## PERCEPTIONS TOWARDS ATTITUDE OF RURAL LEADERS TOWARDS SOME AGRICULTURAL TECHNOLOGIES IN MALAYSIA PADDY FARMING

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**ABSTRACT:** Paddy is the primary staple food crop. In Malaysia there are 0.3 million paddy farmers in Malaysia. The farm sizes of 65% of general paddy farmers are underneath one hectare. As the rural leaders play a function in important programs in agricultural extension. However, The study was conducted to determine the attitude of rural leaders towards Some Agricultural Technologies In Malaysia Paddy Farming, and explore the relationship between the selected characteristics of the respondents. Data were collected through personal interview from 260 randomly selected in MADA area. District during April to June 2015. A five point Likert scale was used to determine the attitude of rural leaders. The majority (57.7%) of the respondents had a moderate level of attitude. The correlation analysis between socio-demographic characteristics and attitude statements show that there is a positive and significant relationship between variable occupation attitudinal statements, and a negative relationship was also found to exist between the paddy income and the respondent's attitude at 0.05 level of significance.

KEYWORDS: Rural Leaders, Attitude , Agricultural Technologies, Paddy Farming

# INTRODUCTION

In lots of developing international locations, agriculture plays a vital role in the economy, and sustainability in the agricultural area needs to cope with the issues of poverty relief, food safety, and strong earnings, technology for an unexpectedly developing population (Lee 2005; Bhutto and Bazmi, 2007). Agricultural improvement has been described as the shift from conventional strategies of production to the usage of modern-day techniques (Swanson and Rajalahti 2010).

Paddy is the primary staple food crop. In Malaysia there are 0.3 million paddy farmers in Malaysia, of which best forty% are full time farmers. The farm sizes of 65% of general paddy farmers are underneath one hectare. The cutting-edge report suggests a bad fashion of land usage for paddy production. There are overall 426,260 ha paddy planted area, and common yield is 3.5 ton in line with hectare Rice farmers in Malaysia are normally settled in 8 (eight) main granaries and several small granaries across the peninsula(Hassan, Shaffril et al. 2010).

in recent times there are many challenges confronted by the farming network particularly rice farmers in Malaysia: 1) The outmigration of youth is a serious difficulty confronting rice farming industry; and 2) risks faced by means of farmers which commonly a good deal older. consequently, it also prompted increasingly more extreme problems of poverty in which the authorities's initiative on removing poverty becomes less effective in terms of value and effectiveness(Man 2009).

New era in all regions has improved agricultural, manufacturing, as a consequence, its sustainability. Nowadays's agriculture is using excellent control practices, though focused on a lot of its programs, now not broadcasting as became completed inside the beyond. New disorder resistant hybrids as the brand new technologies are evolved and transferred to growth yield, the complimentary comfort at the male counterpart are blanketed in the bundle (Ogunsumi 2013).

### LITERATURE REVIEW

Agricultural extension may be described because the entire set agencies that aid and facilitate humans engaged in agricultural production to clear up problems and to gain records, abilties, and technology to improve their livelihoods and properly-being (Jadalla, Bakar et al. 2013).

In developing countries including Malaysia, rural people have depended on extension people for technical recommendation and records. The achievement of extension packages may be determined to a big degree through the capacity of the extension employee to be qualified and ready for the reason that whole extension process is depending on them to switch new thoughts and technical advice to the agricultural humans (Tiraieyari 2009).

The time period "agricultural extension" is a professional communique intervention deployed via businesses to disseminate agriculture information and technologies to rural communities. Extension has a long history, based totally on grownup training, verbal exchange technological know-how, community development, rural development and global improvement and has robust linkages with agriculture studies and exercise (Karbasioun 2007).

As technology improves through the day, numerous procedures have developed and been implemented to make sure powerful dissemination of extension provider so that you can improve the residing preferred of rural farmers. Mind-set is the degree of superb or negative effect associated with mental items and one important technique to determine the effect of extension carrier is initially the farmers' attitude. The employment of extra certified and skilled extension sellers, mainly situation count professional and the adoption of the farmer first approach to agricultural studies and development are encouraged for farmers to show a fantastic mindset toward the extension carrier(Rebacca 2012).

According to Rogers (1999) rural leaders are the individuals who are able in an informal manner that the impact enormously frequently at the conduct and attitudes of others in the direction of what is suited. As the rural leaders play a function in important programs in agricultural extension, so the rural extension is a connection process at -ranges: 1) area Agricultural Extension corporations with rural leaders; 2) rural chief with other farmers.

There may be a huge gap between agricultural technology produced in research establishments and the adoption of such technologies by small-scale farmers and rural families (Kroma, 2003). This indicates the need for paying extra attention to conduct farmers schooling in farm implements and publish-harvest technology through demonstrations.(David 2007)

Attitudes are considered the primary constraints to the adoption costs of vegetable generation by using farmers and therefore, vegetable manufacturing is tormented by these attitudes. The effectiveness of extension offerings is extraordinarily dependent on the potential of extension employees who're able because the complete extension manner is depending on them to switch

data from extension corporations to the clients. The movement of generation from the lab to the sphere has been a assignment for agricultural extension sellers. overall performance of extension retailers is expected to boom in the event that they have program-development skills to maintain extension marketers able and to in addition enhance their performance, those skills need to be taken into consideration and upgraded and non-stop.( Qtaishat,AL-Sharafat,2012)

Attitude as a thing of human behavior is the pre-considered necessary for any motion, which plays a dominant role in adoption of new publish-harvest technology (Meena, Kumar et al. 2009). normally attitude portrays either fine or terrible views toward someone, location, aspect or event. A positive attitude is an important requirement for agricultural technologies utilization (Kumar and Ratnakar 2011).

Based on Rebecca 2012, the rural communities have a completely high quality attitude towards agricultural technology and they welcome any new challenge to be developed in their regions. but, their lack of understanding prohibits them from the use of agricultural technologies in paddy farming frequently(Malek-Saeidi, Rezaei-Moghaddam et al. 2012).

has pressured that frequent usage and publicity to agricultural technologies need to be taken into consideration if someone wants to form a wonderful mindset in the direction of agricultural technology in paddy farming.(Zhang and Aikman 2007 have revealed that attitude can be a mediator on the position of attitude toward item on behavioral purpose. In this case, associated development authorities organizations or personal agencies have to keep in mind that a positive mind-set in the direction of a selected agricultural technologies in paddy farming will lead potential user sespecially the rural groups to determine to accept or use the rural technology in paddy farming Beside, efforts have to be placed into figuring out elements which can make contributions for positive mindset in the direction of agricultural technology in paddy farming utilization).

For this reason, the solution for this query will satisfy the principle objective of this observe which is to expose the attitude towards Some Agricultural Technologies Paddy Farming among the rural leaders in Malaysia.

#### **Objective Of Study**

The main purpose of this study was to assess the attitude of rural leaders towards some agricultural technologies in Malaysia paddy farming, and more specific objectives were to

- 1. To describe the socio -demographic of the respondents
- 2. To measure the respondent's attitude toward sustainable agriculture technologies of paddy farming
- 3. Determine the relationship between socio- demographic factors and perception level of attitude of paddy farming technologies for the respondents.

#### METHODOLOGY

A total of 260 of rural leaders have been selected as the respondents for this study. The respondents selected represented 27 MADA'S Regional. A developed and tested questionnaire was used to collect the data needed. Data were collected from the respondents through direct

interviewing during April to June 2015 The collected data were analyzed using SPSS where descriptive analyses (frequency, percentage, mean and standard deviation) and inferential analyses were performed. The dependent variable for this study was the attitude towards agriculture technologies and the independent variables for this study age, religion, level of education, occupation in paddy farming, years of experience in paddy farming, family size , Paddy income.

### **RESULTS AND DISCUSSION**

Table (1) indicate the descriptive analysis results. The majority of respondents at age between (43-48) years old follow with 25.8% between age (49 to 54) years old, and the remaining 19.6% were respondents in the age above (55) years old. Religious belief of the respondents was shown in Table below, it can be seen that MADA has (51.2) percent of respondents Muslim and (16.9) percent were Christian, while (6.2) percent Hindu then (25.8) percent were Buddha. The below table shows the respondents' level of education (30.4%) of respondents in MADA has secondary levels. Only few of them have further studied in certificate, diploma and degrees. Occupation is as follows, More than half of respondents (76.7 percent) are full time farmers and (32.3) percent are part time farmers. According to their experience in agriculture there were (27.3) percent have (8-13 years experience in agriculture, then (20.0) percent of the respondents have (14-19 years) experience in agriculture, but (52.7) percent have (above20 years) experience in agriculture. Data in the table also shows number of family size of the respondents the data show (21.2) percent of respondents have a small family (2-5 person), is followed by (53.5) percent have (6-9 person) and the remaining (25.4) percent were respondents have a big family (above 10 persons). The below table presents the total of the paddy income of the respondents, (31.5%) of the respondents they earn only about below (RM 1000) income of paddy income, then (32.3%) of respondents they earn between (1100-2000) income of paddy income and (36.2%) of the respondents they earn between (RM 2100-3000) income of paddy income.

Characteristics	n (260)	Percentage
Age	Frequency	Percent
31-36 years	66	25.4
37-42 years	53	20.4
43-48 years	67	25.8
49-54 years	51	19.6
Above 55 years	23	8.8
Religion	Frequency	Percent
Islam	133	51.2
Christian	44	16.9
Hindu	16	6.2
Buddha	67	25.8
Level of education	Frequency	Percent
No education	29	11.2
Primary level	62	23.8

#### Table (1): Profile of the Respondents

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Secondary level	79	30.4
Foundation	35	13.5
Diploma	14	5.4
Degree	41	15.8
Occupation	Frequency	Percent
Full time farmers	176	67.7
Part time farmers	84	32.3
Experience	Frequency	Percent
8-13 years	71	27.3
14-19 years	52	20.0
Above 20 years	137	52.7
Family size	Frequency	Percent
2-5 person	55	21.2
6-9 person	139	53.5
Above 10 people	66	25.4
Paddy income	Frequency	Percent
Below 1000 RM	82	31.5
1100-2000 RM	84	32.3
2100-3000 RM	94	36.2

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The Table (2) indicates Perception toward Attitude toward sustainable agriculture technologies of respondents paddy farming the table below show the rank of level of attitude of the respondents from highest to lowest based on the mean. The rank is as follows, the attitude dimension with the highest mean (4.04) is "you always care about the water and irrigation of your paddy field" this mean rural leaders in area study, they have a high perception to care about the water and irrigation of paddy field, but the lowest mean (3.33) has been "you are always resolved the problems related to the grinding process for paddy"this mean respondents have low knowledge about grinding process of paddy.

Statements of attitude	Frequency(%)						
	1	2	3	4	5	Mean	SD
1.You always care about the water and irrigation of your paddy field	2.3	6.1	8.4	62.0	20.2	4.04	.792
2.You particular about the fertility of my paddy field	1.1	6.8	20.9	52.5	17.5	4.02	.761
3.You always take care about the Problems related to the process of storage for paddy	1.5	1.9	15.2	59. 3	20.9	3.98	.819
4.You always analyze my paddy production and the yield	.4	3.0	16.3	54.0	25.1	3.97	.763
5.You believe in the validity and viability of the Clear filed (CL)	.8	3.4	14.1	53.2	27.4	3.96	.946
6.You always take care about the high cost of transport for paddy	2.3	8.7	21.7	46.4	19.8	3.93	.898
7.You always know about the pest and diseases for paddy	2.3	3.4	19.4	47.5	26.2	3.93	.860
8.You always know about the variety of paddy	3.0	10.3	44.9	32.3	8.4	3.79	.854
9.You always do process of drying for paddy after harvest	2.3	1.9	14.8	56.7	23.2	3.73	.956
10.You have always resolved the problems related to the grinding process for paddy	2.3	6.1	8.4	62.0	20.2	3.33	.887
Total average means	•	•	•	•		3.86	0.85

# Table (2) Preception toward Attitude of the respondents on paddy Farming Technologies

Table (3) indicates that the level of attitude of the respondents on paddy farming technologies. Whether high, moderate or low. 36.9 percent of the respondents were high, 57.7 percent were moderate in level and the remainder (5.4 percent) were low in level. Total mean (3.86) is moderate in level, but the researcher believes there is still room for improvement since some of the respondents were still in low and moderate level.

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Level	Frequency	Percentage	Mean	SD
High (3.67-5.0)	96	36.9	3.86	0.85
Moderate (2.34-3.66)	150	57.7		
Low (1-2.33)	14	5.4		
Total	260	100.0		

Correlation analysis between socio-demographic characteristics and attitudinal statements: From the table 4 below, the result of the analysis showed that there is a positive and significant relationship between the total occupation and the respondent's attitude at 0.01 level of significance ( $r = 0.004 P^{**}=0.01$ ). This simply implies that most of them they are full time

farmer this assist them to know what is the best thing that can use for farm paddy, and because they spent most of time on a farm they can discover the problems that face them when they farm paddy, and what technologies need to use to resolve these problems. Also, large scale of respondents is often eager to try out new recommended practices in order to improve their yield and productivity, more ever, they are the first people who receive the new technologies from agencies. A significant, but negative relationship was also found to exist between the paddy income and the respondent's attitude at 0.05 level of significance (r = -0.200, P\*=0.05). This implies that respondent's attitude to use agricultural technologies is negatively related to the paddy income. This is to say that rural leader's attitude is most likely to be negative if the technologies that come from agencies are not relevant to increase their paddy income.

no	Independent variables	r	P (2-tailed)	Remark
1.	Age	0.228	-0.75-	Not Significant
2.	Religion	0.181	0.83	Not Significant
3.	Level of education	0.272	0.068	Not Significant
4.	Occupation	0.176**	0.004	Significant
5.	Years of experience in paddy farming	0.151	-0.089-	Not Significant
6.	Family size	0.490	-0.043-	Not Significant
7.	Paddy income	-0.200*	0.046	Significant

# Table 4: Correlation Coefficient between Independent Variables and attitudinal statements (n=260)

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

\*Correlation is significant at the 0.05 level (2-tailed)

## CONCLUSION

Based on the questionnaire survey administered to a sample of rural leaders in MADA, this study investigated attitude of rural leaders towards some agricultural technologies in Malaysia paddy farming. The Level of the attitude of the respondents on paddy farming technologies at a moderate level at (57.7%). The results show that rural leader's attitude towards agricultural technologies the study revealed that the occupation and paddy income have an influence on rural leader's attitude towards some agricultural technologies. Based on the findings of this study. A positive and significant relationship between the total occupation and the respondent's attitude at 0.01 level of significance, but A significant, but negative relationship was also found between the paddy income and the respondent's attitude at 0.05 level of significance.this mean Majority of the respondents' positive attitude towards the selected technologies is an indication of the importance of improved agricultural technologies in the study area. Extension agents should endeavor to foster better working relationships between themselves and the rural leaders as this would grant them more freedom to express their plight and challenges better. Efforts should be geared towards increasing the technical manpower of farmers and also reduce the incidence of pest and diseases in the study area. Financial aid should be granted to the rural leaders to resolve the problems related to the grinding process for paddy and process of drying for paddy after harvest and to get a good variety of paddy.

### **Future Research**

This research is part of a Ph.D study, And I will publish another research about knowledge and implementation perception levels of rural leaders of paddy farming technologies in Malaysia.

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