The Effects of Establishing Sustainable Oil Palm Growers' Cooperatives on the Incomes of Oil Palm Smallholders

Azman, I* and Nazirah, C J*

ABSTRACT

This article attempts to study the impact of establishing Sustainable Oil Palm Growers Cooperatives (KPSM) on the incomes of oil palm smallholders in Malaysia. In the study, data on income were collected from members as well as non-members of KPSM in Saratok, Sarawak. The study found that the nett average fresh fruit bunch (FFB) price (after deducting transportation cost) obtained by KPSM Saratok members was higher than for non-members. For example, in July 2012, the average nett price obtained by KPSM members was RM 524.80/t compared with RM 414.60/t obtained by non-members. The price difference was RM 110.20. During this period, from July 2012 until April 2014, the average nett price obtained by members of KPSM Saratok was RM 410.80/t while non-members received a price of RM 345.50/t. The average price difference in that period was RM 65.30/t. Greater efforts have to be made to attract more independent smallholders to join the cooperatives as the cooperative is an institution that can help increase productivity and income of smallholders.

Keywords: cooperatives, oil palm smallholders, income, quality.

INTRODUCTION

The palm oil industry in Malaysia plays an important role in the country's economic growth. Its contribution to the country's export revenue, coming from many palm oil products, has increased to RM 61.4 billion in 2013 as compared with only RM 2.9 billion in 1980. The increase in the export revenue is mostly a result of growth in export quantity and also the increase in the prices of exported products. This development does not only profit the oil palm growers or planters in the independent sector, those in government agencies and smallholders, but also benefits the country.

Good demand for palm oil products has encouraged new entrepreneurs to leap into this industry. This is evident as the area of oil palm plantings keeps on increasing year after year. The

* Malaysian Palm Oil Board,
6 Persiaran Institusi,
Bandar Baru Bangi,
43000 Kajang, Selangor, Malaysia.
E-mail: azman@mpob.gov.my

area planted with oil palm was only 1.02 million hectares in 1980, and has jumped to 5.23 million hectares in 2013. Of that area, 3 218 693 ha or 61.54% were run by the private estates, 949 185 ha (18.15%) by government schemes, 313 569 ha (5.99%) by state governments or government agencies, and 748 292 ha (14.31%) by independent smallholders (*Table 1*).

Oil palm smallholders are defined as those who own an area not larger than 40.46 ha (100 ac). Any area exceeding 40.46 ha is categorised as an estate. In Malaysia, the smallholder sector is divided into two: *i.e.* smallholders under the supervision of Federal Land Development Authority (FELDA), Rubber Industry Smallholders Development Authority (RISDA), Federal Land Consolidation and Rehabilitation Authority (FELCRA) and state land schemes; and independent smallholders. The oil palm planted area for the independent smallholder sector has shown quite a significant increase. In 1980, the area for that sector was only 264 361 ha. However, in 2013, the total area had almost tripled to 748 292 ha, while the overall area percentage had also increased from only 8.59% in 1980 to 14.31% in 2013.

A large portion of the independent smallholders is located in Peninsular Malaysia, with a total of 144 279 smallholders having oil palm areas covering 456 328 ha in 2013 (*Table 2*). Johor is the state with the biggest number of independent smallholers at 65 797 (34.23% of the total number in the country), followed by Perak (17.79%), Sabah (15.45%), Selangor (9.92%) and Sarawak (9.49%), with the remaining states totalling 13.12%.

In terms of planted area, Sabah holds the largest area of oil palm, *i.e.* 198 632 ha or 26.54% of the total oil palm area for the independent smallholder sector in Malaysia. The second largest is Johor with an area of 196 865 ha (26.31%), followed by Perak and Sarawak having 99 790 and 93 332 ha, respectively.

In general, oil palm planted by independent smallholders yields less than that of smallholders under the supervision of federal government agencies such as Felda, RISDA and Felcra. There are a few factors that have led to this discrepancy. Among them are the use of poor quality seeds, insufficient crop management and monitoring, and inefficient utilisation of the latest technologies.

ISSUES IN THE OIL PALM SMALLHOLDER SECTOR

In comparison with the estate sector, the smallholder sector is frequently associated with issues such as low fresh fruit bunch (FFB) yield, low quality FFB, and the failure to apply good agricultural practices. The average yield of FFB for the independent smallholder sector is estimated to be less than 18 t/ha/yr. A study conducted by Azman *et al.* (2003) found that the average FFB yield by smallholders in Johor in the year 2000 was 15.85 t/ha/yr. This yield was lower than that in the estate sector in Johor which recorded an average FFB yield of 19.55 t/ha/yr in the same year. Thus, FFB yield in the smallholder sector has room for

TABLE 1. DISTRIBUTION OF OIL PALM PLANTED AREA ACCORDING TO SECTOR IN 1980 AND 2013

Category	1980		2013	
	ha	%	ha	%
Private estates	1 751 370	56.90	3 218 693	61.54
Federal government schemes:				
Felda	672 142	21.84	701 302	13.41
Felcra	130 651	4.24	171 405	3.28
RISDA	37 863	1.23	76 478	1.46
State government schemes	221 729	7.20	313 569	6.00
Smallholders	264 361	8.59	748 292	14.31
Total	3 078 116	100.00	5 229 739	100.00

Note: Felda – Federal Land Development Authority.
Felcra – Federal Land Consolidation and Rehabilitation Authority.
RISDA – Rubber Industry Smallholders Development Authority.
Source: PORLA (1981). MPOB (2014).

TABLE 2. NUMBER AND AREA OF INDEPENDENT SMALLHOLDERS IN MALAYSIA: 2013

State	No.	%	Area (ha)	%
Johor	65 797	34.23	196 865	26.31
Perak	34 194	17.79	99 790	13.34
Selangor	19 062	9.92	42 097	5.63
Pahang	8 967	4.67	40 585	5.42
Negeri Sembilan	4 325	2.25	21 361	2.85
Kedah	4 646	2.42	22 562	3.02
Pulau Pinang	1 682	0.88	8 677	1.16
Melaka	2 166	1.13	10 289	1.38
Terengganu	2 407	1.25	9 909	1.32
Kelantan	1 025	0.53	4 134	0.55
Perlis	8	0.00	58	0.01
Peninsular Malaysia	**144 279**	**75.07**	**456 328**	**60.98**
Sabah	29 685	15.45	198 632	26.54
Sarawak	18 234	9.49	93 332	12.47
Malaysia	**192 198**	100.00	**748 293**	100.00

Source: MPOB (2014).

improvement. There are a number of factors that cause smallholders to harvest a lower yield. Some of them include the lack of implementing the recommended crop management practices or incomplete implementation, the planting of poor quality seeds or seedlings, and improper crop monitoring.

Many efforts have been taken by the government to increase the FFB yield of independent smallholders. The establishment of *Tunjuk Ajar dan Nasihat Sawit* (TUNAS) in 2002 proved that the government is serious in helping the independent smallholders in this endeavour. TUNAS with its main function as a consultant for independent smallholders is entrusted to assisting them with advice and coaching with regard to methods of planting and care of oil palm. Other than poor yield issues, poor oil extraction rate (OER) claimed by buyers or mills is another main issue brought up by the independent smallholders. They claim that the buyers or mills did not give them an OER matching the amount of FFB that they sold. This resulted in the smallholders earning less than what they were entitled to.

The government is very committed to assist the independent smallholders as oil palm is one of the main sources of income for nearly 200 000 smallholders registered with MPOB nationwide. To ensure that the independent smallholder sector remains competitive, in 2010 the government launched the programme on Sustainable Palm Oil Clusters (SPOC). The main objective of SPOC is to improve productivity and quality of FFB through certification and to increase the income of independent smallholders by forming Sustainable Oil Palm Growers Cooperatives (KPSM).

SUSTAINABLE OIL PALM GROWERS COOPERATIVES

The main objective of establishing KPSM is to unite independent smallholders under one roof, enabling them to conduct activities or projects for their common good. The first KPSM to be established was KPSM Tongod, registered on 14 January 2011 (*Table 3*). To date, it has 315 registered members. The next KPSM to be registered was KPSM Saratok on 16 February 2011, and currently it has 449 members.

The government has set a target to establish a total of 80 KPSM by the end of 2016, and to date, there are 30 KPSM registered in states all over Malaysia. KPSM membership is open to any independent smallholder who owns an oil palm holding which is less than 40.46 ha in size.

To improve the members' income, KPSM sells FFB directly to palm oil mills to obtain a better OER offer, *i.e.* higher than what is offered by FFB buyers, in accordance with the quality of FFB produced by the smallholders. OER is one of the key elements in calculating the price of FFB. A high OER will fetch a high FFB price. OER determination is done through grading in the mills. There are mills that offer OER higher than their grades, taking into account other factors such as the quantity of FFB sold to the mill. Apart from the FFB quality factor, the mill also requires a minimum quantity of FFB to be processed to reduce the processing cost. The mills will try to achieve production or processing at an economic level, *i.e.* higher production will result in a lower production cost. As the KPSM members increase in number, so will the chance of getting a higher OER offer from the mills, as the FFB quantity sold to the mills will also increase.

Other than getting a higher OER offer, followed by a better price, KPSM members also enjoy lower agricultural input prices for their purchases. KPSM buys those input in bulk, thus rendering the prices

TABLE 3. THE LIST OF KPSM ESTABLISHED TILL 2013

No.	State	District	Date registered
1	Sabah	Tongod	14 January 2011
		Kunak	9 March 2011
		Kinabatangan	29 March 2011
		Tawau	13 June 2011
		Beluran	4 November 2011
		Keningau	27 August 2012
		Tungku	20 June 2014
2.	Sarawak	Saratok	16 February 2011
		Belaga	23 February 2011
		Serian	17 February 2012
		Selangau Sibu	25 May 2012
		Bakong Marudi	5 June 2013
		Limbang	31 July 2013
		Long Lama Marudi	29 November 2011
		Asajaya Samarahan	*
		Meradong Sarikei	17 December 2013
		Lawas	28 March 2014
3.	Pahang	Temerloh	21 September 2011
		Bera	27 April 2014
		Maran	8 October 2012
4.	Johor	Kulai Jaya	25 August 2011
		Kluang	14 April 2011
		Yong Peng Utara	30 November 2012
5.	Perak	Selama	7 May 2012
		Teluk Intan	25 May 2012
		Batang Padang Selatan	15 July 2013
6.	Melaka	Jasin	22 February 2011
7.	Selangor	Kuala Selangor Selatan	14 October 2011
		Tanjung Dua Belas 1 & 2 Kuala Langat	19 March 2013
8.	Terengganu	Besut	20 November 2013

Note: * Still in the registration process with Cooperatives Commission of Malaysia.
KPSM - Sustainable Oil Palm Growers Cooperatives.

lower than the market price. This helps KPSM members lower their production cost, and consequently increases their income.

FFB Marketing Method by KPSM

KPSM gathers together the members of the cooperative who agree to sell FFB in scheduled batches to the mills to get a better price. With its many members, the cooperative has the upper hand, in terms of bargaining power, over the mills in pushing for a better price (Nazirah *et al.*, 2012). Besides being offered a better price, KPSM will also be offered incentives if it can send a quantity of good quality FFB as agreed by both parties. To make sure FFB sent to the mills are of good quality, KPSM works together with TUNAS officers and cooperative members to monitor each FFB delivery to the mills.

KPSM provides FFB transportation service, with the transportation charge included in the management charge. The charges are reasonable nonetheless. For smallholders who have their own transport, they can deliver FFB directly to the mills, but that delivery will be under the cooperative's account.

Effects of Establishing KPSM on Smallholders' Income Based on a Study on KPSM Saratok

KPSM Saratok started to sell FFB to mills in July 2012. A survey found that the nett average FFB price (after deducting transportation cost) obtained by KPSM Saratok cooperative members who joined the batch sale managed by the cooperative was higher than that obtained by non-members. For example, in July 2012, the average nett price for KPSM members was RM 524.80/t compared with RM 414.60/t for non-members. The difference is RM 110.20 (*Table 4*). During the period from July 2012 until April 2014, the average nett price obtained by members of KPSM Saratok was RM 410.80/t while non-members obtained a price of RM 345.50/t. The average price difference during that period was RM 65.30/t.

Table 5 shows the average extra or increase in income for one KPSM member who joined the batch sale run by the cooperative over the period from July 2012 until April 2014. In July 2012, the average extra income or income increment for one KPSM member was RM 1461.70 with an average FFB sales volume of 13.3 t/month. On average, during that period, the average extra income for one KPSM member was RM 613.20/ month.

The establishment of cooperatives has given a positive impact to the income of smallholders who are members. The average monthly income for a member has increased as a result of the better prices offered by the mills to the cooperative. Apart from that, even non-members are able to enjoy benefits indirectly from the establishment of the cooperative. The price offered by the FFB buyer had also been raised to attract smallholders to sell FFB to them. This is evident in *Figure 1* where in a number of instances (especially from March

TABLE 4. DIFFERENCE IN AVERAGE NETT PRICE OBTAINED BY KPSM MEMBERS AND NON-MEMBERS

Month/year	Average FFB price (RM/t)		FFB price difference	
	Member	Non-member	(RM/t)	(%)
July 2012	524.8	414.6	110.2	26.6
August 2012	479.8	397.2	82.6	20.8
September 2012	388.8	315.5	73.3	23.2
October 2012	461.0	301.6	159.4	52.9
November 2012	361.8	307.3	54.5	17.7
December 2012	313.5	255.0	58.5	22.9
January 2013	343.7	265.6	78.1	29.4
February 2013	381.5	315.2	66.3	21.0
March 2013	373.3	347.7	25.6	7.4
April 2013	368.8	354.5	14.3	4.0
May 2013	362.3	343.0	19.3	5.6
June 2013	384.9	342.1	42.8	12.5
July 2013	372.2	318.8	53.4	16.8
August 2013	379.1	307.4	71.7	23.3
September 2013	377.3	307.8	69.5	22.6
October 2013	386.5	319.0	67.5	21.2
November 2013	435.7	356.0	79.7	22.4
December 2013	445.2	373.3	71.9	19.3
January 2014	436.7	357.1	79.6	22.3
February 2014	466.5	406.2	60.3	14.8
March 2014	516.3	430.4	85.9	20.0
April 2014	478.6	465.4	13.2	2.8
Average	410.8	345.5	65.3	18.9

Note: KPSM - Sustainable Oil Palm Growers Cooperatives.
FFB – fresh fruit bunch.

TABLE 5. INCOME INCREMENT FOR ONE KPSM MEMBER COMPARED A NON-MEMBER

Month/year	No. of smallholders joining the batch sale	Total FFB sold (t)	Average FFB sold per person (t)	FFB price difference (RM/t)	Average extra income per person (RM)
July 2012	11	145.9	13.3	110.2	1461.7
August 2012	16	166.0	10.4	82.6	857.0
September 2012	50	427.8	8.6	73.3	627.2
October 2012	113	930.2	8.2	159.4	1312.2
November 2012	74	572.6	7.7	54.5	421.7
December 2012	57	409.9	7.2	58.5	420.7
January 2013	54	507.5	9.4	78.1	734.0
February 2013	41	278.0	6.8	66.3	449.5
March 2013	33	187.9	5.7	25.6	145.8
April 2013	28	250.9	9.0	14.3	128.1
May 2013	29	289.3	10.0	19.3	192.5
June 2013	28	258.3	9.2	42.8	394.8
July 2013	31	345.7	11.2	53.4	595.5
August 2013	31	283.2	9.1	71.7	655.0
September 2013	28	275.3	9.8	69.5	683.3
October 2013	37	437.6	11.8	67.5	798.3
November 2013	28	322.0	11.5	79.7	916.6
December 2013	23	289.1	12.6	71.9	903.8
January 2014	24	304.2	12.7	79.6	1008.9
February 2014	26	285.0	11.0	60.3	661.0
March 2014	24	316.6	13.2	85.9	1133.2
April 2014	23	313.9	13.6	13.2	180.2
Average	37	345.3	9.4	65.3	613.2

Note: KPSM - Sustainable Oil Palm Growers Cooperatives.
FFB – fresh fruit bunch.

to May 2013) the price offered by the buyers nearly matched the prices given by the mills to the cooperatives.

Random Feedback Survey on Members and Non-members

MPOB has conducted a random survey on members and non-members of the cooperative in Saratok District to obtain their views regarding the cooperative. In the survey, they found most of the smallholders joined the cooperative to get better FFB price along with getting better agricultural input prices. Agricultural input such as fertilisers, that cost less will reduce their production cost, and subsequently improve their income. They admitted that the FFB price was to their advantage; however, most of them hoped that payment can be made in a timely manner, like what the FFB buyers do. While non-members had the intention of joining the cooperative, they were adopting a 'wait-and-see' position.

CONCLUSION

Other than the estate sector, the smallholder sector also plays an important role in the growth of the nation's palm oil industry. The number and area of the smallholders' oil palm plantings are both on the rise year after year. Realising the importance of this sector to the development of the country's economy, a multitude of efforts have been taken by the government to ensure that the sector remains competitive. One

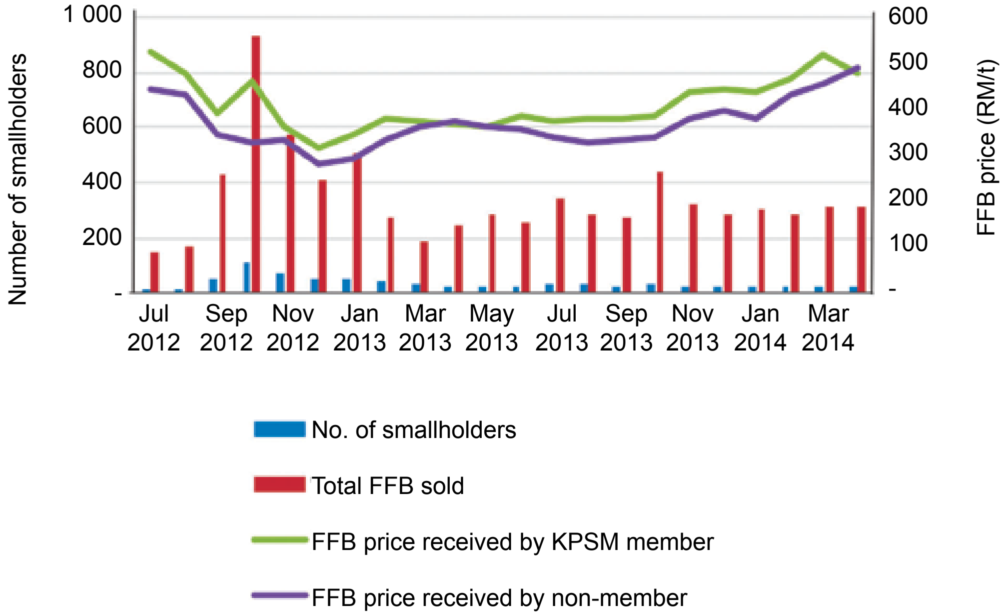

Figure 1. Flow of prices obtained by cooperative members compared with that of non-members.

of the efforts was by launching the SPOC with its main objective of increasing productivity and quality of FFB through certification, and of improving the income of independent smallholders by establishing KPSM. A closer look into KPSM Saratok revealed that the average income of the cooperative members who joined the batch FFB sales managed by the cooperative had increased. The increment was due to the better prices offered by the mills to the cooperative.

Greater efforts have to be made to attract more smallholders to join the cooperatives as the cooperative is an institution that can help increase productivity and income of smallholders. The cooperative is highly dependent on support from the smallholders, with them joining the cooperative and working together to sell their yield in batches directly to the mills to get better prices. The buyers of FFB should not regard the cooperatives as a threat. What is important is for the FFB buyers to play their role in helping the government increase productivity and income for the smallholders.

REFERENCES

AZMAN ISMAIL; MOHD ARIF SIMEH and MOHD NOOR MAMAT (2003). Production cost for fresh fruit bunches: case study on independent smallholders in Johore. *Oil Palm Industry Economic Journal Vol. 3 No. 1*: 1-7.

MPOB (2014). *Malaysian Oil Palm Statistics 2013*. MPOB, Bangi.

PORLA (1981). *PORLA Palm Oil Statistics 1980*. PORLA.

NAZIRAH CHE JAAFAR; ZAKI AMAN and IDRIS OMAR (2012). Cooperatives as an institution for boosting productivity and income of smallholders: case study in sustained oil palm planters cooperatives (KPSM). *Proc. of the National Conference of Oil Palm Smallholders 2012.*