

Gender Analysis on Decision Making Pattern in Sugarcane Cultivation

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ABSTRACT

The present study was conducted in Mandya and Maddur taluks of Mandya district in Karnataka State during 2014-15 to analyze the decision making pattern of farm men and women in sugarcane cultivation. A total of 120 respondents (60 farm men and 60 farm women) from ten villages of Mandya and Maddur taluks were interviewed for the purpose using a pre-tested structured schedule. It was found that a majority (56.67%) of the farm men were belonging to high level of decision making category, while, 36.67 and 6.66 per cent of the farm men were belonging to medium and low levels of decision making categories, respectively. On the contrary, it was found that a majority (61.66%) of the farm women were belonging to medium level of decision making category, whereas, 20.00 and 18.34 per cent of the farm women were belonging to low and high levels of decision making category, respectively. There was a significant difference between the farm men and farm women in respect of their decision making pattern in sugarcane cultivation activities. On the whole, it could be observed that farm women are not considered in the forefront when it comes to decision making with respect to sugarcane cultivation activities

Women referred as 'invisible farmers' are the backbone of agricultural work force in our country. Women do the most tedious tasks in agriculture production and they are active partners associating in almost all unit operations of agriculture sharing work between 20 to 80 per cent. They participate in most of the agricultural operations like manuring, land preparation, sowing of setts, transplanting, weeding, applying fertilizers, harvesting etc. The success and failure of farm depends mainly on the contribution made by farm women. Women are involved in all the important aspects related to agriculture, decision making, finance and marketing. They get limited opportunities in modern occupations as they do not have access to the training required for new technologies. It has often been said that a women is physically fragile and unfit to do strenuous jobs involving hard labour. But, it is not the physical incapacity, which has kept her in background; it is illiteracy, social restriction, her low self-esteem and lack of facilities for technical training (Rajula Shanti, 2010).

Women play an important role in decision-making in farming sector also, since the housewife bear the entire burden of managing the household affairs, her discontentment with the meager amount at her disposal, motivate her to influence the male members of the family to adopt modern technologies and high yielding

varieties which would facilitate increase in their farm income. However, male dominance in decision making in the household and economy is still continued. In spite of their active involvement and significant contribution, they have not been duly recognized, appreciated and are ignored in decision making process. Farm women play an important role in decision making related to various farm activities. Few decisions are taken by farm women alone, some of them by farm men alone, while, some are decided jointly by both farm men and women and some are decided together with family members. Farm women's opinions and suggestions also carry weightage at the time of decision making (Zaidi and Munir, 2014)

Sugarcane is an annual crop wherein more than 45 million people are engaged in various activities. In order to know the extent to which the women involved in decision making with respect to sugarcane cultivation. The present study is undertaken with the following specific objectives:

1. To know the personal, socio-economic, psychological and communication characteristics of farm men and women practicing sugarcane cultivation.
2. To analyze the decision making pattern of farm men and women in sugarcane cultivation.

METHODOLOGY

The study was conducted in Mandya and Maddur taluks of Mandya district in Karnataka State during 2014-15. Five villages were randomly selected for the study from each of the two sampled taluks. Small and marginal farmers were interviewed for the study since farm women from small and marginal farmers are more involved in decision making regarding sugarcane cultivation activities. From each village, six farm households cultivating sugarcane were randomly selected. Relevant data was collected from the head of the family and his spouse. Thus, the total sample constituted 120 respondents (60 farm men and 60 farm women).

Decision making pattern refers to the '*extent of involvement of farm men and women in deciding the sugarcane cultivation activities that needs to be performed*'. Decision making was measured using the scale developed by Puri (1972) with slight modification.

A total of 15 sugarcane cultivation activities were included to know the decision making pattern of farm men and women. While analyzing the decision making pattern of farm men, the respondents were given a score of 4, 3, 2 and 1 for 'farm men alone', 'farm women alone', 'both' and 'together with family members', respectively. A score of 4, 3, 2 and 1 for 'farm women alone', 'farm men alone', 'both' and 'together with family members', respectively, were assigned to know the extent of decision making pattern of farm women. Based on the total score obtained for the 15 sugarcane cultivation activities by the respondents, the farm men and women were grouped into low, medium and high decision making categories using mean and half standard deviation as a measure of check.

Decision making Category	Score	
	Farm Men	Farm women
Low { Less than (Mean - ½ SD)}	<29.09	<20.0
Medium {Between (Mean ± ½ SD)}	29.09 to 34.71	20.02 to 25.16
High {More than (Mean + ½ SD)}	>34.71	>25.16
Mean	31.90	22.68
Standard deviation	5.62	4.96

RESULTS AND DISCUSSION

1. Personal, socio-economic, psychological and communication characteristics of farm men and women : Table I presents the data on the personal, socio-economic, psychological and communication characteristics of farm men and women. Table I showed that a majority of farm men were of middle age (56.67 %), small farmers (51.67 %), living in nuclear family (91.66 %), having moderate farming experience (60.00 %) with high level of economic motivation (51.67 %) and medium level of management orientation (51.66 %). A larger number of farm men were having medium level of education (43.33 %), falling under low annual income category (41.66 %), possessing more favourable attitude towards farming (43.32 %), high level of mass media participation (38.33 %) and having medium level of innovativeness (46.67 %), scientific orientation (46.67 %), achievement motivation (45.00 %), extension agency contact (48.33 %) and extension participation (43.34 %). It can be inferred that more number of farm men had medium to high level of personal, socio-economic, psychological and communication characteristics.

The data in Table I revealed that majority of farm women were of middle age (61.66 %), living in nuclear family (91.66 %), having small size land holding (51.67 %) and low level of education (61.66 %). More number of farm women were possessing favourable attitude towards farming (48.33 %), falling under low annual income category (41.66 %) with less farming experience (43.33 %) and having medium level of innovativeness (45.00 %), scientific orientation (46.67 %), management orientation (45.00 %), achievement motivation (46.67 %), economic motivation (40.00%), mass media participation (45.00 %), extension participation (41.67 %) and low level of extension agency contact (48.33 %). It can be concluded that more number of farm women had low to medium level of personal, socio-economic, psychological and communication characteristics.

The findings with respect to family type, land holding and annual income are same for both the farm men and women since the data was collected from the head of the family and his spouse.

TABLE I

Personal, socio-economic psychological and communication characteristics of farm men and women

Characteristics	Category	Men (n=60)		Women (n=60)	
		No.	Per cent	No.	Per cent
Age	Young	07	11.66	10	16.67
	Middle	34	56.67	37	61.66
	Old	19	31.67	13	21.67
Education	Low	14	23.33	37	61.66
	Medium	26	43.33	12	20.00
	High	20	33.34	11	18.34
Family type	Nuclear	55	91.66	55	91.66
	Joint	05	8.34	05	8.34
Farming experience	Less	09	15.00	26	43.33
	Moderate	36	60.00	21	35.00
	More	15	25.00	13	21.67
Land holding	Marginal	29	48.33	29	48.33
	Small	31	51.67	31	51.67
Annual family income	Low	25	41.66	25	41.66
	Medium	21	35.00	21	35.00
	High	14	23.34	14	23.34
Attitude towards farming	Less favourable	11	18.34	13	21.67
	Favourable	23	38.34	29	48.33
	More favourable	26	43.32	18	30.00
Innovativeness	Low	15	25.00	22	36.66
	Medium	28	46.67	27	45.00
	High	17	28.33	11	18.34
Scientific orientation	Low	13	21.66	19	31.67
	Medium	28	46.67	28	46.67
	High	19	31.67	13	21.66
Management orientation	Low	12	20.00	20	33.33
	Medium	31	51.66	27	45.00
	High	17	28.34	13	21.67
Achievement motivation	Low	14	23.33	20	33.33
	Medium	27	45.00	28	46.67
	High	19	31.67	12	20.00
Economic motivation	Low	09	15.00	15	25.00
	Medium	20	33.33	24	40.00
	High	31	51.67	21	35.00
Mass media participation	Low	20	33.34	19	31.66
	Medium	17	28.33	27	45.00
	High	23	38.33	14	23.34
Extension agency contact	Low	14	23.34	29	48.33
	Medium	29	48.33	24	40.00
	High	17	28.33	07	11.67
Extension participation	Low	15	25.00	23	38.33
	Medium	26	43.34	25	41.67
	High	19	31.66	12	20.00

The above findings are in line with the findings of Shailaja (1990), Thejaswini *et al.* (2004), Vinay Kumar (2005), Venkatappa and Chinnappa (2007), Ganeshprasad (2010), Satyanarayan and Jagadeeswary (2010) and Madhushree (2014).

2. Overall decision making pattern of farm men and women in sugarcane cultivation activities: A cursory perusal of Table II reveals that a majority (56.67%) of the farm men belonged to high level of decision making category, while, 36.67 and 6.66 per cent of the farm men belonged to medium and low levels of decision making categories, respectively. It can be inferred that as high as 93.34 per cent of the farm men belonged to medium to high level of decision making category. Farm men have either 'exclusively' or 'jointly with their spouse' were involved in taking decisions in all the 15 sugarcane cultivation activities selected for the study, hence as high as 93.34 per cent of the farm men were belonging to high to medium level of decision making category.

The results in Table II also reveals that a majority (61.66 %) of the farm women belonged to medium level of decision making category, whereas, 20.00 and 18.34 per cent of the farm women belonged to low and high level of decision making category, respectively. It can be inferred that the role of farm women with respect to the decision making in the selected 15 sugarcane cultivation activities is very less or negligible. The women has been consulted for making decisions to a limited extent, hence a majority (81.66%) of the farm women were having low to medium level of

decision making category. The results are in line with the findings of Shreeshailaja (2000).

3. Activity-wise decision making pattern of farm men and women in sugarcane cultivation: It is evident from Table III that cent per cent of the decisions on land preparation, irrigation and source and application of plant protection chemicals were undertaken exclusively by 'farm men alone'. Since, most of these activities are carried out by the male members; therefore, the decisions were taken exclusively by farm men.

The decision on activities such as time of planting (73.34 and 26.66%), selection of variety (85.00 and 15.00 %), source of sett (78.33 and 21.67 %), sett treatment (76.67 and 23.33 %), method of planting (75.00 and 25.00%), source of fertilizer (91.66 and 8.34%), application of fertilizer (93.33 and 6.67%) and time of harvesting (86.66 and 13.34%) were taken by 'farm men alone' and by 'both farm men and women', respectively.

The decision with respect to the remaining activities *viz.*, application of FYM (83.34 %, 6.67 and 10.00%), weeding (80.00 %, 10.00 and 10.00%) and ratooning (80.00 %, 3.33 and 16.67%) were taken by 'farm men alone', 'farm women alone' and by 'both farm men and women', respectively.

Farm men and women have not consulted family members for taking decisions on any of the selected 15 sugarcane cultivation activities.

It can be inferred from the results that with respect to the 15 selected sugarcane cultivation activities, farm men have taken decisions either 'exclusively by themselves' or 'along with their spouse'. Decisions were not taken either 'exclusively by farm women' or in 'consultation with the family members' in any of the selected sugarcane cultivation activities.

On the whole, it could be seen that women are not considered in the forefront when it comes to decision making with respect to sugarcane cultivation activities. In some cases, women deliberately do not

TABLE II

Overall decision making pattern of farm men and women in sugarcane cultivation activities

Category	Men (n=60)		Women (n=60)	
	No.	Per cent	No.	Per cent
Low	04	6.66	12	20.00
Medium	22	36.67	37	61.66
High	34	56.67	11	18.34
Total	60	100.00	60	100.00

TABLE III

Decision making pattern of farm men and women in sugarcane cultivation activities

Characteristics	Men (n=60)		Women (n=60)		Both (n=120)		Together with family members	
	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Time of planting	44	73.34	0	0.00	32	26.66	0	0.00
Land preparation	60	100.00	0	0.00	0	0.00	0	0.00
Selection of variety	51	85.00	0	0.00	18	15.00	0	0.00
Source of sett	47	78.33	0	0.00	26	21.67	0	0.00
Sett treatment	46	76.67	0	0.00	28	23.33	0	0.00
Method of planting	45	75.00	0	0.00	30	25.00	0	0.00
Application of FYM	50	83.34	4	6.67	12	10.00	0	0.00
Fertilizer								
i) Source of fertilizer	55	91.66	0	0.00	10	8.34	0	0.00
ii) Application of fertilizer	56	93.33	0	0.00	08	6.67	0	0.00
Weeding	48	80.00	6	10.00	12	10.00	0	0.00
Irrigation	60	100.00	0	0.00	0	0.00	0	0.00
Plant protection								
i) Source of plant protection chemicals (n=50* and 100*)	50	100.00	0	0.00	0	0.00	0	0.00
ii) Application of pesticide/ bio-pesticide (n=50* and 100*)	50	100.00	0	0.00	0	0.00	0	0.00
Time of harvesting	52	86.66	0	0.00	16	13.34	0	0.00
Ratoon crop	48	80.00	2	3.33	20	16.67	0	0.00

* Number of farmers applied plant protection chemicals / bio-pesticides

take part in decision making because men put blame on them if something goes wrong. Lack of knowledge on the improved sugarcane cultivation practices among farm women and other members of the family might be also the reason for the farm men for not involving farm women and other members of the family in making decisions.

The findings are in consonance with the findings of Velmayil and Maheswari (1997), Kishore *et al.* (1999) and Bharat Kumar (2010).

4. *Test of significance between farm men and women with respect to decision making pattern in sugarcane cultivation activities* : Table IV reveals that the mean score of farm men (31.90) was more than the mean score of farm women (22.68) with respect to decision making pattern. The 't' value (9.60) was found to be highly significant indicating that there exists a significant difference between the farm men

and farm women in respect of their decision making pattern in sugarcane cultivation activities. Farm men have taken decision on performing sugarcane cultivation activities either 'exclusively by themselves' or with 'less or no involvement of their spouses', hence there exist a significant difference between the farm men and women in respect of their decision making pattern on sugarcane cultivation activities.

The research results revealed that a overwhelming majority (93.34%) of the farm men were belonging to medium to high to level of decision making category, whereas, a majority (81.66%) of the farm women were having low to medium level of decision making category. The 't' value was found to be highly significant indicating that there exists a significant difference between the farm men and farm women in respect of their decision making pattern in sugarcane cultivation activities. On the whole, it could be inferred that women are not considered in the

TABLE IV

Test of significance between farm men and women with respect to decision making pattern

Respondents	Decision making pattern	
	Mean score	't' value
Farm Men (n=60)	31.90	9.60**
Farm Women (n=60)	22.68	

forefront when it comes to decision making with respect to sugarcane cultivation activities. Therefore, the extension agencies should educate the farm men to encourage women in the decision making process and also it should motivate farm women to involve in decision making and participate actively in farming activities. Hence, both farm men and women can profitably engage themselves in different activities of sugarcane cultivation.

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