

A Study On Knowledge Level Of Cashew Growers In Ariyalur District Of Tamilnadu

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ABSTRACT

Cashew (*Anacardium occidentale*. L, family Anacardiaceae) a native of Brazil was presented in India during sixteenth century. The present investigation “**A Study on level of knowledge of cashew growers in Ariyalur district of Tamil nadu**” was designed to study the level of knowledge possessed by the cashew growers on recommended cashew cultivation practices. This study also aimed to find out the relationship between the knowledge level and profile characteristics of cashew growers. A sample size of 300 respondents was selected by using proportionate random sampling technique. The collected data were tabulated and analyzed using appropriate statistical tools. The result of this study revealed that majority of the cashew growers had medium level of knowledge on cashew cultivation practices. As regards to relationship between the knowledge level and profile characteristics of cashew growers, out of eighteen variables considered for the study, six variables viz., educational status, experience in cashew cultivation, extension agency contact, mass media exposure, scientific orientation and innovativeness were found to have positive and significant relationship with the knowledge level.

Key words: Cashew growers, Knowledge, Profile characteristics, Relationship

Introduction:

The cashew belongs to the Anacardiaceae family, composed of some 60 to 74 genera and 400 to 600 species. It is often referred as Golden mine of waste land, is a tree native from Eastern part of Brazil. And this cashew is introduced in India, nearly ago five centuries by portugese. Initially, cashew was introduced in the region of Goa in Indian from which it spreads to the rest of the country. The primitive reason to cultivate cashew is to prevent soil erosion as it binds the soil particles firmly. By the year of 1960, the commercial cultivation of cashew is identified as crop with high economic value and gained the status of an export oriented commodity as it earns a huge foreign exchange for our country (Bezerra, et al., 2007).

Cashew industry gives business to more than 1 million individuals in cashew cultivating and handling area, out of which 90% are ladies (S.K.Malhotra, 2017). Cashew cultivation has the potential to be a significant source of income for small farmers in developing economies, as well as a massive opportunity

for cashew by-product extraction, which may contribute positively to cashew farming. (Mehazabeen, 2019). In Tamil Nadu, cashew was introduced into the Cuddalore district from Konkan coast of Kerala in the early 19th century during British period to meet the demand of raw cashew nuts then gradually grown on neglected land and soils prone for high degree of erosion. Ariyalur district occupies a primitive position in terms of cashew production area. Cashew cultivation has been identified as a key source of revenue for the district.

Research Methodology

The study was carried out in selected villages of Andimadam, Jayankondam, Sendurai, T.Palur and Thirumanur blocks of Ariyalur district of Tamil Nadu.

The sample size consisted of 300 cashew growers. The respondents were interviewed personally through a well structured and pre-tested interview schedule. Arithmetic mean, percentage analysis, cumulative frequency, zero order correlation and multiple regression were used to analyze the collected data. The salient findings of the study are detailed below.

Findings and Discussion

Knowledge level on cultivation practices of cashew

The results of the allocation of respondents based on their level of knowledge of cashew cultivation techniques were presented in Table 21 and Fig 3, respectively.

Table 1. Distribution of respondents according to their knowledge level on Cashew cultivation practices

(n=300)

S.No	Category	Number of respondents	Per cent
1.	Low	39	13.00
2.	Medium	173	57.67
3.	High	88	29.33
	Total	300	100

According to the findings in Table 1, more than partial per cent of the respondents (57.67 percent) had a medium level of knowledge about cashew farming, with the remaining 29.33 percent having a high level of knowledge about the crop. Only a small percentage of those who answered the survey questions (13.00 percent) had a limited knowledge of cashew farming. Because the greater numbers of respondents were above the age of 50 years, it was found that they had a great deal of experience in cashew cultivation, which in turn resulted in a high level of knowledge about cashew cultivation methods. This result is in accordance with the findings of Anusuya (2015).

Relationship of characteristics of cashew growers with their knowledge on cashew cultivation practices

The objective of this research was to determine the connection and contribution of respondent's attributes to their degree of knowledge about cashew farming methods. The findings had been presented in Table 2.

Table 2. Relationship of characteristics of cashew growers with their knowledge on cashew cultivation practices.

(n=300)

S.No.	Variables	'r' value	Regression Co-efficient	Standard error	't' value
X1	Age	0.042NS	0.739	0.380	0.126NS
X2	Educational status	0.176**	0.145	0.055	2.636**
X3	Occupational status	0.067NS	0.546	0.478	1.142NS
X4	Annual income	0.014NS	1.689	1.495	1.129NS
X5	Area under cashew cultivation	0.101NS	-0.128	0.079	-1.345NS
X6	Experience in cashew cultivation	0.165**	0.698	0.278	2.510**
X7	Social participation	0.056NS	0.105	0.076	1.323NS
X8	Extension agency contact	0.130*	0.198	0.119	1.663*
X9	Mass media exposure	0.121*	1.210	0.233	2.179*
X10	Innovativeness	0.149**	1.265	0.656	1.928*
X11	Trainings attended	0.137NS	0.789	0.549	0.986NS
X12	Risk orientation	0.117NS	1.875	0.947	1.979NS
X13	Scientific orientation	0.139*	1.621	0.301	1.685*
X14	Credit orientation	0.056NS	-0.016	0.043	-0.198NS
X15	Economic motivation	0.108	0.454	0.427	1.337NS
X16	Market perception	0.165NS	1.876	0.692	2.710NS
X17	Market orientation	0.367NS	0.574	0.655	1.057NS
X18	Market decision	0.269NS	0.933	0.974	0.964NS

R²=0.526**a=14.367****F=6.126****

*- Significant at 5% level

**- Significant at 1% level

NS- Non-significant

Association of characteristics of respondents with their knowledge level on cashew cultivation practices.

As shown in Table 2, among the eighteen variables examined, mass media exposure, extension agency contact and scientific orientation all demonstrated a significant and positive relationship at the five per cent level of probability, whereas educational status, cashew cultivation experience, and innovativeness all demonstrated a positive as well as the significant relationship at the one per cent level of probability. The remaining variables were determined to be non-significant. This finding is in line with the findings of Selvam (2018).

Educational status had a positive as well as the significant relationship with respondent's knowledge level. It is quite understandable that an educated person would have an orientation towards

seeking information through all possible sources. As majority of the respondents were educated, they would have been exposed to more information sources and hence acquired better knowledge. This finding is in line with the findings of Sivapriyan (2018).

Experience in cashew cultivation had a positive as well as the significant relationship with respondent's knowledge level. It is quite obvious that more experience in cashew cultivation would have enabled the farmers to learn more number of technologies and thereby leading to acquire more knowledge. This finding is in line with the findings of Jenila Stepency (2018).

Scientific orientation had positive and Educational status had a positive as well as the significant relationship with respondent's knowledge level. significant relationship with the knowledge level. The cashew growers with higher scientific orientation might be curious to learn the various cashew cultivation practices which might have resulted in higher knowledge level. This finding is in line with the findings of Janusia (2017).

Extension agency contact had positive as well as the significant relationship with the degree of knowledge of cashew growers. It was due to the reason that majority of the cashew growers had moderate to high level of contact with extension agency who were usually related with higher level of knowledge. This finding is in line with the findings of Mahalakshmi (2019).

Mass media exposure was observed to have shown positive as well as the significant relationship with the level of knowledge. Majority of the cashew growers were reading regional (tamil) news paper for accessing market information, watching television to know the latest technology whereas, few progressive cashew growers were utilizing internet facility for accessing latest cultivation methods and using advanced technologies in farm operations and hence gains mass media exposure. This finding is in line with the findings of Chengappa (2017).

Innovativeness was observed to have positive as well as the significant relationship with the knowledge level. This might be due to the fact that creative thinking enhances the respondents to think beyond the boundaries. An innovative person will always be ready to accept the risk with extent. This finding is in line with the findings of Sriramana (2014).

Contribution of characteristics of respondents towards their knowledge level on cashew cultivation practices.

Multiple regression technique was used to figure out which independent factors best described the difference in knowledge level and also to determine the degree to which these variables contributed. The findings are presented in Table 30.

As seen in Table 31, the eighteen factors explained 61.26 percent of the variance in knowledge level. The value of 'F' was determined to be significant. As a result, it is possible to construct a linear functional connection between the dependent and independent variables.

At the one per cent level of probability, education status and experience in cashew cultivation contributed significantly and positively to the eighteen variables. Contact with extension agents, scientific

orientation, mass media exposure and innovativeness of those who responded all contributed significantly and positively to the respondents' knowledge level at the five per cent level of probability. The balance factors were determined to be non-significant.

Thus, a unit increase in education status, experience in cashew cultivation, mass media exposure, with extension agency contact, innovativeness and scientific orientation, would result in an increase in knowledge of 2.636, 2.510, 1.663, 2.179, 1.685, and 1.928 units, respectively.

It may be concluded that cashew farmer's knowledge level is favorably affected by their educational status, experience with cashew farming, contact with agency, mass media exposure, innovativeness and scientific orientation

The positive as well as the significant relationship of independent variables with level of knowledge of cashew growers might be discussed on the same line as already given under zero-order correlation of these variables with knowledge level.

Table-3 Direct, indirect and largest indirect effects of independent variables on knowledge level of respondents

Var.No	Variable	Direct effect	Indirect effect	Three largest indirect effects channeled through		
				1	2	3
X1	Age	0.0651	0.0847	0.0271 X3	-0.0120 X2	0.0092 X12
X2	Educational status	-0.1215	-0.0211	0.0214 X15	-0.0191 X10	0.0113 X9
X3	Occupational status	-0.0203	0.1314	-0.1219 X9	0.0827 X12	0.0127 X2
X4	Annual income	0.0271	0.0332	-0.0512 X9	0.0221 X6	0.0201 X5
X5	Area under cashew cultivation	0.0091	-0.0078	-0.1057 X12	-0.0947 X14	0.0231 X6
X6	Experience in cashew cultivation	-0.0316	0.0135	-0.0875 X1	0.0567 X15	0.0071 X3
X7	Social participation	0.1963	-0.0027	-0.0180 X10	-0.0142 X6	0.0089 X12
X8	Extension agency contact	0.0761	0.0276	-0.0721 X1	-0.0312 X15	0.0201 X3
X9	Mass media exposure	-0.0854	0.1325	0.0901 X10	-0.0364 X2	-0.0118 X7
X10	Innovativeness	-0.0992	0.0764	0.0421 X9	-0.0601 X2	-0.0089 X10
X11	Trainings attended	0.6741	0.6979	0.9848 X2	-0.8549 X7	0.8784 X9

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X12	Risk orientation	0.0075	0.0478	0.1409 X9	0.0810 X10	-0.0621 X15
X13	Scientific orientation	0.0124	-0.0279	0.1421 X2	-0.1213 X13	0.0821 X15
X14	Credit orientation	-0.1207	0.0727	-0.1243 X15	0.0925 X4	-0.0421 X3
X15	Economic motivation	0.0137	0.0583	-0.0277 X9	0.0266 X2	0.0097 X15
X16	Market perception	0.4670	0.2356	0.1367 X12	-0.0670 X9	-0.0429 X3
X17	Market decision	0.6847	-0.6749	0.1257 X15	0.0571 X14	-0.0866 X8
X18	Market orientation	-0.7488	0.0257	-0.0698 X9	0.0798 X15	0.3577 X7

Residual = 0.7180

Direct, indirect and largest indirect effects of independent variables on knowledge level of respondents

The findings of path analysis comprising of direct effect, total direct effect and third largest indirect effects channeled through either independent variables on the knowledge level of respondents are presented in Table-3.

The findings of path analysis comprising of direct effect, total direct effect and third largest indirect effects channeled through either independent variables on the knowledge level of respondents are presented in Table-30.

Among the indirect effects, the variables viz., mass media exposure (X9), economic motivation (X15) and educational status (X2) had maximum positive indirect effect on knowledge level.

From the 54 substantial indirect effects, nine passed through mass media exposure (X9), economic motivation (X15), seven passed through educational status (X2), five passed through occupational status (X3), innovativeness (X10) and risk orientation (X12), three passed through experience in cashew cultivation (X6) and social participation (X7), two passed through age (X1) and credit orientation (X14), and one passed through annual income (X4), area under cashew cultivation (X5), extension agency contact (X8) and scientific orientation (X13).

Thus, it could be inferred from above table that the variables economic motivation (X15), mass media exposure (X9), and educational status (X2) acted as significant variables in understanding variation in knowledge level of cashew growers.

Conclusion

Over partial per cent of respondents (57.67 per cent) had a moderate degree of knowledge about recommended cashew cultivation practises, while 29.33 percent had a high level of knowledge about recommended cashew cultivation practises. The remaining 13.00 per cent of respondents reported had a

good degree of knowledge about appropriate cashew cultivation practices. Out of the eighteen independent variables, six independent variables such as educational status, experience in cashew cultivation, mass media exposure, extension agency contact, scientific orientation and innovativeness were observed to have the significant and positive relationship with the knowledge level. In path analysis, the variables viz., economic motivation, mass media exposure and occupational status acted as significant variables in understanding variation in knowledge level of respondents.

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