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Profile Characteristics and Attitude of Farmers Towards Farming - A Critical Analysis

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Abstract **– The present study was conducted in Guntur district of Andhra Pradesh with the objective of studying the relationship between selected profile characteristics and attitude of chilli farmers. For the purpose of study one twenty (120) farmers growing Chilli crop were selected. Ex post facto research design was followed. A Likert type scale was developed which consists of 25 statements. Data were collected by personal interview method. The collected data were processed through descriptive statistics, correlation analysis and multiple regression analysis. Study reveals that more than half of the farmers had moderately favourable attitude towards farming. The correlation analysis revealed that education, annual income, extension contact, mass media exposure, scientific orientation, risk orientation and market orientation had positive and significant relationship with the attitude of farmers towards farming. Further, Multiple Linear Regression analysis showed that all the independent variables of owner farmers put together explained 81.04 per cent variation embedded with the dependent variable, attitude towards farming; while the independent variables of tenant farmers all together explained 86.28% variation in attitude.**

Keywords **– Chilli, Attitude, Correlation, Owner Farmers, Tenant Farmers.**

I. INTRODUCTION

Attitude as a component of human behavior is the pre-requisite for any action, which plays a dominant role in adoption of technologies. The adoption of any technology depends on the individual development and acceptance of modern agricultural technology is the foremost for increasing crop production. Agricultural technology is never completely accepted by the farmers in all respects, as such there always appears to be a gap between the recommended technology by the scientists and its modified form at the farmer's level. The technological gap is thus the major problem in the efforts of increasing agricultural production in the country. A need of the day is to reduce the technological gap between the agricultural technology recommended by the scientists and its acceptance by the farmers on their field. An attitude can be defined as a positive or negative evaluation of people, objects, event, activities, ideas, or just about anything in your environment. The study was carried out to bring to light attitude of farmers towards farming as an occupation as it indicates whether they may abandon agriculture or continue with considering farming as an occupation (Onima *et al*, 2017) and also to ascertain the association between attitude of farmers towards farming and selected independent variables of owner and tenant farmers.

II. MATERIAL AND METHODS

The present study was taken up with the main objective to find the correlation between the attitude of Chilli farmers of Guntur district of Andhra Pradesh and their profile characteristics. For the purpose of study sixty owner farmers and sixty tenant farmers thus constituting one twenty (120) farmers growing Chilli were selected at random from Sattenapalli, Pedakurapadu and Veldurthy mandals of Guntur district of Andhra Pradesh. The data was collected with the help of structured interview schedule through personal interview method. The collec- -ted data were processed through descriptive statistics, correlation analysis and multiple regression analysis.

The profile characteristics included both independent and dependent variables. The independent variables selected were age, education, land holding, farming experience, family type, family size, annual income, training exposure, source of credit, extension contact, mass media exposure, social participation, scientific orientation, risk orientation and market orientation for cultivation of chilli crop. While the dependent variable selected was attitude of farmers towards farming'.

The attitude towards farming was studied with twenty five statements related to farming and was measured on a three point continuum namely, less favourable, moderately favourable and more favourable attitude. Correlation analysis was carried out to analyze the relationship between independent and dependent variables. In this study, attitude of farmers towards farming was measured using the Likert's method of summated rating.

III. RESULTS AND DISCUSSION

Correlation analysis (r values) between the independent variables and the attitude is depicted in Table 1 and the distribution of respondents according to their attitude towards farming is presented in Table 2. The variable wise results were discussed below.

1. *Age vs Attitude*

It is evident from Table 1 that the computed r-value for age and attitude towards farming for owner farmers (0.0764) showed non-significant relationship with attitude. In case of tenant farmers, the computed r-value (0.289) showed positive significant relationship with attitude. This indicated that as the age increased, the positive attitude towards farming also increased.

The finding was in confirmity with Ramprasad (2004).

2. *Education Vs Attitude*

The computed r-value for education and attitude towar-

-ds farming for owner farmers (0.367) and tenant farmers (0.287) showed positive significant relationship with attitude. Higher the education, more favourable is the attitude towards farming.

The finding was in line with Obaiah (2004).

3. *Land holding Vs Attitude*

The computed r-value for land holding and attitude towards farming for owner farmers (0.141) showed non-significant relationship. In case of tenant farmers, the computed r-value (0.264) showed positive significant relationship with attitude. This indicated that as the land holding increased, the positive attitude towards farming also increased.

The finding was in accordance with Kishore (2006).

4. *Farming experience Vs Attitude*

The computed r-value for farming experience and attitude towards farming for owner farmers (-0.2502) and tenant farmers (0.0003) showed non-significant relation- -ship with attitude towards farming. This indicates that farming experience did not significantly influence attitude in both owner and tenant farmers.

The finding was in conformity with Ramprasad (2004).

5. *Family type Vs Attitude*

The computed r-value found for family type and attitude towards farming for owner farmers (0.333) showed positive and significant relationship with attitude towards farming. This indicates that as the family type shifts from nuclear to joint type positive attitude increases. In case of tenant farmers, the computed r-value (0.07) for family type showed non-significant relationship with attitude.

6. *Family size Vs Attitude*

The computed r-values for family size and attitude towards farming for owner farmers (0.123) and tenant farmers (0.106). This indicates that family size did not significantly influence attitude of both owner and tenant farmers.

7. *Annual income Vs Attitude*

The computed r-values for annual income and attitude towards farming for owner farmers (0.287) and tenant farmers (0.334) showed positive significant relationship with attitude. This indicated that as the annual income increased, the positive attitude towards farming also increased.

The finding was in accordance with Kishore (2006).

8. *Training Exposure Vs Attitude*

The computed r-values for training exposure and attitude towards farming for owner farmers (0.071) and tenant farmers (0.362). Owner farmers training exposure showed non-significant relationship with attitude towards farming. This indicated that training exposure did not significantly influence attitude. In case of tenant farmers, training exposure showed positive significant relationship with attitude.

The finding was in agreement with Sravan (2012).

9. *Source of Credit Vs Attitude*

The computed r-values for source of credit and attitude towards farming for owner farmers (0.166) and tenant farmers (0.265). Owner farmers source of credit showed non-significant relationship with attitude towards farming. This indicates that source of credit did not significantly influence attitude. In case of tenant farmers, source of credit showed positive significant relationship with attitude. This indicated that as the tenant farmers gets financial assistance from banks the attitude towards farming increases.

10. *Extension Contact Vs Attitude*

The computed r-values for extension contact and attitude towards farming for owner farmers (0.281) and tenant farmers (0.524). Both owner and tenant farmers showed positive significant relationship with attitude.

The finding was in conformity with Reddy (2003).

11. *Mass Media Exposure Vs Attitude*

The computed r-values for mass media exposure and attitude towards farming for owner farmers (0.294) and tenant farmers (0.344). Both owner and tenant farmers showed positive significant relationship with attitude.

The finding was in accordance with Hemanth (2002).

12. *Social Participation Vs Attitude*

The computed r-values for social participation and attitude towards farming for owner farmers (-0.138) and tenant farmers (0.191). Both owner and tenant farmers showed non-significant relationship with attitude. This indicated that there was no significant relationship between social participation and attitude.

The finding was in accordance with Chinchmalatpure and Mayani (2002).

13. *Scientific Orientation Vs Attitude*

The computed r-values for scientific orientation and attitude towards farming for owner farmers (0.267) and tenant farmers (0.332) showed positive significant relationship with attitude. This indicated that as the scientific orientation increased, the positive attitude towards farming also increased.

The finding was in line with Reddy (2003).

14. *Risk Orientation Vs Attitude*

The computed r-values for risk orientation and attitude towards farming for owner farmers (0.272) and tenant farmers (0.364) showed positive significant relationship with attitude. This indicated that as the risk orientation increased, the positive attitude towards farming also increased.

The finding was in accordance Chinchmalatpure and Mayani (2002).

15. *Market Orientation Vs. Attitude*

The computed r-values for market orientation and attitude towards farming for owner farmers (0.278) and tenant farmers (0.307) showed positive significant relationship with attitude. This indicated that as the market orientation increased, the positive attitude towards farming also increased.

The finding was in conformity with Sravan (2012).

On further analysis as depicted in table 2, more than half of owner farmers had moderately favourable (68.33%) attitude towards farming, followed by more favourable (16.67%) and less favourable (15.00%) attitude. In case of tenant farmers, more than half of them had moderately favourable (61.67%) attitude towards farming, followed by more favourable (20.00%) and less favourable (18.33%) attitude.

The result was in conformity with Rani *et al.* (2009) and Nagdeve and Venkataramaiah (2010).

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Table 1. Correlation analysis between profile characteristics of owner and tenant farmers and their attitude towards farming

S. No	Independent Variables	'r' values	
		Owner	Tenant
1	Age	0.076^{NS}	0.289*
2	Education	0.367*	0.287*
3	Land holding	0.141^{NS}	0.264*
4	Farming Experience	-0.250^{NS}	0.003^{NS}
5	Family type	0.333*	0.07^{NS}
6	Family size	0.123^{NS}	0.106^{NS}
7	Annual income	0.287*	0.334*
8	Training exposure	0.071^{NS}	0.362*
9	Source of credit	0.166^{NS}	0.265*
10	Extension contact	0.281*	0.524*
11	Mass media exposure	0.294*	0.344*
12	Social participation	-0.138^{NS}	0.191^{NS}
13	Scientific orientation	0.267*	0.332*
14	Risk orientation	0.272*	0.364*
15	Market Orientation	0.278*	0.307*
* Significant at 0.05 level of probability		NS – Non significant	

Table 2. Distribution of respondents according to their attitude towards farming.

S. No.	Attitude	Owner farmers (n=60)		Tenant farmers (n=60)	
		F	%	F	%
1	Less favourable	9	15.00	11	18.33
2	Moderately favourable	41	68.33	37	61.67
3	More favourable	10	16.67	12	20.00
Mean = 76.58 Mean = 72.61 S.D = 13.53 S.D = 14.88					

Multiple Linear Regression analysis of profile characteristics of owner farmers and tenant farmers with attitude towards farming

Multiple Linear Regression analysis of profile characteristics of owner farmers and their attitude towards farming

An attempt has been made to find out the amount of contribution made by the profile characteristics in explaining the variation in the dependent variable namely; attitude towards farming for owner farmers. The profile characteristics being age, education, land holding, farming experience, family type, family size, annual income, training exposure, sources of credit, extension contact, mass media exposure, social participation, scientific orientation, risk orientation and market orientation. The results are presented in Table 3.

Table 3. Multiple Linear Regression analysis of profile characteristics of owner farmers and their attitude towards farming

S. No.	Independent variables	Regression coefficient (bi's)	Standard Error	't' value
1	Age	0.655	0.113	5.787*
2	Education	2.386	0.769	3.102*
3	Land holding	0.421	1.010	0.416^{NS}
4	Farming experience	-0.859	0.137	-6.253*
5	Family type	5.055	2.111	2.394*
6	Family size	-3.803	2.404	-1.582^{NS}
7	Annual income	2.034	0.994	2.045*
8	Training exposure	-1.585	1.932	-0.820^{NS}
9	Source of credit	5.451	1.617	3.369*
10	Extension contact	0.679	0.217	3.123*
11	Mass media exposure	0.902	0.657	1.372^{NS}
12	Social participation	-1.074	0.335	-3.203*
13	Scientific orientation	0.489	0.300	1.630^{NS}
14	Risk orientation	0.729	0.341	2.134*
15	Market orientation	-1.540	0.321	-4.798*
		R^2 = 0.8104	F=12.54	a = 41.02

It is evident from the Table 3, that all the independent variables contributed to the total variation, in particular age, education, farming experience, family type, annual income, Source of credit, extension contact, social participation, risk orientation, market orientation were significantly contributed towards attitude. The MLR equation is as follows,

$$Y = 41.02+0.655x_1+2.386x_2+0.421x_3-0.859x_4+5.055x_5-3.083x_6+2.034x_7-1.585x_8+5.451x_9+0.679x_{10}+0.902x_{11}-1.074x_{12}+0.489x_{13}+0.729x_{14}-1.540x_{15}$$

From the Table 3, it could be inferred that the multiple regression equation with fifteen selected independent variables put together contributed 81.04 per cent to the total variance in the Attitude; remaining 18.96 per cent was due to the effect of extraneous variables.

Multiple linear regression analysis of profile characteristics of tenant farmers and their attitude towards farming

An attempt has been made to find out the amount of contribution made by the profile characteristics in explaining the variation in the dependent variable namely; attitude towards farming for tenant farmers. The profile characteristics being age, education, land holding, farming experience, family type, family size, annual income, training exposure, sources of credit, extension contact, mass media exposure, social participation, scientific orientation, risk orientation and market orientation. The results are presented in Table 4.

Table 4. Multiple linear regression analysis of profile characteristics of tenant farmers and their attitude towards farming

S. No.	Independent variables	Regression coefficient (bi's)	Standard Error	't' value
1	Age	0.988	0.123	8.005*
2	Education	-1.837	1.565	-1.173^{NS}
3	Land holding	-4.939	1.830	-2.698*
4	Farming experience	-0.999	0.173	-5.768*
5	Family type	6.587	1.844	3.571*
6	Family size	8.480	2.283	3.713*
7	Annual income	5.474	2.131	2.568*
8	Training exposure	10.829	1.830	5.916*
9	Source of credit	13.867	3.254	4.260*
10	Extension contact	1.110	0.332	3.344*
11	Mass media exposure	2.063	0.888	2.323*
12	Social participation	0.829	0.251	3.300*

S. No.	Independent variables	Regression coefficient (bi's)	Standard Error	't' value
13	Scientific orientation	-1.639	0.434	-3.769*
14	Risk orientation	1.100	0.702	1.567*
15	Market orientation	3.886	0.716	5.420*
		R^2 =0.8628	F=18.45	a = 28.78

It is evident from the Table 4, that all the independent variables contributed to the total variation, in particular, age, land holding, farming experience, family type, family size, annual income, training exposure, source of credit , extension contact, mass media exposure, social participati--on, scientific orientation, Risk orientation, market orienta--tion were significantly contributed towards attitude. The MLR equation is as follows,

$$Y = 28.78+0.988x_1-1.837x_2-4.939x_3-0.999x_4+ 6.587x_5+8.480x_6+ 5.474x_7+10.829x_8+13.867x_9+ 1.110x_{10}+2.063x_{11}+0.829x_{12}-1.639x_{13}+ 1.1x_{14}+3.886x_{15}$$

From the Table 4, it could be inferred that the multiple regression equation with fifteen selected independent variables put together contributed 86.28 per cent to the total variance in the Attitude; remaining 13.72 per cent was due to the effects of extraneous variables.

IV. Conclusion

This study concluded that greater proportion of owner and tenant farmers showed moderately favourable attitude towards farming, followed by more favourable and less favourable attitude. This is an indication that farmers are interested in continuing farming as their major occupation. Multiple Linear Regression analysis showed that all the independent variables of owner farmers put together explained 81.04 per cent variation embedded with the dependent variable, attitude towards farming; while the independent variables of tenant farmers all together explained 86.28% variation in attitude. Further the analysis of profile characteristics of owner and tenant farmers revealed that education, annual income, extension contact, mass media exposure, scientific orientation, risk orientation and market orientation showed positively significant relationship with attitude towards farming. On the basis of the findings, it is suggested that socio-economic status of the farmers can be improved by imparting technical knowledge/ training to change their attitude towards more favourable towards farming.

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