, AP, 2009. Communication Strategy Tesso Nilo National Park Authority in the Community Social Conflict Handling TNNP Kab. Palalawan. Riau University .
- Darmono, 2008. Environment and Pollution, Jakarta: UI Press
- Diarni J, Suarman, Kartikowati S 2018 Accomplishment Motivation and Soft Skill Related to Learning Achievement. *Journal of Educational Sciences. Vol. 2, No. 2, 2018, 83-89 83*
- Elfiandri, 2014. Environmental Communication Model in Preservation Imbho Laghangan (Rimba Prohibition) in the province of Riau Kampar regency, Riau University.
- Fauzan. K, 2015. Environmental Management Through Community-Based Ecotourism in the National Park Tesso Nilo- Riau. Padjadjaran University, Bandung.
- Firdaus LN, 2009. National Vigilance against Indigenous Knowledge Protection in the Context of Good Governance. National Security Agency of the Republic of Indonesia.
- Gunggung., S, 2011, Behavior Baduy community in Managing Forests, Land and Environment in South Banten. *Journal of Humanities, Vol. 23 No. February 1st, 2011.*
- Gudolina respin, 2015. Local Wisdom Community Based Forest Management Area Neighborhood Nature Park Sicike-Cike, North Sumatra, Widyamart, Vol 18 No. 1.
- Hendro. AW, 2012. Local Wisdom in Teaching Environment. *Journal of Educational Studies Socila*
- Jony., P, 2005. Processing of Social Environment, Jakarta: Ministry of Environment, Second Edition.
- Kamaruddin & Ahmal (2018) The study of history based on local antiquity: A case study of existence of Kampar River in analyzing the past maritime in teaching history. *Journal of Educational Sciences. Vol. 2, No. 1, 2018, 72-82*
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- Keraf. USA, 2010. *Environmental Ethics*. Jakarta: Kompas Media Nusantara
- Kumu PJ, 2012. *Land Resource Conservation in the Perspective of Local Wisdom Threats Confronting Global Climate Change*. Proceedings of the National Seminar on Agroforestry 5th.
- Latifah Binti Monnas 2018 Insight stories: Looking into teacher support in enhancing scientific thinking skills among pre-school students. *Journal of Educational Sciences*. Vol. 2, No. 1, 2018, 19-25
- Made, Atmaja, 2015. Management of Spatial Based Local Wisdom on Indigenous Peoples Panglipuran Bangli Regency Ekosains Journal, Vol VII No. 1.
- Martua., S, 2000. How the Rights of Indigenous People in Managing Natural Resources Regulated? presented at the Seminar on Spatial Planning and Participative Approach by WATALA BAPPEDA Lampung Province, October 11, 2000 in New York City
- Maskar, Herman, 2009. *Songs of Long Sutan Pominggie, Riau Petalangan People Oral Tradition*. Pekanbaru: Pres couplets and DKP Palalawan
- Nani. S, 2003. *Alternative Community-Based Forest Management Model*. Delivered on Day Seminar on Forest Village: Foundation Damar, Gadjah Mada University Center Building, 23 April 2003
- Nur. A, 2010. *Wisdom Kaindea Community Forest Management in Wangi-scented district. Wakatobi. Southeast Sulawesi*. Forestry Department at the Faculty of Agriculture Unhalu, Kendari.
- Said., F, 2004. *Pengelolaan Natural Resources and Environment and the Knowledge-Based Local Wisdom (Local Wisdom) in Kalimantan*. PKP2A III LAN Samarinda.
- Sandra., M, 2002. *Rights of Indigenous Peoples and Problems and Environmental Sustainability in Indonesia*. The main article in *Human Rights Discourse*, No. 10 / Year II / June 12th, 2002, Jakarta
- Suparmini, 2013. *Environmental Preservation Badung Community-Based Local Wisdom*. Humanities Research Journal, Vol 18, No. 1
- Rachmad.S, 2008. *Local Wisdom On Indigenous Peoples in Indonesia*. Publica Journal, Vol. IV No.01 2008
- Rachmawaty, 2004. *Forest Function and Role for Communities*. Faculty of Agriculture, Forestry Sciences Program University of North Sumatra, Digital Library USU.
- Santoso., I, 2007. *How We Should Respect the Rights of Indigenous People?* Sanggabuana news Quarterly Bulletin, Special Issue 2007. RMI- The Indonesian Institute for Forest and Environment Water Resources in Pelalawan, Riau University
- Soerdjani Muhammad, Rofiq, Rosy Munir, 2008. *Environment Natural Resources and Population in Development*, Jakarta: UI Perss
- Soekma, S 2010. *Design Costs for the Environment of Indonesia*. Journal of Tropical Environment, Vol.4, No.1, March 2010: 53-62
- Sudjatmoko.1992. *Sustainable Development: Looking for Political format*. Jakarta: Gramedia Pustaka Utama together Spes Foundation
- Sudjatmoko, 1992. *Certification of Natural Resources in the Global Political Economy Perspective*. Jakarta: Gramedia Pustaka Utama together Spes Foundation
- Tenas, Effendy, 1997. *Bujang Tan Domang: Oral Literature People Petalangan*. Yogyakarta: Cultural Landscape Foundation
- Roikhwanput. M, 2012, *Local Knowledge and Wisdom: Community Treasure*, *International Journal of Humanities and Social Science* Vol. 2 No. 13; july
- Hamidy Act. 2013. *Select Petalangan Warehouse Oral Literature*. Pekanbaru: Room Creative
- Zulhelmi, Muhammad Nur 2017 *The Internalization Effort of Student Scientific Attitude through Inductive Teaching Method in Basic Physics Practical Course, Biology Study Program - PMIPA FKIP UR*. *Journal of Educational Sciences*. Vol. 1, No. 1, 2017, 56-68 56
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