

**RESEARCH ARTICLE :**

Participation of rural women in agricultural and allied activities

■ UMESH R. CHINCHMALATPURE, R.T. KATOLE AND G.B. MORE**ARTICLE CHRONICLE :****Received :**

11.04.2015;

Revised :

02.07.2015;

Accepted :

03.08.2015

SUMMARY : The study was carried out in Akola district of Maharashtra state. An exploratory design of social research was used. A sample of 100 rural women as respondents were drawn and information was obtained from them which was considered for tabulation and analysis of data. Findings revealed that the majority of the rural women were middle age, illiterate, married, landless, medium family size and joint family. The higher percentage of rural women were with annual income upto Rs. 25000/-. Majority of the respondents always participated in cleaning of the field, sowing, weeding, thinning, harvesting/cutting/picking, winnowing, drying of grains and cleaning of grains as related to agricultural activities. In case of dairy activities only 45 respondents were found. Out of them majority were participated in dairy activities like cleaning of cattle and cattle shed, collection of cow dung. Regarding household activities all the selected activities like washing clothes, rearing of children, cooking related activities, cleaning and decoration of home, fetching of water and buying of cooking ingredients, fruits, vegetables etc. were performed by the majority of rural women. Majority of the rural women expressed their problems in participation of agricultural and allied activities like less wage rates received, health problems and poor economic condition.

KEY WORDS :

Participation, Rural women, Agricultural, dairy and household activities

How to cite this article : Chinchmalatpure, Umesh R., Katole, R.T. and More, G.B. (2015). Participation of rural women in agricultural and allied activities. *Agric. Update*, **10**(3): 187-193.

BACKGROUND AND OBJECTIVES

Women's are considered to be pioneers in all arena of development. The women are the backbone of agricultural workforce but worldwide her hard work has mostly been unpaid. She does the most tedious and back-breaking tasks in agriculture, animal husbandry and homes. Women contribute nearly equal to men in the economic development of our country. About two third of the manual labour in farming is constituted by rural women. Research evidences focused

that women play a significant and crucial role in agricultural development and allied fields including crop production, livestock production, horticulture, post-harvest operations, agro-social forestry etc. The nature and extent of women's involvement in agriculture varies greatly from region to region. Even within a region their involvement varies widely among different ecological sub-zones, farming systems, caste, class and socio-economic status of families etc. (Swaminathan, 1985). Regardless of these variations, there is hardly any activity in agriculture production except

Author for correspondence :**UMESH R.
CHINCHMALATPURE**

Department of
Extension, College of
Agriculture, Dr.
Panjabrao Deshmukh
Krishi Vidhyapeeth,
AKOLA (M.S.) INDIA
Email: rcumesh@
rediffamil.com

See end of the article for
authors' affiliations

ploughing in which women are not actively involved due to taboo preventing women from touching plough while male doing domestic chores are ridiculed (Ferber and Spaeth, 1984; Singal, 1989; Varma, 1992).

Manju (2002) revealed that the participation of women in post harvest operation was higher as compared to their participation in pre-harvest operations. Toppo *et al.* (2004) reported that farm women largely participated in selection of milch animals, breed, purchase of animals and culling of uneconomic animals. Keeping this in view, the present study on participation of rural women in agricultural and allied activities was planned and carried out to assess the role of rural women in agricultural and allied activities.

RESOURCES AND METHODS

An exploratory design of social research was used in the present investigation as the study aimed to assess participation of rural women in agricultural and allied activities. The present investigation was carried out in the ten villages of Akola Panchayat Samiti of Akola district. From each selected villages ten rural women were selected randomly. Thus, 100 rural women constituted the sample for the study. A random sample of 100 rural women selected for the present study. A structured interview schedule was prepared in accordance with the objectives of the project and used for data collection. The respondents were contacted either at farm or at home and the information in the interview schedule was collected. Thus, the information obtained from 100 rural women was taken for analysis.

Participation in agricultural and allied activities :

Participation of rural women in agricultural and allied activities was determined on the basis of actually performing by them. Rural women were asked to state whether she was participating regularly, occasionally or never in performing listed activities. The score was given according to the nature of her participation in the above activities. Zero score was assigned for no participation of rural women, one score for occasionally participation and two score for regular participation in each activity. On the basis of total participation score of an individual respondent, participation index was worked out. In order to know the level of participation of rural women in agricultural and allied activities, they were grouped on the basis of their participation index :

$$\text{Participation index} = \frac{\text{Actual obtained participation score}}{\text{Maximum obtainable participation score}} \times 100$$

On the basis of participation index obtained they were categorized as follows :

Sr. No.	Participation level	Index range
1.	Low	Upto 33.33
2.	Medium	33.34 to 66.66
3.	High	66.67 and above

OBSERVATIONS AND ANALYSIS

The detail research report with all relevant data has been presented as below:

Personal and economical characteristics of the respondents :

The data with respect to various characteristics of the respondents have been furnished in Table 1.

Age :

It is observed from Table 1, that nearly half of the respondents (52.00%) belonged to middle age group *i.e.*, 36 to 50 years, whereas, slightly higher than one third of respondents (36.00%) belonged to young age group. Remaining 12.00 per cent respondents were in the old age category.

Education :

Majority of the respondents *i.e.*, 56.00 per cent were illiterate. Whereas more than one fifth of the respondents (22.00%) had education upto primary school level followed by middle school level (15.00%). Very meagre percentage of respondents (7.00%) were having upto high school level education.

Marital status :

It is apparent from the Table 1 that the majority (69.00 %) of respondents were married. Whereas 31.00 per cent of the respondents were unmarried, widow and divorced category.

Land holding :

It could be noticed that the more than half of the respondents (54.00%) were landless. Whereas 36 per cent and 10 per cent of the respondents were in marginal and medium land holding category, respectively. However, none of the respondents was having more than 2 hectares of land holding.

Family size :

It was evident from the Table 1 that 69.00 per cent of respondents had medium size of family *i.e.*, 4 to 7 members in a family whereas, small (upto 3 members) and big families had 22.00 per cent and 9.00 per cent respondents, respectively.

Type of family :

Table 1 indicated that, more than two third of the respondents (68.00%) had a joint type of family, whereas,

32.00 per cent of respondents belonged to nuclear families.

Annual income :

It is seen from Table 1 that the more than two fifth of the respondents (45.00%) had annual income upto Rs. 25000/- per year, followed by 35.00 per cent respondents had the annual income in between of Rs. 25000 – Rs. 50000/-. Whereas one fifth (20.00%) of the respondents had annual income in between of Rs.50001 – Rs. 75000/-.

Table 1: Personal and economical characteristics of the rural women**(n=100)**

Sr. No.	Particular / category	Respondents	
		Frequency	Percentage
Age (Years)			
1.	Young (upto 35)	36	36.00
2.	Middle (36 to 50)	52	52.00
3.	Old (Above 50)	12	12.00
Education			
1.	Illiterate (No schooling)	56	56.00
2.	Primary school (Upto 4th)	22	22.00
3.	Middle school (5th to 7th)	15	15.00
4.	High school (8th to 10th)	07	7.00
5.	College (11 th and above)	00	00.00
Marital status			
1.	Married	69	69.00
2.	Unmarried/widow/divorced	31	31.00
Land holding (ha)			
1.	Landless	54	54.00
2.	Marginal (upto 1.00)	36	36.00
3.	Small (1.01 to 2.00)	10	10.00
4.	Semi-medium (2.01 to 4.00)	00	00.00
5.	Medium (4.01 to 10.00)	00	00.00
6.	Large (Above 10.00)	00	00.00
Family size			
1.	Small (upto 4)	22	22.00
2.	Medium (4 to 7)	69	69.00
3.	Large (8 and above)	09	9.00
Family type			
1.	Nuclear family	32	32.00
2.	Joint family	68	68.00
Annual income (Rs.)			
1.	up to Rs.25000/-	45	45.00
2.	Rs.25001 to 50,000/-	35	35.00
3.	Rs. 50,001 to Rs. 75000/-	20	20.00
4.	Rs. 75,001 and above	00	00.00

Participation of rural women in agricultural and allied activities :

The data with regard to participation of rural women in agricultural and allied activities are presented in the following tables.

Participation of rural women in agricultural activities:

The data pertaining to the participation of rural women in agricultural activities are depicted in the Table 2. From the table it is observed that most of the rural women were participated in pre-sowing, post-sowing and post-harvesting activities Nikhade and Nimje (1988) and Khalida (2009).

In case of pre-sowing activities, three fourth of the rural women were always participated cleaning of field activity (75.00%). Whereas cent per cent of the rural women were never performed the ploughing activity

followed by more than half of the rural women never performed seed treatment (58.00%) and raising of nursery for seedling activities. Half of the rural women were occasionally participated in the field leveling activity.

Regarding post-sowing activities, cent per cent rural women were always participated in weeding activity. This was followed by harvest/cutting/picking, sowing and thinning activities were always performed by the 85.00 per cent, 50 per cent and 45 per cent of the rural women, respectively. Whereas more than half of the rural women were occasionally participated in irrigation (60.00%), fertilizer application (56.00 %), gap filling (55.00%) and manure application (50.00%).

Application of plant protection (64.00%) and transplanting (52.00%) activities were never performed by the rural women. With respect to post-harvest activities, three fourth of the rural women always

Table 2 : Participation of rural women in agricultural activities

(n=100)

Sr. No.	Agricultural activities	Participation of women		
		Always	Occasionally	Never
Pre-sowing activities				
1.	Ploughing of field	00 (00.00)	00 (00.00)	100 (100.00)
2.	Cleaning of field	75 (75.00)	25 (25.00)	00 (00.00)
3.	Leveling of field	20 (20.00)	50 (50.00)	30 (30.00)
4.	Raising nursery for seedling (Onion, Brinjal, Okra, Chilly, Tomato etc.)	16 (16.00)	32 (32.00)	52 (52.00)
5.	Seed treatment	22 (22.00)	20 (20.00)	58 (58.00)
Post-sowing activities				
6.	Sowing	50 (50.00)	22 (22.00)	28 (28.00)
7.	Transplanting	20 (20.00)	28 (28.00)	52 (52.00)
8.	Manure application	35 (35.00)	50 (50.00)	15 (15.00)
9.	Fertilizer application	30 (30.00)	56 (56.00)	14 (14.00)
10.	Weeding	100 (100.00)	00 (00.00)	00 (00.00)
11.	Thinning	45 (45.00)	30 (30.00)	25 (25.00)
12.	Gap filling	35 (35.00)	55 (55.00)	10 (10.00)
13.	Irrigation	25 (25.00)	60 (60.00)	15 (15.00)
14.	Plant protection measures (Insecticide, pesticide used)	10 (10.00)	26 (26.00)	64 (64.00)
15.	Harvesting/Cutting/ Picking	85 (85.00)	15 (15.00)	00 (00.00)
Post- harvest activities				
16.	Shifting produce to threshing floor	25 (25.00)	65 (65.00)	10 (10.00)
17.	Threshing	00 (00.00)	35 (35.00)	65 (65.00)
18.	Winnowing	44 (44.00)	30 (30.00)	26 (26.00)
19.	Drying of grains	75 (75.00)	25 (25.00)	00 (00.00)
20.	Cleaning of grains	75 (75.00)	25 (25.00)	00 (00.00)
21.	Grading	00 (00.00)	25 (25.00)	75 (75.00)
22.	Storage	29 (29.00)	41 (41.00)	30 (30.00)
23.	Marketing	20 (20.00)	45 (45.00)	35 (35.00)
24.	Processing	00 (00.00)	25 (25.00)	75 (75.00)

Figures in the parentheses indicates percentages

performed drying and cleaning of grains, followed by 44.00 per cent winnowing activities. Nearly two third of the rural women occasionally performed the shifting or transporting the produce to threshing floor, followed by marketing (45.00%) and storage (41.00%). Whereas, three fourth of the rural women never participated in grading and processing followed by threshing (65.00%) activities. Manju (2002), Goyal *et al.* (2003) and Waris (2008) reported in findings that high participation of women in weeding, harvesting, threshing and post-harvest operations.

Therefore, from the above results it is cleared that the majority of the rural women were always and occasionally involved in the post-sowing and post-harvest activities rather than pre-sowing activities.

From Table 3, it is revealed that 45.00 per cent and 43.00 per cent of the rural women were found in the medium and high level of participation in the agricultural activities, respectively. Only 12.00 per cent of the rural women were found in low participation level category.

It could be inferred that the majority of the rural women were found to be medium to high level of

participated in agricultural activities.

Participation of rural women in dairy activities :

The data pertaining to the participation of rural women in dairy activities are depicted in the Table 4. During the data collection only 45 respondents were having the milch animals and their always participation was found in collection of cow dung (77.78%) and cleaning of cattle and cattle sheds (55.56%) followed by occasionally they participated in the dairy activities like harvesting and chaffing of fodder (55.56%) and making cow dung cakes (55.56%).

Cent per cent respondents were not participated in maintenance of chaff cutter due to non-availability of chaff cutter. Other dairy activities in which the respondents were never participated such as feeding of animals and milking (66.67%) and selling of milk (55.56%).

From the Table 5, it is reported that the more than three fourth (77.78%) of the rural women were found in the low level of participation in the dairy activities. Only 22.22 per cent of the rural women were found in medium

Table 3 : Distribution of rural women according to participation in agricultural activities (n=100)

Sr. No.	Category	Respondents	
		Frequency	Percentage
1.	Low (upto 33.33)	12	12.00
2.	Medium (33.34 to 66.66)	45	45.00
3.	High (66.67 and above)	43	43.00
	Total	100	100.00

Table 4 : Participation of rural women in dairy activities (n=45)

Sr. No.	Dairy activities	Participation of women		
		Always	Occasionally	Never
1.	Cleaning of cattle and cattle sheds	25 (55.56)	10 (22.22)	10 (22.22)
2.	Harvesting and chaffing of fodder	10 (22.22)	25 (55.56)	10 (22.22)
3.	Maintenance of chaff cutter	00 (00.00)	00 (00.00)	45 (100.00)
4.	Feeding of animals and milking	00 (00.00)	15 (33.33)	30 (66.67)
5.	Selling of milk	00 (00.00)	20 (44.44)	25 (55.56)
6.	Collection of cow dung	35 (77.78)	10 (22.22)	00 (00.00)
7.	Making cow dung cakes	20 (44.44)	25 (55.56)	00 (00.00)

Figures in the parentheses indicates percentages

Table 5 : Distribution of rural women according to participation in dairy activities (n=45)

Sr. No.	Category	Respondents	
		Frequency	Percentage
1.	Low (upto 33.33)	35	77.78
2.	Medium (33.34 to 66.66)	10	22.22
3.	High (66.67 and above)	00	00.00
	Total	45	100.00

participation level category. However, none of the rural woman was highly participated in dairy activities.

The overall participation level of the rural women in dairy activities were found to be medium to low. Because it might be due to their no involvement in the dairy business or any other subsidiary occupation. Therefore, it is suggested that the different training programmes on dairy management practices and visit to modern dairy farms for the rural women should organized by the various extension agencies to increase the level of participation in dairy activities.

Participation of rural women in household activities:

The data pertaining to the participation of rural women in household activities are presented in the Table 6.

Table 6 indicated that the cent per cent of the rural women always participated in the household activities like washing of clothes, rearing of children and cooking related activities.

Similarly three fourth of the rural women were always engaged in cleaning and decoration of their homes, followed by nearly two third of them were involved in fetching of water and 45.00 per cent were always involved in buying of ingredients, fruits, vegetables etc. Whereas half of the rural women were occasionally participated in grinding of grains and spices.

The data in the Table 7 reported that the more than two third of the rural women were observed in high participation level in the household activities followed by 33.00 per cent of them were found in medium level of participation in the household activities.

Problems experienced by the rural women in participation of agricultural and allied activities :

The information regarding problems experienced by the rural women in participation in the agricultural, dairy and household activities are given in Table 8.

It is seen from the Table 8 that the majority of the rural women were faced the problems during the

Table 6 : Participation of rural women in household activities

(n=100)

Sr. No.	Household activities	Participation of women		
		Always	Occasionally	Never
1.	Fetching of water	65 (65.00)	35 (35.00)	00 (00.00)
2.	Washing of clothes	100 (100.00)	00 (00.00)	00 (00.00)
3.	Rearing of children	100 (100.00)	00 (00.00)	00 (00.00)
4.	Cleaning and decoration of home	75 (75.00)	25 (25.00)	00 (00.00)
5.	Buying of cooking ingredients, fruits, vegetables etc.	45 (45.00)	35 (35.00)	20 (20.00)
6.	Grinding of grains and spices	25 (25.00)	50 (50.00)	25 (25.00)
7.	Cooking related activities	100 (100.00)	00 (00.00)	00 (00.00)

Figures in the parentheses indicates percentages

Table 7 : Distribution of rural women according to participation in household activities

(n=100)

Sr. No.	Category	Respondents	
		Frequency	Percentage
1.	Low (upto 33.33)	00	00.00
2.	Medium (33.34 to 66.66)	33	33.00
3.	High (66.67 and above)	67	67.00
	Total	100	100.00

Table 8 : Problems experienced by the rural women in participation of agricultural and allied activities

(n=100)

Sr. No.	Problems	Respondents	
		Frequency	Percentage
1.	Less wages rate received	87	87.00
2.	Health problems	75	75.00
3.	Poor economic condition.	68	68.00
4.	Ignorance towards their child education	60	60.00
5.	Lack of knowledge about improved technological practices	45	45.00
6.	Illiteracy is main drawback	42	42.00

participation in the agricultural and allied activities like less wages rate received (87.00%), health problems such as back pain, joint pain, skin disease, etc. (75.00%), poor economic condition (68.00%) and ignorance towards their child education (60.00%).

They were also expressed that their inability to start the subsidiary business like dairy, poultry etc. due to low annual income, illiteracy and lack of knowledge about improved technologies. Similar work related to the present investigation was also conducted by Baba *et al.* (2009) and Devi *et al.* (2012).

Conclusion :

It could be concluded that the majority of the rural women were middle aged, illiterate, married, landless, medium family size and joint family type and having annual income upto Rs. 25000/-. Majority of the respondents always participated in cleaning of the field, sowing, weeding, thinning, harvesting/cutting/picking, winnowing, drying of grains and cleaning of grains as related to agricultural activities. Nearly half of the rural women were medium level of participation in the agricultural activities.

Further, from the study it is observed that more than half of the rural women were not involved in the dairy or any other subsidiary business. More than three fourth of the rural women were found in low level of participation in dairy activities. Regarding household activities all the selected activities like washing clothes, rearing of children, cooking related activities, cleaning and decoration of home, fetching of water and buying of cooking ingredients, fruits, vegetables etc. were performed by the majority of rural women. Higher than two third of the rural women had high participation level in the household activities. Majority of the rural women expressed their problems in participation of agricultural and allied activities like less wages rate received, health problems, poor economic condition and ignorance towards their child education.

Authors' affiliations :

R.T. KATOLE, Department of Extension, College of Horticulture, Dr. Panjabrao Deshmukh Krishi Vidhyapeeth, AKOLA (M.S.) INDIA

G.B. MORE, College of Horticulture, Dr. Panjabrao Deshmukh Krishi Vidhyapeeth, AKOLA (M.S.) INDIA

REFERENCES

Aggarwal, Hemla, Sharma, Subita and Sharma, Rajni (2013). A

study of agricultural activities performed by rural women and problems faced by them in Jammu District of J&K State. *Internat. J. Scient. & Res. Publications*, **3**(1) : 1-3.

Baba, Z.A., Hakeem, A.H., Ganai, N.A., Malik, K.M. and Sheikh, T.A. (2009). Role of rural women in agriculture and income generating activities. *Asian J. Home Sci.*, **4** (1) : 1-3.

Devi, Sarita, Baranwal, Amrita and Singhal, Asha (2012). Entrepreneurial needs as perceived by rural women in agriculture and non- agriculture sector. *Agric. Update*, **7**(3&4): 271-274.

Ferber, M.A. and Spaeth, J.L. (1984). Work characteristics and male female earning gap, *American Economic Review*, May, **74** (3): 262-263.

Ghosh, Mun Mun and Ghosh, Arindam (2014). Analysis of women participation in Indian agriculture. *IOSR J. Humanities & Soc. Sci.*, **19**(5) : 1-6.

Goyal, G., Randhawa, V., Pannu, K. and Kaur, R. (2003). Empowerment of women in agriculture. *Rajasthan J. Extn. Edu.*, **11** : 5-6.

Khalida, Jamali (2009). The role of rural women in agriculture and it's allied fields: A case study of Pakistan. *European J. Soc. Sci.*, **7** (3): 71-77.

Manju, Suman (2002). Involvement of women in agricultural activities. *Maharashtra J. Extn. Edu.*, **21**(1) : 105-106.

Monda, Manas (2013). The role of rural women in agriculture sector of Sagar Island West Bengal, India. *Internat. J. Engg. & Sci.*, **2**(2) : 81- 86.

Nikhade, D.M. and Nimje, N.R. (1988). Involvement of rural women in agriculture. Paper presented in Seminar on "Role of farm women in agriculture", MSE, 7-8 Oct 1988. Akola.

Singal, S. (1989). Women's work pattern and economic contribution to family resource development in rural households of Haryana. Doctoral Thesis. Baroda: M.S. University, Baroda, GUJARAT (INDIA).

Toppo, A., Trivedi, M.S. and Patel, Ashok (2004). Participation of farm women in dairy occupation. *Gujarat J. Extn. Edu.*, **15**(2) : 15-21.

Varma, S.K. (1992). *Women in agriculture: A socio-economic analysis*. New Delhi: Concept Publishing Company, 17-118pp.

Waris, Amtul (2008). Farm women's participation in agricultural activities in semi-arid region of Andhra Pradesh. *Green Farm*, **2**(2) : 137-138.

10th
Year
★★★★★ of Excellence ★★★★★