

## Marketing Behaviour of Cashew Farmers

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### ABSTRACT

*Marketing of cashew nut is not properly organized. The channel consists of the producer, village merchant, wholesalers or agents and exporters. Since it is an activity restricted to only three months in a year, there are no exclusive traders for raw cashew nuts. Often there are intermediaries or wholesalers between the traders and manufactures who provide the services of information and make the deal. This has resulted in middleman playing an important role in the marketing of nuts thereby reducing the margin or dividends for the cashew farmers. The present study was aimed to find the marketing behaviour of new and old farmers of Cuddalore district, Tamil Nadu. The study reflected the relationship of characteristics of the cashew farmers with their marketing behaviour. The study was conducted in four villages from Panruti block of Cuddalore district. Two villages from Panruti block and four villages from Vridhachalam block of Cuddalore district farmers were selected for the purpose. The sample size consisted of 45 respondents each from old garden and new garden. Majority of the respondents had medium level of marketing behaviour. New garden respondents exhibited better marketing behaviour than the old garden respondents. Without value addition, the nuts were being sold as raw to the local traders. Cashew nuts were sold by majority of the respondents whenever there was fair price for nuts in the market. Cashew apples were sold rarely by the respondents. Before marketing majority counselled their neighbours and relatives. Only few counseled extension officials. The decision making behaviour, progressiveness, annual income and age were found to be influential and crucial variables for marketing behaviour.*

**Key words :** *Marketing behaviour; Decision making behaviour; Correlation regression; Path analysis*

**M**arketing of cashew nut is not properly organized. The channel consists of the producer, village merchant, wholesalers or agents and exporters. Since it is an activity restricted to only three months in a year, there are no exclusive traders for raw cashew nuts. Often there are intermediaries or wholesalers between the traders and manufactures who provide the services of information and make the deal. This has resulted in middleman playing an important role in the marketing of nuts thereby reducing the margin or dividends for the cashew farmers (Kalam, 1994). So it is indispensable to analyse the marketing behaviour of cashew farmers.

### METHODOLOGY

The importance of this cash crop has risen with the introduction of scheme "Model Clonal Cashew Garden" (MCCG). Under this scheme improved varieties are supplied to farmers. Majority of the recommended cultural practices are adopted in the gardens with the assistance of scientists and state department officials. These farms are called new gardens. Another type of farm is old garden

in which traditional varieties are grown. The propagation is done through seedlings. Only minimum cultural operations are carried out by farmers. These gardens are not much cared. The study was conducted for new and old garden.

Cuddalore district in Tamil Nadu state was selected for the study because this district has the maximum area and production under cashew than other districts of the state. Villages from Panruti and Vridhachalam blocks in Cuddalore district were selected for this study. Proportionate random sampling procedure was employed in selecting 45 respondents each from old garden and new garden. Thus, the sample size consisted of 90 respondents. Marketing behaviour was studied under the selected ten dimensions of selling form, selling apple, grading, selling place, selling method, selling persons, selling time, mode of transport and selling terms and conditions. The marketing behaviour of cashew farmers were ascertained through closed type questions and interpreted by percentage analysis. The data were collected through a well structured and pre-tested interview

schedule. The statistical tools of cumulative frequency, arithmetic mean, percentage analysis, correlation, multiple linear regression, path analysis, and chi-square were used to analyse the collected data. The findings were meaningfully interpreted and relevant conclusions were drawn.

**RESULTS AND DISCUSSION**

*Overall marketing behaviour* : The overall marketing behaviour of respondents explained in Table 1. Majority of respondents with new gardens (37.78%) had medium level of marketing behaviour, closely followed by high (33.33%) and low (29.89%). Majority of the old garden owners (71.11%) had medium level of marketing behaviour, followed by low (24.45%) level of marketing behaviour. Only 4.44 per cent were found with high marketing behaviour. Most of the old garden respondents had low to medium level of marketing behaviour. This

finding was in conformity with the finding of Venkatesan (2000).

The chi-square value reveals that there is a significant difference between the marketing behaviour of the new and old garden owners. The overall analysis of respondents shows that more than half of the respondents (54.44%) had medium level of marketing behaviour. The low level of marketing behaviour was observed with 26.67 per cent of the respondents, while 18.89 per cent of the respondents had high level of marketing behaviour. The findings thus, revealed that the overall marketing behaviour was medium. New garden owners exhibited better marketing behaviour than the old garden respondents. New garden owners adopted improved cultivation practices in their farm with the help of development functionaries and scientists. The contact with marketing agency, high media exposure and social participation would have helped the new garden owners to exhibit high marketing behaviour than the old garden owners.

Table 1. Distribution of respondents according to their overall marketing behaviour

Category	New garden owners n=45		Old garden owners n=45		Total n=90		Chi square value
	No	%	No	%	No	%	
Low	13	28.89	11	24.45	24	26.67	14.700**
Medium	17	37.78	32	71.11	49	54.44	
High	15	33.33	2	4.44	17	18.89	

\*\* - significant at 0.01 level

*Component wise marketing behaviour* : To study the marketing behaviour of the respondents’ ten components were identified. The results of the study are presented in Table 2. It could be seen that all the respondents sold cashew as raw, without any processing or value addition. This finding was in line with the finding of Singh (1991). Further, none of the respondents graded cashew to fetch high price. They sold nuts to the village level traders at the farm site itself. Majority counselled outsiders to get knowledge about the market price.

Majority of the respondents (81.11%) did not sell the cashew apple. Before selling cashew apple to the traders, nearly half of the respondents (52.22%) counselled with the neighbours and relatives. About 44.44 per cent respondents sold the produce whenever the price was high. Selling the cashew apple and selling nut after counselling with neighbours and relatives, when price in the market was high were found more with the new garden owners. For transport of raw cashew from the farm site, lorry and tempo were used. Majority of the respondents (77.78%) sold the nuts for ready cash.

*Relationship and influence of independent variables on marketing behaviour* : This section gives the findings related to the relationship between 14 selected variables with dependent variable i.e. marketing behaviour. For studying the relationship simple correlation, multiple regression and path analysis were done.

*Correlation* : Table 3 reveals that, educational status (X<sub>2</sub>), extension agency contact (X<sub>7</sub>), mass media exposure (X<sub>8</sub>), scientific orientation (X<sub>11</sub>) and progressiveness (X<sub>14</sub>) had positive and significant association with marketing behaviour at one per cent level of probability. The variable age (X<sub>1</sub>) showed negative and significant association with marketing behaviour at one per cent level of probability. The variables namely farm status (X<sub>3</sub>), farming experience (X<sub>4</sub>), experience in cashew cultivation (X<sub>5</sub>), social participation (X<sub>6</sub>), annual income (X<sub>9</sub>), economic motivation (X<sub>10</sub>), decision making behaviour (X<sub>12</sub>) and credit orientation (X<sub>13</sub>) had shown a non-significant association with the marketing behaviour.

Table 2. Distribution of respondents according to their marketing behaviour

S.No.	Marketing behaviour	Category	New garden owners n=45		Old garden owners n=45		Total n=90	
			No	%	No	%	No	%
1	Selling form	Raw	45	100.00	45	100.00	90	100.00
		Processed	–	–	–	–	–	–
2	Selling cashew apple	Always	–	–	–	–	–	–
		Sometimes	16	35.56	1	2.22	17	18.89
		Never	29	64.44	44	97.78	73	81.11
3	Grading	Always	–	–	–	–	–	–
		Sometimes	–	–	–	–	–	–
		Never	45	100.00	45	100.00	90	100.00
4	Selling place	Farm site	45	100.00	45	100.00	90	100.00
		Nearby markets	–	–	–	–	–	–
		Far off markets	–	–	–	–	–	–
5	Selling person	Village level traders	45	100.00	45	100.00	90	100.00
		Commission agents	–	–	–	–	–	–
		Export organisation	–	–	–	–	–	–
6	Selling counselling	No counselling	4	8.89	23	51.11	27	30.00
		Neighbour and relatives	28	62.22	19	42.22	47	52.22
		Family members	–	–	–	6.67	3	3.33
		Progressive farmers	13	28.89	3	13	–	14.45
		Extension agents	–	–	–	–	–	–
		Market officials	–	–	–	–	–	–
7	Selling time	Immediately after harvest	12	26.67	12	26.67	24	26.67
		After initial storage	6	13.33	20	44.44	26	28.89
		Whenever price is high	27	60.00	13	28.89	40	44.44
8	Transport	Head load	–	–	–	–	–	–
		Cycle	–	–	–	–	–	–
		Bullock cart	–	–	–	–	–	–
		Two wheeler	–	–	–	–	–	–
		Bus	–	–	–	–	–	–
		Lorry	22	48.89	20	44.44	42	46.67
		Tempo	23	51.11	25	55.56	48	53.33
9	Selling terms and conditions	Ready cash	38	84.44	32	71.11	70	77.78
		To settle the loan	–	–	–	–	–	–
		On credit	7	15.56	13	28.89	20	22.22
		On pledge loan	–	–	–	–	–	–
10	Selling with value addition	Always	–	–	–	–	–	–
		Sometimes	–	–	–	–	–	–
		Never	45	100.00	45	100.00	90	100.00

*Regression* : The results of multiple regression analysis are given in Table 3. Results indicated that co-efficient of determination ( $R^2$ ) was 0.447 and it revealed that 44.70 per cent variation in the marketing behaviour was explained by the 14 independent variables. The 'F' values showed that the analysis was significant at one per cent level of probability. Therefore the prediction equation was fitted for marketing behaviour as given below.

$$Y_1 = 23.454 - 0.083X_1 - 0.027X_2 + 0.558X_3 + 0.090X_4 + 0.090X_5 + 0.378X_6 - 0.058X_7 + 0.042X_8 + 0.025X_9 - 0.086X_{10} + 0.126X_{11} + 0.111X_{12} + 0.155X_{13} + 0.162X_{14}$$

It could be seen from the above equation that the variable, decision making behaviour ( $X_{12}$ ) had shown a positive and significant contribution at one per cent level of probability, whereas annual income ( $X_9$ ) had shown a positive and significant contribution at five per cent level of probability. The variable age ( $X_1$ ) had shown a negative but significant contribution at five per cent level of probability. The strength and contribution of these three variables could be explained as one unit increase ceteris paribus in decision making behaviour and annual income would bring increase of 0.040 and 0.111 units on marketing behaviour, respectively. Similarly one unit increase ceteris paribus in age would decrease 0.041 units in marketing behaviour.

Table 3. Correlation co-efficient and multiple regression of profile characteristics with marketing behaviour n=90

Variable number	Characteristics	Correlation co-efficient 'r' value	Regression Coefficient 'b'	Standard error of 'b'	't' value
X <sub>1</sub>	Age	-0.469 **	-0.083	0.041	-2.007 *
X <sub>2</sub>	Educational status	0.419 **	-0.027	0.219	-0.125 NS
X <sub>3</sub>	Farm status	0.056 NS	0.558	0.343	1.860 NS
X <sub>4</sub>	Farming experience	-0.183 NS	0.090	0.056	1.606 NS
X <sub>5</sub>	Experience in cashew cultivation	-0.183 NS	0.090	0.056	1.606 NS
X <sub>6</sub>	Social participation	0.198 NS	0.378	0.485	0.781 NS
X <sub>7</sub>	Extension agency contact	0.434 **	-0.058	0.054	-1.071 NS
X <sub>8</sub>	Mass media exposure	0.336 **	0.042	0.151	0.278 NS
X <sub>9</sub>	Annual income	0.100 NS	0.025	0.011	2.287 *
X <sub>10</sub>	Economic motivation	0.106 NS	-0.086	0.084	-1.028 NS
X <sub>11</sub>	Scientific orientation	0.494 **	0.126	0.065	1.960 NS
X <sub>12</sub>	Decision making behaviour	0.330 NS	0.111	0.040	2.774 **
X <sub>13</sub>	Credit orientation	0.019 NS	0.155	0.179	0.866 NS
X <sub>14</sub>	Progressiveness	0.403 **	0.162	0.170	0.950 NS

\*\* - significant at 0.01 level

R<sup>2</sup> = 0.447

\*\* - significant at 0.05 level

F = 4.730\* \*

NS - non-significant

Table 4. Path analysis showing direct, indirect and substantial indirect effects of independent variables on marketing behaviour (N=90)

Variables	Direct effect	Indirect effect	Substantial indirect effects		
			I	II	III
Age (X <sub>1</sub> )	-0.2522	-0.135	-0.2735X <sub>12</sub>	0.1767X <sub>7</sub>	0.1310X <sub>14</sub>
Educational status (X <sub>2</sub> )	-0.0151	0.3942	0.2642X <sub>12</sub>	-0.1513X <sub>7</sub>	0.1427X <sub>1</sub>
Farm status (X <sub>3</sub> )	0.2337	-0.1905	-0.1607X <sub>9</sub>	0.1452X <sub>12</sub>	0.1315X <sub>11</sub>
Farming experience (X <sub>4</sub> )	0.1793	-0.1836	-0.2596X <sub>12</sub>	0.1724X <sub>7</sub>	-0.1461X <sub>14</sub>
Experience in cashew cultivation (X <sub>5</sub> )	0.1793	-0.1836	-0.2596X <sub>12</sub>	0.1724X <sub>7</sub>	-0.1461X <sub>14</sub>
Social participation (X <sub>6</sub> )	0.0763	0.1212	0.1599X <sub>12</sub>	-0.1076X <sub>7</sub>	0.0951X <sub>14</sub>
Extension agency contact (X <sub>7</sub> )	-0.2146	0.6509	0.4296X <sub>12</sub>	0.2547X <sub>14</sub>	0.1417X <sub>1</sub>
Mass media exposure (X <sub>8</sub> )	0.0436	0.2175	0.3541X <sub>12</sub>	0.2333X <sub>7</sub>	0.2194X <sub>14</sub>
Annual income (X <sub>9</sub> )	0.2633	0.1151	0.1426X <sub>3</sub>	-0.1035X <sub>12</sub>	0.1027X <sub>11</sub>
Economic motivation (X <sub>10</sub> )	-0.1049	0.2046	0.1766X <sub>12</sub>	-0.0946X <sub>7</sub>	0.0891X <sub>14</sub>
Scientific orientation (X <sub>11</sub> )	0.2095	-0.0153	0.1096X <sub>7</sub>	-0.0881X <sub>14</sub>	-0.0637X <sub>1</sub>
Decision making behaviour (X <sub>12</sub> )	0.4724	-0.0771	-0.2861X <sub>3</sub>	0.2407X <sub>9</sub>	0.1460X <sub>1</sub>
Credit orientation (X <sub>13</sub> )	0.0786	-0.0226	-0.1076X <sub>12</sub>	0.0654X <sub>7</sub>	-0.0648X <sub>14</sub>
Progressiveness (X <sub>14</sub> )	0.2730	0.0340	0.4165X <sub>12</sub>	-0.2734X <sub>7</sub>	0.1210X <sub>1</sub>

Residual effect = 0.5528

*Path analysis* : Path analysis was attempted to separate the direct and indirect effects through other related variables apportioning the correlation coefficient. The results of path analysis are presented in table 4.

The results from Table 4 clarify that decision making behaviour (0.4724), progressiveness (0.2730) and annual income (0.2633) had more positive direct effects on marketing behaviour. The variable age (-0.2522) had more negative direct effect on marketing behaviour. The

variables viz., extension agency contact (0.6509), educational status (0.3942) and mass media exposure (0.2175) had more positive indirect effects on marketing behaviour.

With respect to  $\Phi$  substantial indirect effects of independent variables, 12 variables passed through decision making behaviour (X<sub>12</sub>), ten variables passed through extension agency contact (X<sub>7</sub>) nine variables passed through progressiveness (X<sub>14</sub>), five variables

passed through age ( $X_1$ ), two variables each passed through annual income ( $X_9$ ), farm status ( $X_3$ ) and scientific orientation ( $X_{11}$ ).

It could be concluded from the correlation, regression and path values that decision making behaviour, progressiveness, annual income and age were found to be influential and crucial variables for marketing behaviour.

Increased age leads to reduced marketing behaviour since the old age people always tend to follow the traditional practices and they will not like to undertake any risks. Increase in annual income will increase the social participation. Hence, people come to know of different marketing channels and the various methods of marketing. Garden owners also had knowledge of the selling price and market condition of the produce. Decision making behaviour shows the mentality of the farmers to decide when, where, whom and how to sell. A farmer may decide accordingly by contacting his neighbour,

friends, relatives and progressive farmers to decide for that condition. So he gets more information of it and decides it in favour of himself. Hence, increased decision making behaviour leads to increased marketing behaviour. This might be the reason for increased marketing behaviour.

## CONCLUSION

Nuts are being sold without value addition. Infrastructure facilities are required for value addition. Government may take necessary steps to establish cashew processing industries and cashew oil extraction units considering the available export avenues. The cashew garden owners felt lack of proper marketing channel and lack of price policy as the major constraints. Hence the government can give priority in establishment of proper marketing channel for cashew produce to prevent the intervention of intermediaries and to ensure a better price for cashew growing farmers.

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