



# FACTORS INFLUENCING INFORMATION MANAGEMENT BEHAVIOUR OF CASHEW GROWERS IN CUDDALORE DISTRICT OF TAMIL NADU, INDIA

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## Abstract

Cashew is predominantly cultivated in Asia, Africa and Latin America. It is a native of Brazil, which was introduced in India by the Portuguese during 16th century. It occupies the status of an important export-oriented plantation crop. Cashew is described as 'poor man's crop' and 'rich man's food'. Cashew is popular for its greater nutritive value. India is rated as the largest exporter of cashew kernels and Cashew Nut Shell Liquid (CNSL). Considering the importance of this plantation crop in Tamil Nadu, providing the right informations to cashew growers about the latest technologies in cashew cultivation can help them to increase the production and productivity of cashew. An efficient management of informations can enable the cashew growers to enhance the yield of cashew. A study was undertaken to analyse the factors influencing Information Management Behaviour of cashew growers in cashew cultivation. The study was taken up at Cuddalore, one of the cashew predominant districts in Tamil Nadu State. A sample size of one hundred and twenty cashew growers were selected based on proportionate random sampling method. This study revealed that educational status, experience in cashew cultivation, extension agency contact, mass media exposure, innovativeness, riskorientation and scientific orientation of the cashew cultivators play a significant role in influencing the information management behaviour of the cashew growers.

**Key words:** Factors influencing, Information Management Behaviour, cashew growers

## Introduction

Cashew (*Anacardium Occidentale* L.) is a notable cash crop grown worldwide. Cashew ranks third in world production of edible nuts that are traded globally (Loganathan, 2018). It is otherwise called as the 'Gold Mine' of the wasteland and 'Dollar earning crop'. It is also called as the 'Wonder nut' and it is the most processed and globally traded nut (Anusuya, *et al.*, 2020). The Cashew nut production in India accounts for 19 percent of the global production (FAOSTAT, 2017). Cashew is grown in an area of 1.089 million hectares in India producing 0.743 million tonnes. Maharashtra stands first in terms of production among the other major cashew growing states of India followed by Andhra Pradesh, Odisha, Karnataka, Kerala and Tamil Nadu. The area and production of cashew in Tamil Nadu during 2018-19 was 145,950 ha and 66,770 tonnes respectively (Agricultural Statistics at a Glance, 2019).

Cashew Nut Shell Liquid (CNSL) is also one of the important by-products of cashew. It is used for painting work, touch wood oil, rubber and resin processing work. Cashew apple can be used for preparing cashew syrup, jam and juice. They are the products for the healthy diet of human beings.

It has the potential to provide livelihood for the cashew growers, empower rural women in the processing sector, create employment opportunities and generate foreign exchange through exports (Murugamani and Ravi, 2015). Cultivation of cashew assumes remarkable significance as it is being grown in dry tracts of Tamil Nadu providing income to small and marginal farmers (Kanagasabapathi and Sakthivel, 2017). To meet the future demand for cashew, the production of cashew has to be increased and sustained. The need of the hour is to enhance the production and productivity of cashew crop. Providing appropriate informations about the latest cashew cultivation technologies can remarkably help the

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cashew growers to boost the cashew yield. An efficient management of the informations received may enable the cashew growers to use the informations for enhancing the yield. A variety of factors influence the 'information management behaviour' of cashew growers in cashew cultivation. Keeping in view, this study was conducted to analyse the factors influencing information management behaviour of cashew growers in Cuddalore district of Tamil Nadu.

## Methodology

This study was conducted in Panruti block of Cuddalore district of Tamil Nadu. Proportionate random sampling procedure was applied to select 120 cashew growers from six selected villages namely, Vegakollai, Marungur, Kadampuliyur, Kattugudalur, Silambinathanpettai and Vallam. Data were collected using a well-structured and pre-tested interview schedule. The collected data were properly analysed using statistical tools like zero-order correlation and multiple regression and the results are tabulated.

## Findings and Discussion

### Characteristics of the respondents which influence the information management behaviour

The association and contribution of the characteristic variables that influence the information management behaviour are analysed. For studying the association and contribution of independent variables towards dependent

variable, the statistical tools namely zero-order correlation and linear multiple regression analysis were employed and the results are presented and discussed in table 1.

### Association of characteristics of the respondents with information management behaviour

Correlation analysis was performed to find out the association of factors (independent variables) with the information management behaviour (dependent variable).

It could be seen from Table 1 that out of fourteen characteristics considered for the study, three variables had shown positive and significant relationship with their information management behaviour at one percent level of probability and they were educational status ( $X_2$ ), experience in cashew cultivation ( $X_5$ ) and scientific orientation ( $X_{11}$ ). The variables namely extension agency contact ( $X_6$ ), mass media exposure ( $X_8$ ), innovativeness ( $X_9$ ) and risk orientation ( $X_{10}$ ) were found to be positive and significant at five percent level of probability.

The correlation value for the rest of the seven variables showed non-significant association with the information management behaviour.

All these characteristics that proved to influence the information management behaviour of the cashew growers were taken for discussion and presented here under.

'Education' had a positive and significant association with their information management behaviour of cashew

**Table 1:** Factors influencing the information management behaviour of cashew growers in cashew cultivation (n=120).

Var. No.	Variables	'r' value	Standardised regression co-efficient	Standard error	't' value
$X_1$	Age	-0.076NS	-0.039	2.198	-0.441NS
$X_2$	Educational status	0.267**	1.476	0.512	2.882**
$X_3$	Farm size	0.21NS	-0.049	2.206	-0.345NS
$X_4$	Annual income	0.017NS	0.012	0.119	0.110NS
$X_5$	Experience in cashew cultivation	0.298**	0.299	0.433	3.137**
$X_6$	Extension agency contact	0.207*	0.942	0.456	2.065*
$X_7$	Social participation	0.145NS	-0.323	0.328	-0.984NS
$X_8$	Mass media exposure	0.181*	0.419	0.201	2.084*
$X_9$	Innovativeness	0.209*	0.618	0.312	1.980*
$X_{10}$	Risk orientation	0.231*	1.768	0.992	1.782*
$X_{11}$	Scientific orientation	0.271**	2.198	0.764	2.876**
$X_{12}$	Economic motivation	-0.004NS	-0.030	0.359	-0.305NS
$X_{13}$	Decision-making pattern	0.142NS	1.126	0.792	1.312NS
$X_{14}$	Training programmes undergone	0.094NS	0.123	0.724	0.173NS

$R^2 = 0.526$   $A = 8.54$

$F = 6.728$ \*\*

\*\* - Significant at 0.01 per cent level of probability

\* - Significant at 0.05 per cent level of probability

NS - Non-significant

growers at 0.01 percent level of probability. This might be due to the fact that majority of the respondents had acquired education and this education might have influenced the respondents to involve themselves intensively in information acquiring techniques. The respondents with higher education would have easily understood the information on cashew cultivating practices.

'Experience in cashew cultivation' had shown positive and significant association at 0.01 percent level of probability. A majority of the respondents were having medium level of experience in cashew cultivation. This might have influenced them to realise higher information management in cashew cultivation. It may be stated that more experience in cashew farming would have enhanced the information needs of the respondents.

'Extension agency contact' of the respondents had positive and significant association with the information management behaviour of cashew growers at 0.05 percent level of probability. Majority of the respondents were having medium level contact with extension agency and it might have influenced them to get more information for better information management behaviour by the cashew growers. It can be concluded that more extension agency contact increases the information seeking behaviour of the respondents.

'Mass media exposure' of the respondents had positive and significant relationship with the information management behaviour of cashew growers at 0.05 percent level of probability. Majority of the respondents were having medium to high level of mass media exposure in cashew cultivation. The respondents with more mass media exposure would be easily acquiring information on cashew cultivation practices. It can be stated that more exposure to various kinds of mass media channels makes an individual to have more orientation on information management.

'Innovativeness' of the respondents had positive and significant association with their information management behaviour of cashew growers at 0.05 percent level of probability. Most of the respondents had medium level of Innovativeness. It is quite natural for an innovative farmer to acquire more information about the latest technologies.

'Risk orientation' had shown positive and significant association at 0.05 percent level of probability. Most of the respondents had medium level of risk orientation. Thus, it is quite obvious for the respondents with high risk bearing tendency to have increased information management in cashew cultivation for better utilisation of information, resources and for getting additional

income.

'Scientific orientation' had a positive and significant association with their information management behaviour of cashew growers at 0.01 percent level of probability. The farmers who had higher aspiration adopted more scientific methods in cashew cultivation practices. Hence, it may be concluded that the respondents who had high level of scientific orientation were having higher information management in cashew farming.

### **Contribution of characteristics of the respondents towards information management-behaviour**

Correlation analysis generally explains the nature of association of characteristics of the respondents with their information management behaviour. In order to find out the relative contribution of each variable towards information management behaviour, multiple regression analysis was performed and the results are furnished in table 1.

The perusal of regression co-efficient and 't' value in Table 1 indicates, that out of the fourteen characteristics, only seven variables namely educational status ( $X_2$ ), experience in cashew cultivation ( $X_5$ ), extension agency contact ( $X_6$ ), mass media exposure ( $X_8$ ), innovativeness ( $X_9$ ), risk orientation ( $X_{10}$ ) and scientific orientation ( $X_{11}$ ) had contributed towards the information management behaviour of the respondents.

Among the seven variables, three variables had shown significant and positive relationship at one percent level of probability. They were educational status ( $X_2$ ), experience in cashew cultivation ( $X_5$ ) and scientific orientation ( $X_{11}$ ). Another four variables viz., extension agency contact ( $X_6$ ), mass media exposure ( $X_8$ ), innovativeness ( $X_9$ ) and risk orientation ( $X_{10}$ ) contributed significantly and positively at five percent of probability towards the information management behaviour of cashew growers.

The predictive power of the linear multiple regression was estimated with the help of the co-efficient of multiple determination ( $R^2=0.526$ ). The  $R^2$  value indicated that all the fourteen variables taken together explained as much as 52.60 percent of variation in the information management behaviour of cashew growers. The 'F' value was found to be significant at 0.01 percent level of probability. Hence, the higher  $R^2$  value might be due to the significant and positive correlation co-efficient of educational status ( $X_2$ ), experience in cashew cultivation ( $X_5$ ), extension agency contact ( $X_6$ ), mass media exposure ( $X_8$ ), innovativeness ( $X_9$ ), risk orientation ( $X_{10}$ ) and scientific orientation ( $X_{11}$ ).

It can be inferred that when all other variables were

kept at constant level, a unit increase in educational status ( $X_2$ ), experience in cashew cultivation ( $X_3$ ), extension agency contact ( $X_6$ ), mass media exposure ( $X_8$ ), innovativeness ( $X_9$ ), risk orientation ( $X_{10}$ ) and scientific orientation ( $X_{11}$ ) *ceteris paribus* would result respectively in an increase of 1.476, 0.299, 0.942, 0.419, 0.618, 1.768 and 2.198 units of information management behaviour of cashew growers. This meant that the respondents who had more educational status ( $X_2$ ), experience in cashew cultivation ( $X_3$ ), extension agency contact ( $X_6$ ), mass media exposure ( $X_8$ ), innovativeness ( $X_9$ ), risk orientation ( $X_{10}$ ) and scientific orientation ( $X_{11}$ ) would have higher level of information management in cashew cultivation.

Hence, it may be concluded that educational status ( $X_2$ ), experience in cashew cultivation ( $X_3$ ), extension agency contact ( $X_6$ ), mass media exposure ( $X_8$ ), innovativeness ( $X_9$ ), risk orientation ( $X_{10}$ ) and scientific orientation ( $X_{11}$ ) were the crucial variables in significantly influencing the information management behaviour of the growers in cashew cultivation.

The other variables like age, farm size, annual income, social participation, economic motivation, decision-making pattern and training programmes undergone did not show significant effect on the information management behaviour of cashew growers.

The prediction equation is as follows,

$$Y = 8.54 - 0.039X_1 + 1.476X_2 - 0.049X_3 + 0.012X_4 + 0.299X_5 + 0.942X_6 - 0.323X_7 + 0.419X_8 + 0.618X_9 + 1.768X_{10} + 2.198X_{11} - 0.030X_{12} + 1.126X_{13} + 0.123X_{14}$$

### Conclusion

This study revealed that educational status,

experience in cashew cultivation, extension agency contact, mass media exposure, innovativeness, riskorientation and scientific orientation of the cashew growers were the crucial factors influencing the information management behaviour of the cashew growers in cashew cultivation. Hence, the extension agencies should consider these characteristics while selecting trainees and organising the training programmes.

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