

RESEARCH ARTICLE :

Role of farm women in agricultural activities

■ ANURADHA RANJAN KUMARI* AND LAXMIKANT

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SUMMARY : 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 been highlighted. By and large they have remained as invisible workers. Therefore, efforts were made to highlight the role of farm women in agricultural activities. The study was undertaken in Deoria district of U.P. during 2013-14. The data were collected from 180 farm women by adopting the proportionate random sampling method. The results of the study revealed that under agriculture related tasks, the data reveals that drying, cleaning, storage of grains and processing of farm produce were the major farm operations where the women's role was cent per cent. In terms of decision making, the majority of farm women did not take any decision single handedly. Farm women took single hand decision regarding live stock management (40.55%) followed by farm supplies and inputs (28.88%), area for different crops (18.88%), maintenance of implements (14.44%), labour management (12.22%), capital management (9.44%), and marketing of agricultural produce only 8.88 per cent. It could be concluded that the women of Deoria district of U.P. state were highly involved in all agricultural practices. So, it is needed to develop suitable, strategy training to women about modern technologies to make them more skilled for agricultural production.

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Agricultural activities,
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BACKGROUND AND OBJECTIVES

In India, women constitute near about 50 per cent of the population and 77 per cent of them in rural areas. Eighty per cent of rural women are engaged in agriculture related activities and as small traders in household industrial activities (Kapur, 1996). Women are playing a significant and crucial role in agricultural development and allied fields including crop 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 sown area is 142 million hectares. It is estimated that women are responsible for 70 per cent of actual farm work and constitute up to 60 per cent of the farming population. But it is most unfortunate that the role of women in

agriculture has not been highlighted. By and large they have remained invisible workers. Over the years women cultivators are typically and wrongly characterized as economically inactive and women cultivators play only a supportive role in agriculture as farmers wives (Samanta, 1994).

The rural women have very busy schedules of the day for her starts in the very early hours of the morning and work for 18 hours or more till night. The types of agriculture activities carried out are considerable according to the social status *viz.*, agriculture wage labourers work on their own farms and supervise the farm work done by labourers. Scientific achievements and modernization are yet to make an impact on them, keeping this point in view, the present study on the role of rural women in agricultural activities in Deoria district of U.P. was undertaken with the following objectives *viz.*, socio-economic status of rural women and their participation in agricultural activities and

Author for correspondence :

ANURADHA RANJAN KUMARI

Krishi Vigyan Kendra,
Indian Institute of
Vegetable Research,
Malhana, DEORIA (U.P.)
INDIA
Email: anuradha_rau@rediffmail.com

See end of the article for authors' affiliations

involvement in decision making in farm, livestock and home management.

RESOURCES AND METHODS

The present study was undertaken in Deoria district of Uttar Pradesh state for data collection. Out of five tehsil two tehsil *i.e.* Salempur and Bhatparani were selected for this study. Six villages were selected from each tehsil for this study. Fifteen farm women from each village were selected randomly. 90 farm women from each group by adopting the proportionate random sampling method (RSM), thus, total 180 farm women. The desired information especially the work furnished by women in agricultural activities was collected by administrating developed interview schedule and also by divert observation in the farmers field. The collected data were subjected to basic statistical analysis as per Snedecor and Cochran (1989). The amount of work done by farm women in various farm activities was found by using the following criteria score category and the mean weighted score was found out for individual farm activities (Table A).

Category	Score
Least	1
Less than half	2
More than half	3
Major	4
Complete	5

OBSERVATIONS AND ANALYSIS

The socio-economic characteristics of related respondents are presented in Table 1.

Table 1 depicts that majority (53.33%) of the respondents belonged to middle age group followed by young age (30.00%) and old age (16.67%) group. It is also revealed that majority (64.44%) of respondents belonged to nuclear family and followed by 36.66 per cent enjoyed with joint family. Results on cast categories indicate that maximum (63.88%) of respondents were from other backward caste followed by (27.22%) were from schedule caste and only 6.66 per cent belonged to general caste. While looking at their educational status, results revealed that majority (54.44%) respondents were illiterate followed by 24.44 per cent were educated up to fifth class and only 16.11 per cent were having middle and above level of education in study area. Agricultural and animal husbandry were the main occupation of 64.44 per cent respondents followed by 21.66 per cent, 8.88 per cent and 5.00 per cent agricultural, animal husbandry and service, respectively. More or less similar results were also reported by Pathodiya (2001). The distribution of

respondents based on their annual income. Majority (63.88%) of respondents were from middle income group (Rs. 10,000 – 30,000) followed by 27.22 per cent were from high income group and only 8.88 per cent were low income group. These results are in accordance with Ajith Kumar and Shree Kumar (1996). They have reported that the average annual income of 48 per cent of farmers in Thrissur district was above Rs. 5000. Data revealed that most of the respondents (47.77%) had land holding size less than 1 hectare, among these 36.66 per cent were having land holding size 1-2 hectare and 15.55 per cent of respondents were landless. In this situation income from livestock production play a major role for their subsistence in such type of rural area.

Role of farm women in agricultural activities :

The survey results presented in Table 2 clearly show that the role of rural women in agricultural activities predominantly.

The data in Table 2 reveal that drying, cleaning, storage of grains and processing of produce were the major farm operations where in women role was cent per cent. Singh *et al.* (2004) also reported that the farm operation in which the participation of women was hundred per cent were cleaning the produces, cutting, picking, storage and processing. The role was observed in harvesting (97.77%), winnowing (96.11%), transplanting (88.33%), seed sowing (84.44%), gap filling (82.22%), weeding (79.44%), animal care (78.33%) and seed grading (76.66%). The other tasks in which women participation observed were thinning (69.44%) and threshing (54.44%).

The result also shows that the application of manure and fertilizer and land preparation were performed on field by women were 42.77 per cent and 31.11 per cent, respectively. Least involvement of farm women was found in seed treatment (16.11%) and plant protection measures (8.88%). Similar results were also reported by Lavania *et al.* (2006); Singh and Sharma (2003) Chaudhary and Singh (2003) and Chayal and Dhaka (2010).

The data in Table 3 show 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 by Singh *et al.* (2004), the farm operations including drying of grains, processing of produce, cleaning of grains, harvesting. Storage of grains and threshing in which major amount of work done by farm women. They do more than half work of winnowing, animal care, weeding, seed grading, gap filling, transplanting and seed sowing.

The farm women do less than half work of thinning, application of manure and fertilizer. In case of seed treatment, land preparation and plant protection measure least amount of work was performed by women.

Role of women in decision making :

In the terms of decision making majority of farm women did not take any decision single handily shown in Table 4.

Farm women took single hand decision regarding live

stock management (40.55%) followed by farm supplies and inputs (28.88%), area for different crops (18.88%), maintenance of implements (14.44%), labour management (12.22%), capital management (9.44%) and marketing of

Table 1 : Socio economic characteristics of farm women

Sr. No.	Variable	Categories	Frequency	Percentage
1.	Age	Young (< 25 years)	54	30.00
		Middle (26-50years)	96	53.33
		Old (>50 years)	30	16.67
2.	Type of family	Nuclear	114	64.44
		Joint	66	36.66
3.	Caste	General	12	6.66
		OBC	115	63.88
		Schedule caste	49	27.22
		Schedule tribes	4	2.22
4.	Education	Illiterate	98	54.44
		Primary	53	29.44
		Middle and above	29	16.11
5.	Main occupation	Agriculture	39	21.66
		AH	16	8.88
		Agriculture +AH	116	64.44
		Service	9	5.00
6.	Annual income	Low (below 10,000)	16	8.88
		Medium.(Rs. 10,000- 30,000)	115	63.88
		High (above Rs. 30,000)	49	27.22
7.	Land holding	Landless	28	15.55
		Marginal (<1hecture)	86	47.77
		Small (<1-2hecture)	66	36.66

Table 2 : Role of farm women in agricultural activities

Sr. No.	Activity	Frequency	Percentage
1.	Land preparation	56	31.11
2.	Application of manure and fertilizer	77	42.27
3.	Seed grading	138	76.66
4.	Seed treatment	29	16.11
5.	Seed sowing	152	84.44
6.	Transplanting	159	88.33
7.	Weeding	143	79.44
8.	Thinning	125	69.44
9.	Gap filling	148	82.22
10.	Plan protection measures (insecticide, pesticide used)	16	8.88
11.	Harvesting	176	97.7
12.	Threshing	98	54.44
13.	Winnowing	173	96.11
14.	Drying of grains	180	100.00
15.	Cleaning of grains	180	100.00
16.	Storage of grains	180	100.00
17.	Processing of produce	180	100.00
18.	Animal care	141	78.33

agricultural produce only (8.88%).

Economic contribution of farm women in agriculture :

The word economic contribution is conceived as the annual income generated by the farm women themselves by participating in agricultural as well as working as hired labour in the field of agricultural.

Based on the total annual income of the individual, the respondents were categorized under five level of annual economic contribution, like annual economic contribution, of Rs. (2501-5000), Rs. (5001-10000), Rs. (10001-15000),

Rs. (15001-20000), Rs. 20001 and above. From Table 5 it can be observed that maximum 78.88 per cent of farm women contributed to the tune of Rs. 10001 to Rs. 15000 annually through participating in different agricultural activities followed by 15.33 per cent of respondents contributed annually to the tune of Rs. 15001 - Rs. 20000 and only 2.77 per cent of respondents contributed annually to the tune of Rs. 20001 and above through participation in different agricultural activities. Almost similar results were reported by Mendel and Sidhartha (2012). Similar work related to the present investigation was also carried out by Acharya and

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

Sr. No.	Farm activities	Work done (MWS)
1.	Land preparation	1.19
2.	Application of manure and fertilizer	2.18
3.	Seed grading	3.66
4.	Seed treatment	1.83
5.	Seed sowing	3.41
6.	Transplanting	3.47
7.	Weeding	3.69
8.	Thinning	2.36
9.	Gap filling	3.63
10.	Plant protection measures (insecticides, pesticide used)	1.01
11.	Harvesting	4.66
12.	Threshing	4.33
13.	Winnowing	3.94
14.	Drying of grains	5.00
15.	Cleaning of grains	5.00
16.	Storage of grains	4.66
17.	Processing of produce	5.00
18.	Animal care	3.72

Table 4 : Role of farm women in decision making

Sr. No.	Activity	Frequency	Percentage
1.	Area of different crop	34	18.88
2.	Capital management	17	9.44
3.	Farm supplies and inputs	52	28.88
4.	Maintains of implements	26	14.44
5.	Labour management	22	12.22
6.	Marketing of agriculture produce	16	8.88
7.	Livestock management	73	40.55

Table 5 : Economic contribution of farm women

Sr. No.	Income (Rs.)	Frequency	Percentage
1.	2501-5000	0	0.00
2.	5001-10000	0	0.00
3.	10000-15000	142	78.88
4.	15000-20000	33	15.33
5.	20001 and above	5	2.77

Bennett (1982); Joshi (2000); Kantor (2008); Kapadia (1993); Mehra and Rojas (2008); Sharma *et al.* (2007); Singh (2003); Singh and Sengupta (2009).

Conclusion :

The present study concluded that the women play a significant and crucial role in agricultural and allied fields. Research showed that role of farm women in many agricultural activities without any formal training but their skill can be enhanced by giving proper scientific guidance related to agricultural. This a need of hour that the policy maker, extensive workers, voluntary organization and other agencies should give more attention towards rural women for better development of agricultural in Deoria district of U.P. through proper education and by providing training and practical orientation and on the basis of learning by doing on different aspect of agricultural production and their management in better way cent per cent role of farm women in drying, cleaning, storage of grains and processing of produce are the major farm operations which were completely done by farm women. Farm women took single hand decision regarding live stock management (40.55%). It was also found that the total mean annual participation hour of respondents farm women was 1366 hours per year, maximum 78.88 per cent of farm women were found to have made economic contribution to the tune of Rs. 10001 – Rs. 15000.

Authors' affiliations :

LAXMIKANT, Krishi Vigyan Kendra (S.V.P.U.A. & T.), RAMPUR (U.P.) INDIA.

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