Role of Rural Women in Farm Management Decision Making Process

U.D. Patil[1], T.B. Deokate[2] and S.N. Patil[3]

Introduction

Rural women play a significant role in domestic and socio-economic life of the society. As per 2001 census, agriculture and allied industrial sectors employ as much as 89.5 per cent of total female labour. In the case of working population, rural female participation rate is 27.2 percent which is nearly thrice of the urban female participation rate (9.7 per cent).

Indian rural women, in addition to participating in different farm operations and activities also help in decision making with regard to farm practices, operations and household affairs. Successful management of the farm and family is totally dependent upon taking the right decision at the right time and execution of the same with proper zeal and ability. Thus, women have a considerable role in decision making in home as well as in farm affairs and thus play an important role in the development process.

A study was taken up with the objective of examining the role of women in farm management decision making process.

Methodology

The study area was Sangamner tahsil of Ahmednagar district of Maharashtra state. Four villages were selected and from each village 30 families were selected as the sample, thus making it a sample size of 120 farm families. Out of the 120 samples, 30 samples were selected from each size group of farmers viz. I , II, III and IV, being landless families, group having holding size of 0.01 to 2.00 ha, 2.01 to 4.00 ha and above 4.01 ha, respectively. Thus the sample for the study consisted of 120 families from Sangamner tahsil of Ahmednagar district of Maharashtra state. The data were collected with the help of a questionnaire specially designed for the purpose. The data pertains to the agricultural year 2004-05. The data of the sample families were compiled according to size groups of farms.

[1]Junior Research Assistant, Agricultural Economics, MPKV, Rahuri

[2]Junior Research Assistant, Agricultural Economics, MPKV, Rahuri

[3]Assistant Professor, ABM College, Akurdi, Pune

Decision making function

Chi-square test was used to quantify the decision making process of farm women. The following formula was used:

$$x^2 = (1/n1n2) \sum \frac{(aini-bini)^2}{(ai+ bi)}$$

Where, i = 1,2,3,4 (four size groups of farms)

x^2	=	Chi-square statistic
n1n2	=	Product of the number of women workers.
a1	=	Number of women workers involved in decision making of group-I
b1	=	Number of women workers not involved in decision making of group-I
a2	=	Number of women workers involved in decision making of group-II
b2	=	Number of women workers not involved in decision making of group-II
a3	=	Number of women workers involved in decision making of group-III
b3	=	Number of women workers not involved in decision making of group-III
a4	=	Number of women workers involved in decision making of group-IV
b4	=	Number of women workers not involved in decision making of group-IV
n1	=	Total number of women workers involved in decision making.
n2	=	Total number of women workers not involved in decision making.

Results and Discussion

1. Working Members of Sample Families

The information relating to working members of sample families is given in Table 1. It is observed from the table that the average number of workers in the landless families, Group-II, III and IV were 3.15, 3.20, 4.23 and 4.02 respectively. On an average, the number of workers was 3.65 per family.

The average number of men and women workers in the farm families increased with increase in the size of holdings upto size group-III and the same decreased in size group-IV.

Table 1 . Proportion of Workers in the Sample Families

Sl. No.	Size Groups	Size limit (Ha)	No. of Cultivators	Proportion of workers in the sample families	
				Men	Women
1	Landless	-	30	1.69	1.46
				(53.65)	(46.35)
2	Small	0.01 to 2.00	30	1.75	1.45
				(54.69)	(45.31)
3	Medium	2.01 to 4.00	30	2.53	1.70
				(59.81)	(40.19)
4	Large	Above 4.00	30	2.18	1.84
				(54.23)	(45.77)
	Total		**120**	**2.04**	**1.61**
				(55.89)	**(44.11)**

2. Decision Making

There are a large number of activities in which women workers participate in decision making. Though decisions of these activities are expected to be taken by each sample family, women workers from each sample family may or may not be involved in each decision. In other words, some of the women workers may participate in decision making in one activity, while women from another family may not participate in that activity. The extent of participation of women workers would differ from one activity to another. The following major activities are identified where women workers participated in decision making process in the present study. All those identified activities in which women have participated in different magnitudes depend upon their involvement. In order to specify the magnitude of involvement, the results of chi-square test are presented in the Tables.

2.1 Decision making relating to Purchase of Items of Family Consumption

It can be seen from the table that the results are highly significant with Chi-square value of 18.63. The study shows that the women from landless and small size groups participated much than the women from the medium and large size groups. The involvement of women workers in decision making was 56.67 per cent comprising the women of landless labourers who were involved to the extent of 70.00 per cent, women of small farm size group to the extent of 73.33 per cent, and women of medium size group to the extent of 50.00 per cent. The involvement of the women from large size group was to the extent of 33.33 per cent.

Table 2. Involvement in Decision Making relating to Purchase of Items of Family Consumption

N=120

Size group	Involvement in Decision Making				Total	
	Involved		Not Involved			
I	21	(70.00)	9	(30.00)	30	(100.00)
II	22	(73.33)	8	(26.67)	30	(100.00)
III	15	(50.00)	15	(50.00)	30	(100.00)
IV	10	(33.33)	20	(66.67)	30	(100.00)
Total	**68**	**(56.67)**	**52**	**(43.33)**	**120**	**(100.00)**

(Figures in the parentheses are the percentages to the total)

Chi-Square = 12.76xx (Highly significant)

The result of chi-square test revealed that women are involved in decision making process to a greater extent.

2.2 Decision making regarding Purchase of Farm Input

A large number of inputs are home produced while others are required to be purchased from market. Some of the inputs have to be used at the proper time, in certain quantities and a few with some skills. Therefore, there are several decisions to be taken in this regard. The extent to which women of different size groups influence such decisions on sample farms was tested through the statistical test and the data are presented in Table-3. The chi-square value 4.91 shows that there is non significant relationship. On an average nearly 37.78 per cent women workers are involved in decision-making

Table 3. Involvement of Women Workers in Decision Making regarding Purchase of Farm Inputs

N=90

Size group	Involvement in Decision Making				Total	
	Involved		Not Involved			
I	00.00		00.00		00.00	
II	16	(53.33)	14	(46.67)	30	(100.00)
III	10	(33.33)	20	(66.67)	30	(100.00)
IV	8	(26.67)	22	(73.33)	30	(100.00)
Total	34	(37.78)	56	(62.22)	90	(100.00)

(Figures in the parentheses are the percentages to the total)

Chi-Square = 4.91 (Non significant)

The women workers from the size group-II are involved in decision making to the extent of 53.33 which was greater than group-III and IV, where the extent of involvement was 33.33 and 26.67 per cent, respectively.

2.3 Decision Making regarding Crops to Grow

It was thought that women from economically low status i.e. from size group-II, are consulted in decision making regarding crops to grow, while those from economically better status are not consulted with regard to taking up several crops on the farms. This is because the women from medium and low economic status tend to always plan for different requirements of their families and therefore, it was thought that they would be involved in decision making to a larger extent in that respect.

Table 4. Involvement of Women Workers in Decision Making regarding Crops to Grow

N=90

Size group	Involvement in Decision Making				Total	
	Involved		Not Involved			
I	00.00		00.00		00.00	
II	16	(53.33)	14	(46.67)	30	(100.00)
III	10	(33.33)	20	(66.67)	30	(100.00)
IV	7	(23.33)	23	(76.67)	30	(100.00)
Total	33	(36.67)	57	(63.33)	90	(100.00)

(Figures in the parentheses are the percentages to the total)

Chi-Square = 6.02x (significant at 1 per cent level)

However, the above comments have been partially proved as evidenced from the data in Table 4. The result of chi-square test is 6.02 which is significant. The chi-square value implies that the women workers from the size groups-III and IV, were involved in the decision making process regarding crops to grow to some extent.

2.4 Decision regarding Area Allocation of Crops

Decision regarding area allocation of crops is thought to be taken by men counterparts of the farm family, but even then the women are consulted in the transaction related to area allocation for the crops. This was tested through a statistical test. The chi-square test gives the result 5.76 which is not significant. The data also shows that at overall level about 38.00 per cent of the women were involved in decision making regarding the allocation of crops. The women from size group-III and IV were involved to a lesser extent in decision making.

Table 5. Involvement of Women Workers in Decision Making regarding Area Allocation of Crops

N=90

Size group	Involvement in Decision Making		Total
	Involved	Not Involved	
I	00.00	00.00	00.00
II	16 (53.33)	14 (46.67)	30 (100.00)
III	11 (36.67)	19 (63.33)	30 (100.00)
IV	7 (23.33)	23 (76.67)	30 (100.00)
Total	34 (37.78)	56 (62.22)	90 (100.00)

(Figures in the parentheses are the percentages to the total)

Chi-Square = 5.76 (Non-significant)

2.5 Decision regarding Disposal of Farm Produce

Which farm produce, where it is to very important decisions in the farm business. The decision regarding disposal of farm produce are dominated by men. The result of the chi-square test applied to work out the extent of involvement in decision making regarding disposal of farm produce is given in Table-6.

Table 6. Involvement of women workers in Decision Making regarding Disposal of Farm Produce

N=90

Size group	Involvement in Decision Making		Total
	Involved	Not Involved	
I	00.00	00.00	00.00
II	16 (53.33)	14 (46.67)	30 (100.00)
III	11 (36.67)	19 (63.33)	30 (100.00)
IV	8 (26.67)	22 (73.33)	30 (100.00)
Total	35 (38.89)	55 (61.11)	90 (100.00)

(Figures in the parentheses are the percentages to the total)

Chi-Square = 4.58x (Non significant)

It can be seen from the table that the results are non significant with the chi-square value of 4.58. The result of chi-square test revealed that women are involved in decision making process to a very small extent.

2.6 Decision regarding Repayment of Loan

Farm women are lagging behind in advising heads of the families, who are male

members in respect of borrowings. The results of Table 7, where this has been presented indicates non significant relationship.

Table 7. Involvement of Women workers in Decision Making regarding Repayment of Loan

N=90

Size group	Involvement in Decision Making				Total	
	Involved		Not Involved			
I	00.00		00.00		00.00	
II	14	(46.67)	16	(53.33)	30	(100.00)
III	10	(33.33)	20	(66.67)	30	(100.00)
IV	7	(23.33)	23	(76.67)	30	(100.00)
Total	31	(34.44)	59	(65.56)	90	(100.00)

(Figures in the parentheses are the percentages to the total)

Chi-Square = 3.64 (Non significant)

The result of chi- square test revealed that women are not involved in the decision making process.

2.7 Decision making regarding Disposal of Milk and Milk Products

Farm women are expected to be involved in the decision making regarding disposal of milk and milk products by utilizing it for meeting family needs, for sale and other purposes. The investigation in the involvement in decision making regarding the disposal of milk and milk product showed positive results. The results of the chi-square test are presented in Table 8.

Table 8. Involvement of Women Workers in Decision Making regarding Disposal of Milk and Milk Products

N=120

Size group	Involvement in Decision Making		Total
	Involved	Not Involved	
I	16 (53.33)	14 (46.67)	30 (100.00)
II	10 (33.33)	20 (66.67)	30 (100.00)
III	10 (33.33)	20 (66.67)	30 (100.00)
IV	5 (16.67)	25 (83.33)	30 (100.00)
Total	**41 (34.17)**	**79 (65.83)**	**120 (100.00)**

(Figures in the parentheses are the percentages to the total)

Chi-Square = 9.00xxx (significant at 1 per cent level)

The chi-square value obtained is 9.00 which was significant, implying that the women were involved in decision making regarding disposal of milk and milk products to a great extent.

Conclusion

It can therefore be concluded that though the women farmer is heavily involved in agriculture in western Maharashtra, the level of her participation in decision- making is quite low, because of dominance of men in the family, illiteracy, less exposure to the outside world, lack of confidence, shyness, lack of knowledge regarding improved agriculture which were the major reasons. To overcome this, short duration training programmes should be conducted in decision making process. This will not only improve the knowledge and skill of women workers but will also help to expose them to different types of settings and also explore entrepreneurial abilities of farm women.

References

Bajaj, S. S. and Shaikh, A. M. (1989). Role of farm women in decision making regarding Agriculture. Maharashtra Journal of Extension Education, 8:185-188.

Geethalakshmi, G., Roghuprasad, K. P. and Suresha, S.V. (2002). Comparative study on the farm activities performed by landless farm women labourers in the irrigated and rainfed areas of Shimoga District. Current Research-University of Agricultural Sciences, Bangolore 31:5-6, 99:100:3 ref.

Kadlag, Sangita (1993). Role of women in decision making in farming in Sangamner tahsil of Ahmednagar district. A thesis submitted to Mahatma Phule Krishi Vidyapeeth, Rahuri.

Kamble, A. S., Havaldar, Y.N. and Katacrki, P.A. (2002). Farm women decision making family and farming activities in family and farming activities in Bellary District of Karnataka. Karnataka J. of Agril. Sciences

Kavita, L. and Reddy, M.S. (2002). Problem and suggestions from farm women for effective time utilization in farm activities. Current research, University of Agricultural Science, Bangalor 31: 5-6, 78-80.

Nawadkar, D. S. and Gavali, A. V. (2003). A study of farm and Non-farm employment and income of the farm families in Maharashtra. A Report of the Research Work Done on Agricultural Economies, During 2003 at M.P.K.V., Rahuri.