



ISSN (E): 2277-7695
ISSN (P): 2349-8242
NAAS Rating: 5.23
TPI 2022; SP-11(5): 1403-1406
© 2022 TPI
www.thepharmajournal.com
Received: 15-03-2022
Accepted: 19-04-2022

Kavyashree C
Research Scholar, University of
Agricultural Sciences, GKVK,
Bangalore, Karnataka, India

Basavaraj Beerannavar
Associate Professor, University
of Agricultural and Horticultural
Sciences, Navile, Shivamogga,
Karnataka, India

Dharmaraj B
Research scholar, University of
Agricultural Sciences, GKVK,
Bangalore, Karnataka, India

Sagar S Pujar
Research Scholar, University of
Agricultural Sciences, GKVK,
Bangalore, Karnataka, India

Vishwanath H
Research Scholar, University of
Agricultural Sciences, GKVK,
Bangalore, Karnataka, India

Corresponding Author
Kavyashree C
Research Scholar, University of
Agricultural Sciences, GKVK,
Bangalore, Karnataka, India

Extent of participation of farm men and women in paddy cultivation activities

Kavyashree C, Basavaraj Beerannavar, Dharmaraj B, Sagar S Pujar and Vishwanath H

Abstract

The slogan "RICE is life" is most appropriate for India as this crop plays a vital role in our national food security and livelihood for millions of rural households. In 2009, 94% of the female agricultural labour force in crop cultivation were in cereal production. Women are overworked, and are more arduous than that undertaken by men. Further, since women's work is largely based on human energy it is considered unskilled and hence less productive. This makes the woman's work invisible. The present study was conducted during 2017-18 in Shivamogga district of Karnataka state. The study reveals that less than half (46.67%) of the farm women had medium level of participation and one third (33.33%) had low level of participation in paddy cultivation activities. Activities such as value addition in paddy (83.33%), transplanting (20.00%), applying of chemical fertilizers (16.67%), hand weeding (15.00%) were performed by women alone. Activities namely winnowing (81.67% and 6.67%), hand weeding (10.00% and 66.67%), transplanting (8.33% and 66.67%) and milling (58.33% and 13.33%) were performed by farm men with family members or with labourers and farm women with family members or with laborers, respectively. Farming experience, Attitude towards farming are significant with extent of participation of women at one per cent level of significance. Age of the farm women is also significant with participation of farm women at five per cent level of significance.

Keywords: Farm women, farm men, extent of participation, paddy, and cultivation practices

Introduction

It is well known fact that the success of rural development process largely depends on the participation of rural people and farmers at large, irrespective of sex. The word farmers and for any rural development process society have notion that men are the major player, but problems of involving women's participation in the development process are now catching the attention of planners and policy maker because of increasing imbalances generated out of development process. Now days, rural women play a vital role in domestic and socio-economic life of the society and therefore, national development is not possible without developing this important and substantial section of our society. Women played an important role in agriculture in India. No difference was found in role expectation held by farmers and role of performance by farmwomen labourers (Bhople and Patki 1992) ^[1].

Women comprise half of the work force in agriculture especially in developing countries. In India according to 2001 census, female population is 48.27 per cent of total population, out of which 72.72 per cent come from rural areas. In rural India, the percentage of women who depend on agriculture for their livelihood is as high as 84%. Women make up about 33% of cultivators and about 47% percent of agricultural labourers (Rao, E. Krishna 2006) ^[4]. In Indian situation within agriculture labour force, the proportion of women was more as compared to men and their contribution in agriculture/farm activities was also greater (Gautam and Meenakshi, 1992) ^[3]. farm women were salient workers labouring hard from dawn to dusk in the interest of their farms and homes (Yadav *et al.* 2005) ^[9]. In addition to working as farmers and farm laborers women shoulder the responsibility of rearing children and looking after home. The participation of women in Indian agriculture has important place in rural economy. They contribute about three-fourth of the labour requirement for agricultural operations. 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 1995) ^[7]. Although, the legal and constitutional provisions for equal status, they have been traditionally put in a weak position in Indian society and have a subordinate role to play.

It is said that women along men are the main actors in feeding the people. Because in many, if not most, rural societies women are, in fact, farmers; often bear the major or sole responsibilities for crop production. They work as mothers, household labourers and as social production workers. Women's contribution to agriculture, whether it is in subsistence farming or commercial agriculture, when measured in number of tasks performed and time spent, is greater than men. Not only are women overworked, their work is more arduous than that undertaken by men. Further, since women's work is largely based on human energy it is considered unskilled and hence less productive. On this basis, women are invariably paid less wage despite their working harder and for longer hours. This makes the woman's work invisible.

The slogan "RICE is life" is most appropriate for India as this crop plays a vital role in our national food security and is a mean of livelihood for millions of rural households. Participation of women in agricultural activities in case of rice marketing of produce, their participation was very low (Das, 1996) [2]. The jobs traditionally done by farm-women in paddy based cropping system in order of importance are weeding harvesting, transplanting, nursery raising and fertilizer application and so on an average female labour has been utilized for 12.68 days per hectare in paddy based cropping system (Sudharani and Raju, 1991) [6]. Women contribute significantly more in rice-based agriculture than men. This is the finding of many rigorous studies on the different roles and responsibilities of men and women from different socioeconomic groups in rice-based agriculture. Women often have specific tasks such as transplanting, weeding or harvesting. Their participation in rice production varies by country, production systems, type of household (nuclear or extended), socio-economic status and availability of male family members.

Besides this, the main reason for the negligible involvement of women in any development decisions is their illiteracy. Many women also participate in agricultural work as unpaid subsistence labour. Despite their dominance of the labour force women in India still face extreme disadvantage in terms of pay, land rights, and representation in local farmer's organizations. Furthermore, their lack of empowerment often results in negative externalities such as lower educational attainment for their children and poor familial health. On the basis of fact and data based research, it can be stated that increasing number of rural women in India are not simply housewives but are in fact farmers.

Methodology

The study was conducted in three talukas of Shivamogga district namely Bhadravathi, Soraba, and Sagara. From each taluka, four villages were selected based on the highest area under paddy cultivation. Five farm men and five farm women were randomly selected from each village. From 12 villages of three talukas, 60 farm men, and 60 farm women were selected. Thus, a total of 120 respondents constituted sample for the study. The criteria for selection of respondents were the family having both husband and wife involved in agriculture and cultivating paddy crop since three years. The ex-post facto research design was used, and the data was collected through personal interview method using structured interview schedule. Frequency and percentage are used to interpret the results.

Results

1. Extent of participation of farm men and women in paddy cultivation activities

1.1 Overall participation of farm men and women in paddy cultivation activities

It can be observed from the Table 1 that more than half of farm men (53.33%) had medium level of overall participation, while 26.67 per cent had high level of overall participation in the paddy cultivation activities. The probable reason might be due to the fact that men involved in activities like cleaning irrigation channels (91.67%), seed selection and seed treatment (88.33%), mixing plant protection chemicals (86.67%), spraying plant protection chemicals (83.34%), irrigating main field (80.00%) and chemical weed management (70.00%).

The results reveal that less than half (46.67%) of the farm women had medium level of participation and one third (33.33%) had low level of participation in paddy cultivation activities (table 1). This could be due to less participation of women in certain activities like main land preparation, nursery preparation, spraying plant protection chemicals and weedicide, irrigation, harvesting using cutters and machine operated activities. On the contrary 20.00 per cent of the farm women had high level overall participation as these respondents jointly involve in activities like threshing, winnowing, bagging and transporting. The women respondents also involve in manual transplanting, hand weeding, harvesting using sickle, supply of water for spraying activities and assisting men for application of fertilizers.

Table 1: Overall Participation of Farm Men and Women in Paddy Cultivation Activities.

Category	Men (n ₁ =60)		Women (n ₂ =60)		Total (n=120)	
	No.	%	No.	%	No.	%
Low	12	20.00	20	33.33	32	26.67
Medium	32	53.33	28	46.67	60	50.00
High	16	26.67	12	20.00	28	23.33

1.2 Activity-wise participation of farm men and women in paddy cultivation

The table 2 shows the extent of participation of men alone in activities like cleaning of irrigation channels (91.67%), seed selection and treatment (88.33%), mixing plant protection chemicals (86.67%), spraying plant protection chemicals (83.34%), irrigating the main field (80.00%), spraying weedicide/pesticide (70.00%) and nursery preparation (56.67%). The above mentioned activities in paddy cultivation are laborious, tough and cumbersome hence being performed exclusively by farm men. These activities involved skills and were performed by men alone since ages. Some of the activities like ploughing, puddling, irrigating the main field and spraying of chemicals require muscle power and traditionally it was practiced by men and same continued even today. Hence performed is by farm men alone. More or less similar findings were observed by Rajula Shanthi (2010) [8] and Nishitha (2016) [5].

It was witnessed from the table 2 that the activities like value addition in paddy (83.33%), transplanting (20.00%), applying of chemical fertilizers (16.67%), hand weeding (15.00%), harvesting the crop using sickle (16.67%), post harvesting activities like drying (8.33%) and milling (8.33%) were performed by women alone due to non-availability of family men labour in some of the farm families as they were engaged

in other subsidiary occupation. In addition to this, these activities are laborious but do not demand much physical energy as required by the activities done by farm men. Women are more skilled in manual transplanting of paddy and hand weeding and these activities are women dominated activities.

It was evident from the table 6 that the paddy cultivation activities namely threshing (83.33% and 6.67%), winnowing (81.67% and 6.67%), transporting (83.33% and 0.00%), hand weeding (10.00% and 66.67%), bagging (71.67% and 3.33%), transplanting (8.33% and 66.67%) and milling (58.33% and

13.33%) were performed by farm men with family members or with labourers and farm women with family members or with laborers, respectively. The data presented with respect to possession of land holding revealed that 26.67 per cent of the respondents having large sized landholdings. It is difficult for them alone to carry these activities; hence they take the help of either family members or hired labours. The activities like transplanting, harvesting and post-harvest operations need to be carried out within a stipulated period and require more number of labours therefore these activities are carried out together with family members and labours.

Table 2: Activity-wise Participation in Paddy Cultivation by Farm Men and Women of the Farm Family.

n= 60

Sl.no.	Paddy cultivation activities	Farm Men alone		Farm Women alone		Men with family and labours		Women with family and labours	
		No.	%	No.	%	No.	%	No.	%
1.	Seed selection and treatment	53	88.33	3	5.00	3	5.00	1	1.67
2.	Nursery preparation	34	56.67	3	5.00	21	35.00	2	3.33
3.	Land preparation								
	a. Ploughing	21	35.00	0	0.00	39	65.00	0	0.00
	b. Puddling	18	30.00	2	3.33	40	66.67	0	0.00
4.	Transplanting	3	5.00	12	20.00	5	8.33	40	66.67
	Manuring								
	a. Applying FYM/green manure	34	56.67	2	3.33	20	33.33	4	6.67
	b. Applying chemical fertilizers/NPK	24	40.00	10	16.67	23	38.33	3	5.00
	Weed management								
	a. Hand weeding	5	8.33	9	15.00	6	10.00	40	66.67
	b. Spraying weedicide	42	70.00	3	5.00	13	21.67	2	3.33
	c. Rotovator	2	3.00	0	0.00	0	0.00	0	0.00
	Irrigation								
	a. Irrigating main field	48	80.00	2	3.33	9	15.00	1	1.67
	b. Cleaning channels	55	91.67	2	3.33	3	5.00	0	0.00
	Plant protection								
	a. Mixing plant protection chemicals	52	86.66	3	5.00	4	6.67	1	1.67
	b. Spraying plant protection chemicals	50	83.33	5	8.33	4	6.67	1	1.67
	Harvesting								
	a. Using sickle	3	5.00	10	16.67	4	6.67	17	28.33
	b. Using cutter	11	18.33	2	3.33	4	6.67	0	0.00
	c. Machine operated/combined harvester	0	0.00	0	0.00	9	15.00	0	0.00
	Post harvesting								
	a. Threshing	4	6.67	2	3.33	50	83.33	4	6.67
	b. Winnowing	5	8.33	2	3.33	49	81.67	4	6.67
	c. Drying	15	25.00	5	8.33	38	63.66	2	3.33
	d. Milling	12	20.00	5	8.33	35	58.33	8	13.33
	e. Bagging	15	25.00	0	0.00	43	71.67	2	3.33
	f. Transporting	10	16.67	0	0.00	50	83.33	0	0.00
11.	Value addition activities	0	0.00	50	83.33	2	3.33	8	13.34

2. Association of independent variables with the participation of farm men and women in paddy cultivation activities

The results of the table 3 reveal that Attitude towards farming, farming experience, Mass media participation and Extension participation are significant with participation of farm men at one per cent level of significance.

The table 3 also shows that Farming experience, Attitude towards farming are significant with extent of participation of women at one per cent level of significance. Age of the farm women is also significant with participation of farm women at five per cent level of significance.

2.1 Attitude towards farming and Extent of participation of farm men and women

It can be observed from the results that (Table 3) attitude towards farming showed positive and significant association

with the extent of participation of farm men and women. The key attribute of an attitude is its evaluative component. That is, attitude generally refers to individual's disposition to respond positively or negatively to some aspect/object. So, when a farmer possesses a favorable attitude towards paddy farming, they would have, naturally evaluated its positive and negative implications of practicing the same on their farm. Therefore, favorable attitude towards farming brings significant association with the participation, since the positive attitude of farm men and women is very essential to participate in paddy cultivation activities.

2.2 Farming experience and Extent of participation of farm men and women

The results of the table 3 reveals that farming experience showed positive and significant association with the extent of participation of farm men and women. Farming experience in

paddy cultivation motivates the respondents to involve more in paddy cultivation activities. Generally it is observed that the older generation is involved in more of paddy cultivation activities because of their experience. On the contrary the young aged less experienced respondents prefer to participate in activities of commercial crops in order to gain high profit.

2.3 Mass media participation and Extent of participation of farm men

It is seen from the results that the mass media participation has a significant association with the extent of participation in paddy cultivation. The higher levels of mass media use would facilitate the farmers to develop habits of gathering more information about paddy cultivation through radio, television, newspaper, farm magazines and other literatures. Mass media develop modern orientation among the farm men and make them more efficient in acquiring, retaining and evaluating the

effectiveness of farm innovations. Hence, mass media participation has motivated the farm men and to participate in paddy cultivation activities

2.4 Extension participation and Extent of participation of farm men

The results reveal that extension participation is significantly associated to the extent of participation of farm men in paddy cultivation activities. Participation in extension activities such as, group discussion, demonstrations, training programmes, field days, farmers field school, video conferencing, krishimelas, etc., would promote the acquisition and consequent adoption of farm technologies. The eagerness in solving their problems with extension workers and also the interest in extension activities to gather recent information will enhance their participation in the farming activities.

Table 3: Association of Independent Variables with the Participation of Farm Men and Women in Paddy Cultivation Activities.

n=120			
Sl. No.	Independent variables	Farm Men (n ₁ =60) 'r' value	Farm Women (n ₂ =60) 'r' value
1	Age	0.27 ^{NS}	0.30*
2	Education	0.34 ^{NS}	-0.05 ^{NS}
3	Family type	-0.01 ^{NS}	0.05 ^{NS}
4	Land holding	-0.06 ^{NS}	-0.06 ^{NS}
5	Annual family income	-0.28*	-0.03 ^{NS}
6	Farming experience	0.43**	0.38**
7	Possession of Agricultural implements	-0.24 ^{NS}	-0.26*
8	Attitude towards farming	0.86**	0.87**
9	Innovativeness	-0.14 ^{NS}	-0.15 ^{NS}
10	Achievement motivation	-0.19 ^{NS}	-0.10 ^{NS}
11	Economic motivation	0.00 ^{NS}	0.06 ^{NS}
12	Mass media participation	0.92**	-0.33
13	Extension agency contact	-0.19 ^{NS}	-0.12 ^{NS}
14	Extension participation	0.34**	-0.04 ^{NS}

NS= Non-significant

*= Significant at 5 per cent level

**= Significant at 1 per cent level

Conclusion

In an Agrarian nation like India, Rural farm women are the support system for Agriculture and drudgery works of paddy farming for farm men. Without women farmers and women labourers many of the works would get delayed and undone. Apparently, Women participation in some of the activities such as seed selection, manuring, irrigation and marketing of the produce is meagre. But Most of the works involved by women are drudgery-oriented activities such as transplanting (66.67%), hand weeding (66.67%) and harvesting (28.33%) can be noticed from the study. Women population need to be encouraged for minimum education and should motivate to participate in extension activities such as undergoing training, field schools, demonstrations etc., in rural development and agriculture related activities so that they gain confidence in involving in all the paddy farming activities independently without relying upon farm men.

Reference

- Bhople RS, Alka Patki. Correlates of role performance and training needs of farm women labour, Journal of Rural Development. 1992;11(1):49-58.
- Das L. Krishi main Gramin Mahilaon ki Bhagidari, Krishi Vistar Samiksha, 1996, 21-23.
- Gautam Neeta, Meenakshi. Women participation in

farming of Himachal Pradesh, Kuruksheta. 1992;11(6):17-19.

- Krishna Rao E. Role of Women in Agriculture: A Micro Level Study, Journal of Global Economy. 2006;2(2):107-118.
- Nishitha K. Decision making and participation of farm men and women in sugarcane cultivation: A study in Mandya district. M.Sc. (Agri.) Thesis, Univ. Agri. Sci., Bangalore, 2016.
- Sudharani P, Raju VT. Participation of women in Agricultural operations. Indian J Extn. Edn. 1991;27(1&2):54-59.
- Samanta RK. Improving Women Farmers, Access of Extension Services, in Women in Agriculture, Perspective, Issues and Experiences, (ed.) R.K. Samanta. M.D. Publications Pvt. Ltd., 1995.
- Rajula Shanthi T. Gender perspectives for sustaining sugarcane-based farming system. Indian Res. J Extn. Edn. 2010;10(1):112-116.
- Yadav JP, Sharma K, Saini H. Role performance of farmwomen in animal husbandry practices. Abstract 3rd National Extension Education Congress, April 27-29, 2005 organized by Society of Ext. Edu. Agra & NDRI Karnal.1-112, 2005.