

Analysis of Role Performed by Women in Agriculture

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Abstract: Women play a significant and crucial role in agricultural development and allied fields. It is most unfortunate that the role of women in agriculture has not highlighted. By and large they have remained invisible workers. Therefore, efforts were made to analyze the work performed by women in agriculture. The study was undertaken in Bundi district of Rajasthan. A total of 200 farm women selected as respondents through proportionate random sampling. The selected respondents were interviewed personally using pre-tested well structured interview schedule. The data were analysed using appropriate statistical tool. The findings showed that cutting, picking, cleaning of grains, drying of grains, storage, processing, weeding, winnowing are the major farm operations mainly performed by farm women. Participation of farm women in agriculture was significantly affected by socio-economic variables like –age, family income, land holding.

Key words: Missing

INTRODUCTION

It is not an exaggeration, that women in India are the backbone of food security. Women are playing a significant and crucial role in agricultural development and allied fields including crop production, livestock production, horticulture, post harvest operation, agro/social forestry, fisheries etc. There is a greater involvement of women under various agricultural operations along with house arrangement out of the total 329 million hectares geographical area of the country, net shown area is 142 million hectare. It is estimated that women are responsible for 70 percent of actual farm work and constitute up to 60 percent of the farming population [1]. But it is most unfortunate that the role of women in agriculture has not highlighted. By and large they have remained invisible workers. Over the years women cultivators are typically and wrongly characterized as economically inactive and women cultivator play only a supportive role in agriculture as farmers' wives [2]. Herein this paper an attempt was made to analyze the participation of women in agriculture.

METHODOLOGY

The study was undertaken in Bundi district of Rajasthan, to analyse the participation of women in agriculture. The population of study consisted of farm women involved in agriculture and allied activities. A sample of 200 farm women was selected through proportionate random sampling. Selected respondents were interviewed personally using well structured pre tested interview schedule. Data thus collected were analyzed using appropriate statistical tool to infer results.

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RESULTS AND DISCUSSION

The socio-economic characteristics of related respondents were analyzed and presented in Table 1. The Table 1 depicts that majority (52.5 %) of the respondents belonged to middle age group followed by young age (30 %) and old age (17.5 %) group. It was also revealed that majority (60%) of respondents were belonged to nuclear family and followed by (40 %) were from joint family. Result on family income shows that majority (44.5 %) of respondents were belongs to income group Rs. 60000-90000 followed by (27.5 %) income group below Rs. 30000, (25%) income group Rs. 30000-60000 and (3%) income group above Rs. 90000 annually.

Result on cast categories indicate that maximum (45%) were from other backward class and (42.5%) were from schedule tribe category and rest of respondents (7.5%) were belonged to schedule class. While looking at their educational status, results revealed that majority (57%) respondents were illiterate, (35%) were literate and (5%) were from primary level (2.5 %) were from middle level and only (0.5 %) were graduate. Result on land holding depicts that majority (42.5%) were had medium scale land followed by small (37.5%) scale land and only (20%) had large scale land.

The participation of selected respondents in farm activities was analyzed and presented in Table 2. The Perusal of the Table 2 reveals that cutting, picking, cleaning of grains, drying of grains, storage and processing are the major farm operations wherein women participation was 100 percent. It was reported that the farm operations in which the participation of women was 100 percent were cleaning the produces, cutting, picking, storage and processing [3]. It was observed that winnowing, weeding, gap filling, grading, shifting produce to threshing floor and cleaning of field farm operations in which the participation of women was more than 75 percent. The tasks in which women participation was varied between 50-75 percent were thrashing, raising nursery for seedlings and thinning. The results also show that sowing, manure application and irrigation were performed on field by women 25 to 32.5 percent. Least involvement of farm women was found in ploughing of field (2%) and in fertilizer application was (1%). There was no participation of women reported in marketing, plant protection measure.

Table 1: Socio personal characteristics of respondents (n=200)

Variable	Categories	Number	Percent
Age	Young (<30)	60	30.0
	Middle (31-40)	105	52.5
	Old (>40)	35	17.5
Type of family	Joint family	80	40.0
	Nuclear family	120	60.0
Annual family income (Rs.)	Below 30,000	55	27.5
	30000-60000	50	25.0
	60000-90000	89	44.5
	90000& above	6	3.0
Caste	General	10	5.0
	Other backward class	85	42.5
	Schedule caste	15	7.5
	Schedule tribes	90	45.0
Education	Illiterate	114	57.0
	literate	70	35.0
	Primary	10	5.0
	Middle	5	2.5
	Graduation	1	0.5
Land holding	Small	75	37.5
	Medium	85	42.5
	Large	40	20.0

Table 2: Participation of farm women in farm activities (n=200)

S.No.	Farm activities	Participation of farm women in farm activities	
		Frequency	per cent
1.	Ploughing of field	4	2.0
2.	Cleaning of field	170	85.0
3.	Leveling of field	10	5.0
4.	Raising nursery for seedling (okra, chilly, tomato, pea)	110	55.0
5.	Sowing	51	25.5
6.	Transplanting	41	20.5
7.	Mannure application	65	32.5
8.	Fertilizer application	2	1.0
9.	Weeding	151	75.5
10.	Thinning	121	60.5
11.	Gap filling	161	80.5
12.	Irrigation	52	26.0
13.	Plant protection measures (Insecticide, pesticide used)	0	0.0
14.	Cutting	200	100.0
15.	Picking	200	100.0
16.	Shifting production to threshing floor	179	89.5
17.	Threshing	100	50.0
18.	Winnowing	190	95.0
19.	Drying of grains	200	100
20.	Cleaning of grains	200	100
21.	Grading	180	90
22.	Storage	200	100
23.	Marketing	0	0
24.	Processing	200	100

Table 3: Amount of work done by farm women in various farm activities

S.No.	Farm activities	Amount of work done (Mean weighted score)
1.	Ploughing of field	1.00
2.	Cleaning of field	4.90
3.	Leveling of field	1.00
4.	Raising nursery for seedling(lady finger, green chilly, tomato, cauliflower)	4.50
5.	Sowing	3.40
6.	Transplanting	5.00
7.	Mannure application	3.50
8.	Fertilizer application	1.00
9.	Weeding	4.21
10.	Thinning	3.00
11.	Gap filling	4.00
12.	Irrigation	2.00
13.	Plant protection measures	0.00
14.	Cutting	2.90
15.	Picking	4.00
16.	Shifting production to threshing floor	4.90
17.	Threshing	2.00
18.	Winnowing	4.50
19.	Drying of grains	5.00
20.	Cleaning of grains	5.00
21.	Grading	4.10
22.	Storage	4.59
23.	Marketing	0.00
24.	Processing	5.00

Table 3: Continued

Amount of work done Category	Score
Least	1
Less than half	2
More than half	3
Major	4
Complete	5

Table 4: Relationship of personal variables of women with their participation in agriculture activities (n=200)

S. No.	Personal variables	Coefficient of correlation "r"
1	Age	- 4.76*
2	Type of family	1.28 NS
3	Family income	2.13 *
4	Land holding	3.63 *
5	Education level	1.4 NS
6	Caste	1.08 NS

* Significant at 5 percent level of significance NS - Non significant

The amount of work done by farm women in various farm activities was found by using the following criteria score category and the MWS was found out for individual farm activities.

Perusal of Table 3 shows that the transplanting, drying of grains, cleaning of grains and processing were major farm activities which were completely done by farm women. Similar results were reported in earlier studies [3]. The farm operations including cleaning of field, raising nursery for seedling ,weeding, gap filling, picking, shifting production to threshing floor, winnowing, storage& grading in which major amount of work done by farm women. They do more than half work of sowing, thinning and manure application. The farm women do less than half work of irrigation, cutting and threshing operations. In case of ploughing of field, leveling of field and fertilizer application least amount of work was performed by women. Earlier studies reported that the role of women in ploughing of field, application of manure and fertilizer was found to be very less¹. Results of Table 3 depicts that work was not done in marketing, plant protection measure.

Efforts were made to find out the relationship if existed between the personal variables of women with their participations. Table 4 depicts that women age was negatively correlated with agriculture operations. Obviously the young aged farm women are more prone to change. Their physical strength enables them to perform more agriculture activities. The findings are supported by Choudhary and Singh [1]. Type of family, education level, caste were found non significant with women participation in agriculture. It is also shows by data that land holding and family income were also effects the participation farm women in agriculture activities significantly.

CONCLUSION

The present study concludes that the women play an significant and crucial role in agriculture and allied fields. Research showed that farm women's participation was maximum in Cutting, Picking, cleaning of grains, drying of grains, storage , processing operations and major part of cleaning of field, raising nursery for seedling ,weeding, shifting production to threshing floor, winnowing, & grading operations are also done by farm women . In case of leveling of field, fertilizer application they do least amount of work. Whereas there is no participation of farm women in ploughing of field, plant protection measures and marketing activities. The study also depicts that age, family income, land holding influence the women participation in agriculture and the women participation in agriculture. type of family, education level, cast were not effects the women participation in agriculture.

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