# Adoption Behaviour of Awardee Farmers of Department of Agriculture Development and Farmers' Welfare in Southern Kerala

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### **ABSTRACT**

The study was conducted in the Thiruvananthapuram and Pathanamthitta districts of Kerala to study the adoption behaviour of awardee farmers. Altogether, 70 awardee farmers, 35 each from the two districts constituted the sample. A list of farming practices in coconut, rice, banana and vegetables were selected from package of practices recommendations of Kerala Agricultural University to study the adoption behaviour of awardee farmers. The statements on recommended practices were administered to awardee farmers and it was measured as no adoption, partial adoption, full adoption and modified adoption. The results showed that majority of the awardee farmers belonged to the medium to the high category of adoption behaviour. Profile characteristics like farming experience, decision making ability, dealing with failure, creativity, credit orientation and training acquired had a significant relationship with adoption behaviour.

**Key Words:** Awardee farmers, Adoption behaviour, Package of practices recommendations, decision making ability, dealing with failure, creativity, credit orientation.

#### INTRODUCTION

Kerala a small State, accounts only 1.18 per cent of the total land area of India and accommodates 3.1 per cent of the Indian population. The total land area is 38,863 km and has a population density of 859 people per sq km. Demand for agriculture is increasing rapidly with population growth and per capita income. The state has the potential to modernize the farm sector in tune with the time by making use of the developments in the information technology, education and industries sectors. A farmer who produced more was considered successful in earlier times. Unlike earlier times, a farmer who obtains higher productivity from his fields, who uses resources effectively and sustainably, markets his produce efficiently and can maintain quality in line with national and international standards is considered as a successful farmer (Vimalraj, 2010).

Farmers are the most economically weak group in the production sector, facing challenges. Amidst such situations, farmers who have been successful needs to be applauded for their work and felicitating them with an award for the hard work put in pulls in attention of more farmers into adding efforts in agriculture. A recognition given by central and state government establishments, agricultural departments, Non-Governmental and organizations to farmers through awards generates interest in them to practice new technologies and improve the quality of the produce. The paradigm shift towards education and service sector created a big gap between demand and availability of manpower in agriculture (KAU, 2015). There should be enough recognition and rewards to the farmers to create interest in them to practice new technologies and improve the quality of the produce. Therefore, Government of Kerala has introduced

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the awards viz. K Viswanathan (Mithranikethan) Memorial Nelkathir award, Karshakothama award, Karshakathilakam award, Kerakesari award etc. to prompt and inspire the progressive farmers from the state.

These awardee farmers vary from other farmers in certain ways such as the utilization of resources, marketing strategies, adoption of advanced technologies, etc. (Kale et al, 2018). The differences may be due to varied knowledge levels, skills possessed and differences in certain psychological attributes. These achiever farmers have become inspirational to fellow farmers by earning substantially from their lands due to many factors especially in the utilization of available opportunities and the adoption of latest technologies to withstand the ambiguities of agriculture. The present study aimed at analyzing adoption behavior of awardee farmers of department of agriculture development and farmers' welfare in southern Kerala

# MATERIALS AND METHODS

Ex-post- facto research design was used for the study because there was no scope for manipulation of any variables under study. The study focused on the awardee farmers cultivating major crops like coconut, rice, banana and vegetables in an integrated manner in Thiruvananthapuram and Pathanamthitta districts of Kerala as these two districts contain a greater number of awardee farmers in southern Kerala compared to other districts. Thirty five awardee farmers nominated for state awards from Thiruvananthapuram and Pathanamthitta districts each, during the period 2014-18 were selected in consultation with Principal Agricultural Officers of the respective districts and other officials of Department of Agriculture Development and Farmers' Welfare, making the total sample size of 70.

To study the adoption behaviour of awardee farmers, a list of forty-three recommended practices in coconut, rice, banana and vegetables were selected from package of practices of Kerala Agricultural University (KAU, 2016) based on the discussion with the experts in the respective fields. These practices were administered to awardee farmers and it was measured as no adoption, partial adoption, full adoption and modified adoption with the score of 1, 2, 3 and 4 respectively. Then adoption index was calculated using the equation as given below.

	Respondent's total	
Adoption index =	score	× 100
	Total possible score	

On the basis of Adoption Index values obtained, awardee farmers were classified into three categories ranging from low to high by considering the mean and standard deviation values. The profile characteristics of the awardee farmers such as age, size of land holding, farming experience, decision making ability, dealing with failure, creativity, credit orientation and trainings acquired were categorized and expressed in terms of frequency and percentage.

# RESULTS AND DISCUSSION

It was evident (Table 1) that majority of the awardee farmers (65.71 %) belonged to medium adoption behaviour whereas 18.57 and 15.71 per cent of the respondents belonged to high and low level of adoption behaviour category. It was revealed during the data collection itself that many of the awardee farmers were innovators than laggards as these farmers would implement the recommendations of KAU at the very first instance itself and later they would make their own modifications as per the micro conditions at their farm. This scientific temperament might have helped them to grab the prestigious state awards.

The results of the study revealed that majority (54.28%) of the awardee farmers belonged to middle aged group, whereas 44.28 per cent and 1.43 per cent of them belonged to old and young age groups, respectively. Middle-aged farmers were usually enthusiastic and have more flexibility in their work than older ones. The result clearly points

# **Adoption Behaviour of Awardee Farmers**

Table 1. Distribution of awardee farmers based on adoption index

Sr. No.	Category	Frequency (N=70)	Percentage
1.	Low (<51)	11	15.71
2.	Medium (51-67)	46	65.71
3.	High (>67)	13	18.57
	Total	70	100

Mean- 59.48

SD- 7.96

Range - 43.25-77.20

out the reluctance of youth towards agriculture as only one person out of 70 respondents belonged to the category of young. These results were in line with the findings of Manjula (2003) and Vimalraj (2010). About 88.57 per cent of the awardee farmers

possessed medium land holding whereas 8.57 per cent had large land holding followed by small size of land holding (2.86%). The farmers with larger area are generally the resourceful persons who can afford to use the different technologies on their

Table 2. Profile characteristics of awardee farmers.

(n=70)

Sr. No.	Variable	Category	Class Interval	Frequency	Percentage
1.	Age	Young	<35 yr	01	1.43
		Middle aged	35-55 yr	38	54.28
		Old	>55 yr	31	44.28
2.	Size of land holding	Small	0.4ha	02	2.86
		Medium	0.4 -2.0 ha	62	88.57
		Large	>2 ha	06	8.57
3.	Farming experience	Low	4-7 yr	09	12.85
		Medium	7-28 yr	42	60
		High	28-40 yr	19	27.14
4.	Decision making ability	Low	12-15	11	15.71
		Medium	15-19	47	67.14
		High	19-23	12	17.14
5.	Dealing with failure	Low	12-15	05	7.14
		Medium	15-25	53	75.71
		High	25-30	12	17.14
6.	Creativity	Low	12-15	08	11.43
		Medium	15-23	50	71.43
		High	23-29	12	17.14
7.	Credit orientation	Low	5-6	10	14.28
		Medium	6-8	45	64.28
		High	8-10	15	21.43
8.	Trainings acquired	Low	1-5	08	11.43
		Medium	5-15	46	65.71
		High	15-25	16	22.86

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Table 3. Correlation on adoption behaviour and profile characteristics of awardee farmers

Independent Variable	Correlation Coefficient
Age	0.116
Size of land holding	0.022
Farming experience	0.273*
Decision making ability	0.416**
Dealing with failure	0.503**
Creativity	0.439**
Credit orientation	0.495**
Trainings acquired	0.390**

fields, which might have helped to increase the income and procure awards. The result was in line with the findings of Kale (2016).

The data (Table 2) show that majority of the awardee farmers (60 %) had medium farming experience. Farming experience plays an influential role in the acquirement of knowledge and skills of farmers. The result was in line with Prasad (2003). Most of the awardee farmers (67.14 %) were having medium decision making ability. The reason might be due to medium annual income and medium size of land holding. The results were in line with the findings of Maratha *et al* (2017).

About 75 per cent of the awardee farmers belonged to medium category of dealing with failure. Failure in agriculture might not pull them back as they have high risk taking ability and they might be well aware of how to tackle the problems.

Most of the awardee farmers (71.43%) had medium level of creativity. Medium and high levels of creativity show their ability to do innovative things in a different way to achieve success in their farming and might have helped them to secure awards of State Government of Kerala (Sreedaya et al, 2019). Majority of the awardee farmers (64.28 %) belonged to medium category of credit orientation. The medium and high credit seeking behaviour might be due to their medium level of economic motivation. The result was in line with the findings of Namitha (2017). Most of the awardee

farmers (65.71%) belonged to medium category of trainings acquired. Training helps to motivate the farmers and increase their competitive ability in receiving awards. The result was in line with the findings of Vimalraj (2010).

Farming experience was positively and significantly correlated with adoption behaviour at 5 per cent level. Higher experience in farming provides more knowledge and potential to work efficiently Sreedaya (2000). Hence, the awardee farmers adopt most of the package of practices recommendations of Kerala Agricultural University. The decision making ability was positively and significantly correlated with adoption behaviour at one per cent level. Higher decision making ability might have helped the awardee farmers to adopt the most effective package of practices at a reasonable cost (Basheer, 2016.)

Dealing with failure was positively and significantly correlated with adoption behaviour at one per cent level. Even though the awardee farmers had to face failure in their crop, they might have the capability to use another effective measure to cope up with. (Paul, 2017). Credit orientation was positively and significantly correlated with adoption behaviour at one per cent level. The credit seeking behaviour of awardee farmers has an impact on purchase of costly inputs and technologies which helped them to increase their income.

### **Adoption Behaviour of Awardee Farmers**

Trainings acquired was positively and significantly correlated with adoption behaviour at one per cent level. Training helps farmers in gaining more knowledge and skills through interaction. Greater number of trainings enables more contact with the information sources about recent farming practices and increase knowledge and adoption of package of practices recommendations of Kerala Agricultural University.

# **CONCLUSION**

It can be concluded that the awardee farmers had medium to high adoption behaviour. These farmers practiced not only the traditional and recommended practices, but also innovative technologies in production, protection, value addition, storage and in marketing. It can be concluded that, other farmers should also follow this holistic approach adopted by these awardee farmers because the future of agriculture depends on such an inevitable convergence of diverse management practices.

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