Historical and cultural constraints of Tebing Tinggi Timur Community in Meranti Riau District in land management for avoiding peat-wild fire

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Abstract. Changes in land use and forest fires covering peatland in Kecamatan Tebing Tinggi Timur (T3) are the main factors that contribute to the degradation of forest peatlands. This study aims to determine the socio-cultural and economic constraints of peatland fires against the perception of local communities in T3 Meranti Regency, Riau Indonesia. The source of data obtained from this report besides coming from literature sources is dependent on the oral history of T3 residents. Because basically, with the background of the spirit of writing "critical history", making the primary data sources used in this paper focus more on oral history. Oral history becomes important and necessary because its existence represents how the perceptions of residents see and give meaning related to the living history of the environment in which they live. Severe peat fires through historical tracking are influenced by the habit of burning fields, decreasing purchasing power, and beginning to reduce land due to population increases. The phenomenon of finding work abroad and owing to it to the “tauke” is also a finding. So that uncontrolled fires through government policies have not been able to answer the challenges and constraints of sustainable land management. But numbers of vegetation like sago are highly recommended for economic resilience to residents, to obtain restoration and revitalizing socio-economy in the region.

1. Introduction

Peatland restoration is now a priority, it is related to the government's task on carbon credit and sustainable development without haze disasters. The 3R process (re-wetting, re-vegetation, and revitalization) is the main program of the BRG (2016 Peat Restoration Agency)(Badan Restorasi Gambut, 2016; BNPB, 2015). In the functions of production, protection and conservation forests, forest fires are the biggest threat after floods. Sustainability of disaster equilibrium during the rainy season floods and puddles. Over 10 days of dry season will increase the risk of land and forest fires in peat hydrological unity - KHG) [1,3]. The wetting program is the most logical validation to divide and maintain the stability of the best and sustainable water to keep the land anti-fuel during the dry season. The Peat Hydrology Unit (KHG) has an important role in completing the task of wetting besides being enhanced by re-vegetation. Being a problem is a). whether the vegetation will return in the restoration mission (back to original), b). or, planted with industrial plants (production) or conservation/protection plants, c). the vegetation is left naturally after being moistened. Then if “revitalized” how to use and open the land without burning. In addition to burning, it is the most efficient and effective way to help
land clearing [2]. The quick and inexpensive way of preparing the land by commercial entrepreneurs is also the same, namely burning bushland and thick peat [4,5].

Based on Law number 32 of 2009 concerning Environmental Protection and Management (PPLH Law) it is expressly stated that everyone is prohibited from clearing land by burning. Regulated in Article 69 paragraph (1) letter h of the PPLH Law. With the threat of imprisonment for a minimum of three years and a maximum of ten years and a fine of 3-10 billion rupiahs (see also Law No. 18 of 2014 concerning Plantation, it is also supplemented by Government Regulation No. 45 of 2014 concerning Forest Protection). However, the provision of land clearing by burning is softened by paragraph 2 in the same article which also stipulates that verse 1 is paying close attention to local wisdom. This regulation is clarified with the provision that burning of land with a maximum land area of 2 ha per head of family for local varieties and insulated fires as a deterrent to fire spread Law number 18 of 2014 concerning Plantations (Plantation Law) also regulates the prohibition of burning this land, with an affirmation of the impact of pollution and environmental functions with the same threat of criminal sanctions. Minister of Environment Regulation confirms in Minister of Environment Regulation no. 10 of 2010 that customary law communities that burn a maximum of 2 ha per family must notify the village head. Laws and regulations in Indonesia have become unique and have been debated because sometimes central government regulations and local government regulations have been controversial. The following details will explain and illustrate contradictory central and regional government regulations. The anti-burning policy (zero burning policy) becomes an example as explained in the following discussion. This diagnosis describes the Tebing Tinggi Timur area as a case study and several cases explain national conditions and some cases take local stories. Literature studies and some interview results were included as material for discussion and discussion. The paper wants to answer and provide a diagnosis of the question: what is the description of the historical and cultural from actors/stakeholders in compliance with the laws and regulations of the community against peat fires.

Tebing Tinggi Timur in Kepulauan Meranti District is one of low land and the small island that vulnerable due to peat-land mismanagement. Since 2014, peat-wildfire had burnt down the peat layer of the island. The importance of managing lowland areas (where peat is included) is landscape-based so that the government's target to restore peat can be achieved optimally. (2) In addition to the lowlands having a strategic role in storing carbon, biodiversity, timber & income / economic resources for the Indonesian people, the challenges of lowland management are increasingly complex and severe in the future. As a result of threats: other water level increases, subsidence, and flooding. The restoration of peat-land has been conducted since 2016, where Tebing Tinggi Timur (T3) is one of the main targeted ad prioritized area since Badan Restorasi Gambut (BRG) establishment. The great fire events in 2014 made the government pay special attention to the situation in the Tebing Timur Subdistrict, the majority of which is peatland. This fire incident was allegedly motivated by the drying out of peatlands as a result of wasting water through canals. The government views the need for a realignment of the peatland management system so that its sustainability is more secure for the future of this region and the people who are the residents. In order to improve sustainable peatland governance involving the community, information is needed about the conditions and social characteristics of the community in Tebing Tinggi Timur. This paper will reveal the complex historical and cultural issue in avoiding a fire in converting or clearing peatland.

"Sometimes we feel that in companies like PT. Xxxx (agro-industry), Yyyyy, people are depressed. Usually because of a job vacancy. The people and community were eager to be invited and to be hired by those company. But the company requires expertise. If we have skills, we will certainly be accepted. So why do we hold mass actions to ask for work at the company? It's peculiar If someone with no skills gets a job unless for the most despicable helper and garbage man there, aren't we ashamed too? " Ahboon said (during an interview)
From the above-mentioned quote, this article aims to reveal and describe the cultural and historical constraints of peatland management in avoiding slash and burn. This research is executed in the Meranti Islands, where later on 2020 will become a pilot project for sustainable peat restoration. Along with Pulang Pisau (Central Kalimantan), Ogan Komering Ilir and Musi Banyu Asin (South Sumatra) and had become BRG’s priority targets. With the consideration that the Meranti Islands Regency has a historical chronology as a contributor to the closest smoke to the neighboring country. Aside from being a region that was affected both materially and non-materially, not only to Malaysia and Singapore but local livelihoods, namely the destruction of the sago plant ecosystem. Another consideration was the location of Tebing Tinggi Timur (T3) as the research location because in the air dispersion model it will influence neighboring countries when peat fires occur during 2014-2015. Only 115 Km to Singapore and 120 Km to Johor Malaysia, mainly the haze will be reached both instantly by haze.

Contemporary research in the aspect of government actor as peat stakeholder had been conducted. According to Agung Wicaksana in his thesis (2018), it was mentioned that the constraints of peatland management are mainly by the regulation. In addition to TRGD (Regional Peat Restoration Team) as the spearhead of the restoration program in Riau, it does not function properly in setting measurement of successful peat restoration.

There is a record of failure in global scale strategy; development decade (the decade of development) which was sparked by the United Nations in 1961. Ten years later, the UN conducted an evaluation of the mission of accelerating economic independence and social progress of developing countries. On the contrary, the economic growth of these poor countries has actually slowed. Anthropologist research concludes that the failure of one of them to be triggered is none other than; because of the lack of understanding of policymakers regarding the target community. Their motivation and reactions to the landscape ecosystem are poorly understood. The policy-setting paradigm of the central government and forced to apply equally to all ecological areas. The generalization paradigm and uniformity of problem solutions should be changed to a bottom-up.
Table 1. Village area at Tebing Tinggi Timur

| No. | Village Name          | Area (km²) | BPS* Survey 2015 |
|-----|-----------------------|------------|------------------|
| 1   | Kepau Baru            | 230.8      | 140              |
| 2   | Teluk Buntal          | 10.6       | 10.6             |
| 3   | Tanjung Gadai         | 10.6       | 90               |
| 4   | Tanjung Sari          | 56.0       | 17               |
| 5   | Nipah Sendanu         | 33.0       | 33               |
| 6   | Sungai Tohor          | 68.0       | 68               |
| 7   | Lukun                 | 154.6      | 154.6            |
| 8   | Sungai Tohor Barat    | 92.0       | 86               |
| 9   | Sendanu Darul Ihsan   | 31.6       | 30               |
| 10  | Batin Suiir           | 81.4       | 81.4             |
|     | **TOTAL**             | **768.6 km²** | **710.6 km²**    |

Source: BPS Tebingtinggi Timur (2013)

From the above-mentioned area, since 2013 it had declined area of about 50 km² that indicates the problem of abrasion and land degradation. Environment degraded by anthropogenic and hydrometeorology or climate change. Drought and peat-wildfire during the dry season, flood during the rainy season. Restoration and local government effort by revitalization and upgrading livelihood did not drive the local community to avoid a fire in land clearing or conversion. History and socio-culture aspect described in this article were adopting local community based historical interview and observation. For the wealthy province in Indonesia, Riau province particularly small island district had an annual problem of haze and degraded peatland mismanagement. For this research only covering and researching six villages to be observed due to time limitation.

2. Methods

Primary data collection is conducted by in-depth interviews. Interviews are the main data source in the observation method. In addition to using the in-depth interview method, data collection was also carried out by observing life in each village. According to Robert Chamber in his book entitled building the village that in order to know the condition of a tribe go further and stay longer. The researcher inhabits directly and lives in the life of the community to get the data as needed. Interviews were conducted on a number of speakers from the local community who were purposively selected in each village. to know the activities of people's lives in daily life, to know the geographical conditions, the environment, work activities of the society, technology, interactions between members of society, and changing social conditions. The population in this study is communal/local communities on T3 that are involved or related to the use of peat and competent land regarding the community environment, as well as its social influence (religious leaders / traditional leaders/community leaders). The sample is in the section of community leaders at various levels starting from local business leaders, farmers and forest encroachers (land users), family breadwinner (related to livelihood), village heads and related agencies.

The source of data obtained from this report besides coming from literature sources is dependent on the oral history of T3 residents. Because basically, with the background of the spirit of writing "critical history", making the primary data sources used in this paper focus more on oral history. Oral history becomes important and necessary because its existence represents how the perceptions of residents see and give meaning related to the living history of the environment in which they live. Critical history aims to capture the view of the past. It is the referenced historical evidence as to the historian’s and reader’s perspectives and ideological presuppositions.
3. Results and Discussion

According to data the monograph of the year 2014, the villages where research conducted has been carried out has a population that ranged from 970 to 1,873 inhabitants/village or number of the household that range up to 301 496 KK/village (Table 1.1). In general, the composition of the population according to gender in each village are very evenly matched, that ranged between 1.0 and 1.2 (male: female). Over the next two-three years, i.e. until the end of the year 2016, estimated population increase has happened as well as households, although the possibility of no more than 5%. This change does not affect the sex ratio of the presumed inhabitants in each village.

| No. | Villages             | Male (jiwa) | Female (jiwa) | Total (jiwa) | Household |
|-----|----------------------|-------------|---------------|--------------|-----------|
| 1   | Lukun                | 995         | 878           | 1,873        | 496       |
| 2   | Sungai Tohor Barat  | 550         | 446           | 998          | 265       |
| 3   | Sungai Tohor         | 689         | 639           | 1,328        | 344       |
| 4   | Nipah Sendanu        | 600         | 592           | 1,192        | 301       |
| 5   | Sendanu Darul Ihsan  | 489         | 481           | 970          | 269       |
| 6   | Tanjung Sari         | 593         | 528           | 1,122        | 293       |

Source; Socio-culture Research Report Tebing Tinggi Timur (2016)

T3 sub-district is known as a marine border area far from the center of government and it is difficult to access transportation to get out from other villages, it can only be used using sea transportation access, with people who are still underdeveloped about education, economics, and others compared to other villages in the district. The majority of peat wildfire occurs in Kepau Baru Village. Eventhough in early 2019 also arose in Lukun village (as the site of Demonstration plot of Restoration Project BRG), the new Kepau villages are tribes of “akits”, people in the islands, who are still far from the touch of outside communities, are far from being open to outsiders, they are afraid of outsiders because they are considered a threat and they can do anything. Kepulauan Meranti District compares to Timor-Leste had almost the same inhabitants (almost 2 million Populations). T3 sub-district only 6.4% populations of Kepulauan Meranti District, but it has the most land coverage.

| Kecamatan          | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  |
|--------------------|-------|-------|-------|-------|-------|-------|-------|
| Tebing Tinggi Barat| 15254 | 15254 | 15395 | 15507 | 15602 | 15712 | 15809 |
| Tebing Tinggi      | 54306 | 54306 | 54797 | 55181 | 55504 | 55879 | 56192 |
| Tebing Tinggi Timur| 11325 | 11325 | 11429 | 11511 | 11581 | 11661 | 11733 |
| Rangsang           | 17875 | 17875 | 18039 | 18170 | 18281 | 18409 | 18253 |
| Rangsang Pesisir   | 16405 | 16405 | 16558 | 16668 | 16765 | 16875 | 16971 |
| Rangsang Barat     | 16878 | 16878 | 17029 | 17146 | 17243 | 17353 | 17448 |
| Merbau             | 13691 | 13691 | 13816 | 13914 | 13997 | 14091 | 14174 |
| Pulau Merbau       | 14472 | 14472 | 14603 | 14705 | 14791 | 14889 | 14975 |
| Tasik Putri Puyu   | 15783 | 15783 | 15926 | 16037 | 16130 | 16235 | 16327 |
| Kepulauan Meranti  | 175989| 175989| 177587| 178839| 179894| 181095| 182152|
While living there, it turns out that a little more shadow is reduced, not all people are closed, there are still those who have known the outside world and welcomed our arrival happily. This time we were forged for self-maturity, faced with a community known as retarded, far from electricity a day and far from greeting communication signals. We have to survive with the natural and geographical conditions there, find and meet people from the tip of the end with the condition of the peat road transportation that we know if wet will become mud. The land constraint to the people who live in their own country but feel like being colonized, the land does not have, must live on rente, they are pursued with debts that never pay off. Far from the word for progress, for education, if they can already be thankful, limited facilities, and unattainable government attention. Even though this village has great potential, here we know the biggest sago company (PT. NSP) in the world for now, but they are very minimal to feel the benefits. They must feel the effects of fires from the spiteful hands of company employees until they burn their only livelihood. This village must rise with proper management of peat, the sago that they know is very friendly to peat, in the matter of the tax system/bondage to Chinese-Tauke, their potential for agriculture and fisheries is the capital of the rise of the economic downturn in the village community.

### Table 4. Tribes Population at Tebing Tinggi Timur

| No. | Desa             | Tribe | Melayu | Akit | Jawa | Lainnya |
|-----|------------------|-------|--------|------|------|---------|
| 1   | Lukun            |       | 1.686  | 94   | 94   | -       |
| 2   | Sungai Tohor Barat |      | 399    | 100  | 449  | 50      |
| 3   | Sungai Tohor     |       | 1.315  | -    | -    | 13      |
| 4   | Nipah Sendanu    |       | 834    | -    | 334  | 24      |
| 5   | Sendanu Darul Ihsan |      | 941    | -    | 29   | -       |
| 6   | Tanjung Sari     |       | 707    | 11   | -    | 404     |

Source: Research report [Kajian Sosial Masyarakat Tebing Tinggi Timur](2016)

### Historical Constraints

This section will review the history of the people of Tebing Tinggi Timur. Includes a summary picture of the history of the arrival of Javanese people, the history of indigenous tribes, footage of the characteristics of Malay life, and the history of the entry of rubber and sago as livelihoods summarized in the following table. Before we came to historical constraining factors of land management in T3 community, below table summarizes some historical path of Meranti Island District. Compile and concluded from desk study and literature reviews.

| Year          | Event                                                                 |
|---------------|----------------------------------------------------------------------|
| 1902          | Introduction of Rubber Trees in Sumatra                              |
| 1905-1911     | The colonial government moved around 4,800 people out of Java, mainly to Sumatra. Some say up to 6,073 people. The policy continued during the Japanese occupation. It is estimated that around 2,000 Javanese were moved out at that time [11] |
| 1920-1960     | The economy of the population of Sumatra from agriculture i.e: gum rubber, cloves, pepper, coffee, tobacco, oil palm and as the largest exporter of crude oil. It is estimated that the economy of the Sumatran people is twice the average income of Javanese [12,19]. This situation is thought to strengthen the background of Javanese migration to Sumatra (other than due to government programs). The migrants work as forest encroachers, open gardens until eventually become settlements that can be in T3. |
| 1933          | Dutch Government publishes a map of Bengkalis and surrounding islands. |
| 1950          | The era of the 50s The old order, in 1950 the program of resettlement policies continued. Javanese people were moved to South Sumatra. The implementation at that time was handled by the Transmigration Office. |
The 60s era The pattern of transmigration continues, with the main mission for rice production in an effort to achieve food self-sufficiency. Job looking for wood and forest encroachment to fulfill economic needs.

The 70s The work of mbalak (cutting wood) looking in the forest was more widespread. They called it Mbalak because most of them are arrival from Java. Migrants work with Chinese tauke financial assistance, the proceeds are deposited to companies and sold abroad. Noted that Japanese ships are often anchored in this Bengkalis islands in 1970-1975. This Japanese ship transports natural wood from the Meranti islands, the result of the provisions of the Foreign and Domestic Investment Laws (PMA) in 1967 and 1968. This momentum is considered the beginning of the start of forest concessions by the private sector in full.

In the 80s era, Meranti Island was abandoned by its residents to work in Malaysia, becoming construction and plantation laborers. Some people still do forest loggers.

90s era Before entering 1990, Meranti islanders were still free to enter and leave Malaysia. In fact, they even have official Malaysian identity cards. Post-1990 era immigration regulations began to be tight. But T3 people still migrate to Malaysia.

1998-2000 The era of reform began with the fall of the New Order. The centralized system of government began to be abandoned. Changing to regional autonomy (decentralized). So that the regional government has the authority to determine policies regarding the area independently.

2009 Tebing Tinggi Timur, which is part of the Meranti Islands Regency, is a district resulting from the expansion of Bengkalis Regency. SK no. 327 changed the status of the forest in Kab. Kep Meranti became an Industrial Plantation Forest (HTI). The area of HTI was initially 235,140 ha in 2004 to 350,167 ha in 2009. Including small islands in southern Sumatra. PT. LUM owns land at T3

2011-2016 PT. LUM returned their land to the community. Communities in 7 villages were given the right to manage the former PT. LUM.

2016 Forest and land fires in the eastern coastal region of Riau continue. Until now there have been 310.25 hectares of peatland burning in Meranti. Land fires also burned 50 hectares of community-owned sago plantations. Head of the Emergency Section of the Riau Province Regional Disaster Management Agency Mitra Adhimukti said, land fires were spread in the village of Tanjung Medang, Rangsan District, the area of the land burned was around 40 hectares; Semukut Village, Pulau Merbau District, 70 hectares; Mekar Sari Village, Merbau District, 150 hectares; Alahan Village, Tebing Tinggi District, 0.25 hectares; and Kayu Ara Village, Rangsan District, 50 hectares.

2016-2017 BRG and communities begin to work to restore peat which covers almost 80% of the island's area is peatland. Tebing Tinggi was included in the national pilot project in an effort to restore peatlands with sustainable management to avoid forest and land fires (Karhutla).

Summarized from the above path, the conclusion is most of the villagers are food gatherer (after harvesting) and mostly low-income community. The history concluded that their ancestors came as woodcutter and lumberer. Then their local knowledge as farmers is low technology agriculture. Have no support from the government, has no social security and depends on nature

T3 is consist of heterogeneous villagers with various ethnicities and religions. The society is dominated by Malay, Javanese, Minang, Bugis, Akit and Chinese tribes with existing religions namely Islam, Buddhism, Christianity, Confucianism areand belief in spirits (animism). Of the several religions that exist, Islam is a majority religion, while Christianity is a religion that has just developed in the village, but its development is quite rapid, marked by the number of worshippers who are increasingly recently. From the diversity that there is a relationship between the community in terms of the community less developed. The majority of people work in the company as BHL (Buruh harian lepas-casual daily workers) and permanent employees with working hours from 06.00 to 03.00 making daily community activities are spent working and the remaining time is used to take care of household needs and rest. Community activities are carried out on work holidays such as mutual cooperation, weekly religious services for Islam, praying in the church for Christianity and worship of other religions that are carried out in their respective homes.
Mutual cooperation (gotong royong) is only done for public facilities such as cleaning the connecting road between hamlets and making skating canals only because if the mutual assistance is carried out in an area where there is a community house residents will be reluctant to do mutual cooperation. Especially for people who live in the port area (the coast) which is inhabited by many people who are predominantly of Chinese, it is more difficult to mingle with the new society compared to the people living on land which are predominantly Muslim and Buddhist. In terms of concern between one community and another, it is also, if neighbors experience difficulties such as illness, there is no initiative from residents to visit, waiting for the condition to be very severe, then the community will collect money for medical expenses. This has become one of the drivers in a large family (relatives) occupying adjacent residential areas to anticipate if something unexpected happens can be directly helped by their own relatives.

Gotong Royong is local wisdom that allows the local community to help neighboring resident. The government and corporate actor had initiated this driven local wisdom to Masyarakat Peduli Api (MPA-Fire Aware Community) on July 24, 2014. With this local organization will help the to early detect and early warning of peat-wildfire. Through CSR (Corporate Social Responsibility) the community had given training and counseling of wildfire.

Table 5. Fire Extinguisher

| No. | Village      | Fire Extinguisher Aid |
|-----|--------------|-----------------------|
| 1.  | Kepau Baru  | 5 unit                |
| 2.  | Teluk Buntal| 2 unit                |
| 3.  | Sungai Tohor| 1 unit                |
| 4.  | Tanjung Gadai| 1 unit             |
| 5.  | Nipah Sendanu| 1 unit            |
| 6.  | Sendanu D. Ehsan| 1 unit        |
| 7.  | Lukun       | 1 unit                |
| 8.  | Batin Suir  | 1 unit                |
|     | Total       | 13 unit               |

Source: PT NSP CSR MPA Project in 2014

Above news was released by Antara news, LIPI as Indonesia Science Institution which stated Sago as a peat-land friendly plantation. In terms of the number of households or families resting their livelihood as well as a spacious garden, then the Sago plants the most important source of livelihood in the villages, except in Tanjung Sari. The garden there is the widest River in sago Tohor (estimated at 3770 ha). The garden there is the widest river in rubber Tohor (about 467 hectares) and the River West of Tohor (approximately 465 ha), while the largest coconut groves are found in Tanjung Sari (at least 155 ha). Disruption of hydrological system peat has led the impact quite easily seen in the community gardens. Be the drying of peat resulted in sago plant growth constrained. According to the speech of the local community, this has resulted in the leaves of plants can not grow sago Palms thrive so that the stems of this plant does not grow tall and smaller in diameter. Mengeringnya peat on rubber gardens and coconut in addition to causing fast declining soil also results in a decrease in the productivity of the plant. Rooting the tree of coconut and rubber surfacing the ground prove soil degradation that happens from time to time in the villages.

Disruption of peat is also fueled by the influx of seawater into the ground. The community testified that many rubber or sago, coconuts, especially that are relatively close to the coastline, with
which suffered damage as a result of these events. The gardens are already disturbed by the seawater is usually no longer productive so often considered worthless anymore to be treated. Many of the gardens suffered damage and then abandoned like these actually resides on shallow peat which is known as "either a chelate is sweet," which is known to be very fertile.

### Table 6. Livelihood, Plantation and Farm Area in Tebing Tinggi Timur

| No. | Desa             | Sago  | Rubber | Coconut |
|-----|------------------|-------|--------|---------|
|     |                  | Σ Household (KK) | Farm Area (ha) | Σ Household (KK) | Area (ha) | Σ Household (KK) | Area (ha) |
| 1   | Lukun            | 117   | 585    | 96      | 240       | 0           | 0         |
| 2   | Sungai Tohor Barat | 172   | 860    | 310     | 465       | 69          | 69        |
| 3   | Sungai Tohor     | 239   | 3770   | 199     | 467       | 0           | 0         |
| 4   | Nipah Sendanu    | 181   | 336    | 96      | 144       | 30          | 14        |
| 5   | Sendanu Darul Ihsan | 229   | 325    | 175     | 262       | 242         | 69        |
| 6   | Tanjung Sari     | 58    | 267    | 234     | 351       | 35          | 155       |

Source: Research report Sosial Masyarakat Tebing Tinggi Timur (2016)

The condition of the rubber plantation communities in the East generally not so Prime. This is indicated by the relatively low productivity. Information can be obtained from rubber farmers demonstrate that most rubber plant only produces 30-40 kg ojol/ha/week or 120-160 kg/ha/month. The low productivity of this likelihood is influenced by several factors. First, as expressed the farmers, many gardens contain rubber trees that likely was too old, for example, was more than 30 years. Second, the condition of the land for a garden that is generally a peat possibility is quite fertile so that rubber trees there are not getting adequate nutrient intake, while the farmers did not have the ability to do cultivation. Third, many gardens that were disrupted by a decrease or subsidence peat which causes most of the rubber tree rooting hanging above ground level, in addition to drought due to falling in the face of the water too. This interferes with the absorption of nutrients and water that is needed by the plant cultivation. Most gardens are pretty close to the shoreline even interrupted by intrusions or intrusion of seawater into the ground. The rubber trees that interrupted a lot of seawater is experiencing drought and death. Fourth, custom rubber farmers in T3 is intercepting rubber between 06.00 until 09.00 hours, as is the case in other areas in Indonesia in General. The tapping was done after the sun broke it probably joined lower volume SAP that can be tapped from each tree.

If now the price of rubber ojol in villages in district is an average of Rp 4000,-/kg, then the rubber farmers income which only has 1 ha, of course, means only ranged from Rp 480,000, up to Rp 640,000/month or when the plantation longing to 2 ha, then their revenues range from Rp. 960,000,- to Rp 1,280,000,-/month. In this case, must still be reckoned with times where farmers can't tap their rubber groves in October to December when it rained almost every day. Farmer income can also be reduced if they were tapping their garden entrusted to another party with the system for the results of 1:1, meaning that they can only earn half of the figures that have been mentioned above.

Like other sago farmers, the rubber farmers sago mostly borrowed money from their rubber Tauke the Chinese proprietor. This loan is usually paid gradually with rubber ojol deposit with the price as agreed upon by both parties at the time of borrowing the money. As experienced by most farmers sago, rubber farmers can "entangled" in accounts receivable which impacted greatly harming themselves. The accumulated debt can make them no longer able to enjoy the proceeds ojol their full rubber or even eventually were forced to forfeit their harvest when it should be released to pay off the debt. According to information, in a State of "derailed" rubber farmers were forced to sell not their garden with very low prices, such as only Rp 3 million,-/line or less than $1,000,-/ha.

Labour is often meant to refer to various types of lower-level jobs generally rely on brute power and skill. Labour is an important part of the economy of communities in T3. The number of members
of the public in this subdistrict has a source of livelihood by working as laborers were treated around 1250 people. They are working in the various activities of the economy there, either as the main source of livelihood or sideline. Some residents of T3 of seeking livelihoods in Malaysia. According to estimates of the speaker, in each village, there are likely between 20-40 KK whose head and/or one of its members working as illegal laborers in this neighboring country, where they worked mainly in the field of palm plantations and/or rubber. Income can be earned in this way touted.

4. Conclusions

Peat Land management barriers in T3 are low levels of community education, and many are illiterate. The motivation to learn and the importance of low education is not even available, driven by low education and educator facilities. The pattern of public relations to other communities is still very closed, even difficult to communicate directly with the indigenous people's community, the language and the feeling of minder. The low education makes the public easily meshed up in the tax practice Towkay China resulted in them having no land for shelter. Village leaders are still far from good governance management, because in terms of archiving the important documents of the village still do not exist. It is not less important than the staff and village rank are selected and appointed not because of the quality and the ability of the field, but only a fraternity relationship with the village head. Since 2016 several villages had initiate election for village leader. Social society disease like gambling, drugs, and alcohol also emerge in T3.

T3 Sub-District has potential if managed properly. In the future, the community is invited to not be bound by tax practices (ijon), which results in the loss of their residences, finding solutions for an economically independent community that does not depend on sago trees alone. The potential of existing sago can be developed by home industries for other derivative products from sago. Communities to keep the balance of peat still wet by maintaining natural wood alongside sago. Other agriculture such as black soybeans and vegetables are also promising plantation. But mostly socio-cultural and historical constraints in land management is mainly caused by lack of education and economy system in the region. Because their predecessor came to this island to mbalak then the changing role as environment keeper is not something they are familiar with. Back then, nature had given them enough livelihood, but since the growth of population and lack of attention to the environmental issue had driven the society to face annual haze disaster.

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