

Decision Making Pattern of Farm Women in Management of Coffee Plantation in Kodagu District

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Abstract The present study was conducted during 2014-15 in Kodagu District of Karnataka state to assess the extent of decision making pattern of farm women in management of coffee plantation. Nighty farm women of coffee growers from Somwarpet, Madikeri and Virajpet talukas were interviewed using a pre-tested interview schedule. It was found that most of the farm women had medium (66.67%) to high level (17.78%) of decision making in coffee plantation. Further, analysis of decision making of farm women in different operations reveals that they were involved mainly in weed management, liming, fertilization, pruning, irrigation, plant protection operations and harvesting. Age, education, economic orientation, extension contact, extension participation, achievement motivation, mass media exposure, man-

agement orientation and innovativeness of farm women had a positive and significant relationship with their extent of decision making pattern. These personal, socio-economic, psychological and communication characteristics of the coffee growers had contributed to the tune of 61.20% of the variation in the decision making pattern of farm women.

Keywords Decision making, Farm women, Management, Coffee plantation.

Introduction

Coffee is a popular beverage and an important commodity in the world. Over 90% of coffee production takes place in developing countries, while consumption happens mainly in the industrialized economies. Millions of small producers in developing countries make their living by growing coffee. Today, coffee occupies a place of pride among plantation crops grown in India. The area under coffee is around 4.15 lakh ha of which Arabica accounts for 2.06 lakh ha and Robusta accounts for the rest 2.09 lakh ha. The annual average production is around 3.10 lakh tonnes and about 75% of this is exported. Coffee is one of the most traded agricultural commodity earning nearly Rs 4,600 crores of foreign exchange to the national exchequer annually (Anon 2014 a, b).

Coffee as an agro based rural enterprise primarily is a source of employment for over one million

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people in cultivation, processing and trade sectors. Women nurture coffee at every stage of the production process and coffee indeed blossoms under their expert care. But most of their contribution is unacknowledged. Playing vital multi-faceted role right from 'seed to cup' by engaging in tasks like harvesting, field-work, sorting, processing, drying, women amount to 60% of the work force engaged in coffee production (Sangeetha and Menon, 2014). But still are faced with many challenges including financial and cultural ones. Hence, the present study is carried out with the following specific objectives: (1) To analyze the extent of decision making pattern of farm women in management of coffee plantation. (2) Extent of contribution of independent variables with the decision making pattern of farm women in management of coffee plantation.

Materials and Methods

The present study was conducted in Somwarpet, Madikeri and Virajpet taluks of Kodagu district in Karnataka state during 2014-15. In each of the selected three talukas, three villages were randomly selected for the study. Farm each village, ten farm women were again randomly selected. Small, medium and big farm women were selected to know their varied extent of work participation in the management of coffee plantation. Relevant data was collected using a pre-tested interview schedule from the farm women. Thus the final sample consists of 90 respondents from the nine villages of Kodagu district. Ex-post facto research design was employed in the present study. The collected data was analyzed using frequency, percentage, mean and standard deviation.

Decision making

Decision making pattern is referred to the extent of involvement of farm women in taking decisions pertaining to different activities. Decision making pattern was measured using the procedure developed by standard method with slight modification. A total of 10 activities were included to know the decision making pattern of farm women.

Decision-making pattern was considered as of

Table 1. Overall decision making pattern of farm women in management of coffee plantation. (n = 90), Mean=20.46, SD=5.60.

Sl. No.	Category	Farm women	
		F	Per cent
1.	Low	14	15.55
2.	Medium	60	66.67
3.	High	16	17.78
	Total	90	100.00

involving three broad categories namely, 1. Self decision, 2. Joint decision, 3. Decision by others.

Each of the respondents were asked to indicate as to which of the above mentioned decision making patterns they follow in their family with regards to each of the decision making activity considered for the study. The respondents were asked to indicate their decision making in selected activities. The respondents categories were self decision, joint decision and decision by others with score 3, 2 and 1 respectively.

Category	Criteria	Farm women (Score)
Low	< (Mean-½ SD)	Below 17.65
Medium	(Mean ± ½ SD)	17.65 to 23.26
High	> (Mean+½ SD)	Above 23.26

The respondents were grouped into low, medium and high decision making categories using mean and standard deviation as measure of check.

Results and Discussion

Overall decision making pattern of farm women in management of coffee plantation

A perusal of Table 1 reveals that 66.67% of the farm women had medium level of decision making category followed by 17.78 and 15.55% of the farm women had high and low level of decision making in management of coffee plantation, respectively. It can be inferred that majority of the farm women are involved in taking decisions from medium to high levels of decision

Table 2. Activity-wise decision making pattern of farm women in management of coffee plantation. (n=90).

Sl. No.	Activities	Self decision		Joint decision		Exclusively decided by others	
		No.	%	No.	%	No.	%
1.	Centering	15	16.66	59	65.56	16	17.78
2.	Pruning and training	22	24.45	56	62.22	12	13.33
3.	Soil management	16	17.78	58	64.44	16	17.78
4.	Fertilization	25	27.78	52	57.78	13	14.44
5.	Liming	27	30.00	49	54.44	14	15.56
6.	Weed management	36	40.00	44	48.89	10	11.11
7.	Irrigation	19	21.11	58	64.45	13	14.44
8.	Plant protection operations	17	18.89	58	64.45	15	16.67
9.	Harvesting	17	18.89	61	67.78	12	13.33
10.	Processing	14	15.55	59	65.56	17	18.89

making category. The possible reasons could be that majority of the respondents belonged to nuclear family and women were involved in most of the farm operations, which was their sole important income source. Most of the activities were laborious and all these works are exclusively dominated by them.

Activity-wise decision making pattern of farm women in management of coffee plantation

As many as 10 coffee plantation activities selected for the study is tabulated in Table 2. An appraisal of Table 2 reveals the self decision pattern was observed more in weed management (40.00%) and liming (30.00%), followed by fertilization (27.78%) and pruning and training (24.45%). It could be seen that farm women had highest percentage of self decision in women oriented tasks, which are exclusively done by them. So women had a freedom of deciding these activities in which they have more expertise and possess better management skills.

It is observed that majority of the farm women were found to be involved in joint decision making. They took decisions in harvesting (67.78%), processing and centering (65.56%) followed by irrigation (64.45%) and plant protection operations (64.44%). Majority of the decisions were taken jointly because in small land holdings, farm women had almost active equal contribution in terms of management of coffee plantation. Since men diversified in other nonfarm activities, they involved more in decision making sup-

porting the day to day activities in the management of coffee plantation. Whereas in the category of exclusively decided by others, less per cent of farm women were involved in the activities of processing (18.89%), centering and soil management (17.78%) followed by plant protection operations (16.67%). The possible reason could be that male member have dominant role in these works and they consider this as their field of decision.

Table 3. Relationship between independent variables and decision making pattern of farm women in management of coffee plantation. (n=90). NS-Non-significant, * = Significant at 5%, ** = Significant at 1%.

Sl. No.	Characteristics	Correlation coefficient
1.	Age	0.2231*
2.	Education	0.2762**
3.	Family size	0.0816 NS
4.	Land holding	0.1409 NS
5.	Annual income	0.1819 NS
6.	Economic orientation	0.2561*
7.	Credit orientation	0.0769 NS
8.	Extension contact	0.3198**
9.	Extension participation	0.4128**
10.	Mass media exposure	0.2899**
11.	Cosmopolitaness	0.1999 NS
12.	Achievement motivation	0.2444*
13.	Risk bearing ability	0.2001 NS
14.	Deferred gratification	0.0926 NS
15.	Management orientation	0.2928**
16.	Innovativeness	0.2888**

Table 4. Extent of contribution of independent variables to the decision making pattern of farm women in management of coffee plantation. (n=90). NS=Non significant, *=Significant at 5% level, **=Significant at 1% level, $R^2 = 0.6120$.

Sl. No.	Characteristics	Regression co-efficient (b)	Standard error	't' value
1.	Age	0.015	0.009	1.680NS
2.	Education	0.633	0.316	2.005*
3.	Family size	0.115	0.116	0.992 NS
4.	Land holding	0.164	0.216	0.762 NS
5.	Annual income	0.295	0.318	0.928 NS
6.	Economic orientation	0.964	0.618	1.561 NS
7.	Credit orientation	0.088	0.070	1.261 NS
8.	Extension contact	1.622	0.512	3.168 **
9.	Extension participation	1.199	0.399	3.006 **
10.	Mass media exposure	1.36	0.484	2.812 **
11.	Cosmopolitaness	0.0149	0.116	0.129 NS
12.	Achievement motivation	0.622	0.313	1.989 *
13.	Risk bearing ability	0.375	0.212	1.769 NS
14.	Deferred gratification	0.007	0.112	0.0681 NS
15.	Management orientation	1.788	0.612	2.922 **
16.	Innovativeness	1.184	0.567	2.089*

Relationship between independent variables and decision making pattern of farm women in management of coffee plantation

The relationship of independent variables with their decision making pattern of farm women in management of coffee plantation are presented in Table 3. The results revealed that, six independent variables namely education, extension contact, extension participation, mass media exposure, management orientation and innovativeness were found to be positively significant at one per cent level of probability with the decision making pattern of farm women in management of coffee plantation. Whereas age, economic orientation and achievement motivation of farm women were found to be positively correlated with decision making pattern of farm women in management of coffee plantation at 5% level of significance.

The remaining seven variables namely, family size, land holding, annual income, credit orientation, cosmopolitaness, risk bearing ability and deferred gratification were found to be having positive but non-significant correlation with their decision making pattern. Similar results have been reported earlier (Monika and Sawhney 1999, Nethravathi 2008, Naseri 2012, Sindhu 1998, Sujaykumar 2012).

Extent of contribution of independent variables with the decision making pattern of farm women in management of coffee plantation

The results in Table 4 revealed that 61.20% of the variation in the decision making pattern of farm women could be explained by personal, socio-economic, communication and psychological characteristics in the study as evidenced by R^2 value of 0.6120. It may be further observed from the table that among 16 variables, extension contact, extension participation, mass media exposure and management orientation were significantly contributing to the decision making pattern of farm women at one per cent level of probability. Whereas education, achievement motivation and innovativeness were significantly contributing to the decision making pattern of farm women at 5% level of probability. The remaining variables age, family size, land holding, annual income, economic orientation, credit orientation, cosmopolitaness, risk bearing ability and deferred gratification had not significantly contributed to the decision making pattern of farm women in management of coffee plantation.

The present findings are in accordance with the results reported by Nirmala (2013), Hadagali (2014),

Thejaswini et al. (2004) and Usman (2013).

Conclusion

The research revealed that majority of the farm women involved in weed management, liming, fertilization and pruning and training. It could be seen that farm women had highest percentage of self decision in women oriented tasks, which are exclusively done by them. So women had a freedom of deciding these activities in which they have more expertise and possess better management skills. The overall decision making of farm women in the management of coffee plantation was found to be medium to high level, since most of the farm women had medium and large land holdings, who are mainly involved in management of the coffee plantation. This indicates there is direct relationship between better income, land holding, education and economic orientation towards strengthening women decision making opportunities and abilities.

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