

Gender Issue in Contract Farming: The Case of Malaysian Students

Hayrol Azril Mohamed Shaffril, Jeffrey Lawrence D'Silva, Jegak Uli and Bahaman Abu Samah
Laboratory of Rural Advancement and Agricultural Extension,
Institute for Social Science Studies, University Putra Malaysia, Malaysia

Abstract: Problem statement: Agriculture has been proved to be a significant impetus for development in Malaysia. Agriculture offers a number of profitable activities, contract farming is one of it and it is still in infancy stage. Besides being a developed sector in Malaysia, it still has a number of problems to be solved. Gender issue is one of it. Gender issue in agriculture has become more crucial these days. To sustain the agriculture sector especially contract farming, an equal level of acceptance, attitude and knowledge towards contract farming should be gained between male and female. **Approach:** This study investigated whether male and female have any difference on acceptance, attitude and knowledge towards contract farming. Data was gained through a survey questionnaire on 400 male and female youth who are currently studying in various tertiary institutions throughout Malaysia. For the purpose of analyses, PASW software was used where descriptive and inferential analyses were employed. **Results:** Male and female youth were found to have a good and positive level on acceptance, attitude and knowledge towards contract farming. Based on the independent t-test done, male and female youth possessed equal level of acceptance, attitude and knowledge towards contract farming. **Conclusion/Recommendations:** Results gained bring us to the conclusion that contract farming has a huge potential to attract youth to be part of agriculture community. To transform this potential agricultural method to a reality, more promotion, exposure and information on contract farming should be given to the youth. It was recommended that related agriculture agencies, Department of Women Development and agriculture related universities to take the responsibilities of exposing contract farming activities to the youth in Malaysia.

Key words: Acceptance, attitude, knowledge, gender and contract farming

INTRODUCTION

Agriculture is planned to be one of the major industries in Malaysia. It is expected in 2010 the export value of agriculture productivity will reach almost USD 236 million. This huge number portrays the potential that this sector has. In order to intensify this sector, the government has introduced a number of agricultural activities. Contract farming is one of it. Without doubt, contract farming has become one of the major means of production in a number of Asian countries such as Indonesia, India and Thailand. The concept of contract farming has been introduced since 1960 (Jaffee, 1994) but in Malaysia contract farming can be considered as a new agriculture scheme. Leech rearing for example started to be part of contract farming scheme in 2007. Contract farming are frequently conducted privately, but government agencies such as Department Of Agriculture (DOA) and Federal Agriculture Marketing Authority (FAMA) have also been involved in contract

farming. Contract farming offers a number of benefits. It can be a catalyst to unleash the potential of small farmers for rural development. Contract farming benefits both parties, the farmers and the contractors. The reduction of production risks and transaction costs for export firms can be benefited by the contractor and marginalized farmers are provided with market access and input credit otherwise unobtainable (Warning and Nigel, 2002). Contract farming also can result in technological growth, double the productivity, the formation of a peasant middle class and the privatization of extension services (Little and Watts, 1994).

Based on the existing literature, there is abundance of benefits being offered by contract farming and this agriculture activity should be sustained. The increasing number of ageing farmers nowadays indeed requires a drastic movement from the related agriculture agencies. According to Norsida (2007), the number of farmers exceeding 56 years old is increasing in Malaysia. To

Corresponding Author: Hayrol Azril Mohamed Shaffril, Laboratory of Rural Advancement and Agricultural Extension, Institute for Social Science Studies, University Putra Malaysia, Malaysia

sustain contract farming, the acceptance, attitude and knowledge of youth in this activity is essential. The number of youth in Malaysia now is encompassing 40.18% while the unemployment among youth is reaching 4%. The current situation provides a room for contract farming to be the medicine to overcome unemployment problem in Malaysia.

Acceptance, attitude and knowledge indeed have become important determinants for male or female to accept agriculture. Gidarakou (1999) in her study emphasized that attitude is the major cause why women are reluctant to accept agriculture while Guo *et al.* (2005) have other view where they emphasized more on characteristics of agents, product or enterprise type and government support compared to attitude. There are a number of previous studies that try to seek association between gender and acceptance towards contract farming. Based on a study done completed by Nor Aini (2003) it was found that responsibility for household tasks and childcare responsibility lessen the acceptance of female towards contract farming. Bulow and Sorensen (1993) also display quite similar result where they stressed male preferred contract farming more than female. Knowledge indeed is an important factor of success in any sector including contract farming. According to Prokop *et al.* (2007), female have poor knowledge on agriculture activities compared to male. The inconsistencies that exist bring us to a question; can these situations be found in Malaysia? The question raised has become the main objective of this study, to identify any differences on acceptance, attitude and knowledge towards contract farming between male and female youth.

MATERIALS AND METHODS

To collect the data needed, an instrument on acceptance (12 items), attitude (11 items) and knowledge (9 items) were constructed. The instrument was pre tested and further refined. The data collection was done on the four selected higher learning institution namely University Putra Malaysia (UPM), University Malaysia Terengganu (UMT), Northern University of Malaysia (UUM) and Rubber Industry and Smallholders Development Authority College (RISDA). Employing a simple random sampling, a total of 400 respondents were selected as the respondents. Each of the institution was represented by 100 respondents. The data collection process took two months to be completed. The data gathered were cleaned using exploratory data analysis and analyzed using PASW software where analyses such as frequency, percentage, mean, standard deviation and independent t-test were performed. The dependent

variables for this study are acceptance, attitude and knowledge towards contract farming while the independent variable for this study is gender.

RESULTS

Table 1 narrates to us the socio-demographic data of the respondents studied. More than two third of the respondents (70.8%) were female. A slight majority of the respondents (40.2%) are among those age range between 20-21 years old. The four selected universities/college are represented by an equal number of percentage which is 25.0%. Three quarter of the respondents (75.0) are taking degree course while a total 31.8% of the respondents have spent between 300-400 Ringgit Malaysia a month. Half of the respondents (50.0%) are taking agriculture course while more than half of the respondents (59.5%) live in urban areas compared to only 40.5% respondents who live in rural areas. Slightly more than three quarter of the respondents (75.5%) have no family background on agriculture while a total of 54.8% of the respondents have received information regarding contract farming.

Table 1: Socio-demographic of respondents (n = 400)

Variables	Frequency (%)	Mean	SD
Gender			
Male	117	29.2	
Female	283	70.8	
Age		20.78	1.53
18-19 years	111	27.8	
20-21 years	161	40.2	
22-24 years	128	32.0	
Zone (the university located)			
Northern (UUM)	100	25.0	
Central (UPM)	100	25.0	
East Coast (UMT)	100	25.0	
Southern (RISDA College)	100	25.0	
Level of recent education received			
Degree	300	75.0	
Diploma	100	25.0	
Monthly expenditure (value in ringgit Malaysia)		395.85	217.18
<200	57	14.2	
201-300	102	25.5	
301-400	127	31.8	
>401	114	21.5	
Courses taken			
Agriculture	200	50.0	
Economic	100	25.0	
Others	100	25.0	
Locality			
Rural	162	40.5	
Urban	238	59.5	
Family background (n = 381)			
Have agriculture background	79	19.8	
Do not have agriculture background	302	75.5	
Received information regarding contract farming			
Yes	219	54.8	
No	181	45.2	

On the next part, we will look into the aspect of acceptance toward contract farming among youth. Referring to Table 2, a total of 71.8% of the respondents have a high positive acceptance towards contract farming. More than a quarter of the respondents (28.1%) moderately accept contract farming. Data presented depicted that none of the respondents have a low acceptance towards contract farming thus proves that contract farming is accepted among youth in Malaysia.

A total of twelve items have been utilized to get a measurement regarding the level of acceptance towards contract farming among the youth. Based on data shown in Table 3, three highest mean score were recorded by the statement of "CF industry is a potential industry nowadays" (M = 7.86), followed by "CF has the ability to attract investors" (M = 7.63) and "Compared to other farming methods, CF has so much to offer" (M = 7.61).

Table 4 portrays to us the overall attitude towards contract farming among the respondents of the study. From the overall mean score recorded (M = 7.33) from the maximum mean score of 10.0, it can be concluded

that the respondents studied have a positive attitude towards contract farming. More than two third of the respondents (69.4%) have a high positive attitude towards contract farming while only .8% of the respondents have a low attitude towards contract farming.

Table 5 focuses on every item constructed to analyze the attitude towards contract farming. The statement of "Willing to seek for more entrepreneurs opportunities regarding CF" recorded the highest mean score (M = 7.74) followed by the statement of "Willing to take the opportunity to attend training on CF" as the second highest mean score (M = 7.64) followed by the statement of "Willing to seek further knowledge on CF" as the third highest mean score (M = 7.63).

Table 2: Overall level of acceptance towards contract farming (n = 400)

Factors	Frequency	Percentage	Mean	SD
Acceptance			7.29	1.15
Low (1.0-3.33)	0	0		
Moderate (3.34-6.67)	113	28.2		
High (6.68- 10.0)	287	71.8		

Table 3: Acceptance towards contract farming (n = 400)

Statement/Score Percentage	1	2	3	4	5	6	7	8	9	10	Mean	SD
CF is a potential industry nowadays	-	-	0.2	1.2	5.8	10.5	17.8	29.2	22.2	13.0	7.86	1.45
CF has the ability to attract investors	-	-	0.8	2.5	8.8	11.5	18.8	24.8	21.2	11.8	7.63	1.60
Compared to other farming methods, CF has so much to offer	-	-	0.2	2.5	7.8	11.0	21.0	28.0	21.0	8.5	7.61	1.49
CF encourages transfer of technology	0.2	-	0.2	3.2	7.2	11.2	20.8	28.5	20.0	8.5	7.56	1.54
CF is an agreement between farmers and contractors	-	0.5	1.2	2.2	10.8	11.2	20.0	21.8	18.2	14.0	7.53	1.73
CF results in higher yields	-	-	1.0	3.0	8.5	13.2	21.5	27.8	16.8	8.2	7.43	1.55
CF is a sustainable industry	0.2	-	0.5	4.0	9.0	14.5	23.0	25.0	15.0	8.8	7.33	1.60
CF is a prestigious profession	-	0.5	0.5	2.2	11.2	13.2	25.5	28.5	13.0	5.2	7.23	1.49
CF has a guaranteed market for the products that have been produced	-	-	1.5	2.0	12.8	14.2	23.0	26.8	11.8	8.0	7.23	1.58
CF assures quality and high production	-	-	0.8	4.5	12.8	12.2	24.0	27.5	13.5	4.8	7.15	1.54
Accept all the information regarding CF disseminated to me	0.5	1.0	2.0	5.2	18.2	17.8	19.5	19.5	10.8	5.5	6.72	1.78
CF involves low risks	1.0	1.0	4.2	10.0	22.2	18.0	15.8	13.8	10.0	4.0	6.25	1.90

Table 4: Overall level of attitude toward contract farming

Factors	Frequency	Percentage	Mean	SD
Attitude			7.33	1.38
Low (1.0-3.33)	3	0.8		
Moderate (3.34-6.67)	119	29.8		
High (6.68- 10.0)	278	69.4		

Table 5: Attitude towards contract farming (n = 400)

Statement/score percentage	1	2	3	4	5	6	7	8	9	10	Mean	SD
Willing to seek for more entrepreneurs opportunities regarding CF	-	0.20	1.20	3.50	8.8	9.8	14.2	25.5	17.8	19.0	7.74	1.78
Willing to take the opportunity to attend training on CF	0.2	0.20	2.00	3.00	8.5	11.0	17.0	23.2	16.2	18.5	7.64	1.83
Willing to seek further knowledge on CF	-	0.20	1.00	2.80	7.8	13.0	18.0	25.2	16.0	16.0	7.63	1.69
More prepared to be involved in farming as a result of CF	-	-	0.80	3.80	10.0	11.5	18.0	24.2	17.8	14.0	7.56	1.70
CF Improves standard of living	-	-	0.50	2.00	8.2	12.5	24.0	28.8	16.0	8.0	7.48	1.46
Feel more productive being involved in CF	-	1.00	1.20	3.50	8.5	13.8	21.2	24.2	17.0	9.5	7.36	1.70
Feel more professional if i'm involved in CF	-	0.20	1.80	3.50	9.8	14.2	19.5	25.8	15.0	10.2	7.34	1.69
More motivated to work when i am involved in CF	-	0.20	1.50	3.00	10.5	13.8	22.0	24.0	12.8	12.0	7.33	1.71
Career objectives will be achieved if i invlove in CF	0.2	0.80	1.80	3.50	11.5	16.0	19.2	23.2	14.5	9.2	7.18	1.76
CF is acceptable for me even if I do not get enough profit than other farming methods	1.2	0.50	2.20	4.00	17.5	17.5	24.0	17.5	9.0	6.5	6.72	1.79
Feel comfortable if i getting involved in CF	-	0.20	1.00	5.50	16.5	20.8	27.0	17.2	6.0	5.8	6.71	1.56

Table 6 clarifies to us the overall level of knowledge on contract farming among the respondents studied. To get the overall mean score, a cumulative value of the nine items measuring knowledge was gained. The overall mean score recorded for knowledge is 7.54 (from maximum 10.0) thus it depicts that the majority of the respondents studied have a high level of knowledge on contract farming. It was found that a total of 73.3% of the respondents have a high level of knowledge regarding contract farming.

To further analysis, the mean score of each of the items was gained. Based on the results gained in Table 7, we can see that the statement of “CF involves animal rearing, fisheries, farming and plantation” recorded the highest mean score (M = 8.20) while the statement of “Opportunities for CF is abundance especially in the field of health and raw meat products” (M = 6.87) recorded the lowest mean score. The low mean score recorded here bring us to a possibility that youth should be exposed to the type of productivity and opportunity that contract farming can offer.

In this part we will focus on the main objective of this study, which is to inspect whether there is any difference, exist in acceptance, attitude and knowledge towards contract farming between male and female youth. To fulfill the objective, the independent t-test was employed in order to reveal the difference on the mean score of acceptance, attitude and knowledge towards contract farming for male and female youth.

Are male and female youth having any difference on their acceptance towards contract farming? Results presented in Table 8 claim that there was no significant difference in the mean score of acceptance towards contract farming between male (M = 7.30, SD = 1.17) and female (M = 7.28, SD = 1.13; t (400) = 0.120, p = 0.905). Further analysis of the two mean scores concludes to us that both male and female youth have a similar level of acceptance towards contract farming. Conversely, the data presented here is in tandem with what have been found by a study done by Kimani *et al.* (2007).

How about attitude toward contract farming? Is there any difference between male and female youth? Table 8 provides the answer. Based on the analyses done, it can be noted that (M = 7.28, SD = 1.45) recorded for male respondents and (M = 7.37, SD = 1.32; t (400) = -0.673, p = 0.501) for female respondents. This proves that there was no significant difference in attitude towards contract farming between male and female respondents. Results gained here is opposed to what had been found by Filson (1996) who claimed that gender is one of the important factors that will determine attitude.

Table 6: Overall level on knowledge towards contract farming (n = 400)

Factors	Frequency	Percentage	Mean	SD
Knowledge			7.54	1.25
Low (1.0-3.33)	2	0.5		
Moderate (3.34-6.67)	105	26.2		
High (6.68- 10.0)	293	73.3		

Table 7: Knowledge on contract farming (n = 400)

Statement/score percentage	1	2	3	4	5	6	7	8	9	10	Mean	SD
CF involves animal rearing, fisheries, farming and plantation	-	-	0.5	0.8	3.5	8.5	16.0	25.2	21.8	23.8	8.20	1.48
CF provides alternative markets for small market	0.20	0.8	0.8	1.0	6.8	10.0	16.0	30.2	21.0	13.2	7.77	1.61
CF provides larger opportunities for local products to enter global market	-	0.5	1.2	1.2	7.2	10.5	19.0	25.8	22.0	12.5	7.71	1.61
CF guarantees consistent supply to the markets	0.20	-	0.5	2.0	6.8	10.0	19.2	30.8	19.5	11.0	7.70	1.52
The government offers CF schemes through their agencies such as FAMA and DOA	0.20	0.8	0.5	1.8	6.5	12.8	19.0	30.8	14.0	13.8	7.62	1.62
CF entrepreneurs provide opportunities for the general public to participate in contract farming as investors	-	0.2	1.0	0.8	9.0	8.8	22.5	29.2	20.0	8.5	7.61	1.49
CF can save middle man cost	0.20	-	1.2	3.0	8.5	13.2	20.5	26.5	14.0	12.8	7.47	1.67
CF is not a multi level marketing scheme	1.20	0.5	3.5	8.8	12.8	13.2	17.0	19.0	11.2	12.8	6.91	2.09
Opportunities for CF is abundance especially in the field of health and raw meat products	1.00	1.0	3.8	5.8	11.2	14.5	22.5	20.5	13.0	6.8	6.87	1.91

Table 8: Comparison between male and female youth towards acceptance, attitude and knowledge on contract farming

Variables	n	Mean	SD	t	p
Acceptance towards contract farming				-0.835	0.398
Rural	117	7.22	1.10		
Urban	283	7.32	1.16		
Attitude towards contract farming				1.267	0.206
Rural	117	7.47	1.37		
Urban	283	7.27	1.38		
Knowledge on contract farming				0.826	0.409
Rural	117	7.62	1.39		
Urban	283	7.50	1.20		

Do male youth have a higher level of knowledge of contract farming compared to female youth? The independent t-test employed depicted that male ($M = 7.62$, $SD = 1.26$) and female ($M = 7.48$, $SD = 1.25$; $t(400) = 1.090$, $p = 0.276$) thus it can be concluded that there was no significant difference between the two groups studied. An inspection of two mean scores bring us to a prediction that gender does not contribute much to the level of knowledge of contract farming. The finding here is in line with what have been noted by Haugen and Brandth (1994) where they stressed that female and male nowadays have a similar level of knowledge towards modern agriculture activities including contract farming caused by their vocational training, technology know-how and union membership.

DISCUSSION

From the data collected, it manage to fulfill the objective of this paper which is to reveal any difference that might occur between male and female students on their acceptance, knowledge and attitude towards contract farming. In Malaysia, Norsida (2007) and Gidarakou (1999) has stressed that youth especially women have a low acceptance, attitude and knowledge towards agriculture. Uniquely, this study revealed results that opposed with what have been found by Norsida (2007) and Gidarakou (1999). Results gained proved that there are similarities in acceptance, attitude and knowledge towards contract farming between male and female youth. The similarities unleashed are not the reason for no actions to be taken to further improve youth acceptance, attitude and knowledge towards contract farming. Some significant actions must be taken in order to strengthen it. It is recommended that specific courses on contract farming can be introduced at all universities in Malaysia. in strengthening youth participation in agriculture activities especially contract farming. Specific courses on contract farming can be introduced in the universities in Malaysia while related agencies such Department Of Agriculture (DOA), Federal Agriculture Marketing Authorities (FAMA), Department of Women Development and related agriculture universities can play pivotal role in intensifying youth acceptance, attitude and knowledge towards contract farming irrespective of gender.

CONCLUSION

Majority of the respondents are male, age between 20-21 years old, taking degree course, spend between Ringgit Malaysia 301-400 a month, currently taking

agriculture course, live in urban areas, have no agriculture family background and have received information regarding contract farming. From the analyses done, it can be concluded that majority of youth have a high and positive acceptance, attitude and knowledge towards contract farming. From the ANOVA test performed, it can be clarified gender is not a significant factor to create a better acceptance, attitude and knowledge towards contract farming among youth in Malaysia.

REFERENCES

- Bulow, D. and A. Sorensen, 1993. Gender and contract farming: Tea out grower scheme in Kenya. *Afr. Political Econ.*, 56: 38-52. DOI: 10.1080/03056249308703984
- Filson, G.C., 1996. Demographic and farm characteristic differences in Ontario farmer's view about sustainability policies. *Agric. Environ. Ethics*, 9: 165-180. DOI: 10.1007/BF03055300
- Gidarakou, I., 1999. Young women's attitude towards agriculture and women's new roles in the Greek countryside: A first approach. *Rural Stud.*, 15: 147-158. DOI: 10.1016/S0743-0167(98)00054-0
- Guo, H., R.W. Jolly and J. Zhu, 2005. Contract farming in China: Supply chain or ball chain? *Proceeding of the Minnesota International Economic Development Conference*, Apr. 29-30, University of Minnesota, pp: 1-1.
- Haugen, M.S. and B. Brandth, 1994. Gender differences in modern agriculture: The case of female farmers in Norway. *Gender Soc.*, 8: 206-229. DOI: 10.1177/089124394008002005
- Jaffee, S., 1994. Contract Farming in the Shadow of Competitive Markets: The Experience of Kenyan Horticulture. In: *Living Under Contract: Contract Farming and Agrarian Transformation in Sub-Saharan Africa*, Little, P. and M. Watts (Eds.). University of Wisconsin Press, Madison, ISBN: 0299140644, pp: 97-139.
- Kimani, V.N., A.M. Ngonde, E.K. Kang'ethe and M.W. Kiragu, 2007. Gender, perception and behaviors towards health risks associated with dairy farming in Dagoretti division, Nairobi, Kenya. *East African Med.*, 84: 57-64. PMID: 18338723
- Little, P. and M. Watts, 1994. *Living Under Contract: Contract Farming and Agrarian Transformation in Sub-Saharan Africa*. 1st Edn., University of Wisconsin Press, Madison, ISBN: 0299140644, pp: 97-139.

- Nor Aini, I., 2003. Malay competitiveness of women entrepreneurs facing challenges of globalization. Proceeding of the National Conference on Environmental Development Challenges, Sept. 12-13, University Kebangsaan Malaysia Bangi, Selangor, Malaysia.
- Norsida, M., 2007. The Agricultural Community, 50 Years of Malaysia Agriculture: Transformational Issues, Challenges and Direction. UPM Publisher, Serdang, Selangor, ISBN: 978-967-5026-14-0, pp: 128-143
- Prokop, P., A. Leskova, M. Kubiato and C. Diran, 2007. Slovakian student's knowledge and attitudes towards biotechnology. *Sci. Educ.*, 29: 895-907. DOI: 10.1080/09500690600969830
- Warning, M. and K. Nigel, 2002. The social performance and distributional consequences of contract farming: An equilibrium analysis of the Arachide de Bouche program in Senegal. *World Dev.*, 30: 255-263. DOI: 10.1016/S0305-750x(01)00104-8