

Factor Associated with Adoption of Date Palm Cultivation Technology by the Farmers

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ABSTRACT

With a view to study the knowledge and adoption of scientific date palm cultivation technology by the farmers this study was planned in Kachchh district of Gujarat state. The data revealed that 97.50 per cent of respondents were having medium level of knowledge. The adoption of date palm cultivation technology was also found medium (57.50 %). The independent variable viz., education, social participation, scientific orientation, risk preference, economic motivation and knowledge were positively and significantly related with extent of adoption of scientific date palm cultivation technology by the farmers.

Keywords : Adoption, Knowledge, Date palm

INTRODUCTION

Date palm is the oldest plant amongst the cultivated fruit trees. In India, the commercial cultivation of date palm is rare. In Gujarat, Kachchh district enjoys monopoly in the commercial cultivation of this crop. Date palm in the district is cultivated in 12200 hectares with the production of 82800 million tonnes. But, the average yield per plant per year in the district is low. The knowledge of an innovation is pre-requisite for adoption. In order to increase the level of adoption, farmer must be aware of the scientific technology. On this ground, a study was conducted to examine the adoption level of farmers about scientific date palm cultivation technology. The specific objectives of the study were;

OBJECTIVES

- (i) To ascertain the knowledge level of the farmers about scientific date palm cultivation technology.
- (ii) To measure the extent of adoption of scientific date palm cultivation technology by the farmers
- (iii) To study the relationship between selected personal,

social, economic and psychological characteristics of the farmers and their adoption of scientific date palm cultivation technology.

METHODOLOGY

The present study was conducted in Kachchh district of Gujarat state as the district ranks first as far as the area and production under date palm is concerned. Two talukas viz. Mundra and Anjar were selected purposively as they occupy more than 70 per cent area of date palm in the district. Five villages having highest area under date palm cultivation were selected purposively from each taluka. Using proportionate random sampling technique, 15 per cent date palm growers were selected from each village making a sample of 120 respondents.

For the measurement of knowledge of scientific date palm cultivation technology, the test was developed. With a view to find out the extent of adoption of scientific date palm cultivation technology, the date palm growers were asked to give the information about the package of practices adopted by them during last year.

RESULTS AND DISCUSSION

Knowledge level of the farmers about Scientific Date Palm Cultivation Technology

Table 1 : Distribution of the respondents according to their level of knowledge index n=120

Sr.	Category	No.	Per cent
1	Low (0 to 33.00 per cent)	00	0.00
2	Medium (33.01 to 66.00 per cent)	117	97.50
3	High (66.01 to 100.00 per cent)	03	02.50

The results in Table 1 postulate that clear majority of respondents (97.50%) were having medium level of knowledge. Only 2.50 per cent of them had high level of knowledge. It is interesting to note that no respondent was found having low knowledge.

Adoption level of farmers about scientific date palm cultivation technology

Table 2. Distribution of the respondents according to their adoption quotient n=120

Sr. No.	Category	No.	Per cent
1	Low (0 to 33.00 per cent)	50	41.66
2	Medium (33.01 to 66.00 per cent)	69	57.50
3	High (66.01 to 100.00 per cent)	01	0.84

The result presented in Table 2 indicates that 57.50 percent of the respondents were having medium level of adoption. On the other hand, 41.66 per cent of respondents falls under the category of low level of adoption. It is sad to know that only one respondent was found having high level of adoption.

Though all the farmers were having medium to high knowledge, their adoption was medium to low. This may be due to reason that their plantation was very old. Hence they could not adopt those technologies (variety, intercropping) recommended after plantation. Secondly, lack of resources with them could not permit them to adopt all the scientific technology.

Similar results were found by Chandawat et al (2012) and Pandya *et al* (2013)

Relationship between selected characteristics of farmers an their Adoption of Scientific Date Palm Cultivation Technology

The independent variables viz., education, social participation, scientific orientation, risk preference , economic motivation and knowledge were positively and significantly related with extent of adoption of scientific date palm cultivation technology by the farmers at 0.01 level of significance. Remaining variable viz., age, experience in date palm cultivation, family type, family size, size of land holding, occupation and annual income were failed to establish any significant relationship with extent of adoption of scientific date palm cultivation technology by the farmers.

Table 3 : Relationship between selected characteristics of farmers and their Extent of Adoption of Scientific Date Palm Cultivation Technology n=120

Sr. No.	Variables	Coefficient of correlation ('r' value)
X1	Age	0.0441 NS
X2	Education	0.2894 **
X3	Experience in date palm cultivation	0.1177 NS
X4	Family type	0.1035 NS
X5	Family size	0.1053 NS
X6	Social participation	0.2735 **
X7	Size of land holding	0.1564 NS
X8	Occupation	0.0710 NS
X9	Annual income	0.1363 NS
X10	Scientific orientation	0.4972 **
X11	Risk preference	0.4583 **
X12	Economic motivation	0.5307 **
X13	Knowledge about date palm cultivation technology	0.7700**

NS : Non-significant

** : significant at 0.01 level of significance

CONCLUSION

The study revealed that a clear majority of the respondents (97.50%) had medium level of knowledge .Their adoption level was predominately medium (57.50%). The variables viz; education, social participation, scientific orientation, risk preference, economic motivation and knowledge were found to have positive relationship with adoption of scientific date palm cultivation technology. All the independent variables explained as much as 64.88 per cent total variation in the extent of adoption of scientific date palm cultivation technology.

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