

## Role of Farm Women in Agricultural Operations and Decision Making Pattern

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### ABSTRACT

*This study was conducted in Raisen district of Madhya Pradesh in the year of 2008-09 at Department of Agricultural Extension, R.A.K. College of Agriculture Sehore (M.P.). The main objective of the study was to ascertain the extent of participation and decision making pattern of farm women in agricultural operations. The study revealed that more number of farm women found to have high level of participation in agricultural operation i.e. (47.50%) followed by the medium participation (33.33%) and low participation (19.17%) in agricultural operations respectively. The study also revealed that the higher number of farm women (58.33%) were observed in low category of decision making which was followed by 22.50 per cent and 19.17 per cent respectively in case of medium and high decision making process. The study also revealed that the socio economic factors found to influence the agriculture operations and decision making pattern of farm women positively and significantly.*

**Key words:** Farm women; Agricultural operations; Extent of participation; Decision making pattern;

**W**omens' contribution to the farming sector in respect of operation and decision making has largely been ignored. Very few scientific and empirical attempts have been made in the state of Madhya Pradesh to examine the actual participation and decision making efficiency of women with respect to farm and other farm supporting activities. This phenomenon is particularly true in the case of study area where women, apart from actual participation in crop production, also substantially participate in other subsidiary activities and having decision making capabilities regarding farm production. It is, therefore, pertinent to examine the relative contribution of women in crop production and subsidiary activities, in the process of operations and in decision making to account for their economic contribution at the farm level.

Such study is essential to assess the contribution of women in economy of the area so that hidden obstacles in uplifting the status of women could be identified and suitable suggestions could be given to overcome these obstacles. The main objective of study was to ascertain the extent of participation and decision making pattern of farm women in agricultural operations in Raisen district (M.P.).

### METHODOLOGY

The present study was conducted in Sanchi Block of Raisen district of Madhya Pradesh in the year of 2008-09 at Department of Agricultural Extension, R.A.K. College of Agriculture Sehore (M.P.). The block has 30 Rural Agriculture Extension Officers (RAEO's) circles. Out of the 30 RAEO's circles, 10 RAEO's circles were selected randomly. The H.Q. village of these RAEO's circles was simultaneously selected for the study. A village wise list of farm women was prepared and 12 farm women from each village were selected through random sampling method. Thus, the total sample drawn was 120 respondents.

The data were collected personally by the researcher through a structured and pre-tested interview schedule. The researcher personally approached the respondents and explained to them about the purpose of this study. After establishing rapport with the respondents, the farm women were interviewed and their responses were recorded in the interview schedule.

The present study, the role of farm women and decision making pattern was analyzed with the help of methodology explained by *Hedges (1963)*.

The scale consists of 17 statements of agricultural operations and decision making process. The responses of respondents were obtained in 3 points continuum namely low, medium and high. The scoring was assigned in the order of 1, 2 and 3 respectively.

Keeping in view the objectives of the study and to draw logical conclusion, statistical test i.e. percentages and means were used for analyzing and interpretation of the data.

## RESULTS AND DISCUSSION

*Extent of participation pattern of farm women :* From Table 1, it is revealed that more number of farm women were found to have overall high level of participation in agricultural operations i.e. (47.50%) followed by medium participation with (33.33%) and low participation of (19.17%) respectively. The study of *Ghosh (2000)*, *Badiger and Huilgal (2004)*, *Singh et al. (2005)* and *Yadav et al. (2005)* also found higher participation of farm women in agricultural activities, in this respect the present study is conformity with these findings.

**Table 1. Distribution of farm women according to their extent of participation in agricultural activities**

Area of activities	Extent of participation			Mean score
	Low	Medium	High	
Weeding	15	39	66	2.43
Selection of seed variety	31	38	51	2.17
Harvesting	12	35	73	2.51
Soil testing	30	48	42	2.10
Winnowing process	13	34	73	2.50
Seed treatment	14	28	78	2.53
Plant protection	12	32	76	2.53
Sowing	11	29	80	2.58
Manure and fertilizer application	15	32	73	2.48
Threshing process	32	52	36	2.03
Seed processing	28	63	29	2.01
Grain Storage	20	28	72	2.43
Irrigation management	35	48	37	2.02
Collection of harvested crops	22	43	55	2.28
Preparation of land	45	48	27	1.85
Marketing	41	40	39	1.98
Soil treatment	15	43	62	2.39
Overall average	23 (19.17)	40 (33.33)	57 (47.50)	2.28

Figure in parentheses shows % to total

Data from the table revealed that the farm activities in which farm women obtained the highest score at high level of participation were weeding (mean score 2.43), selection of seed variety (mean score 2.17), harvesting (mean score 2.51), winnowing process (mean score 2.50), seed treatment (mean score 2.53), plant protection (mean score 2.53), sowing (mean score 2.58), manure and fertilizer application (mean score 2.48), Grain Storage (mean score 2.43), collection of harvested crops (mean score 2.28) and soil treatment (mean score 2.39). The activities in which farm women obtained the highest score at medium level of participation were soil testing (mean score 2.10), threshing process (mean score 2.03), seed processing (mean score 2.01), irrigation management (mean score 2.02) and preparation of land (mean score 1.85). The activities in which farm women obtained the highest score at low level of participation was marketing (mean score 1.98).

**Table 2. Distribution of farm women according to their decision making pattern in agricultural activities**

Area of activities	Decision making pattern			Mean score
	Low	Medium	High	
Weeding	86	19	15	1.41
Selection of seed variety	75	23	22	1.56
Harvesting	75	30	15	1.50
Soil testing	64	28	28	1.70
Winnowing process	83	24	13	1.42
Seed treatment	83	20	17	1.45
Plant protection	91	13	16	1.38
Sowing	82	21	17	1.46
Manure and fertilizer application	93	12	15	1.35
Threshing process	36	52	32	1.97
Seed processing	29	63	28	1.99
Grain Storage	82	18	20	1.48
Irrigation management	37	48	35	1.98
Collection of harvested crops	85	13	22	1.48
Preparatory of land	32	48	40	2.07
Marketing	75	14	31	1.63
Soil treatment	82	13	25	1.53
Overall average	23 (58.33)	27 (22.50)	70 (19.17)	1.61

Figure in parentheses shows % to total

The perusal of data presented in Table 2 revealed that the farm women participated in decision making process in each and every farm activities. The data

clearly indicated that the higher number of farm women (58.33%) were observed in low category of decision making followed by medium decision making of (22.50%) and high decision making with (19.17%) respectively. The study of *Mohod Kalpana (2000)*, *Goswami et.al. (2004)*, *Praveena (2005)* and *Kavita (2006)* also found that the more number of farm women in agricultural activities taken low decision making involvement, in this respect the present study is conformity with these findings.

The activities in which farm women achieved the highest score at low level of decision making process were weeding (mean score 1.14), selection of seed variety (mean score 1.56), harvesting (mean score 1.50), soil testing (mean score 1.70), winnowing process (mean score 1.42), seed treatment (mean score 1.45), plant protection (mean score 1.38), sowing (mean score 1.46), manure and fertilizer application (mean score 1.35), grain storage (mean score 1.48), collection of harvested crops (mean score 1.48), marketing (mean score 1.63) and soil treatment (mean score 1.53).

The activities in which farm women achieved the highest score at medium level of decision making process were threshing process (mean score 1.97), seed processing (mean score 1.99), irrigation management (mean score 1.98) and preparatory of land (mean score 2.07).

Thus, none of the farm women had an opportunity to get themselves involves into high level of decision making. Hence, there is a need to involve farm women in decision making at higher level and give them opportunity to express their views.

*Influence of socio-economic characteristics of farm women in agriculture operations and decision making pattern:* In order to study the relative influence of socio-economic characteristics of farm women in agricultural operations and decision making pattern, the values of standard partial regression coefficients ( $\beta$ -values) were calculated and are presented in Table 3.

The study of standard partial regression coefficient between socio personal characteristics of farm women and the agricultural operations revealed that out of all socio economic factors, only four factors, namely caste, socio economic status, mass media exposure and innovativeness ( $\beta$ - values 0.234 N.S., 0.124 N.S., 0.105 N.S. and 0.187 N.S.) were found to non significant.

Study also revealed that socio economic factors,

**Table 3. Standard partial regression coefficient ( $\beta$ - values) of agriculture operations and decision making pattern with their socio-economic characteristics**

Socio-economic characteristics	Agriculture operation $\beta$ - values	Decision making pattern $\beta$ - values
Age	1.221*	1.328*
Education	0.834*	0.985*
Caste	0.234 <sup>NS</sup>	0.023 <sup>NS</sup>
Size of family	0.849*	2.160*
Marital Status	0.774*	0.213 <sup>NS</sup>
Size of land holding	2.239*	1.134*
Social participation	1.885*	0.546*
Extension Participation	0.439*	0.674*
Information seeking behavior	1.914*	0.458*
Socio-economic status	0.124 <sup>NS</sup>	0.386*
Mass media exposure	0.105 <sup>NS</sup>	0.945*
Cosmopolitaness	0.756*	0.546*
Economic motivation	0.953*	0.745*
Innovativeness	0.187 <sup>NS</sup>	0.568*
Exposure to training	0.785*	0.647*
Management orientation	0.675*	0.487*
Coefficient of determination ( $R^2$ )	68.00%	76.00%

\*= Significant at  $p=0.05$

\*\*= Significant at  $p=0.01$

whose  $\beta$ - values were found to be positive and significant were, age (1.221\*), education (0.834\*), size of family (0.849\*), marital status (0.774\*), size of land holding (2.239\*), social participation (1.885\*), extension participation (0.439\*), information seeking behavior (1.914\*), cosmopolitaness (0.756\*), economic motivation (0.953\*), exposure to training (0.785\*) and management orientation (0.675\*). This clearly shows the influence of these characteristics on agricultural operations.

On the other hand, in case of decision making pattern only two factors namely caste and marital status ( $\beta$ - values 0.023<sup>NS</sup> and 0.213<sup>NS</sup>) were found to be non significant. Thus, the factor did not influence decision making pattern of farm women.

In case of decision making pattern, correlation study further revealed that socio economic factors, whose  $\beta$ - values were found to be positive and significant were, age (1.328\*), education (0.985\*), size of family (2.160\*), size of land holding (1.134\*), social participation (0.546\*), extension participation (0.674\*),

information seeking behavior (0.458\*), socio economic status (0.386\*), mass media exposure (0.945\*), cosmopolitaness (0.546\*), economic motivation (0.745\*\*), innovativeness (0.568\*), exposure to training (0.647\*) and management orientation (0.487\*). Thus, these factors had significantly influenced the decision making pattern of farm women.

## CONCLUSION

On the basis of results in the study it may be concluded that high number (47.50%) of farm women were found to have overall high level of participation in agricultural operations. On the other hand, the farm

women participated in decision making process in each and every farm activities. The data clearly indicated that the higher number (58.33%) of farm women were observed in low category of decision making process. Study further revealed that age, education, size of family, size of land holding, social participation, extension participation, information seeking behavior, cosmopolitaness, economic motivation, exposure to training and management orientation factors had significantly influenced the participation and decision making pattern of farm women.

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