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Consulting Pattern and Adoption Behaviour of Coconut Growers A Case Study in Karnataka State

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Abstract: The study conducted in Tumkur district of Karnataka State revealed that major source of information consulted by coconut growers are formal source followed by information and media source. But the least consulted one is institutional source. The practices like-recommended variety, spacing inter cultivation and application of FYM are fully adopted by majority of respondents. Majority of them did not follow raising nursery, growing green manure crop and plant protection. Whereas, fertilizers application, irrigation, plant protection and construction of bunds are partially adopted. The adoption behaviour is positiveely and significantly related with all the socio-personal characteristics of respondents, except with the age.

Keyword : Source, Adoption, Variety, Market orientation, Motivational hierarchy.

Introduction

Coconut is one of the important plantation crop and it is extensively used for edible oil. In India. it is grown in 1.43 million hectares with an estimated production of 1259 million nuts per year (Negi *et al*.). It contributes considerable portion of income to the national economy. Often it is also called as "Kalpaviksha' because of its manifold uses. In order to produce higher yields, the growers must follow recommended cultivation practices. The Department of Horticulture, the coconut Development Board and the Central Plantation Crops Research Institute have taken up several developmental programmes to promote higher production in coconut. Inspict of all these efforts, the average yield of this crop is not encouraging. The farmer involvement in consulting different information sources for scientific information on cultivation of coconut is not up to the expectation of development departments. Though many organizations are involved in promoting the coconut production. the impact of these programmes on increasing the adopting level is not well established. Keeping this as background, the present study was designed, to know the information sources consulted by coconut growers, to study the adoption behaviour of coconut growers about the recommended cultivation practices and to know the correlation if any, between adoption behaviour and socio-personal characteristics.

Material and Methods

The present investigation was carried out during 1999, in Tumkur district of Karnataka. This district was purposively selected because it has higher area under coconut cultivation. In consultation with the Assistant Director of Horticulture of the taluka, six villages were purposively selected. From these six villages 120 farmers were selected at the rate of 20 farmers from each village using random sampling technique. Thus the sample size of study constitute 120 farmers. Twenty sources of information were grouped in four broad categories as formal, informal, media and institutional source consulted in the order of preference as first, second and third (Reddy, 1983). The total score obtained give consultancy pattern. Socio economic status scale of Trivedi (1973) and adoption quotient scale of Sengupta (1967) were also used. The data was collected personally by the researcher with the help of structured, protested interview schedule. The collected information was tabulated and analyzed using scores, simple percentage, correlation and 't' test. The resulted are presented as below.

Results and Discussion

The dam presented in table 1 gives a clear view of sequential order of sources consulted by coconut growers for information on recommended coconut culivation. It is interesting to note that the farmers prefered formal sources, followed by informal. media and institutional source in the order of preference.

Horticulture Assistant, Asst. Horticultural officer and Extension Guide, were the most prefered formal sources of information and were occupied first, second and third rank respectively. Because, these officials are easily accessible to farmers. However, the Asst. Director of Horticulture is also formal sources, but ranked 7th in order. He is available only in sub-divisional head quarters and hence he may not be accessible to all the farmers. The second major source consulted by farmers are informal sources such as- progressive farmers, neighbours and friends which occupied 4th, 5th and 6th rank respectively. It is due to the fact that these people really share their ideas, success or failures in their locality. They in turn give them advice and moral encouragement to do new things.

The media such as TV and Radio and extension literature, all ranked 8th in preference. The reason may be that most of the farmers are not literate and afford to buy radio and TV. All may not get opportunity to listen and see community set. Moreover, most of them move out to their fields in the morning will be back after sunset and end up performing their household duties. Thus, media source has less impact on the

Table 1. Distribution of coconut growers based on their source of information cosulted

Sl No.	Infonnatlon source	Total score	Rank
1	Horticulture Assistant	336	I
2	Assistant Horticullure Officer	270	II
3	Extension Guide	264	III
4	Progressive farmer	240	IV
5	Neiehbour	222	V
6	Friends	159	VI
7	Assistant Director of Horticulture	123	VII
8	Radio & TV	039	VIII
9	Extension Literature	039	VIII
10	Krishimela	027	IX
11	Cooperative society / Bank	009	X
12	Youth club	003	XI

growers. Lastly, the institutional sources like: co-operative society or banks and youth clubs were ranked least in the rank as the sources of consultation. This finding is on par with the finding of Reddy (1983).

Cent per cent of the farmers fully adopted recommended variety and inter cultivation. Majority of them have fully adopted recommended spacing (58.33%) and quantity of FYM application (79.33%). But, only 62.5% partially adopted proper method of application of FYM. It due to the reason that, farmers get adequate amount of FYM (Table 2).

Majority of respondents partially adopted the use of recommended quantity of fertilizer. It may be due to the high cost of fertilizer. Fewer per cent of them have fully adopted plant protection (40.83%). Even in case of irrigation, majority of them partially adopted correct time and method (60.83% and 8.33% respectively) and 30 per cent did not go for it.

In case of intercropping 45 per cent have fully adopted the annual crop as intercrop. But majorities (56.66%) have grown perennials in intercropping system. Because farmers feel that growing an annual crop is less risky and provides immediate cash when compared to perennial crops. Management is also not a problem.

A large majority of farmer (77.50%) did not take up coconut nursery. They felt that raising nursery requires special skills and attention, involves more cost and their level of knowledge is not sufficient to go for it. And moreover, selling of seedlings is difficult because everyone wants to buy seedling of reputed agencies. Likewise, 79.16 per cent did not realize the need as they are getting plenty of FYM. In case of soil and water conservation practice, 68.33 per cent fully adopted deep ploughing whereas, only 54.16 percent have partially adopted construction of bunds. It is very interesting that the practices which are simple, involve less investment are fully adopted. But, some practices which involve a little high cost, highly technical, involve skill and risky to adopt are followed partially, only raising nursery was not adopted by majority of farmers. These results are in agreement with the studies reported by Thimappa (1981), Kantharaju (1989) and Bavalatti and Sundaraswamy (1990).

Table 2. Adoption of recommended cultivation practices of coconut cultivation

Sl. No.	Practices	Full adoption		Partial adoption		Non adoption		Total	
		No.	%	No.	%	No.	%	No.	%
1	Variety	120	100	-	-	-	-	120	100
2	Spacing	70	58.33	35	29.16	15	12.50	120	100
3	FYM application								
	a. Quantity	95	79.33	25	20.83	-	-	120	100
	b. Medlod	30	25.00	75	62.50	15	12.50	120	100
4	Fertilizer application								
	a. Quantity	20	16.66	60	50.00	40	33.33	120	100
	b. Medlod	19	15.83	81	67.50	20	16.66	120	100
5	Plant protection	49	40.83	44	36.66	27	22.50	120	100
6	Irrigation								
	a. Time	11	09.16	73	60.83	36	30.00	120	100
	b. Method	14	11.66	70	58.33	36	30.00	120	100
7	Inter cultivation	120	100	-	-	-	-	120	100
8	Inter cropping								
	a. Annual	54	45.00	37	30.83	29	24.16	120	100
	b. Perennial	18	15.00	34	28.33	68	56.66	120	100
9	Coconut nursery	09	07.50	18	15.00	93	77.50	120	100
10	Green manure crop grown in main field	15	12.50	10	08.33	95	19.16	120	100
11	Soil & water Conservation								
	a. Deep ploughing	82	68.33	22	18.33	16	13.33	120	100
	b. Construction of bunds	15	12.50	65	54.16	40	33.33	120	100

Table 3. Correlation between adoption behaviour of coconut growers and their socio-personal characteristics

Sl. No.	Socio-personal characteristics	'r' value	't' value
1	Age	0.100	1.097 NS
2	Education	0.626	11.180*
3	Mass media participation	0.252	2.828*
4	Extension participation	0.279	3.156*
5	Information source	0.254	2.948*
6	Market orientation	0.360	4.492*
7	Consmopoliteness	0.273	3.203*
8	Motivational hierarchy	0.650	12.173*

NS - Non significant

* Significatn at 1 % level

The perusal of data in table 3 indicated that out of eight independent variables, seven variable viz, education, mass media participation, extension participation, information source, market orientation, cosmopoliteness and motivational hierarchy of the farmers, were positively and significantly related with their adoption behavious. However, variable age had non-significant relationship with adoption behaviour. It may be due to the fact that majority were educated up to high school level, had higher media and extension participation. They visit nearby town and have frequent contacts with change agents, naturally it will give them more and useful information on various cultivation practices presently followed, success and failure of other farmers those who have tried. Since it is a crop, fetching income to them, they are more cautious about the market value of it.

It could be inferred from the study that most oftenly consulted source is formal source viz., Horticulture Assistant, Asst. Horticulture officer, followed by informal media and least consulted one is institutional source. Majority have adopted practices such as recommended variety, spacing FYM application, intercropping and deep ploughing. The practices such as irrigation, fertilizer application and bunds construction are partially adopted by sizable portion of the respondents. Interestingly great majority are not raising coconut nursery, green manure crops in their field. Except age, all other socio-personal characteristics of coconut growers had a positive and significant relational with adoption behaviour.

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