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The Dynamics of Oil Palm Plantations in East Kalimantan: A Case Study of 2010-2020

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Author's contribution

The sole author designed, analysed, interpreted and prepared the manuscript.

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ABSTRACT

This inquire about investigates the ways that these desires are playing out within the oil palm plantation in East Kalimantan. Oil palm plantation are East Kalimantan's breakthrough to extend community economic development whereas diminishing the region's reliance on natural resources. This investigate employments a qualitative descriptive analysis method from primary data gotten through literature studies and focus group discussions. We discover that oil palm plantation postures genuine deforestation challenges to the concept of green development, as 44% of arrive apportioned for plantations is still forested. At the same time, there may be openings to dodge deforestation and seek after more feasible oil palm improvment pathways, as 87% of concessions have however to be planted. The improvement of oil palm plantations is supported by few government regulations, in spite of the fact that their usage within the districts makes different impediments.

Keywords: Plantation; forest; oil palm; government policies; district head.

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1. INTRODUCTION

East Kalimantan province is depends on land development such as mining and oil palm cultivation, 500,000 hectares of forest are lost every year and the province has become Indonesia's third largest emitter of greenhouse gases. In East Kalimantan, there are approximately 6,388,157 hectares of dryland located in the Non-Forestry Cultivation Area (KBNK). This area status according to the provincial General Plan of Regional Spatial Planning (RUTRW) is included in the area which can be converted into various activities outside the forestry function. In the framework of utilization and management of natural resources in the area, the development of oil palm plantations is carried out, this is one of East Kalimantan's breakthroughs to increase people's economic growth while preparing to anticipate regional dependence on natural resources be renewedces (SDA) which until now is still a mainstay and non-renewable [1,2,3].

The expansion process is guided by the system of permits issued by the local goverment. Companies must have three types of permits before they can legally begin planting. The first is the Local Permit (Ijin Lokasi), which is issued by the District Head (Bupati) and gives the company a specified time to obtain other necessary permits. An investment permit can only be issued to areas that are officially designated for plantation development through regional planning [4,5,6]. Another is the IUP (Plantation Business License) which is issued by Bupati after the company has completed all the necessary steps to set up a plantation. This includes assessing environmental and social impacts and agreeing with communities in the permit area on the location of tree plantations and conditions for community participation. Once all the requirements are met, the Land Administration (BPN) issues a Cultivation Right Permit (HGU) which authorizes the owner to produce palm oil for 35 years, renewable for another 25 years..While it is recognized that conversion of natural forests is not always a bad thing, there are many success stories convert forests into more productive and sustainable cultivation. For example, the conversion of natural forests to rice fields, cocoa plantations, rubber plantations, and various forms of agroforestry, including oil palm plantations in Java, Sumatra, and Kalimantan, have shown that conversion of natural forests is not necessarily less environmentally friendly. Friendly [7-10].

Based on the description above, East Kalimantan has potential natural resources (SDA) and the availability of land that is widely spread to be cultivated either directly or through the production process [11,12]. In the framework of the management and utilization of natural resources always aims to increase the creation of employment and business opportunities so as to increase the income and welfare of the community. In the economic development of the region, one of the sectors that plays an important role besides the oil and gas sector is the agricultural sector, namely the oil palm plantation subsector.

2. MATERIAL AND METHODS

To find answers to the problems formulated and the objectives to be achieved as mentioned above, two approaches were taken:

1. Literature Study. This study was conducted to obtain a comprehensive picture or portrait of the palm oil industry, especially related to government policies in the development and exploitation of oil palm plantations, the structure and performance of the oil palm plantation market and the main issues that arise around the exploitation of oil palm plantations.
2. The Field Study. The second step was to conduct a field study through interviews with various resource persons, as well as FGDs (Focus Group Discussions) with stakeholders in the region.
   The data processing methods in the study are quantitative and qualitative methods, leatherative analysis with descriptive methods.

3. RESULTS AND DISCUSSION

3.1 Result

According to Budidarsono et al [13], the management of oil palm plantations in Indonesia is broadly grouped into three major patterns, namely 1). Smallholder/people's oil palm plantation pattern: is an oil palm plantation carried out by farmers/people; 2). State-owned oil palm plantation pattern: carried out by state-owned plantation companies/SOEs; 3). Private oil palm plantation pattern: carried out by privately owned

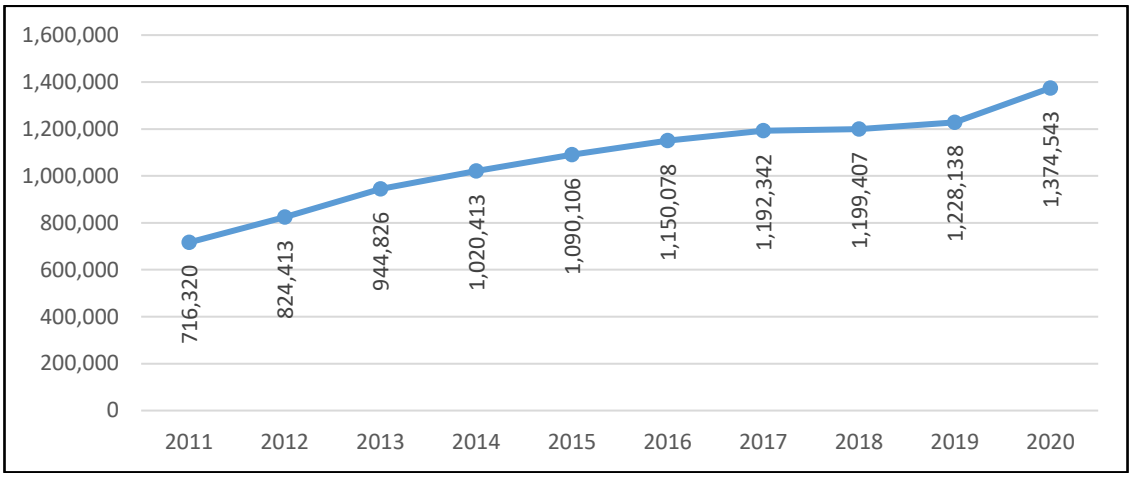

Fig. 1. The development of oil palm plantation area East Kalimantan province (Hectares)

companies. The development of oil palm in Indonesia continues to accelerate, in 2009 it was recorded to reach an area of 7,509,023 ha with a production of 20,900,000 tons of FFB, consisting of 3,013,977 ha (7,599,130 tons) of smallholder oil palm plantations, 608,580 ha (2,729,250 tons) of state plantations and 3,895,470 ha (10,571,620 tons) of private plantations[14, 15].

Recorded development of oil palm plantations in the last five years, namely in 2005 an area of 201,087 ha with a production level of 1,012,788.50 tons of FFB and in 2009 had an area of 530,554.00 ha with a production level of 2. 298,185.50 tons of FFB consisting of 129,279.00 ha (546,111.00 tons), 15,937.00 ha (236,087.00 tons), and 385,338.00 ha (2,298,185.50 tons) of smallholder oil palm plantations. As of 2010 there were 22 palm oil mills with a mill capacity of 965.5 tons FFB/hour, and 8 palm oil mills under construction with a total capacity of 330 Land expropriation will not happen unless the law simply turns on the tap for emission permits. Palm oil plantation companies expand their oil palm plantations in commercial rights area (HGU), while oil palm farmers expand oil palm plantations on their own land or in small plantations. After the launch of the million hectare oil palm development program in 2003, the development of oil palm plantations in East Kalimantan experienced a very rapid increase in almost all of East Kalimantan, namely Paser, East Kutai, West Kutai, Penajam Paser Utara, West Kutai, Berau, Bulungan and Malinau [16,14,15,17]

East Kalimantan is characterized by a large area of untouched tropical forests. For these reasons, East Kalimantan was selected as a priority region for reducing greenhouse gas emissions [16,18], and the National Green Growth Program designated the province as one of its pilot sites in 2013 [19]. Until December 2013, the province granted location permits to a total of 344 companies on an area of 3.9 million hectares; IUP grants permits to 215 companies with an area of 3.1 million hectares; and HGU concessions to 127 plantation companies covering 1.1 million hectares [14, 17, 20], personal communication, December 2013). The county government aims to reach 2 million hectares of HGU concession area by 2018 [21][22][23][24]; this means an acceleration of plantation expansion over the next three years. Until 2020, the oil palm area reached 1,374,543 hectares consisting of 373,479 hectares as plasma crops/people's plantations, 14,402 hectares owned by State-Owned Enterprises (BUMN) as core companies and 986,662 hectares owned by Large Private Plantations (393 companies)[25][26][23].

3.2 Discussion

3.2.1 Oil palm plantation and economic impact

Oil palm plantations as a system do not move independently when growing their palm oil business in the local community. A local network is also a support system that supports the company's productivity. At the heart of the local community is the local elite, the local elite involved in the expansion of oil palm plantations are those who have the human resources to manage the land [13,27].

Local elites are individuals or groups of people who have influence, financial skills, technology,

social skills at the regional level, and in the case of oil palm plantations, local elites use small oil palm plantations with an area of less than 25. hectares. to promote the productivity of the core gardens and on cleaning the harvest and selling it to the gardens [21,13, 22]. One of the main problems with the expansion of oil palm plantations, however, is the conversion of tropical forests that serve to maintain the diversity of flora and fauna and the global climate into mono-culture oil palm plantations. Oil palm presents serious deforestation challenges to the concept of green growth, as 44% of the land set aside for plantations is still forest [21, 26, 27]. There is no significant mapping of social, political and economic risks to be able to produce alternative palm oil management schemes in the institutional context to field practices. At the same time, there may be opportunities to avoid deforestation and develop oil palm more sustainably, as 87 percent of the concessions remain unplanted, but it remains to be seen if there is the political will to continue this policy change. Pollution caused by smoke from land clearing by burning and waste disposal are plantation methods that poison living things and the global climate in the long term [28, 26, 25].

Perhaps the most important question is why oil palm plantations should be established through conversion. Oil palm plantations can be planted on marginal land and in non-forested areas, where they can grow well and contribute to economic development. When oil palm development leads to the conversion of tropical forests, the question arises -in our opinion, which can be considered- whether conversion is necessary. In such cases, an in-depth and transparent assessment needs to be conducted [28, 25].

Economic effects of expansion of oil palm plantations The expansion of oil palm plantation is a change in the incomes of farmers argues that the development of oil palm plantations accelerated the economic development of the community to alleviate poverty in rural areas. Other research suggests that the economic impact of of oil palm expansion can increase diverse diverse investment opportunities and generate stable income [29, 30].

Through the Focus Group Discussion (FGD) activities, it was found that there are several problems and obstacles in the development of oil palm plantations, such as:

1. the increase in oil palm area is claimed to be partly derived from the conversion of natural forests and peatlands that affect global climate change:
2. The social problems that arise in oil palm development areas, as summarized by Alam et al (2012) from various references, center on questions of land ownership and use and how rights are transferred. Amalia et al (2012) cites the Consortium for Agrarian Reform's record of 32 percent or 261 conflicts and Sawit Watch's record of 570 conflicts.
3. difficulties in obtaining capital because of inability to meet collateral linkage requirements for bank financing, unavailability of technical guidance and market information.
4. The Union of Oil Palm Farmers in East Kalimantan (SPKS) perceives that the FFB pricing mechanism is not transparent. While based on the Minister of Agriculture's Regulation, farmers have no opportunity to be involved in the price determination process.
5. the conversion process of natural forest and peatland contributes negatively to deforestation, degraded peatland, and loss of water resources and biodiversity.
6. local governments politicize licensing, which occurs due to individuals' and communities' lack of knowledge of their rights and the processes and procedures to be followed.

3.2.2 Palm oil plantation supporting policies

Through Government Regulation No. 26/2021, there is a minimum and maximum area limit for oil palm plantations. The minimum area for oil palm plantations is 6,000 hectares and the maximum is 100,000 hectares. In addition, companies are obliged to facilitate the development of community plantations covering 20% of the land [31,32].

The expansion process is guided by the system of permits issued by the local government. Companies must have three types of permits before they can legally plant:

1. The Location Permit is issued by the District (Regency) Head (Bupati) and gives the company a fixed amount of time to obtain other necessary permits. An investment permit can only be issued for areas officially designated for plantation development through the 9th District Plan.
2. The IUP permit (Plantation Business Licence) is issued by the Regent (head of

district/city) after the company has completed all the necessary steps to establish the plantation. This includes assessing environmental and social impacts and agreeing with the communities in the permit area on the location of tree plantations and the conditions of participation of community members.

3. Once all requirements are met, the Land Administration (BPN) will issue an HGU (Business Use Rights) Permit, which authorizes the owner to produce palm oil for 35 years, renewable for another 25 years.

Smallholder oil palm farmers (independent Palm Oil Farmers) will also be provided with facilities and infrastructure to receive funding subsidy support through the use of BPDP-KS (Palm Oil Plantation Fund Management Agency) funds [32]. The assistance fund is regulated through the Decree of the Director General of Plantation of the Ministry of Agriculture No. 144/Kpts/OT.050/4/2020 concerning the funding of facilities and infrastructure for smallholders using BPDPKS subsidy funds. Policies to support independent smallholdersincluding a massive community oil palm replanting program to help independent smallholder farmers renew their oil palm plantations with more sustainable and high quality oil palm and reduce the risk of illegal land clearing. Based on the description of problems and obstacles obtained through the interview mechanism and Focus group discussion above, several alternative policies are proposed as follows:

1. Promotion, advocacy and public campaign of the palm oil industry
2. Product development (downstream and sideline) and value-added enhancement
3. Strengthening and law enforcement in sustainable palm oil development and license governance
4. Transparency of information on oil palm plantation development
5. Development of smallholder accessibility to resources
6. Control of natural forest and peatland conversion
7. Encouragement of the application of RSPO principles and criteria
8. Development of conflict resolution mechanisms through partnership cooperation between plantation companies and coconut processing industries with surrounding communities/farmers to develop smallholder plantations.

4. CONCLUSION

Palm oil governance in Indonesia still has a trail of problems. The government has done many things related to the development of the palm oil industry. These include the implementation of environmental and plantation standardization, stimulating palm oil downstream investment, farmer assistance, providing funds for plantation replanting programs, ease of investment, and international trade diplomacy. East Kalimantan oil palm cultivation market structure is oligopolistic, dominated by Large Private Companies, which control 52.73% of the total area of production factors (land) cultivated for oil palm plantations. The development of oil palm plantations is carried out, this is one of East Kalimantan's breakthroughs to increase people's economic growth. The government has done many things related to the development of the palm oil industry.

COMPETING INTERESTS

Author has declared that no competing interests exist.

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