

Contributions and Challenges of Palm Oil to Smallholders in Malaysia

Azhar Ahmad, Likhman Hakim Osman, Ahmad Rafli Che Omar, Mara Ridhuan Rahman, Suraiya Ishak

Abstract—This paper highlights the important contribution of the palm oil industry to the country by providing employment opportunities to more than four million people mostly among the rural community. Smallholders are able to own their land and earn fixed income from palm oil and enjoy the perfect infrastructure facilities. However, there are many obstacles in the global palm oil production such price fluctuations, competition and anti-oil palm campaigns. Therefore, Malaysian smallholders face lack of income from their plantation yields caused by these macroeconomic factors such as rising cost of farming and size of land that is not economical. Therefore, it is a necessity for the smallholders to go into business. An exploratory study among 70 smallholders was done to investigate their interest in doing business. The finding shows that the main reason for their involvement in business activities is to increase their income level. Also, the most widely implemented business type is retailing.

Index Terms— Business activities, Income potential, Market fluctuation, Commodity crops, Palm oil, Rural community, Smallholders.

1 INTRODUCTION

Palm oil products are Malaysia's largest agricultural commodity sector. As of 2017, the export value of palm oil was RM77.85 billion (USD 5.25 billion), which had contributed for almost 56 percent of Malaysia's commodity export earnings [1]. Rubber commodity products sit at second place with the export value of RM32.3 billion, which was 23 percent to export earnings of the country's commodity sector. From Figure 1, timber products contributed for RM23.2 billion or 16.6% while cocoa product sector contributed RM5.6 billion or 4 per cent to commodity export earnings.

The contribution of palm oil is huge on the nation's socio-economy. There are 650,000 smallholders in Malaysia and over 2 million people rely on the palm industry as their source of work [1]. Besides providing economic returns to the country as well as employment opportunities, palm oil commodity also faces many challenges. Uncertain market price of exports as well as negative campaigns by foreign countries and NGOs have affected the country's income [2].

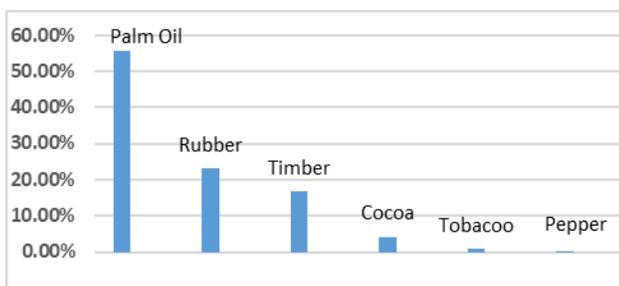


Fig. 1: Commodity Products Exports 2017 (Total RM141.1 Billion)

This paper discusses the contributions of the palm oil industry to the community and smallholders. Through literature review, commodity crops have provided many benefits to the nation and toward reducing poverty among the rural community. Issues related to the palm oil smallholders are also discussed. With the challenges face by the commodity market various efforts are needed to assist the smallholders and one initiative is get them involve in business activities. The final section elaborates on a survey done on the smallholders to get their feedbacks on business ventures

2 PALM OIL INDUSTRY IN MALAYSIA

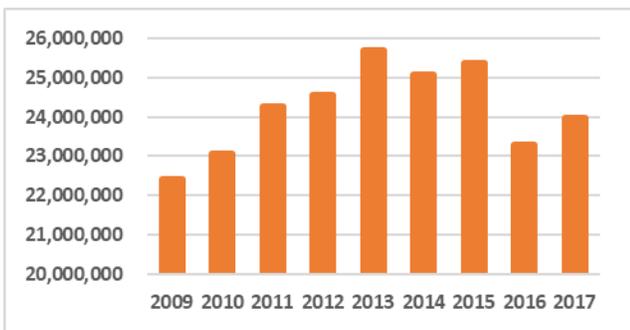
Previously, the agriculture sector in Malaysia concentrated on food-based crops such as rice, vegetables and fruits. Agricultural activity at that time was subsistence and based on traditional farming. Then, Malaysia turned to commercial crops like rubber, cocoa and palm oil. Rubber became the main crop of the mid-1890s. Rubber was cultivated and was rapidly developed into a major trading crop after the 1st World War. However, the size of rubber cultivation has been narrowing as a result of several factors such as decreased in rubber price and the farmers were more interested in planting palm trees.

In 1917, the expansion of palm oil plantations in Malaysia had grown from 145,000 hectares to 5,000,000 hectares. The industry also produced various types of products, such as cooking oil, industrial oil and fuel (biodiesel). This development illustrated the growing demand for palm oil. The three major importers of Malaysia's palm oil are EU nations, China and India [3]. Palm oil industry also has become the major contributor to the agricultural commodity sector. Since then, the agricultural sector has played an important role in contributing to the country's income. This is

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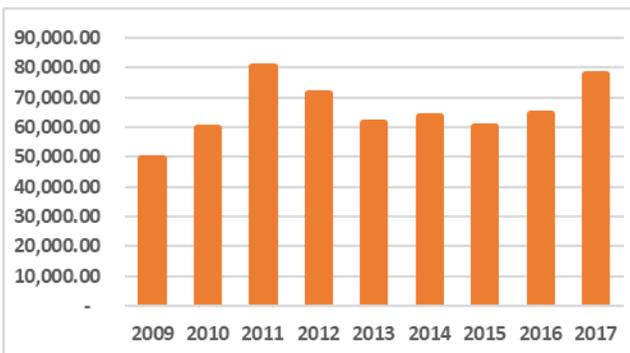
evidenced by the contribution of Malaysia's palm oil as the second largest contributor to the global palm oil market behind Indonesia.

Malaysia has been one of the most important palm oil exporting countries since 2005. According to Malaysia Palm Oil Board (MPOB), Malaysia is the world's second-largest palm oil producer and palm oil-related products manufacturer with a total export worth RM59.8 billion (USD 15 Billion) or 24 million tons [4]. It was an increase of 20.6% from 2009 as resulted from strong global demand and high crude palm oil prices. As shown in Figure 2, palm oil export earnings rose 34.5% or RM20.61 billion to RM80.39 billion in 2011.



Source: MPOB Annual Report

Fig. 2: Palm Oil Exports (Tons)



Source: MPOB Annual Report

Fig. 3: Total Income from Palm Oil Products (RM Billion)

In 2012, Malaysian palm oil industry remains one of the most important industry in the country. Palm oil is the fourth largest contributor to the national economy and currently contributes RM53 billion to Gross National Income (GNI). However, the export value of exports declined from RM80.4 billion in 2011 to RM71.4 billion in 2012. The decrease of export value was due to the decline of commodity prices. As a commodity, palm oil also faces market fluctuation in pricing. Meanwhile in 2013, the exports of oil industry increased to RM73 billion. The increase in export value of palm oil or palm-based products was due to strong palm oil prices in the international market.

In 2015, Malaysia produced RM20 million tons of crude palm oil (CPO) and contributed 32 percent to world

production. Palm oil also contributed 5.8 per cent to the country's export earnings. In 2015, palm oil exports increased to 25.07 million tons from 25.37 million tons in 2014. However, the value of exports declined from RM63 billion in 2014 to RM60 billion in 2015 [5] (Malaysian Statistics Department, 2017).

In 2017, Malaysia's palm industry overcame other commodity sectors in generating export earnings for the nation. Palm products contributed RM77.8 billion or 55.5 per cent in export earnings of the country's commodity sector. The increase was 14.6 per cent as compared to 2016.

3 PALM OIL AND RURAL COMMUNITY

3.1 Commodity Crops

Malaysia's tropical rainforest areas receive annual rainfall of below 3000 mm per year which falls about 200 days a year and receives sunlight within 2200 hours every day have allowed many types and variety of plants to grow and produce yield. This situation gives Malaysia the opportunity to develop the agricultural sector even further.

Since the era of independence, the agriculture sector is one of the most important sectors for Malaysia. This sector contributes to the basis of the formation of a Malaysian economy where the majority of the population was concentrated on the agricultural and mining-based economic activities. Initially, agriculture in Malaysia was based on subsistence farming, then it has developed into commercial agriculture. Commercial farming is divided into two stages of development. First stage is the short-term farming of several produce such as black pepper, cassava, sugar cane and coffee. The second stage is the cultivation of rubber and palm oil which form the most important commercial crops.

Malaysia was responsible for one third of rubber export in the world. Rubber plants were introduced at the end of the 19th century and experienced rapid development in the 20th century. In 1954, natural rubber faced competition with artificial rubber, hence efforts were carried out to expand crop areas, yield promotions, and efficient agriculture practice. In the face of great competition, the Standard of Malaysian Rubber Institute (SMR) was set up to ensure the minimum level of quality, control of smallholders' plantations, and varied the rubber output in the form of scrap, dry rubber SMR, and liquid milk.

Malaysia rubber production started to increase in in 2004. Its total output reached eight billion dollars in 2006 and it topped ten billion dollars in the following year. In 2008, the output value was 11.24 billion dollars. This was due to Malaysia's good reputation around the world with high quality and good rubber products. Rubber producers in Malaysia supplied several rubber products such as medical

gloves, components for cars, belts, and hoses to different countries such as the United States, Japan, China, and many European countries.

However, production declined as most of rubber estates turned to more profitable products such as oil palm. As depicted in Table 1, total area of palm oil was 4,304,913 hectares in 2007 and this figure rose to 5,737,985 hectares by 2016. The rapid growth and development of palm oil production was due to the establishment of FELDA settlers by the government. In fact, government rubber agencies like RISDA also produces palm oil. As such, palm oil development and its potential has attracted plantation companies and smallholders to plant palm trees as compared to other crops.

Table 1: Palm Oil and Rubber Plantation Areas (Hectares)

Year	Palm Oil	Rubber
2007	4,304,913	53,700
2008	4,487,957	50,900
2009	4,691,160	49,700
2010	4,853,766	49,900
2011	5,000,109	49,900
2012	5,076,929	65,900
2013	5,229,739	77,400
2014	5,392,235	80,100
2015	5,642,943	76,800
2016	5,737,985	77,400

Source: Department of Statistics, Malaysia

In the process of poverty eradication, palm oil plays a role in driving the main source of income to rural community. It helps support families and improve their lives. Thus, the government is focusing on palm oil plantations by providing various incentives such as monthly spending and replanting. There are many rural people getting involve in palm oil cultivation in small scale.

Smallholders are individuals who work on palm oil plantations not exceeding 40.46 hectares or 100 acres. Smallholders are divided into two categories such as independent smallholder and organised smallholders. Organised smallholders are the group of palm oil farmers managed by plantation group and government agencies such as FELDA, FELCRA, and RISDA and agencies established by the state government such as Sarawak Land Consolidation and Rehabilitation Authority (SALCRA).

In 2009, palm oil smallholders amounted to 127,819 people. Then, the total area of cultivated land by smallholders in 2015 was 1,917,600 hectares or 34% of the total planted area with palm trees in Malaysia. Out of this, the number of independent smallholders was recorded at 233,746 people working an overall area of 883,004 hectares or 16% of the total

area of palm oil plantation in Malaysia. As of December 2016, the number of primary category holders and smallholders was 247,030 compared to 233,746 by 2015.

Palm oil plantations among the independent smallholders are still in the first generation of planters. The industry is still young that it requires attention and assessment from time to time to determine the development of the industry at an optimum rate. The increase in palm oil cultivation per year indicates that palm oil is the preferred choice for farming and a major source of income for the rural community. Thus, the role of palm oil industry in the country's economic and socio-economic development is very important.

Table 3: Number of Oil Palm Smallholders

Year	Numbers	Area (Hectares)
2009	127,819	609,036
2010	161,000	651,385
2011	168,000	697,826
2012	177,000	691,688
2013	192,198	748,292
2014	201,339	807,008
2015	233,746	883,004
2016	247,030	933,948

Source: Department of Statistics Malaysia

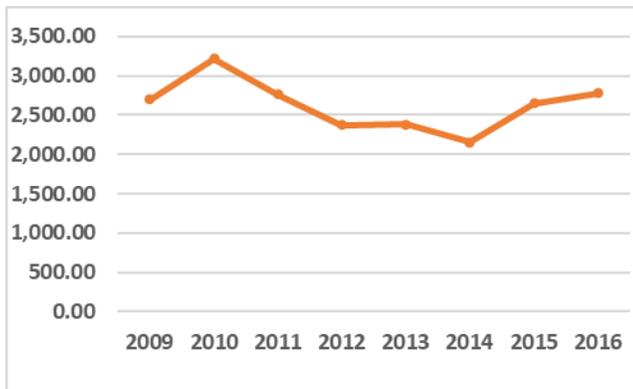
3.2 Issues on Smallholder

Palm oil industry also experienced uncertain market conditions. According to MPOB this situation is due to the rise in production costs and weak exports besides getting serious competition from the neighboring country, Indonesia. These factors cause the palm industry to face the economic downturn in the market uncertainty.

The price movements for crude palm oil (CPO) are no longer just dependent on the situation of domestic supply and demand movements. It is also influenced by external fundamentals such as high import duties imposed by importing countries and competition from neighboring countries. In fact, tariff and non-tariff barriers are aimed at limiting local market penetration. Based on Figure 3, palm oil price is RM2,701.00 in 2009. It increased to RM3,219 due to the high demand for palm products. In 2012, palm oil demand had fallen which caused crude oil prices (CPO) at only RM2,764 per ton. Price continued to fall in 2013 and 2014 at RM2,384 and RM2,119.50 respectively. However, it increased again in 2015 and 2016 at RM2,653 and RM2,783.00. The situation also illustrates that oil palm smallholders are experiencing a shortfall in earnings during the downturn of the crude palm oil prices. In fact, the trend of falling oil palm prices has a severe impact on the farmers.

Local paper, *Sinar Harian* reported in 2019 that the trend of declining palm oil prices had caused unrest among the people in the FELDA settlements and smallholders when some of

them reportedly that they only earned RM280 (USD68) a month. It was also due to their small land size of only 3.9 hectares per family. Therefore, it has led to a decline in income for the Malaysian palm oil industry [7]. In fact, this has directly impacted the revenue of the palm oil smallholders.



Source: MPOB Annual Report 2017

Fig. 3: Price (RM) CPO (Per / Tan)

The issue has been worsened with the presence of middle man who control the prices at the lower levels. It causes the price of oil to fall and the small farmers do not get the fair price for their output. According to Mitchell (2011), the mediator is suppressing in price because the price set by the market differs from the price paid by the middleman [8].

Also, the hardship of smallholders increases with an increase in input costs such as fertilizers and poisons. The rise in prices for fertilizer and poisons caused by the collapse of the national currency have also worsened the situation of oil palm smallholders during the fall of commodity prices. In fact, the price of palm oil in Sabah & Sarawak is more expensive than in Peninsular Malaysia. This causes the farmers not to apply fertilizer on schedule. Thus, all these factors are affecting their productivity and reduce the income of the farmers.

On top of that, palm oil production faces further challenges when the Union Parliament Europe (EU) supports the resolution for sanctions importation of palm oil for bio-fuel sector use in the Sea Wall renewable energy source 2021. Also, EU countries intend to introduce single sustainable certification for palm oil to enter the European market [9]. This means only RSPO certificate will be accepted instead of Malaysia's own MSPO certification. As a result, this scenario is feared to have serious impact on the income of over 650,000 smallholders of palm oil.

Given the importance of palm oil to the Malaysian economy and there are smallholders who rely solely on oil palm, they are faced with the risk of reduced income especially in the event of a fall in palm oil prices in the market. What are the long-term steps that need to be taken to ensure that their

income is maintained even if oil prices are falling? One way to cope with the lack of income is through business activities.

Such activities can increase the income of the smallholders, especially when their palm trees are still at a pre-mature stage. This activity also creates farming entrepreneurs among the smallholders. However, government assistance alone is not a guarantee of success of an entrepreneur but the attitudes and values that exist in the realm of success.

4 BUSINESS AND SMALLHOLDERS COMMUNITY

Business is one way for farmers to earn extra income. Smallholders can venture into small business related to cash crops such as selling crop yields or getting into agricultural-based businesses. Additionally, they also need to identify the types of businesses that are suitable to their local geographical condition. This is because every business needs to understand the needs and wants of the community [10]. In addition, smallholders need to have training such as marketing, finance, management and technical. All these forms of training are a necessity for them to survive in business.

A survey among 70 palm oil smallholders were done to get their feedbacks on business ventures. There were 59 males and 11 females participated in the study. From the analysis, 54 of them are married and 16 are single. This initial study seeks their opinion on the types of business and supports they need in doing business. The suitability of a business venture should also take into account the cultural and social factors of the local contexts.

Table 4: Types of Business

Type	%
Related to food and beverages	27.2 (19)
Related retail business	22.8 (16)
Related to agriculture	20.0 (14)
Related to palm oil products	15.7 (11)
Clothing	8.6 (6)
Livestock raising	5.7 (4)

Table 4 shows the types of businesses that have potential among the smallholders considering the context of their location. Food and beverage business is a typical business favored by many palm oil smallholders. This is because food and beverage businesses are easy and not costly. Meanwhile, the least preferred business by smallholders is livestock raising. This is because livestock raising takes time and require a lot of capital in animal feed, care, shelter and others. Anyway, most of them felt that their business venture is for gaining extra income.

Capital is an important element before commencing and conducting business operations. The selection of the financial support depends on the size of business. There are

several ways to get capital such as private savings, bank loans, assistance from family members and borrowing from government agencies like MARA. From Table 5, most of the smallholders started their business operation through their own personal savings. This is because most of them run small businesses which require only small amount of capital. In the earlier stage, these smallholders are more comfortable in doing retailing at a small and medium scale [11].

Table 5: Initial Capital Source

Support	%
Personal savings	80.1
Borrow from the bank	10.0
Borrow from family	7.9
Borrow from institution	2.0

5 CONCLUSION AND DISCUSSION

Malaysia is one of the world's major palm oil exporters besides Indonesia and Thailand. Without the palm oil industry, Malaysians will lose one of the country's major sources of income and hence the economy of the nation. However, palm oil is not detached from the commodity prices fluctuation. Changes in the price of palm oil either increased or decreased not only affect the country's income but also directly affect the income of the smallholders.

Therefore, smallholders need to be involved in other economic activities to avoid income downfall when there is a reduction in palm oil prices. One way is to get them engage in business however that will depend on the local demand and the suitability of their location.

Doing business is a proactive step in improving the income and living standards of the smallholders [12]. Hence, some strategic actions that need to be implemented by relevant government authorities and agencies in the process of entrepreneurship development among palm oil smallholders. Responsible parties such as MPOB and the Ministry of Agriculture should take the initiatives so that smallholders can engage in business or diversify their sources of income through certain business schemes.

ACKNOWLEDGMENT

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