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# Participation towards Agro-Entrepreneur among RISDA rubber smallholders in Kelantan

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**Abstract.** As their income was under the poverty line income (PLI), most of the rubber smallholders were listed as hard-core poor with the average earning of below RM800 per month. Regarding this issue, the government and private sector have provided several entrepreneurial programs to improve their better lives but however the participation among rubber smallholders are still low according to RISDA report. Therefore, a study is conducted to evaluate the variables affecting the involvement of RISDA rubber smallholders in Kelantan in agro-entrepreneurship program. Theory of Planned Behaviour (TPB) used to observe attitudes towards people behaviour which is important to determine the factor of participation of rubber smallholders in agro-entrepreneurship program conducted. Attitudes influence behaviour by their impact on intentions while intentions and attitudes depend on the situation and person. Thus, TPB model on data derived from Kelantan rubber smallholders with independent variables such as attitude, subjective norm, and perceived behavioural regulation is applied. The questionnaires were distributed among 100 RISDA rubber smallholders using a simple random sampling technique and the data was analyzed using a descriptive and correlation analysis. Results have shown that the all factors influencing participation have high mean score and was significant to the participation towards agro-entrepreneurship program.

## 1. Introduction

Malaysia has lost its position as the world's largest producer of natural rubber and is lagging Thailand and Indonesia. The industry is threatened from different corners, such as ageing trees, planters refusing to innovate, low-capacity latex processing factories driving up production costs, fluctuating latex rates, farmers planting on less than two hectares of land, so no economies of scale and unfavourable weather conditions are nagging woes. Almost half a million Malaysian rubber smallholders producing 95% of their natural rubber are at risk of falling below the poverty line due to low commodity prices. Poverty is commonly characterized as the inability, as measured by income or consumption, to fulfil basic needs. World leaders came together in 2015 to commit to the 2030 Agenda for Sustainable Development. The 2030 Agenda is a universal call for action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity through a global partnership. Eradicating poverty SDG 1 in all its forms remains one of the greatest challenges facing humanity [1]. The national poverty line income (PLI) has recently been revised by the Department of Statistics



Malaysia (DOSM), with the poverty line revised from RM908 to RM2,208 in July 2020 and a family with monthly income below that level living in poverty [2]. Mostly, smallholder families have been pushed into poverty due to current rubber price volatility. Currently, almost all smallholders are low income earners of below RM800 (USD 195; 1 USD=RM4.10) per month and they live scattered in rural areas [3].

Nurturing agro-entrepreneurship among rubber smallholders must be broadened to promote greater opportunities in agribusiness through product, marketing, knowledge delivery and provide job employment to smallholders. Most of the smallholders only relied on rubber sales and had no side earning causing them to lose their main source of income if the market price of the commodity dropped. In general, the term entrepreneurship has been recognized as a driving force for economic development and industrialization. Entrepreneurship is defined as the practice of starting new organizations or reviving mature organizations, in particular new businesses in general, in response to identified opportunities [4].

Government-linked companies, including the Rubber Industry Smallholders Development Authority (RISDA), have given priority to empowering the agricultural sector to strengthen entrepreneurial financing schemes, grants and programs. In 2019, RISDA received an allocation of RM3.85 million for entrepreneur development programme in Kelantan to help to increase the income of the smallholders to earn RM4,000 a month [5]. In addition, smallholder farmers who cultivated cash crops became small-scale entrepreneurs and were able to increase their household income [6]. Thus, the use of entrepreneurship program in eradicating poverty among rural people can be carried out to increase income. A study of oil palm smallholders' engagement in business activities found that the involvement of these smallholders mainly increases their income level [7]. Moreover, a study on the relationship between farmer entrepreneurship and rural poverty alleviation in China revealed that socio-cultural capacity has the greatest impact on farmer entrepreneurship growth, followed by a qualitative increase in farmer entrepreneurship and an attitude towards farmer entrepreneurship growth [8]. In addition, according to [9] in her findings of participation of rural community in entrepreneurial intention are their attitude towards start up the entrepreneurial idea discovery. This entrepreneurial idea discovery can be gain through educating the rural community by entrepreneurial programs with specific target of achievement thus more information can be provided to the rural community.

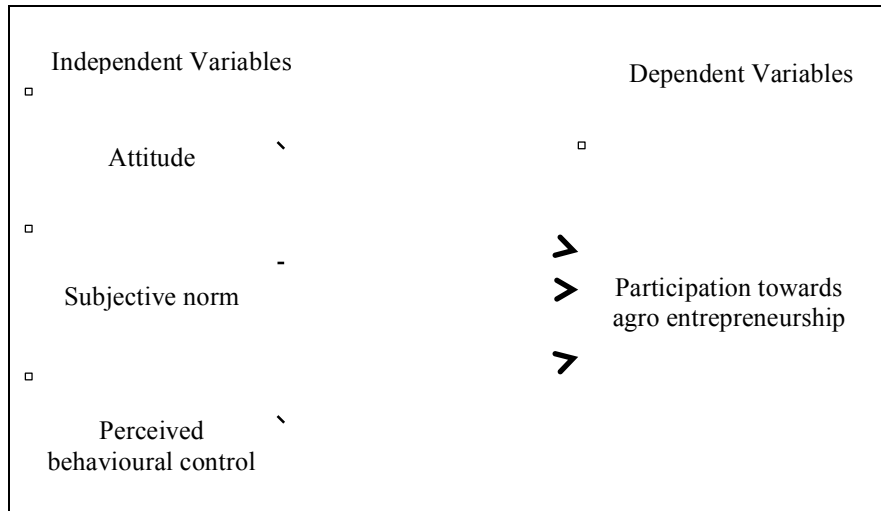
Entrepreneurship is related to SDGs 4 and 8 with respect to the SDGs under review in 2019. Objective 4.4 of the SDG seeks to dramatically increase the number of young people and adults with appropriate skills, including technical and professional skills, in terms of employment, good jobs and entrepreneurship. At the same time, SDG 8.3 aims to promote development-oriented policies that promote productive activities, the creation of decent employment, entrepreneurship, creativity, and innovation, and to promote the formalization and growth of micro, small and medium-sized enterprises (MSMEs), including through access to financial services [10].

Therefore, Azjen and Fishbein's (1980) Theory of Planned Behaviour (TPB) was used in this analysis. This theory implies that the action of an individual is dictated by their intention to carry out the behaviour [11]. Then the goal is to be a feature of his/her behavioural attitude and subjective norm. The best predictor of behaviour is intention. In addition, purpose indicates the planning of a person to perform a certain action and it is the cause of the behaviour. The intention can be determined by an attitude towards specific behaviour, subjective norms, and perceived behavioural control. The objectives of this study were to identify the level of behavioural attitudes, subjective norms and perceived behavioural control of participation in agro-entrepreneurship programs among smallholders of RISDA rubber; to assess the relationship between behavioural attitudes, subjective norms and perceived behavioural control; and to identify factors of participation in agro-entrepreneurship programs among RISDA rubber smallholders in Kelantan.

## 2. Methodology

Quantitative research design was used to gather information from the respondents. This research employs the technique of purposive sampling to gather the data. The selected independent variables behavioural include attitude, subjective norm and perceived behavioural control, while the dependent

variable for this research is the participation towards agro-entrepreneurship among RISDA rubber smallholders in Kelantan.



**Figure 1.** Research framework adapted from Theory of Planned Behaviour (Ajzen, 1991).

### 2.1. Research framework

The research framework is prepared to identify the factor participation towards agro-entrepreneurship among RISDA rubber smallholders in Kelantan. Figure 1 shows the research framework adapted by Azjen (1991).

### 2.2. Questionnaire design

Questionnaires were distributed to the respondents among rubber smallholders to answer. The questionnaire was constructed by referring to the Entrepreneurial Intention Questionnaire (EIQ) developed by [12] based on TPB. Three aspects that influenced the factor participation towards agro-entrepreneurship among RISDA rubber smallholders in Kelantan were behavioural attitude, subjective norm and perceived behavioural control. A set of questionnaires consisted of six parts to collect the data needed. The response in the questionnaire was recorded on a 5-point Likert-type scale. The simple random sampling method has been employed with list of rubber smallholder from RISDA Kelantan as sample frame.

### 2.3. Data analysis

The demographic profile, dependent and independent variables including the relationship between dependent and independent variables were analysed by using SPSS 21. The participation towards agro-entrepreneurship among RISDA rubber smallholders was chosen as dependent variable, while behavioural attitude, subjective norms and perceived behavioural control were chosen as independent variables. Descriptive analysis was used in this study to identify the level of dependent and independent variables. Besides, Spearman Correlation Analysis was used to find the relationship between the two variables which influenced the factor participation towards agro-entrepreneurship among RISDA rubber smallholders in Kelantan. The Spearman Correlation Analysis was used due to abnormal data distributed.

## 3. Results and Discussions

### 3.1 Demographic profile of rubber RISDA smallholders

Descriptive analysis was run in this study to describe the profile of RISDA rubber smallholders. The profile comprised gender, race, religion, age, marital status, educational level, number of family members, land area and experience of having rubber estate. Table 1 shows the profile of the respondents. Most of respondent are male (61%), Malay (98%) with age 41-60 years old (57%). Similar with Abu et al., [13] men and elderly farmer is loyal to farming activities. Moreover, this

study also shows that most of respondent in this study have experience with rubber farming below than 10 years with land below than 3 acres. It shows that, respondents in this study are highly experienced in the rubber farming [14].

**Table 1.** Demographic profile of RISDA rubber smallholders.

Variables	Frequency	Percentage (%)	Mean	SD
<b>Gender</b>			1.39	0.49
Male	61	61.00		
Female	39	39.00		
<b>Race</b>			1.02	0.141
Malay	98	98.00		
Chinese	2	2.00		
<b>Religion</b>			1.02	0.141
Islam	98	98.00		
Buddhism	2	2.00		
<b>Age</b>			53.90	11.63
20-40	10	10.00		
41-60	57	57.00		
61-80	33	33.00		
<b>Marital Status</b>			1.96	0.40
Single	10	10.00		
Married	84	84.00		
Others	6	6.00		
<b>Education Level</b>			3.25	2.21
PMR	30	30.00		
SPM	29	29.00		
Certificate	3	3.00		
Others	38	38.00		
<b>Land Area</b>			3.02	3.50
1-3	74	74.00		
4-6	24	24.00		
7-9	2	2.00		
<b>Experience of having rubber estates</b>			23.28	13.24
1-10	27	27.00		
11-20	22	22.00		
21-30	25	25.00		
31-40	18	18.00		

### 3.2 Level of Factor Influencing Participant towards agro-entrepreneurship program

Based on Table 2 finding participation toward agro-entrepreneurship program shows the high mean score ( $M=4.25$ ,  $SD=0.677$ ). Supported by Anwarudin, & Dayat [15]. there is high participation of farmers toward agribusiness sustainability In addition, the mean score of attitudes also has high mean score ( $M=3.94$ ,  $SD=0.708$ ). It was the second highest mean score after the factor participation. Similar with previous study, attitude has high mean score toward agro entrepreneurship [16]. This showed that attitude was influence to agro entrepreneurship participation and had been supported by [17] who stated that attitudes and intentions towards entrepreneurship were associated with participation in entrepreneurial training. It was also supported by [18] that the poor chose agriculture as one of their main income generating activities because they believed in the agriculture ability in producing higher productivity with less money used.

Finding of subjective norms towards agro-entrepreneurship program in this study also shows the high mean score ( $M=3.85$ ,  $SD=0.768$ ). Supported by [16], subjective norms towards agro-entrepreneurship also have high mean score. This result could be related to the previous finding regarding subjective norms that suggested social norm about entrepreneurship had less influenced for students who are more confident in their ability based on their practical experience [19]. Similar with

Abu et al. [16], finding of perceived behavioural control's in this study also demonstrate high mean score mean score ( $M=3.78$ ,  $SD=0.599$ ). This result can be related to a previous study done towards university students that stated the best predictors of students' entrepreneurial intention is the students' attitudes towards entrepreneurial career, perceived behavioural control as well as entrepreneurial efficacy seem to be related [20].

**Table 2.** Mean score of Factor Influencing Participant towards agro-entrepreneurship.

Factors	Frequency	Percentage	Mean	SD
<b>Participation</b>			4.25	0.677
Low	1	1.0		
Moderate	20	20.0		
High	79	79.0		
<b>Attitude</b>			3.94	0.708
Low	1	1.0		
Moderate	36	36.0		
High	63	63.0		
<b>Subjective Norms</b>			3.85	0.768
Low	0	0		
Moderate	40	40.00		
High	60	60.0		
<b>Perceived Behaviour</b>			3.78	0.599
Low	1	1.0		
Moderate	40	40.00		
High	59	59.0		

### 3.3 Relationship between attitudes, subjective norm and perceived behavioural control and participation towards agro-entrepreneurship program

Table 8 showed the result of Spearman correlation analysis between attitude and factor participation towards agro-entrepreneurship program was significant at the level of 1.000 and it was a very strong positive correlation. Previous study also showed that attitude have significantly and positively influenced toward intention on participate entrepreneurial activities [21]. The result of correlation analysis for subjective norms was also significant at the level of 0.740. It was a strong positive correlation between subjective norms and factor participation. According to the study of [22], the research found that subjective norms had a positive and significant influence on intention on participate entrepreneurial activities. Similar with result of perceived behavioural control was also significant at the level of 0.739. According to [22], perceived behavioural control was significantly and positively influenced the intention on participate entrepreneurial activities. It meant that self-efficacy or a belief of personal ability to succeed and perform a task or control the process of creating a company played an important role in increasing the entrepreneurial intentions.

**Table 3.** Results of Spearman Correlation Analysis.

		Attitude	Subjective Norm	Perceived Behavioural Control
Participation towards agro-entrepreneurship program	Spearman Correlation (Sig (2 tailed))	1.000 0.000	0.740** 0.000	0.739** 0.000

\*\*Correlation is significant at the 0.01 level (2-tailed)

#### 4. Conclusion and Recommendations

The result showed that all factors was significant to the participation towards agro-entrepreneurship program among rubber smallholders in Kelantan and have high mean score. Thus, in future, the study could be enlarged to discover the factor participation of other group of respondents which covers all other rubber smallholders instead of focusing on RISDA rubber smallholders.

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