

## Attitude Towards Contract Farming Among Malaysian Agriculture Learning Institution Students

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**Abstract: Problem statement:** The government's effort in enhancing agriculture productivity cannot be argued. The introduction of contract farming is one of the ways. Contract farming includes a number of new agriculture activities such as leech rearing, worm rearing, vanilla farming, herbs, catfish and many more. However, is the youth who are the pillar of this industry have a positive attitude towards it? This was the main objective of this study, to investigate the attitude of Malaysian agriculture institution students toward contract farming and factors that affect it. **Approach:** This was a quantitative study and data was gathered through a survey questionnaire. A total of 194 respondents from two main agriculture learning institutions in Malaysia were selected through a simple random sampling. The data collection took almost two months to be completed. **Results:** As expected, the study revealed that the Malaysian agriculture institution students have a high level of attitude towards contract farming. Further analysis through multiple regression analysis informed us that three factors which are acceptance, support and knowledge are significant predictors of youths' attitude towards contract farming. **Conclusion:** In order to enhance the attitude of youth towards contract farming, exposure to contract farming among the youth should be doubled and a specific course on contract farming can be introduced. Besides, establishing contract farming youth club can be introduced.

**Key words:** Attitude, contract farming, Malaysian agriculture institution students

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### INTRODUCTION

Agriculture nowadays has increasingly become an important factor in strengthening the economy of the country. This can be seen through the government's effort in intensifying this sector as the one of the main income generators for the country. In the 2010 budget, more than USD 2 billion has been allotted for this sector and it is expected that in the Tenth Malaysia Plan, agriculture will once again be prioritized. In the government efforts to ensure the continuity of agriculture success in this country, University Putra Malaysia (UPM) has been established in 1931. UPM previously was known as the School of Agriculture where the main focus of this school by that time was to produce agriculture officers. Until today, UPM has produced hundred thousands of agriculture graduates in Malaysia. Beside UPM, there is also the Rubber Industry and Smallholders Development Authority (RISDA) College. RISDA College located in Malacca and currently offering a total of seven courses in diploma which include diploma in agriculture and it is

expected that this college can add to the number of agriculture professionals in the country.

Even though the students of these two institutions have been exposed to agriculture almost everyday, how about their attitude towards agriculture activity especially contract farming? This is the main puzzle that has been the main interest of this study. Can we rely on what have been completed by Gidarakou (1999) who revealed that the mind set of youth is the cause why they are having negative attitude toward contract farming. According to Da Silva (2005), contract farming is the rising mechanisms for transactions in agrifood chains. It has become attractive to many agricultural producers worldwide due to the attractive offers such as the guaranteed market and availability of support services. Within this system, buyers are assured with the continuity of produce for sale or processing. Processors are among the most important users of contracts, as they wish to assure full utilization of their plant processing capacity. The main advantage of contract farming is that it facilitates backward and forward market linkages that are the cornerstone of

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market-led, commercial agriculture. Contract farming will lessen the burden of contractors and farmers through the market linkage and access opportunity.

Youth are the power. The overall development of a country depends on their regimented, active and skilled. More than 40 (%) of Malaysian population are youth. Through dominant figure, they possess energy and able to create an intensive contribution to the nation building. Youth have the ability to play the significant part in building global food security and development. Unfortunately many of the youth will not get the chance to fulfill that potential due to the unfavorable attitude formation. Lack of education, training and organizational program are among the causes detected (Ali and Anwar, 2000). Even though previous studies have proved that youth found to have unfavorable attitude towards contract farming, Norsida (2008) in her study found that youth highly believe that agriculture can generate higher income for them if it is handled in the right way. Indeed, the students of these two institutions are hoped to have a better attitude towards agriculture generally and contract farming specifically because it is obvious that they are the backbone of the agriculture future in Malaysia.

## MATERIALS AND METHODS

Data for this study was gained using a survey using self-administered questionnaire. Before filling the questionnaire, the respondents were briefed on the questions. The dependent variable for this study is attitude towards contract farming while there are four independent variables namely acceptance towards contract farming, knowledge towards contract farming, belief towards contract farming and support towards contract farming.

Before going to the actual data collection, a pre-test was conducted to test the reliability and validity of the instruments. Results of the pre test produced a Cronbach Alpha between 0.85-0.92 on the different constructs indicating that the items used to measure the various constructs showed a good level in terms of reliability. Through a simple random sampling, a total of 194 respondents from two agriculture learning institution in Malaysia which are University Putra Malaysia and Rubber Industry and Smallholders Development Authority (RISDA) College were selected.

To meet the determined objectives, descriptive statistics such as frequency, percentage, mean and standard deviation were employed. In order to reveal any different between dependent and independent variables, inferential statistics such as independent t-test

and ANOVA were performed. To investigate any relationship between dependent and independent variables, Pearson correlation and multiple linear regression were performed.

## RESULTS AND DISCUSSION

**Respondents socio-demographic data:** Before we go to the main objective, it is better for us to know the respondents studied. Referring to Table 1, majority of the respondents are females (62.4%). A total of 30.4% of the respondents age between 22-24 years with the mean age of 20.56 years and are taking diploma (51.5%). Almost one third of the respondents (30.9%) spend more than RM400 a month while almost two third of the respondents (62.9%) live in rural areas. This study found that only 24.2% have family agriculture background compared to those who do not have any family agriculture background (75.8%).

**Attitude towards contract farming:** Next, we will look into the respondents attitude toward contract farming. As depicted in Table 2, majority of respondents have a high positive attitude towards contract farming whereby it accounted for 69.4% of the respondents. Only 0.8% of the respondents have a low attitude towards contract farming. This is a good indicator for the future of agriculture in our country as the respondents believe that innovative agricultural methods will prompt them to embark in agriculture activities.

Table 1: Socio-demographic of respondents (n = 194)

Variables	Frequency	Percentage	Mean	SD
<b>Gender</b>				
Male	73	37.6		
Female	121	62.4		
<b>Age</b>			20.56	1.72
18-19 years	82	42.3		
20-21 years	53	27.3		
22-24 years	59	30.4		
<b>Current level of education</b>				
Degree	94	48.5		
Diploma	100	51.5		
<b>Monthly expenditure (value in Ringgit Malaysia)</b>			401.70	220.90
<200	22	11.3		
201-300	53	27.3		
301-400	59	30.4		
>401	60	30.9		
<b>Locality</b>				
Rural	122	62.9		
Urban	72	37.1		
<b>Family background (n = 185)</b>				
Have agriculture background	47	24.2		
Do not have agriculture background	138	75.8		

Table 2: Distribution of respondents attitude toward contract farming

Factors	Frequency	Percentage	Mean	SD
Attitude			7.66	1.32
Low (1.0-3.33)	0	0.0		
Moderate (3.34-6.67)	43	22.2		
High (6.68-10.0)	151	77.8		

Table 3: Comparison between selected demographic factors and attitude towards contract farming using independent t-test

Variables	n	Mean	SD	t	p
<b>Gender</b>				0.372	0.711
Male	73	7.70	1.32		
Female	121	7.63	1.33		
<b>Locality</b>				0.979	0.329
Urban	72	7.78	1.38		
Rural	122	7.58	1.29		
<b>Agriculture background (n = 381)</b>				-1.174	0.242
Yes	47	7.46	1.21		
No	138	7.72	1.34		
<b>Level of education</b>				-1.952	0.052
Diploma	100	7.48	1.26		
Degree	94	7.84	1.36		

To gain a cumulative value for attitude, a total of 11 items were constructed. Table 5 specifically explains on each item constructed to measure the attitude towards contract farming. The statement of “Willing to seek for more entrepreneurship opportunities regarding CF” (M = 8.10) and the statement of “Willing to take the opportunity to attend training on CF” (M = 8.10) recorded the highest mean score. The third highest mean score was recorded by the statement of “More prepared to be involved in farming as a result of CF” (M = 7.95). The lowest mean score recorded by the statement of “Feel comfortable if I getting involved in CF” (M = 6.87). Even though it is the lowest, the mean score recorded is still considered high.

This study has four independent variables consist of 41 items. The selected independent variables are belief (10 items), support (10 items), knowledge (10 items) and acceptance (11 items). The items were constructed based on literature review and also previous and established instruments. Results presented in Table 6 are the cumulative value of each variable. Based on the results presented in Table 6, the highest mean score was recorded by belief (M = 7.70), followed by support (M = 7.69) and knowledge (M = 7.58). The lowest mean score was recorded by acceptance aspect (M = 7.27).

**Differences between selected independent variables and attitude towards contract farming:** To inspect any difference between attitude towards contract farming and selected independent variables, the independent t-test was performed.

Table 4: Comparison in selected socio-demographic factors and attitude towards contract farming using ANOVA

Variables	n	Mean	SD	F	p
<b>Age</b>				0.643	0.527
18-19 years	82	7.54	1.28		
20-21 years	53	7.80	1.38		
22-24 years	59	7.70	1.34		
<b>Monthly expenditure (Value in Ringgit Malaysia)</b>				0.308	0.819
<200	22	7.88	1.29		
201-300	53	7.67	1.30		
301-400	59	7.56	1.28		
>401	60	7.67	1.42		

This study was also designated to compare the mean of attitude towards contract farming between male and female respondents. Referring to the data collected on Table 3, male (M = 7.70, SD = 1.32) and for female (M = 7.63, SD = 1.33; t (194) = 0.372, p = 0.711), concludes that there is no significant difference found on attitude towards contract farming between male and female respondents. Barlet *et al.* (2004) opposed the results revealed in this study when they found that women have more positive attitude towards traditional agriculture activities and have negative attitude towards modern agriculture activities that include contract farming.

In a study completed by Vera-Toscano *et al.* (2008) indicate that rural community have a better and positive attitude towards contract farming compared to the urban community. But do this result can be found in Malaysia. Based on the result which is (M = 7.78, SD = 1.38) for rural respondents and (M = 7.58, SD = 1.29; t (194) = -0.979, p = 0.329) for urban respondents, interestingly, there is no significant difference found in attitude towards contract farming between urban and rural respondents, thus it contradicts with results indicated by Vera-Toscano *et al.* (2008).

For the factor of family agriculture background, based on the result presented in Table 3, we can clarify that there is no significant difference between those who have family agriculture background and those who do not have. This is based on (M = 7.46, SD = 1.21) for those who have agriculture background and (M = 7.72, SD = 1.34; t (194) = -0.418, p = 0.676) for those who do not have family agriculture background.

According to a study completed by Obosu-Mensah (2000) education does have an impact on people’s attitude towards contract farming. But does this situation can be applied among Malaysia agriculture institution students? Table 3 has the answer. Based on (M = 7.84, SD = 1.36) for those who have agriculture background are currently taking degree course and (M = 7.48, SD = 1.26; t (194) = -1.952, p = 0.052) for those who do not have family agriculture background indicates that there are no significant difference between degree and diploma students. Perhaps, these two groups have a similar positive level of attitude towards contract farming.

Table 5: Attitude towards contract farming (n = 194)

Statement/score percentage	1	2	3	4	5	6	7	8	9	10	Mean	SD
Willing to seek for more entrepreneurship opportunities regarding CF	-	-	0.5	2.6	7.2	6.2	13.9	25.8	16.5	27.3	8.10	1.68
Willing to take the opportunity to attend training on CF	-	-	1.0	1.0	6.7	9.8	14.9	21.1	17.0	28.4	8.10	1.70
More prepared to be involved in farming as a result of CF	-	-	-	1.5	6.7	10.8	18.6	23.2	17.0	22.2	7.95	1.59
Willing to seek further knowledge on CF	-	-	0.5	1.5	6.7	11.3	15.5	25.8	16.0	22.7	7.94	1.63
More motivated to work when I am involved in CF	-	0.5	-	2.1	5.7	11.3	22.7	26.3	12.4	19.1	7.77	1.60
Feel more professional if I'm involved in CF	-	0.5	1.0	1.5	5.7	13.4	20.1	25.8	16.5	15.5	7.69	1.62
Feel more productive being involved in CF	-	-	0.5	2.1	7.2	13.4	19.6	24.7	18.0	14.4	7.68	1.58
Career objectives will be achieved if i involve in CF	-	0.5	-	-	8.2	14.9	21.6	25.8	15.5	13.4	7.63	1.52
CF improves standard of living	-	-	0.5	1.0	9.3	10.3	23.7	30.9	13.4	10.8	7.56	1.47
CF is acceptable for me even if I do not get enough profit than other farming methods	1.0	0.5	1.5	4.1	15.5	15.5	22.7	19.1	9.8	10.3	6.96	1.85
Feel comfortable if I getting involved in CF	-	-	1.0	5.7	13.9	22.2	27.3	12.4	6.7	10.8	6.87	1.68

Table 6: Factors affecting attitude towards contract farming

Factors	Frequency	Percentage	Mean	SD
<b>Belief</b>			7.70	1.32
Low (1.0-3.33)	0	0.0		
Moderate (3.34-6.67)	43	22.2		
High (6.68-10.0)	151	77.8		
<b>Support</b>			7.69	1.32
Low (1.0-3.33)	0	0.0		
Moderate (3.34-6.67)	43	22.2		
High (6.68-10.0)	151	77.8		
<b>Knowledge</b>			7.58	1.34
Low (1.0-3.33)	1	0.5		
Moderate (3.34-6.67)	47	24.2		
High (6.68-10.0)	146	75.3		
<b>Acceptance</b>			7.27	1.17
Low (1.0-3.33)	0	0.0		
Moderate (3.34-6.67)	57	29.4		
High (6.68-10.0)	137	70.6		

Table 7: Relationship between independent variables and attitude towards contract farming

Variables	r	p
Acceptance	0.717	0.0001
Support	0.650	0.0001
Knowledge	0.631	0.0001
Belief	0.491	0.0001

Next, the test of ANOVA was utilized to achieve one of the objectives for this study, which is to determine the influence of factors such as courses taken, university where the respondents studied, age and monthly expenditure on attitude towards contract farming.

ANOVA was employed to inspect whether there are difference on attitude towards contract farming between age groups. Based on the data gained, it shows that the age group of 20-21 years old recorded the highest mean score (M = 7.80) and the lowest mean score recorded by the age group of 18-19 years (M = 7.56). It is interesting to know that there is no significant difference between these three age groups based on (F = 4,194) = 0.643, p = 0.527. Simon (2005) has other views when he said the older people are more hesitant to accept modern way of agriculture compared to the younger people.

Table 8: Factors that contribute to attitude towards contract farming using multiple linear regression

Independent variables	Standardize beta	t	p
Constant		1.101	0.2720
Acceptance	0.452	7.423	0.0001
Support	0.239	3.434	0.0001
Knowledge	0.158	2.287	0.0023

R = 0.779; R<sup>2</sup> = 0. 575; Adjusted R<sup>2</sup> = 0.607; F = 73.107; sig. = 0.000

This study was also keen to know whether financial power has any influence on attitude towards contract farming. Table 4 concludes that F(4,194) = 0.308, p = 0.819, thus it reveals that there is no significant difference on attitude towards contract farming between the four groups studied. The highest mean score was recorded by the group of <RM200 (M = 7.80) while the lowest mean score was recorded by the group of respondents who spent between RM301 to RM400 a month (M = 7.56). Liaghati *et al.* (2008) have an interesting finding which is opposed to what have been found here, they said that the higher income that the agriculture activities manage to offer the higher and better attitude they will have towards the agriculture activities.

**Relationship between independent variables and attitude towards contract farming:** One of the main focuses of this study is to inspect any relationship that might occur between attitude and the other four independent variables. To achieve this, Pearson Product Moment Correlation was employed. Referring to Table 7, all the four independent variables which are acceptance (p = 0.0001), support (p = 0.0001), knowledge (p = 0.0001) and belief (p = 0.0001) were found to have significant and positive relationship with attitude towards contract farming. Based on the data revealed, there is a high relationship between acceptance and attitude towards contract farming (r = 0.717). Results presented also portray to us that there is a moderate relationship between support and attitude towards contract farming (r = 0.650), knowledge and attitude towards contract farming (r = 0.631) and belief and attitude towards contract farming (r = 0.491).

Multiple linear regression was used to reveal the significant contributors among the predictor variables in explaining attitude towards contract farming. Based on the multiple linear regression performed, we can conclude that there are four independent variables that provide the best prediction for attitude towards contract farming and explained about 61% of variation in attitude towards contract farming. The variables are acceptance, support and knowledge. Based on the data portrayed in Table 8, there are possibilities that respondents who possess better acceptance towards contract farming will create more positive attitude towards contract farming. Data gained here is not surprising as it is supported by a number of studies. Guo *et al.* (2007) and Reichardt *et al.* (2009) also found more or less similar results in their studies. Sriboonchitta and Wiboonpoongse (2008) has stressed on the government role in creating better attitude towards contract farming. According to them, government support either financially, technically or morally are indeed important determinant for creating a better attitude. By having all of these support, there is a likelihood that youth will be more motivated and possess a positive attitude to involve actively in contract farming. Knowledge without doubt is the key to everything in this world. Based on the results gained here, people with better knowledge will have better attitude towards contract farming. Results gained is pertinent by the previous study completed by Daniel and Alluri (2006) but contradict with a study by Uddin *et al.* (2008).

### CONCLUSION

Based on the results gained it can be concluded that acceptance, support and knowledge are indeed the important determinants for creating better attitude among youth towards contract farming. There are number of efforts that can be introduced at the root cause in order to uplift youth attitude towards contract farming. The best step is to introduce a contract farming course at all universities in Malaysia instead of introducing it to UPM and RISDA college only. As education is an important determinant to alter the attitude, different agriculture universities or college should come forward with different educational programs like mass education, adult literacy and vocational education to make their students more educated on contract farming.

Agricultural knowledge was found to be one of the significant variables that could be intensified by establishing different training programs. Besides, establishing youth club for contract farming in the

agricultural institution for developing contract farming knowledge among agricultural institution students is indeed important.

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