Relational analysis of Selected Entrepreneurial Characteristics of Oil Palm Growers with the Level of Adoption.

Neelaveni, S.[1] Venkatarao P.[2] and Prasad M.V.[3]

Abstract

Oil palm is the crop of present and future vegetable oil economy of world as well as India. The present study was conducted with main objective of studying the farming performance of oil palm growers in terms of level of adoption and entrepreneurial characteristics and how their entrepreneurial characteristics are influencing the level of adoption. Correlation analysis revealed that management orientation, decision making ability, innovativeness, training received, achievement, motivation, information seeking, cosmopoliteness, market orientation, self confidence, value orientation, education, socio economic status, extension contact, socio economic status, education and risk orientation were found positive and significant relationship with extent of oil palm cultivation at 1 per cent level of significance. Leadership status had shown non significant relationship with level of adoption. This paper suggests research, extension and administrative strategies to improve oil palm cultivation.

Keywords: Oil palm, Entrepreneurship Development, Andhra Pradesh, India.

Introduction

Oil palm is known to be the highest edible oil yielding perennial crop. It produces two distinct oils i.e palm oil, and palm kernel oil. Oil palm is the crop of present and future vegetable oil economy of world as well as India. Palm oil has good consumer acceptance as cooking oil because of its price advantage. It is good raw material for manufacturing oleo chemicals used in making soaps, candles, plasticizers, etc. It has also a variety of uses ranging from edible oil, cosmetics, pharmaceuticals, to bio fuel to bio lubricants. The

[1] Associate Professor, Department of Agricultural Extension, Agricultural College, Naira, Andhra Pradesh.
[2] Coordinator, DAATTC Srikakulam, Andhra Pradesh, India.
[3] Principal Scientist, IIOPR, Pedavegi, Andhra Pradesh, India.

Received Date: 23.11.2020 Accepted Date: 26.07.2021

present study was conducted with main objective of studying the farming performance of oil palm growers in terms of level of adoption and entrepreneurial characteristics and how their entrepreneurial characteristics are influencing the level of adoption.

Materials and Methods

Ex post facto research design was followed in present investigation. East Godavari, West Godavari and Krishna districts were selected from Krishna - Godavari zone of Andhra Pradesh investigation on the basis of highest coverage of the area under oil palm cultivation. Two mandals from each district, two villages from each mandal thus 12 villages were selected from three districts randomly. A total of 180 oil palm growers from each village were selected randomly. Fifteen independent variables and five components of farming performance index were identified for the study. Data were collected from the respondents face to face through pre-tested structured interview schedule individually.

Results and Discussion:

Correlation and prediction of contribution of selected entrepreneurial characteristics of Oil palm growers with the level of adoption were studied and correlation between selected entrepreneurial characteristics with the level of adoption Null hypothesis - There will be no significant relationship between the scores on entrepreneurial characteristics and the scores on level of adoption and empirical hypothesis- there will be a positive and significant relationship between the scores on entrepreneurial characteristics and the scores on level of adoption were tested. Table 1 shows correlation and multiple linear relationships between selected entrepreneurial characteristics and level of adoption . Correlation analysis revealed that management orientation, decision making ability, innovativeness, training received, achievement motivation, information seeking, cosmopoliteness, market orientation, self confidence , value orientation, education, socio economic status, extension contact, socio economic status, education and risk orientation were found positive and significant relationship with extent of oil palm cultivation at 1 per cent level of significance. Leadership status had shown non significant relationship with level of adoption. Null hypothesis was accepted for the variable leadership status and rejected for the remaining variables based on the relationships arrived.

Table 1: Correlation between belected entrepreneurial characteristics with the level of adoption

S.No.	Variable	r-value
1.	Education	0.3076**
2	Socio -economic status	0.2578**
3	Extension contact	0.2458**
4	Training received	0.3914**
5	Cosmopoliteness	0.3447**
6	Information seeking	0.3475**
7	Leadership status	0.1377NS
8	Innovativeness	0.4233**
9	Risk orientation	0.2215**
10	Self confidence	0.3301**
11	Market orientation	0.3424**
12	Management orientation	0.5988**
13	Achievement motivation	0.3569**
14	Value orientation	0.3266**
15	Decision making ability	0.487**

NS-Non Significant *significant at 5 percent level ** Significant at 1 percent level

Education had shown positive and significant relationship with level of adoption of recommended practices of oil palm cultivation. Oil palm growers having more education usually exposed to all kinds of information sources and help them to increase their knowledge which made them to adopt all recommended practices. This might be the reason for positive and significant relationship between education and level of adoption. (Rao, 1985) Socio economic status had shown positive and significant relationship with level of adoption. Because of more material possession and financial resources, oil palm growers migh have adopted all the recommended practices. This might be the reason for positive and significant relationship between socio economic status and level of adoption.

Training received, extension contact, information seeking, and cosmopoliteness were also found to be positive and significant relationship with level of adoption. Oil palm growers who received training and had more extension contact, information seeking, and cosmopoliteness might have gained knowledge on the recommended practices. This might be the reason for positive and significant relationship i.e. between above said variables and level of adoption. Innovativeness was found to be positive and significant relationship with the level of adoption. Oil palm growers having more innovativeness usually adopt the recommended practices earlier than other members. Decision making ability was found to be positive and has significant relationship with the level of adoption. Oil palm growers having more decision making ability would have adopted all the recommended practices. Hence, positive and significant relationship was observed between decision making ability and level of adoption. (Surgeon ,1989), (Goud,1990).

Prediction of the contribution of selected entrepreneurial characteristics with the level of adoption was tested. The Null hypothesis- additional sum of squares of regression added by the independent variable X1 to X15 is zero in explaining the amount of variation in level of adoption. The Empirical hypothesis - from the scores of 15 independent variables will explain a significant amount of variation in level of adoption.

Table2. Multiple linear regression analysis for prediction of independent variable that contribute for variation in level of adoption

S.No.	Variable	Regression co efficient(b)	Standard error of b	t-value
1.	Education	0.290	0.126	2.299*
2	Socio -economic status	0.675	0. 287	2.353*
3	Extension contact	1.102	0.436	2.527*
4	Training received	2.438	1.223	1.994*
5	Cosmopoliteness	0.116	0.790	0.140NS
6	Information seeking	0.052	0.319	0.165NS
7	Leadership status	0.335	0. 343	0.979NS
8	Innovativeness	0.609	0.306	1.990*

9	Risk orientation	0.154	0.464	0.334NS
10	Self confidence	0.104	0.227	0.457NS
11	Market orientation	0.277	0.283	0.981NS
12	Management orientation	0.470	0.134	3.511**
13	Achievement motivation	0.285	0. 384	0.743NS
14	Value orientation	0.183	0.400	0.458NS
15	Decision making ability	0.278	0.230	1.210NS

R2 =0.5705 F=14.48

NS-Non Significant *significant at 5 per cent level ** Significant at 1 per cent level

The result of multiple linear regression analysis for prediction of independent variable that contribute for variation in level of adoption were presented in the Table 2. Multiple regression analysis revealed that the variables namely education ($P<0.05$), extension contact ($P<0.05$), training received ($P<0.05$), innovativeness ($P<0.05$) and management orientation ($P<0.01$) were found to have positive and significant regression coefficients. The value of R2 (0.5704) indicates that all the independent variables put together explain the variation on level of adoption to the extent of 57.04 per cent. The computed F value (14.48) was found to be significant.

Based on the R2 variance ratio the null hypothesis was rejected and concluded that the data supported the original proposition that the score on15 independent variables explained a significant amount of variation in level of adoption. Training received and extension contact were the most important determinants of level of adoption with unit change in these variables, there was a change of 2.43 and 1.1 units, respectively in the level of adoption.

Strategy for improving area under Oil palm cultivation:

Various activities should be properly planned and carried out at various fronts.

Activities to be carried out on research front

1. Researchers should develop drought tolerant varieties which will help the oil palm growers to get more yields even during the period of water scarcity.

2. Widening the germplasm should be intensified by the researchers to identify stress tolerant and high yielding varieties.

3. Researchers should identify elite palms for quality seed production.

4. Researcher should evolve suitable agricultural implements (eg. Harvesting tools) for oil palm cultivation.

5. Research should be conducted on by-product utilization and intercrops to explore and utilize the entrepreneurial characteristics of oil palm growers.

Activities to be carried out at development front

1. Development agencies like Department of Horticulture, Private agencies should generate trained manpower in the field of oil palm cultivation. Maintenance of demonstration plots for every five villages to demonstrate the recommended oil palm cultivation practices to oil palm growers.

2. Development agencies should produce sufficient number of oil palm seedlings to meet the demand of seedlings from the oil palm growers. Growers awareness campaigns should be conducted to extend the area under oil palm cultivation.

3. Training programmes should be conducted to impart skills to the oil palm growers in oil palm production, harvesting of FFB, management of pests and diseases.

4. Staff of Department of Horticulture should increase their field visits. They should give more emphasis on optimum utilisation of resources to get more profits.

5. More number of collection centres should be established to avoid transportation problem from the oil palm grower's side.

6. Supervision and monitoring of field staff is needed during weighing the fresh.

7. Immediate payments should be made by processing units for fresh fruit bunches of oil palm.

Activities to be carried out at administrative front

1. Assured power supply and generator subsidy must be given on priority basis to oil palm growers.

2. Minimum support price should be continued for the benefit of oil palm growers to sustain oil palm cultivation.

3. Increased import duty on crude palm oil should be maintained to prevent dumping of it on large scale.

Thus concerted efforts of Research Organisation, Department of Horticulture and Oil palm promoters with proper Government policies can help development of oil palm growers.

References

Goud M.P. 1990 A study to measure entrepreneurial behavioral characteristics among small, medium and big farmers as related to their productivity. M.Sc.(Ag.)Thesis, Andhra Pradesh Agricultural University, Hyderabad.

Rao G.K.V. 1985 A prediction analysis of farming performance of farmers through their entrepreneurial behavior factor. Ph.D Thesis, Andhra Pradesh Agricultural University, Rajendra Nagar, Hyderabad.

Sridevi R 1996 Gender analysis in managerial abilities and farming performance in Krishna Godavari zone of A.P Ph.D Thesis, Andhra Pradesh Agricultural University, Hyderabad.

Surgeon J K 1989 A studies on the management attributes of farmers as related to training performance in Rangareddy district of A.P. M.Sc. (Ag.) Thesis submitted to Andhra Pradesh Agricultural University, Hyderabad.