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Participation of Farm Women in Rice Cultivation and Their Training Needs

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ABSTRACT

An investigation was carried out in Balasore district of Orissa during 2007-08 to assess the participation of farm women in rice farming and their training needs. It was conducted among 75 small and marginal types of farm women. It was found that from the seventeen activities involved in rice farming, maximum number of farm women (100%) participate in storage and preservation whereas the least number (0%) in land preparation. Though the participation of farmwomen in insect pest and disease management was found very poor, yet their perception for need of training on the subject secured the second highest rank i.e. behind the variety selection. Majority of the farm women (92%) avail information from the eo-farmers and neighbours. Need of training was found immaterial for most of the farmwomen, was detected as the major constraint in dissemination of knowledge through training.

India ranks second in the world in rice production. It is estimated that the nation will demand 140 Million tons of rice in 2025 over the existing production of 96.7 Million tons(2007-08). The increasing demand could be achieved only through introduction of latest scientific innovations and better management practices. All these are possible through increasing knowledge on rice farming, improving skill of utilizing the technologies and developing a positive attitude for adoption of them. Training has been a major extension tool for dissemination of the knowledge. But trainings are by and large gender biased. National Research Centre for Women in Agriculture (NRCWA) in its annual report (2001-02) reports that land preparation is the principal activity for men, while in other activities, women play a major role. But most of their works in farm and home are disguised as daily chores (Sidhu and Kaur, 2006). The study of Mishra and Tripathy (1991) reveals that only 3-4 per cent of farm women are exposed to technical personnel and hence their knowledge level is low in rice farming.

Balasore district of Orissa is famous for rice, betelvine and pisciculture. Its fertile alluvial soil and high water table contribute significantly for the higher productivity of various crops. Eighty eight per cent of the net cultivated area of the district is covered by rice only. Rice is cultivated in all the three seasons i.e. kharif rabi and summer in the district. Women play a major role in rice cultivation. Keeping this background in view, this study was undertaken to assess the involvement of farm women of the district in rice cultivation and their training needs.

METHODOLOGY

The present investigation was carried out in Balasore district during 2007-08 in five villages from different blocks, adopted by Krishi Vigyan Kendra (KVK), Balasore. More than 85 per cent of farm families of the villages come under small and marginal categories. Fifteen farm women from each adopted village, belonging to both the categories were selected randomly for the study. A total of 75 numbers of samples were taken for the study purpose. The participation of farm women in various activities of rice cultivation was collected with the help of a pre- structured interview schedule. The causes of non-availabil ity of training facilities were found and measured with the help of a scale with assigned scores of 2, 1 and 0 to agree, partially agree and disagree respectively.

The perceived training needs for rice growing farm women were collected and was measured with the help

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of a 3-point scale and a score of 2, 1 ,0 was assigned for most important, important and not important respectively. Prioritization of the training needs was done calculating the mean score.

RESULTS AND DISCUSSION

Balasore district is called the rice bowl of Orissa. The farming women community has a lot to share to this end. The study attempted to find out the level of participation in various activities of rice cultivation by the farm women (Table 1).

Table 1. Activities undertaken by farmwomen in rice cultivation (N=75)

SI. No.	Activities	Participants		Non-participants	
		Frequency	Percentage	Frequency	Percentage
1	Variety selection	53	71	22	29
2	Land preparation	0	0	75	100
3	Seed bed preparation	35	47	40	53
4	Broadcasting of seeds	15	20	60	80
5	Transplanting	55	73	20	27
6	Weeding	55	73	20	27
7	Gap feeling	52	69	23	31
8	Water management	21	28	54	72
9	Fertilizer application	15	20	60	80
10	Insect pest and disease management	10	13	65	87
11	Harvesting	51	65	24	35
12	Transporting	26	35	49	65
13	Threshing	37	49	38	51
14	Winnowing	42	56	33	44
15	Drying	70	93	05	07
16	Storage and preservation	75	100	0	0
17	Marketing	48	64	27	36

It is clear from table 1 that women community of the district does not participate in the primary land preparation for rice cultivation. Men only perform the tillage activities in rice cultivation as it is mainly done by ploughs and power tillers. It is interesting to note that all the studied farm women perform the storage and preservation works, required for food and seed purpose. Only 13 per cent of the respondents expressed about their involvement in insect pest and disease management. It shows about their ignorance on remedy of the factor which causes serious loss in yield. 73 per cent of farm women perform transplanting and weeding activities. Hossein and Veerabhadraiah (2002) found that higher degree of participation of rural women belonging to small and marginal category in hand weeding and gap feeling is due to the lack of mechanization. This finding is similar to the study of Fabiyi et. al (2007) who stated that farm women mainly participate in planting, weeding, harvesting, transporting of produce, processing and marketing. Like insect pest and disease management, the participation in irrigation and fertilizer application IS not low i.e.28 per cent and 20per cent respectively.

The above table shows farm women of small and marginal categories participate in most of the major activities of rice cultivation. Satpathy (2003) from his study concluded that farm women share the work load in all agricultural operations without required training and skill. The following table reflects the sources from which farm women avail the techniques of the operations.

Table 2. Sources of Information (N=75)

SI. No.	Sources	Frequency	Percentage
1	Co-farmers	69	92
2	Extension agencies	2	3
3	Radio	1	1
4	Television	2	3
5	Newspaper	1	1
6	Technical bulletins	0	0

A look into the table 2 reflects the sources of knowledge and skill, farm women get from different sources. It is interesting to find from the table that the major source of information of farm women is their co-farmers and neighbours. one of the responding farmers has any knowledge on technical bulletins of rice cultivation. The extension agencies have been successful to reach only at 3 per cent of them. Tucker and Napier (2002) observed from their study that when rural women seek information, they use to seek it from local sources like friends, neighbors and colleagues. Radio, television, newspaper like mass media have so far not been successful to enter into the farming women community properly as the table shows, they altogether share 5 per cent of the respondents. Hence it becomes clear that farm women of Balasore district are still far behind the latest trends of modern agricultural technologies.

Government, through a number of special programmes for years, has been trying to reach up to the farm women. But the study shows the efforts are still not fruitful. A critical analysis of the causes of non-availability of training to the farm women yielded the following results.

Table 3. Causes of non-availability of training (N=75)

SI. No.	Causes	Agree	Partially agree	Disagree	Net score	Mean score	Rank
1	Allergy to get training from male trainers	6	12	57	24	0.32	V
2	No leisure time to take training	18	22	35	58	0.77	III
3	Family is discouraging	15	30	33	60	0.8	II
4	Trainings are given at far places	12	16	47	40	0.53	IV
5	Don't feel trainings essential for them	22	18	25	62	0.83	I

It is observed from table 3 that farm women don't feel training is essential for them to perform better in their activities in rice cultivation, ranked first position. During discussion, most of them cite the reason as, these skills are inherited from their ancestors, they know everything on rice cultivation and there is no need of any improvement of their knowledge. Family discouragement came at second rank. In male dominated families, women have limitations to attend training. Hossain and Mishra (2002) expressed the same view in their study that conservative attitude of the family restricts the scopes of farm women to avail training on latest technologies of agriculture. Some farm women complained of their paucity of time to participate for training purposes. It ranked third position. The heavy domestic workload of the family with field works limits their participation in training programmes. A number of farm women raised question about training place. They don't want to spare much time in journey for training. Going to another village or block head quarters also needs a male member of the family to accompany. A very few farm women have an allergy to get training from male trainers. Only six out of 75 opined strictly that they prefer a lady trainer to feel relaxed in a training camp. It ranked the last.

Data collected to assess and priorities the training needs are depicted below.

Table 4. Prioritization of training needs of farm women (N=75)

SI. No.	Activities	Most Important	Important	Not important	Net score	Mean score	Rank
1	Variety selection	40	25	10	105	1.40	I
2	Land preparation	06	11	60	23	0.3	XVI
3	Seed bedpreparation bed	18	25	32	61	0.81	VII
4	Broadcasting of seeds	03	07	65	13	0.17	XV
5	Transplanting	10	18	47	38	0.51	XI
6	Weeding	24	28	23	76	1.01	VI
7	Gap feeling	07	16	42	30	0.4	XIII
8	Water management	08	09	58	25	0.33	XIV
9	Fertilizer application	19	41	15	79	1.05	V
10	Insect pest and disease management	33	37	05	100	1.33	II
11	Harvesting	11	18	46	40	0.53	X
12	Transporting	0	03	72	03	0.04	XVII
13	Threshing	31	26	18	88	1.17	IV
14	Winnowing	27	36	12	90	1.2	III
15	Drying	12	21	42	45	0.6	IX
16	Storage and preservation	14	32	29	60	0.8	VIII
17	Marketing	08	16	51	32	0.43	XII

Women play an important role in selection of rice varieties in most of the farm families because a good number of decisions on domestic factors e.g. taste, local food item preparation, sale and preserve for seed purposes, are performed predominantly by them. They also have an interest on yield and quality of straw for domestic animals of a particular variety. Hence, majority of farm women belonging to small and marginal category, perceived variety selection is an important activity and they have a major role to play as variety selection is not only linked to food security of a family but also it has other socio-economic arid cultural dimensions. It ranked the first position in training need assessment. It is interesting to note that though least number of farm women performs the insect pest and disease management activities, their ea gerness to gain knowledge on it gained second priority. This is because they perceive insect pest and disease causes major loss in yield of rice. It came as the second priority. Winnowing and threshing are the two operations related with high degree of drudgery for farm women. They ranked third and fourth position respectively in rank analysis of the training needs. Fertiliser application, weeding and seed bed preparation then follow. It is interesting to find out that though none of the responding farm women participate .in land preparation but six of them feel it is most important for them to get trained on it. As per their view, proper tillage, time and depth and maintenance of right row to row distance affect the yield very much. It ranked the last but one position. Farm women do not feel transporting of harvested rice or the inputs required for the cultivation need any training for them. It ranked the last position.

CONCLUSION

Participation of women work force in rice cultivation can't be ignored for better yield. From the study it was found that out of the seventeen different activities involved in rice cultivation, in nine activities more than half of the farm women participate. Their neighbours and co-farmers are still the major information sources for them in rice cultivation. The study also revealed that training as a major medium of transfer of latest technologies is unknown to farm women. There are some social constraints which limit the participation of farm women in the training programmes. The study suggests that extension agencies should try to eliminate them to involve more number of farm women in scientific rice cultivation practices.

The study further revealed that as majority of farm women are involved in variety selection, transplantation, weed management, harvesting and post harvest processes, they perceive variety selection, insect pest management, winnowing, threshing, fertilizer application and weeding are the most priority areas for their training. Therefore the trainings should be designed by the extension agencies in such a way so as to fulfill their needs and aspirations.

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