

## CHARACTERISTICS OF ADOPTERS AND NON-ADOPTERS OF HIGH YIELDING VARIETIES OF PADDY\*

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The rate of modernization of a society is mainly dependent on the rate of diffusion of innovations in that society. Development of agriculture, which is the basic factor of our society, will depend upon the cumulative effect of the adoption of various improved agricultural practices by the multitude of farmers. This process of adoption of innovations was an important area of study in recent years. A review of the researches in the area of adoption reveal that there are many differences between adopters and non-adopters of an innovation. Identification of these differential characteristics of adopters and non-adopters will help in the efficient implementation of innovation diffusion programmes. Such studies have not been undertaken in Kerala so far. The present study has therefore been carried out to examine the influences of various factors on the adoption behaviour of farmers in Kerala State.

### Materials and Methods

Farmers in four panchayats in Quilon and Palghat districts of Kerala State selected through a multi-stage random sampling process provided the data. The data were collected by interview with the help of a pre-tested interview schedule. Based on the theoretical concept and review of literature of relevant studies a set of twenty three important variables were selected for finding out the difference between adopters and non-adopters. Of these attitude was measured by an attitude scale developed through the Likert Method of Summated Ratings as explained by Edwards (1957). A standardized knowledge test based on the procedure described by Linquist (1951) was developed to measure knowledge. Farm size, market perception and credit orientation were measured by special scoring techniques developed for this study. The technique used by Roy *et al* (1969) was used to measure fragmentation. Education was measured by scoring developed by Trivedi (1963) and level of aspiration was measured by the Cantuil's Self Anchoring Striving Scale (1962) Economic motivation and Risk preference were measured by the scales developed by Supe (1969) Adoption behaviour was measured by Adoption Quotient developed by Chattopadhaya (1963). The data were obtained from 100 farmers.

Table 1

**Differential characteristics of adopters and non-adopters of high-yielding varieties of paddy**

Sl.No.	Variable	Mean		Difference of mean	SE	t' value
		Adopters	Non adopters			
1.	Size of holding	5.71	4.44	1.27	.57	2.22
2.	Fragmentation	1.046	1.44	0.394	.07	5.62**
3.	Irrigation potential	49.0	30.30	18.70	1.70	11.0 **
4.	Education	4.00	3.77	.83	.16	1.44
5.	Social participation	1.04	0.64	.40	.09	4.4 **
6.	Knowledge	34.55	27.35	7.20	1.00	7.20**
7.	Attitude	36.65	25.95	9.70	.88	11.02**
8.	Economic motivation	37.11	35.00	2.11	.68	3.1 **
9.	Risk Orientation	33.44	25.60	7.80	.75	10.4 **
10.	Aspiration - Past	3.65	3.02	.63	.16	3.90**
11.	Aspiration - Present	5.48	3.74	1.74	.56	3.1 **
12.	Aspiration - Future	7.53	6.15	1.38	.68	2.02
13.	Market perception	4.16	2.72	1.44	.17	8.47**
14.	Credit orientation	4.40	3.97	0.43	.18	2.2
15.	Use of mass media	14.80	12.04	2.76	.39	7.07**
16.	Use of inter-personal cosmopolite source	13.72	8.36	5.36	.5	10.7 **
17.	Use of inter-personal localite source	7.84	9.44	1.60	.73	2.69**
18.	Extension contact	8.48	3.64	4.84	.31	15.6 **
19.	Perception of simplicity complexity	1.80	1.51	.29	.1	2.9 **
20.	Perception of suitability	3.90	2.05	1.95	.14	13.2 **
21.	Perception cost of cultivation	1.63	1.39	.24	.086	2.79**
22.	Perception of Profitability	4.21	2.41	1.80	.13	13.8 **
23.	Perception of labour need	1.94	1.56	.38	.97	3.9 **

\*\* Significant at 0.01 level

### Results and discussion

The results of the tests of significance for the 23 variables are presented in Table 1.

It can be seen from the above table that out of the 23 variables examined the adopters non-adopters differed significantly at 0.01 level of probability with respect to degree of fragmentation, irrigation potential, social participation, knowledge about the practices for the cultivation of high yielding varieties, attitude towards high yielding varieties, economic motivation, risk orientation, aspiration score for the past and present, market perception, use of mass media, use of interpersonal cosmopolite sources of information, use of interpersonal localite sources of information, extension contact and perceptions of simplicity-complexity, suitability, profitability and labour need. Size of holding, education, aspiration score for the future and credit orientation did not show any difference.

### Summary

The study examined 23 variables for testing the difference between adopters and non-adopters. Significant difference was observed with respect to 19 variables. The differences with respect to size of holding, education, aspiration score for the future and credit orientation were not significant.

### സംഗ്രഹം

അത്യുല്പാദനശേഷിയുള്ള വിത്തിനങ്ങളുടെ അംഗീകാരകരുടെയും അല്ലാത്തവരുടെയും പ്രത്യേകതകൾ വേർതിരിക്കുന്നതിനുവേണ്ടി ഇരുപത്തിമൂന്നു ഘടകങ്ങൾ പരിശോധനയ്ക്ക് വിധേയമാക്കി. അതിൽ പത്തൊമ്പതു ഘടകങ്ങളിൽ അംഗീകാരകർ അല്ലാത്തവർ തമ്മിൽ പ്രകടമായ വ്യത്യാസം ഉണ്ടായിരുന്നു. കൃഷിയിടത്തിന്റെ വലിപ്പം, വിദ്യാഭ്യാസം, ഭാവിയിലെ പ്രാരിയുള്ള അഭിലാഷം, വായ്പയോടുള്ള സമീപനം എന്നീ ഘടകങ്ങളിൽ വ്യത്യാസം പ്രകടമായിരുന്നില്ല.

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