

Extent of Participation of Rural Women in Horticultural Activities

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Abstract—The study was undertaken to know the extent of participation of rural women in horticultural activities and to carry out the study, Kamrup (Rural) district and Sivasagar district of Assam were selected purposively. Total 300 rural women from 12 villages of the selected districts, who were mostly engaged in fruits and vegetable cultivation were selected randomly as respondents for the study. Data collection was done by using structured interview schedules. The study revealed that majority of rural women (79.02%) participated independently in transplanting and planting followed by 66.00 per cent in weeding, 43.65 per cent in application of manure and fertilizer, 39.33 per cent in storing of harvested crops, 38.33 per cent in mulching and 37.66 per cent in preparation of organic manure. Seventy six per cent of rural women participated jointly in seed cleaning followed by 73.00 per cent in seed storage, 72.00 per cent in seed collection from harvested crops, 68.33 per cent in cleaning of harvested crops, 64.00 per cent in grading of crops and 62.33 per cent in packaging. A large percentage of rural women had no participation in fencing (74.31%). The study further revealed that regarding the overall participation of rural women in horticultural activities, 37.28 per cent of rural women had high level of participation followed by 35.49 per cent had medium level of participation and 27.23 per cent had low level of participation. The data also revealed that marital status and family size were significantly and positively related with the participation of rural women in different horticultural activities.

Keywords: Extent of participation; horticultural activities; fruits & vegetable cultivation; transplanting and planting ; seed cleaning ; fencing ; marital status ; family size.

1. INTRODUCTION

Agriculture, the single largest production endeavor in India, contributing 25 per cent of GDP, is increasingly becoming a female activity (Dash, 2008). Agriculture sector employs 4/5th of all economically active women in the country. About 48 per cent of India's self-employed farmers are women (Das, 2015). Women today are central to the selection, breeding, cultivation, preparation & harvest of food crops. Apart from their pivotal role in cultivation of staple crops, they are primarily responsible for the production of secondary crops such as pulses, fruits and vegetables which are often the only source of nutrition available to their families. Unquestionably women play a significant and crucial role throughout the third world. In addition to farm work, in which they are actively

involved with men, the burden of almost all the household chores is on them. Assam is one of the agriculture based states of India where women are active partners in both farming and non-farming activities and undertake management along with men. There are certain unit operations in agriculture of Assam, which are women dominated like production, post harvest management and agro-processing. Here, the women perform the maximum farm operations thereby contribute a lot towards the upliftment of the economic and social status of their families and finally, accelerating the pace of rural development.

Horticulture is one of the sectors of agriculture where women perform majority of the operations both independently and jointly with men. Assam being one of the leading producers of horticultural crops in our country specifically production of fruits and vegetable crops, contributes a lot to the Gross Domestic Products. Like other sectors of agriculture, rural women perform majority of operations in production of fruits and vegetable crops also. But despite the global consensus as to their vital role in production of fruits and vegetable crops, their important contributions to this aspect of horticulture are not adequately reflected in the available statistics which are perhaps obscure more than they reveal. Keeping in view a study on the extent of participation of rural women in horticultural activities was undertaken with the objectives;

- (i) To assess the extent of participation of rural women in horticultural activities and
- (ii) To find out the factors affecting the participation of rural women in horticultural activities.

2. METHODOLOGY

The present study was carried out in purposively selected Kamrup (Rural) district and Sivasagar district of Assam. Total 300 rural women from 12 villages of the selected districts, who were mostly engaged in fruits and vegetable cultivation, were selected randomly as respondents for the study. The dependent variable was participation of rural women in selected horticultural activities such as fencing, land preparation, laying out of plots, buying of seeds, seed

treatment, sowing of seeds and nursery raising, transplanting and planting, inter-culture operations, preparation of organic manure, application of manure and fertilizer, plant protection measures, harvesting, cleaning of harvested crops, grading of crops for marketing, storing of graded crops, packaging, marketing, seed collection from harvested crops, seed cleaning and seed storage. The independent variables were relating to socio-personal, socio-economic, and communicational traits of rural women such as age, marital status, caste, educational qualification, family size, size of land holding, occupation of head of the family, organizational membership, contact with extension personnel and mass media exposure. The data were collected by personal interview technique with the help of structured interview schedules. The data were analyzed using statistical methods such as mean, standard deviation and correlation analysis.

3. RESULTS AND DISCUSSION

Data in Table 1 reveals that majority of rural women (79.02%) participated independently in transplanting and planting followed by 66.00 per cent in weeding, 43.65 per cent in application of manure and fertilizer, 39.33 per cent in storing of harvested crops, 38.33 per cent in mulching and 37.66 per cent in preparation of organic manure. Further, the table indicates that 76.00 per cent of rural women participated jointly in seed cleaning followed by 73.00 per cent in seed storage, 72.00 per cent in seed collection from harvested crops, 68.33 per cent in cleaning of harvested crops, 64.00 per cent in grading of crops and 62.33 per cent in packaging. About 74.31 percent of rural women had no participation in fencing.

These findings are in conformity with the findings of Deka and Saikia (2002) and Lal and Khurana (2011). These studies show that women were mostly involved in manually performed activities like weeding, transplanting and post harvest activities which needed more labour and care while performing.

Table 1: Extent of Participation of Rural Women in Horticultural Activities

Activities	Extent of Participation					
	Independent participation		Joint participation		No participation	
	f	%	f	%	f	%
1. Fencing	6	2.02	71	23.67	223	74.31
2. Land preparation	22	7.34	131	43.66	147	49.00
3. Laying out of plots	19	6.34	143	47.67	138	46.00
4. Buying of seeds	32	10.66	105	35.00	163	54.33
5. Seed treatment	45	15.00	142	47.33	113	37.66
6. Sowing of seed and nursery raising	38	12.64	150	50.00	112	37.34
7. Transplanting and planting	237	79.02	63	21.00	--	--

N=300

8. Inter-culture operations						
(i) Irrigation	73	24.33	159	53.00	68	22.67
(ii) Weeding	198	66.00	102	34.00	--	--
(iii) Earthing up	107	35.67	135	45.00	58	19.33
(iv) Mulching	115	38.33	124	41.33	61	20.33
(v) Drainage	76	25.34	116	38.67	108	36.00
(vi) Pruning	111	37.00	136	45.32	53	17.67
(vii) Stacking	92	30.65	129	43.00	79	26.36
9. Preparation of organic manure	113	37.66	175	58.00	12	4.00
10. Application of manure and fertilizer	131	43.65	154	51.33	15	5.02
11. Plant protection measures	102	34.00	137	45.66	61	20.33
12. Harvesting	104	34.67	172	57.33	24	8.00
13. Cleaning of harvested crops	95	31.66	205	68.33	--	--
14. Grading of crops for marketing	108	36.00	192	64.00	--	--
15. Storing of graded crops	118	39.33	182	60.66	--	--
16. Packaging	93	31.00	184	61.33	23	7.66
17. Marketing	68	22.67	39	13.00	193	64.33
18. Seed collection From harvested crops	66	22.00	216	72.00	18	6.00
19. Seed cleaning	61	20.33	228	76.00	11	3.67
20. Seed storage	81	27.00	219	73.00	--	--

Overall participation of rural women in different horticultural activities

The overall participation of rural women in different horticultural activities is presented in Fig.1. The Figure indicates that 37.28 per cent of rural women had high level of participation followed by 35.49 per cent had medium level of participation and 27.23 per cent had low level of participation in horticultural activities. These findings are in line with the findings of Ghosh and Ghosh (2014) and Tripathi *et al.* (2015) which reported that majority of labour intensive and un-mechanized works were performed by women.

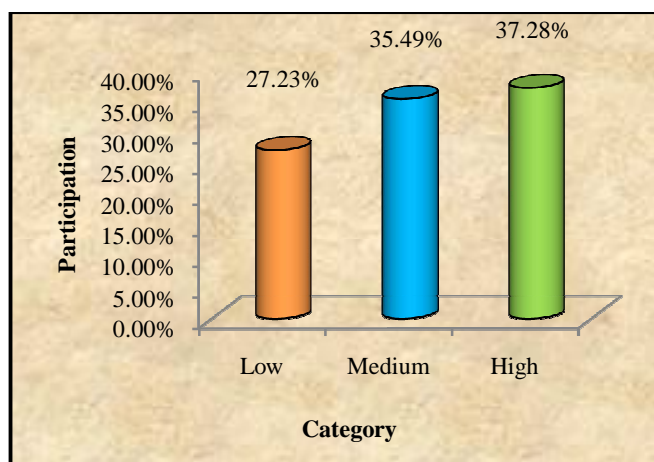


Fig. 1: Overall participation of rural women in different horticultural and household activities

Relationship between participation of rural women in different horticultural activities and selected independent variables

Table 2. reveals that marital status and family size were significantly and positively related with the participation of rural women in different horticultural activities at 0.01 level. The table indicates that age, caste, educational qualification, size of land holding, occupation of head of the family, organizational membership, contact with extension personnel and mass media exposure had no significant relationship with participation of rural women in different horticultural activities.

Table 2: Relationship between participation of rural women in different horticultural activities and selected independent variables N=300

Variables	'r' value	't' value
Age	-0.090	0.118
Marital status	0.266**	0.255
Caste	-0.019	0.146
Educational qualification	0.024	0.079
Family size	0.445**	0.001
Size of land holding	-0.001	0.091
Occupation of head of the family	0.068	0.244
Organizational membership	0.018	0.059
Contact with extension personnel	-0.002	0.069
Mass media exposure	0.079	0.172

**Correlation is highly significant at the 0.01 level (2-tailed)

4. CONCLUSION

The findings of the study indicate that transplanting, planting and weeding are the horticultural activities where rural women participated independently. Rural women participated jointly more in seed cleaning activity and had no participation in fencing. The result of the correlation co-efficient analysis suggested that the traits marital status and family size were significantly and positively related with participation of rural women in different horticultural activities and there was no significant relationship between participation of rural women in different horticultural activities with traits such as age, caste, educational qualification, size of land holding, occupation of head of the family, organizational membership, contact with extension personnel and mass media exposure.

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