The Potential of Palm Oil as An Economic Recovery in Central Kalimantan in The Era of A Pandemic: Typology Klassen Analysis

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Abstract. Palm oil is one of Central Kalimantan's leading commodities. With a plantation area of almost two million hectares. Central Kalimantan is capable of producing up to eight million tons of palm oil annually. During the pandemic, Central Kalimantan's economy experienced the deepest contraction of up to 3.17 percent due to restrictive policies to prevent the spread of the virus. According to Statistics of Indonesia, the agriculture, forestry, and fisheries sectors are the most resilient sectors because they can grow positively amid a pandemic. The palm oil commodity could be a solution for boosting the economy of Central Kalimantan through appropriate management strategies. One strategy in recovering from the impact of the pandemic is through Small and Medium Enterprise's innovation. Based on the Klassen Typology analysis, Pulang Pisau Regency has the biggest potential for developing oil palm SMEs (quadrant I). In addition, Palangka Raya City and Kapuas Regency are in quadrant IV, which means they have the highest number of SMEs. However, their economic growth has contracted.

1. Introduction

Palm oil is one of Central Kalimantan's leading commodities besides coal. Annually Central Kalimantan can produce up to eight million tons of Crude Palm Oil [16]. One of Indonesia's largest palm oil producers, Central Kalimantan contributes to national and regional development. In 2020, The Public Plantation Office of Central Kalimantan Province noted that the land of palm oil plantations in Central Kalimantan reached 1,807,547.27 hectares (Ha). That includes large state plantations, private plantations, and household plantations. During the pandemic, oil palm plantation production was rose to 0.37 percent from last year's output to 5,182,919.43 tons [4].

The emergence of the COVID-19 virus led to a restriction policy with all the consequences. One of the unavoidable consequences is an economic slowdown. Statistics of Indonesia noted the economy of Central Kalimantan in the second quarter of 2020 contracted 3.17 percent if compared to the same quarter the previous year or year-on-year. In the next quarter, the economy started to recover but still contracted by 3.14 percent and 2.10 percent respectively, due to the economic recovery strategies of the central and regional governments. In the first quarter of 2021, Central Kalimantan's economy once again contracted by 3.12 percent. The growth is in line with government consumption which was still low at the beginning of the year. The growth rate of Central Kalimantan's GRDP during the COVID-19 pandemic and cases shows in the following figure.
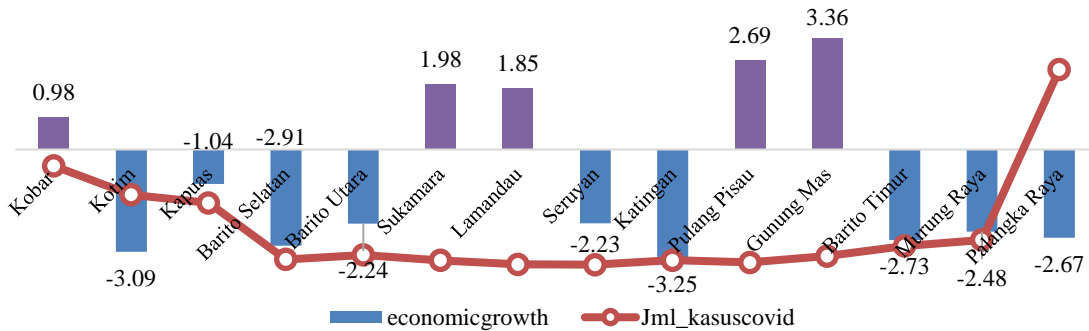
Figure 1. Economic Growth Rate (percent) and COVID-19 Cases in Central Kalimantan 2020.

The COVID-19 pandemic had a negative impact on Indonesia's economic conditions, including in Central Kalimantan Province. In the figure above, of the 14 urban districts, there are five districts with positive economic growth, including Kotawaringin Barat Regency (0.98 percent), Sukamara Regency (1.98 percent), Lamandau Regency (1.85 percent), Pulang Pisau Regency (2.69 percent), and Gunung Mas Regency (3.36 percent). As the largest palm oil producer in Central Kalimantan, the economic growth of the five districts is supported by palm oil. In addition, the largest distributor of GRDP is in the agricultural, forestry, and fishery sectors.

Nationally, the most resilient sectors are agriculture, forestry, and fisheries because they can grow positively amid a pandemic [8]. During the pandemic, agriculture in Central Kalimantan Province grew by 0.10 percent, slower than in 2019. The plantation was the mainstay of the agricultural sub-sector that was able to survive during the pandemic. BPS noted that Central Kalimantan's total exports in the fourth quarter of 2020 contracted 0.67 percent YoY, while CPO exports could grow 3.92 percent. In other words, palm oil commodities can retrieve the economy of Central Kalimantan through appropriate management strategies. One of the strategies in recovering the impact of COVID-19 is through the innovation of Micro, Small, and Medium Enterprises (MSMEs).

The Ministry of Cooperatives and SMEs noted that in 2019 MSMEs had an urgent and strategic role in the structure of the Indonesian economy because they contributed to the Indonesian economy by 60.51 percent, employment of 96.92 percent, exports 15.65 percent, and market share of 99.99 percent of the total business units. There are three indicators that show the important role of MSMEs in the economy, among others are a large number of businesses in each economic sector, great potential in absorbing labor, and contributing greatly to national income [10].

However, MSMEs in Central Kalimantan have not developed optimally. It can be shown from the position of MSME loans which are still below the loan disbursement ratio. As of the second quarter of 2020, the ratio of MSME lending or financing in Central Kalimantan reached 19.57 percent, slightly below the set limit for MSME lending ratio of 20 percent [3]. In addition, the position of MSME loans in Central Kalimantan was only 12.15 trillion rupiahs in the third quarter of 2020. Meanwhile, MSME lending in the nearest province, South Kalimantan, reached 14.52 trillion, an increase of 1.02 percent from last year.

The potential for developing oil palm MSMEs in Central Kalimantan is interesting to study. In addition, this study aims to see the relationship between the export performance of palm oil commodities and economic growth, as well as to analyze which areas have the potential to develop oil palm MSMEs using Klassen typology analysis. Previous research conducted by Dianti in 2019 analyzing the potential of oil palm in Simalungun Regency showed that the palm oil commodity was in quadrant II, namely the advanced but depressed sub-sector. Other researchers also identify and analyze leading commodities and potential commodities in the agricultural sector using Klassen Typology. These studies include the economic potential of the Agriculture and Tourism Sector in Bali Province [14], the leading economic sector in Kerinci Regency, Jambi Province [11], and determining the leading sector in Cilacap Regency [14]. Currently, the government has issued PMK Number 65/PMK.05/2020 regarding the provision of interest subsidies/margin subsidies for MSME

loans/financing to support the implementation of the national economic recovery program [3]. Therefore, it is hoped that MSMEs will become the supporter of the economy amid the current pandemic situation.

2. Methodology

2.1. Klassen Typological Analysis

Klassen typology is an analytical tool used to describe the pattern and structure of economic growth in each district/city. The Klassen typology divides regencies/cities based on two indicators, specifically regional economic and regional per capita GRDP [1]. However, this study uses indicators of regional economic growth, regional palm oil production, and regional economy with the number of Smal Micro Industry companies to determine which areas have great potential to develop palm oil. Through this research, four different characteristics of patterns and structures of economic growth were obtained, namely quadrant I (fast-paced and fast-growing areas), quadrant II (developed but depressed areas), quadrant III (fast-developing lands), and quadrant IV (relatively lagging areas) [12].

The line that separates each district/city into four quadrants is the economic growth of Central Kalimantan Province as the vertical axis, meanwhile the growth of palm oil production and the number of IMK companies as the horizontal axis.

Table 1. Klassen Typology Matrix

	$Y_i < Y$	$Y_i > Y$
$R_i > R$	**Quadrant II** (Developed but depressed area)	**Quadrant I** (Fast forward and fast-growing area)
$R_i < R$	**Quadrant IV** (Relatively underdeveloped area)	**Quadrant III** (Fast-growing area)

Notes:

Y_i : District/city economic growth i

Y : Economic growth of Central Kalimantan Province

R_i : Growth of oil palm production and number of district/cities IMK companies i

R : The growth of palm oil production and the number of IMK companies in Central Kalimantan Province

2.2. Data and Data Source

This analysis uses data from 2017 to 2020 sourced from the Statistics of Indonesia and the Indonesian Palm Oil Association. The descriptive analysis uses the variables of CPO production growth rate, economic growth, export value growth, enterprise, and workforce growth rate, and the growth of Covid-19 cases in Central Kalimantan. Klassen's typology analysis uses data on district/city economic growth, Central Kalimantan Province economic growth, palm oil production growth, and the number of district/city and Central Kalimantan Province companies.

3. Result and discussion

3.1. CPO and Central Kalimantan Economic

Figure 2. Growth Rate of CPO Production and Economic Growth of Central Kalimantan Province 2017-2020.
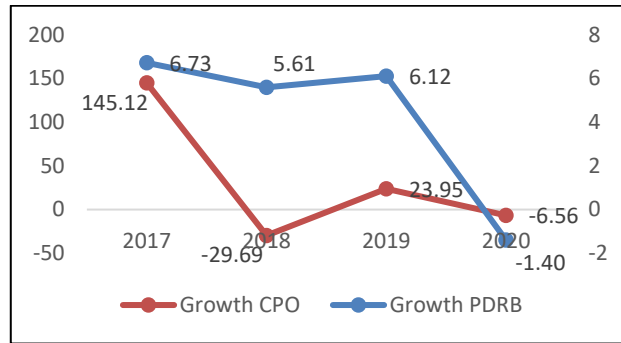
Figure 3. CPO Export Growth Rate and Economic Growth in Central Kalimantan Province 2017-2020.

The figure above shows Central Kalimantan's economic growth is affected by the production of CPO commodities. In 2018, Central Kalimantan's economy grew 5.61 percent, decelerating from the previous year in line with the significant slowdown in CPO production that year. Furthermore, Central Kalimantan's economy accelerated to 6.12 percent in accord with the increase in CPO production to 6.19 percent from the previous contraction of 6.09 percent to 0.10 percent. During the pandemic, Central Kalimantan's economy contracted by 1.40 percent. Meanwhile, CPO production was still able to grow by 0.37 percent.

CPO production in Central Kalimantan is mostly exported abroad. In the figure above, the value of CPO exports grew significantly by 145.12 percent to 7.2 trillion rupiahs in 2017. Following the growth of CPO exports, the economy of Central Kalimantan grew positively by 6.73 percent. Furthermore, when exports contracted 29.69 percent to 4.7 trillion rupiahs, Central Kalimantan's economy slowed 5.61 percent. As palm oil export performance improved in 2019 with a growth rate of 23.95 percent, Central Kalimantan's economy also improved. During the pandemic, the economy of Central Kalimantan recorded a contraction of 1.40 percent, in line with the export value which fell 6.56 percent.

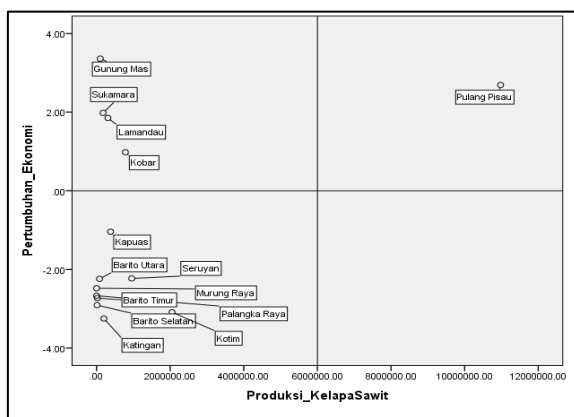*3.2. Klassen Typology Analysis of Economic Growth and Palm Oil Production*

Figure 4. Klassen Typology of Economic Growth and Palm Oil Production Growth in 2017-2020.
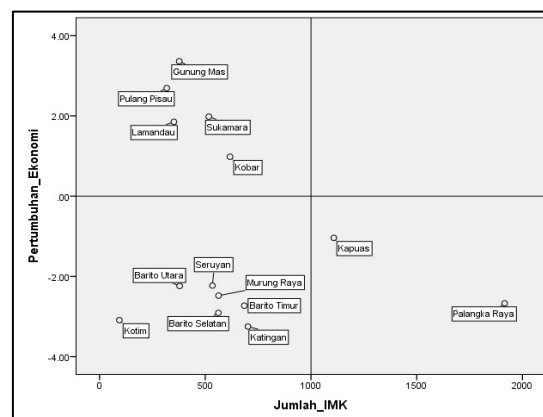
Figure 5. Klassen Typology of Economic Growth and Number of Small Micro Industry Companies in 2017-2020.

Figure 4. shows Pulang Pisau Regency in quadrant I have advanced production and economic growth values. It is growing significantly above the average economic growth and average palm oil production in Central Kalimantan Province. In 2020, the largest palm oil production is located in Pulang Pisau Regency, which has 10.98 million tons of output. In line with that, Pulang Pisau's

economic growth also managed to grow positively by 2.69 percent amid the COVID-19 pandemic. Regions in quadrant II, namely Gunung Mas, Sukamara, Lamandau, and Kotawaringin Barat have advanced production values and economic growth but are depressed, meaning that the average palm oil production growth is above the provincial average. However, the average economic growth is below the province.

If we pay attention to the economic growth and the number of Small Micro Industries in districts/cities, Palangka Raya City and Kapuas District are in quadrant III or fast-developing areas. It means that these districts have economic growth above the average economic growth of Central Kalimantan Province. However, the average growth of SMI companies is still short. In quadrant II there are Gunung Mas, Pulang Pisau, Lamandau, Sukamara, and Kotawaringin Barat (Kobar) regencies. The five regencies have a high average growth rate of IMK companies. However, their economic growth is still below the provincial average. The economy is supported by the main commodity of the district's agricultural sector, namely palm oil. For these five districts, innovation products from palm oil can be developed, such as and are expected to increase the number of MSMEs and advance the MSME sector so that the position of the national palm oil industry is getting stronger.

4. Conclusion

The development of MSMEs during the pandemic is one of the strategies for economic recovery during the phenomenon of workforce reduction by several companies. This development can be focused on the agriculture, forestry, and fisheries sectors as the largest contributors to the economy of Central Kalimantan. In addition, Central Kalimantan is one of the largest palm oil-producing provinces in Indonesia. So there needs to be an injection of knowledge, ease of administration, granting MSME loans, and seed assistance to business actors to encourage the creation of MSME product innovations, especially palm oil commodities. Pulang Pisau Regency is a district that has the potential to develop oil palm commodities. Apart from having a large area, Pulang Pisau's palm oil commodity has the best performance and can continue to accelerate. Thus, MSME's innovative products from palm oil such as bag crafts, hand sanitizers, and others can help support people's lives.

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