



**Research Article** 

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## Knowledge and Perception in Implementing Principle 1-4 of MSPO among Independent Smallholder Case of Sungai Rambai, Melaka



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#### Abstract

The oil palm plantations in Malaysia are largely based on the estate management system and smallholder scheme. The area planted was increasing rapidly from 1.8 million hectares in 1985 becoming a 5.81 million hectare in 2017. However, independent smallholders have possessed a major threat towards Malaysia such as lacking in term of documentation preparation, awareness and higher in cost implementation. Thus, it is perceiving that this sector is unproductive and inefficient as compared to the large-scale production system of the estate sector as they are tending to not achieve the standard principle in existing sustainability standard. This research was conducted to study about knowledge and perception of Principle 1-4 Malaysian Sustainable Oil Palm (MSPO) among independent smallholder in Malaysia. This study was conducted in Sungai Rambai, Melaka. The population size of this study is about 50 smallholders. For this study, 44 respondents had been samples. The questionnaires were distributed to the selected smallholders. Pearson correlation is used to analyze the relationship between independent and dependent variables which independent refer to knowledge and perceptions while the dependent variables is referring to principle 1-4 of MSPO. Finding from this study shows that the highest value of 43.6% from Transparency are explained by Perception and the lowest value of 19.4% from Management Commitment & Responsibility are also explained by Perception.

Keywords: Knowledge; Perception; Sustainability; Oil palm; Independent; Smallholder

### Introduction

The oil palm tree (Elaeis guineensis) originates from West Africa in which it grows within the wild and later became developed into an agricultural crop. It became delivered to Malaysia, then Malaya, by way of the British in early as a decorative plant. The first industrial planting took place in Tennamaran Estate in Selangor, laying the rules for the substantial oil palm plantations and the palm oil enterprise in Malaysia. The oil palm plantations in Malaysia are in large part based on the property management system and smallholder scheme. The positive growing year by year was made Malaysia becoming global's second- largest producer of the commodity after Indonesia. The area planted was increasing rapidly from 1.8 million hectares in 1985 becoming a 5.81 million hectare in 2017 (MPOB). According to [1], the term "smallholder" is regularly described and used in an inconsistent manner, referring, inter alia, to producers who now and again sell products for cash as a supplement to other sources of income: and to people who are small-scale business farmers, with a primary consciousness on production for the marketplace. There are two types of smallholders where independent smallholder according to Malaysian Palm Oil Board (MPOB), are defined as individual farmer who leases or own less than 40 hectare (Ha) of oil palm farm and basically manage the farm by themselves. They actually may employ workers or by themselves to carry out their farming activities. Until the end of 2017, about 2220, 023 smallholder with total planting area of 979, 758 Ha or 16.9% from 5.81 million Ha of planting area has been recorded (MPOB, 2017).

## Methodology

The aim of this present study is focussed to find out the relationship among independent variables (Knowledge and Perception) and dependent variable (Principle 1-4 of MSPO implementation among independent smallholder in Malaysia). This survey was performed to the selected independent smallholder that certified by MSPO in Sungai Rambai Melaka. This location become selected due to several factors. Firstly, this area has been spotting as one of the today's MSPO certification holder. The second reason is this area is near to University Technology Mara (UiTM) Jasin campus in which the information collection

may be easily obtained. The problem took place within the farm has been diagnosed and several adjustments on the hassle might be carried out to provide solution to the any agency that accountable to improve respondents' knowledge and perception towards Principle 1-4 of Malaysian Sustainable Palm Oil (MSPO) implementation among independent smallholder in Malaysia. The population of independent smallholder are focus in Sungai Ramabai, Melaka area and will be specific for independent smallholder that had MSPO Certification. Thus, there will be 50 SPOC around Sungai Rambai. Only 44 had been sample by using Krejcie and Morgan.

In this study, the data collection methods are preferred with questionnaire that consists four parts which is:

- a. Part A: Demographic Information.
- b. Part B: Questionnaire of Knowledge towards Principle 1-4 of MSPO Implementation.
- c. Part C: Questionnaire of Perception towards Principle 1-4 of MSPO Implementation.
- d. Part D: Questionnaire of Relationship between Knowledge and Perception towards Principle 1-4 of MSPO implementation.

The significant relationship between these variables were tested by using Statistical Package for Social Science (SPSS). This software can be assisting a researcher to analyzing, manipulating and presenting a data that was collected [2].

### **Result and Discussion**

Table 1: Demographic Study of the Respondent.

Respondents'	Demographic	Frequency	Percentage (%)
Gender	Male	34	77.3
Age	61 year Above	27	61.4
Race	Malay	34	77.3
Educational Level	Primary	35	79.5
Income	RM0- RM1,000	33	75
Working Experience	6-10 year	31	70.5
Plant Age	4-7 year	29	65.9
Area	0-10 Ha	37	84.1

From the result shown in Table 1, the most respondent of independent smallholder are male. It is consisting about 77.30% of the total of 44 respondent compare to the female which is 22.70% that consisting about 10 independent smallholders. We can see that the highest frequency points are above 61 years old with total of 27 respondents with the percentage of 61.4%. From the table, it shows that the respondent's ethnicity in the study area which 77.30% from the total respondent are Malay with 34

respondents. As for salary and experience of the respondent, it shows that out of 44 total respondent's highest average income per month that consist about RM0 to RM1,000 around 75% for 33 total frequency of respondents and most of the respondent have experienced about 6-10 years which involving 31 total of independent smallholder and contribute about 70.50 % or valid percentage.

Table 2: Reliability Statistics.

Construct	Cronbach's Alpha
Knowledge	0.8
Perception	0.932
Management Commitment & Responsibility	0.875
Transparency	0.74
Compliance to Legal Requirement	0.8
Social Responsibility, Health, Safety & Employment Condition	0.907

## Cronbach's Alpha (>0.7).

All the variables are acceptable since the Cronbach's Alpha value were greater than 0.5 (Table 2). This indicated that the questionnaire is reliable to the targeted respondent. The independent smallholder seems to understand the questions

and able to identify the differences between all the question requirement. The model summary for multiple regression analysis were shown in Table 3.

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Table 3: Model Summary Regression Analysis.

	Variable	Standardized Beta
	Knowledge	-0.091
	Perception	0.444
Management Commitment & Responsibility	F	4.927
	R <sup>2</sup>	0.194
	Adjusted R <sup>2</sup>	0.154
	Knowledge	-0.05
	Perception	0.686
Transparency	F	17.668
	R <sup>2</sup>	0.463
	Adjusted R <sup>2</sup>	0.437
	Knowledge	-0.207
	Perception	0.559
Compliance to Legal Requirement	F	9.759
	R <sup>2</sup>	0.323
	Adjusted R <sup>2</sup>	0.289
	Knowledge	-0.113
	Perception	0.471
Social Responsibility, Health, Safety & Employment Condition	F	5.767
Employment condition	R <sup>2</sup>	0.22
	Adjusted R <sup>2</sup>	0.161

The total correlated variable toward the principle 2 (Transparency) of MSPO certification among independent smallholder in Malaysia were 0.463. This means, 46.3% were influenced by the perception of respondent towards the principle 2 of MSPO certification in Sungai Rambai while, the other 53.7% were influenced by other factors that have no studied. From the results gained, it can be identify and conclude that the most accrual factor towards dependent are perception. Adjusted R2 are explained by different human behavior and responded due to different background. The variable with the highest  $\beta$  value is relatively important independent variable [3]. Which means, standardized beta value for independent variable of perception is high positively related to Principle 1-4 of MSPO implementation among Table 3.

## Conclusion

Based on the problem statement, the independent smallholder that they possess a major threat towards Malaysia such as lacking in term of documentation preparation, awareness and higher in cost implementation. Because of their unproductive and inefficient production, they are tend to not achieve the standard principle in existing sustainability standard. From this study, level of knowledge of independent smallholder are very low as compared to perception. They tend to not understand well the criteria stated in every principle of MSPO certification even though they already have the certification. Based on the demographic result shows

that 79.5% of the educational background of the respondent are from primary school and 61.4% from respondent are above 61 years old. The perception of independent smallholder towards MSPO implementation shows the most dominant factors as for them, the criteria stated in the principle of MSPO certification are important in order to improve their productivity in the farm but lack of knowledge on how and what type of criteria stated in that certification. The action plan for continual improvement shall or need to be based on the consideration for the main social and environmental impact and opportunities of the independent smallholders' group or organization, such as SPOC and Independent smallholders shall be aware of the need to understand the importance of continual improvement. So, it is clearly that the level of awareness of MSPO certification is very low among independent smallholder even though they already have the certification.

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