STUDIES ON INVOLVEMENT OF WOMEN IN AGRICULTURE AND ALLIED ACTIVITIES IN KALAHANDI DISTRICT OF ORISSA

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Introduction

Since time immemorial women have significant contribution in almost every aspects of our society. Generally, they have been considered as the decision makers of our families which they take independently or in consultation with their husbands or with the heads of the families. Besides having an anchoring role in the management of their families, women equally participate in different economic activities like crop production, vegetable cultivation, fruit raising, livestock management, pisciculture and other miscellaneous activities such as mushroom cultivation, leaf plate making, bamboo works, badi and papad making etc. As per recent findings, women in India are major producers of food in terms of value, volume and number of hours worked (Dash, 2000). Nearly 78% of economically active women are engaged in agriculture in comparison to 63% of their male counterparts. Almost 50% of rural female workers are agricultural labourers and 37% as cultivators. Almost 70% of total farm works are performed by women only (census of India ,1981). In Orissa also 27.3% of total workers are women the main workers and marginal workers among female constitute 58.2% and 41.8% respectively (economic survey, Government of Orissa, 1999-2000). According to 1991 census 80.9% of female work force was engaged in agriculture, 25.85 was cultivator and 55.1% was agricultural labourer.

So, from these facts and figures it is clear that hardly any sphere has been left where women can be ignored; may it be in socio-economic aspects or in technological front. Hence, an attempt had been made to study the

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involvement of women of Kalahandi district or Orissa in crop production, vegetable and fruit cultivation, livestock management and other income generating activities along with their socio-economic status and their role in decision making process. Besides, the constraints faced by the women and identification of training needs to update their knowledge and skills were also taken into consideration in the study.

Methodology

A sample of 150 women were randomly selected from 10 adopted villages of KVK, Kalahandi operational areas viz., Mading, Sankhairmal, Kendugupka, Bhangabari, Kanakpur, Jagannathpur, Saralanji, gudialipadar, Goipita and Malpada of Kalahandi district. Further, the farm women were categorized into 4 sub-groups viz., Landless Labourers (LL), Marginal Farmers (MF) Small Farmers and Big Farmers (BF) on the basis of their land holdings following probability proportionate to sample size (PPS) method. Information about sample village and the farm women were collected through a specially designed and pre-tested questionnaire by personal interview. The data were collected on socio-economic status, participation in crop production, fruits and vegetables cultivation, livestock enterprise and in other income generating activities; constraints faced by them and identification of training needs of the farm women. The data thus collected were tabulated and analyzed.

Results and Discussion

Socio-economic status of rural folk has significant role in different farm operations and allied activities where women represent an important sector of human resources. However, castes and different categories of farm women also have greater influence on different farm-related activities. It is evident from Table 1 that 37.4% of the respondents belonged to Scheduled Tribe of which highest number (46.7% and 42.9%) came from landless labourer (LL) and Marginal farmers (MF) categories, respectively. However, the scheduled caster and scheduled tribe population were nearly the double than that of other category. So far as family size of the respondents were concerned, almost half of the sample size belonged to LL and MF category having family

size of eight and above whereas 66.7% of the respondents under BF and 41.9% of that of SF and the family size limited to four members only. Education has grater impact on gender as well as in the selection of job, particularly to the w2omen. In respect to educational status, as is evident from Table 1, 58.1% of the respondents were illeterate, our of which a mammoth size of 86.7% came from LL category followed by 67.9% of mF. Similarly, 64.7% of the respondents lived in Kutcha house and only 10.6%, mainly the Big Farmers live in Pucca house.

Table 1. Socio – economic profile of farm women

(N=150)

Sl. No	Variable	LL		MF		SF		BF		Total	
		F	%	F	%	F	%	F	%	F	%
1.	Caste										
i.	SC	11	36.7	18	32.1	13	30.2	5	23.8	47	31.3
ii.	ST	14	46.7	24	42.9	12	27.9	6	28.6	56	37.4
iii.	Others	5	16.6	14	25.0	18	41.9	10	47.6	47	31.3
iv	Total	30	100.0	56	100.0	43	100.0	21	100.0	150	100.0
2.	AV Family Size										
i.	2-4 Nos.	3	10.0	15	26.8	18	41.9	14	66.7	50	33.3
ii.	5-7 Nos.	12	40.0	14	25.0	16	37.2	5	23.8	47	31.3
iii.	8&above	15	50.0	27	48.2	9	20.9	2	9.5	53	35.4
iv.	Total	30	100.0	56	100.0	43	100.0	21	100.0	150	100.0
3.	Education										
i.	Illiterate	26	86.7	38	67.9	17	39.9	6	28.6	87	58.0
ii.	Primary	3	10.0	11	19.6	15	34.9	8	38.1	37	24.7
iii.	Secondary	1	3.3	7	12.5	10	23.3	5	23.8	23	15.3
iv.	Inter and above	0	0.0	0	0.0	1	2.3	2	9.5	3	2.0
v.	Total	30	100.0	56	100.0	43	100.0	21	100.0	150	100.0
4.	Dwelling Houses										
i.	Kutcha	30	100.00	41	73.2	23	53.5	3	14.3	97	64.7
ii.	Semi-pucca	0	0.0	15	26.8	14	32.6	8	38.1	37	24.7
iii.	Pucca	0	0.0	0	0.0	6	13.9	10	47.6	16	10.6
iv.	Total	30	100.0	56	100.0	43	100.0	21	100.0	150	100.0

Women are considered as the Home Minister of the family as they play a very important role in decision making process. It is revealed from Table 2 that all the respondents took exclusive decision on the pattern of backyard kitchen gardening which ranked first among all variables. Similarly, decision on family budgeting followed by goat rearing ranked second and third respectively which were generally taken by women only.

Table 2. Role of farm women in decision making process

(N=150)

Sl. No	Variables	Number of respondent	Percentage	Rank
1	Selection of crops and varieties	118	78,7	V
2	Backyard kitchen gardening	150	100.0	I
3	Raising of fruits and vegetables	107	71.3	VI
4	Cattle management	121	80.7	IV
5	Goat rearing	141	94.0	III
6	Poultry keeping	97	64.7	VII
7	Family budgeting	149	99.3	II

Women as agricultural workers generally participate in all operations except ploughing. They form major components of labour force but hardly there is any specific training programme for them to increase their competency and save time. As regards to the participation of women in crop production, it is observed from Table 3 that most of the respondents were engaged in harvesting (68.6%), seedling uprooting and transplanting (59.3%) and weeding (58%) operation which corroborates the findings of Satapathy (1996). Moreover, it was found that women from LL and MF had the highest participations in almost all the operations under crop production. However, they had least participation in seed treatment whereas SF (30.2%) and BF (52.4%) had greater participation.

Table 3. Participation of women in crop production

(N=150)

Sl. No	Variable	LL (n=30)		MF (n=56)		SF (n=43)		BF (n=21)		Total	
		F	%	F	%	F	%	F	%	F	%
1	Seed treatment	0	0.00	8	14.3	13	30.2	11	52.4	32	21.3
2	Nursery raising sowing	21	70.0	19	33.9	21	48.8	7	33.3	68	45.3
3	Manures and fertilizer application	23	76.7	15	26.8	6	13.9	0	0.0	44	29.3
4	Uprooting of seedlings and transplanting	30	100.0	51	91.1	8	18.6	0	0.00	89	59.3
5	Weeding	31	100.0	49	87.5	8	18.6	0	0.0	87	58.0
6	Plant protection measures	12	40.0	27	48.2	12	27.9	0	0.0	51	34.0
7	Harvesting	30	100.0	55	98.2	18	41.8	0	0.0	103	68.6
8	Threshing and winnowing	28	93.3	36	64.2	21	48.8	0	0.0	85	56.6
9	Storage	0	0.0	20	46.4	23	53.5	11	52.4	71	47.3

Data in Table 4 shows that whether they were LL, MF, SF or BF, altogether 90.6% preferred to go in for backyard kitchen gardening whereas only 19.3% involved in plant protection measure. Their participation in harvesting (76.6%), sowing / planting (73.3%), interculture operation (72.6%), preservation of fruits and vegetables (72%) and nursery raising (68.6%) was very encouraging and significant participation of women in vegetable and fruit cultivation in general, were more due to their physique, easiness to perform better than any other field crops. Moreover, it supplies nutrition to their family and becomes more remunerative.

Like participation of women in vegetable and fruit cultivation, their participation in livestock enterprises was also encouraging. Almost all the women were engaged in goat rearing (85.3%) cattle management (81.3%), milking (80%), feeding (72%), cleaning of shed (67.3%) and poultry keeping (60%). However, engagement of LL and MF was much higher than those of the SF and BF in all the operations whereas only 27.3% of women involved in marketing (Table 5).

Table 4. Participation of women in vegetable and fruit cultivation

(N=150)

Sl. No	Variable	LL (n=30)		MF (n=56)		SF (n=43)		BF (n=21)		Total	
		F	%	F	%	F	%	F	%	F	%
1	Use of HYV hybrid varieties	0	0.0	33	58.9	32	74.4	17	80.9	82	54.6
2	Nursery raising	5	16.6	46	82.1	41	95.3	11	52.4	103	68.6
3	Sowing / planning	21	70.0	52	72.9	29	67.4	8	38.1	110	73.3
4	Backyard kitchen gardening	18	60.0	56	100.0	43	100.0	19	90.4	136	90.6
5	Developing of frit orchard	0	0.0	7	12.5	16	37.2	17	80.9	40	26.8
6	Manures and fertilizer application	22	73.3	13	23.2	6	13.9	0	0.0	41	27.3
7	Interculture	30	100.0	52	92.9	27	62.8	0	0.0	109	72.6
8	Plant protection measures	0	0.0	18	32.1	11	25.6	0	0.0	29	19.
9	Harvesting	31	70.0	43	76.8	36	83.7	15	71.4	115	76.6
10	Preservation of fruits & vegetables	0	0.0	48	85.7	41	95.3	19	90.4	108	72.0
11	Marketing	0	0.0	35	62.5	16	37.2	0	0.0	51	34.5

Table 5. Participation of women in livestock enterprise

(N=150)

Sl. No	Variable	LL (n=30)		MF (n=56)		SF (n=43)		BF (n=21)		Total	
		F	%	F	%	F	%	F	%	F	%
1	Cattle management	24	80.0	52	92.8	35	81.4	11	52.4	122	81.3
2	Goat rearing	28	93.0	55	98.2	32	69.8	13	61.9	128	85.3
3	Poultry keeping	22	73.2	49	87.5	12	27.9	7	33.3	90	60.0
4	Cleaning of shed	30	100.0	56	100.0	12	27.9	3	14.3	101	67.3
5	Feeding	26	86.6	47	83.9	31	72.1	4	19.0	108	72.0
6	Milking	214	80.0	52	92.8	31	72.1	13	61.9	120	80.0
7	Marketing	7	23.3	17	390.4	14	32.6	3	14.3	41	27.3

In Kalahandi district rural people have the opportunity to be engaged for six moths only. Rest of the period they engage themselves in other income

generating activities. It is clearly revealed from Table 6 that Badi and Papad making was the main source of income generation where 52 per cent women engaged. However, there was lot of scope for bamboo works, mushroom cultivation, rope making and leaf plate making where 40.6%, 36.6%, 30% and 26.6% of women were engaged, respectively. This is because of abundance of bamboos and various forest threes available in the surroundings.

Table 6. Participation of women in other income generating activities

(N=150)

Sl. No	Variable	LL (n=30)		MF (n=56)		SF (n=43)		BF (n=21)		Total	
		F	%	F	%	F	%	F	%	F	%
1	Leaf planting	21	70.0	19	33.9	0	0.0	0	0.0	40	26.6
2	Rope making	18	60.0	32	57.1	0	0.0	0	0.0	50	30.0
3	Bamboo works	27	90.0	23	41.1	11	25.6	0	0.0	61	40.6
4	Mushroom cultivation	16	53.3	22	39.3	14	32.6	3	14.2	55	36.6
5	Badi and papad making	8	26.6	18	32.1	32	74.4	17	80.9	78	52.0

In our society still al lot of things are to be done for bringing the women into the mainstream. Till today women are facing a lot of constraints towards their fullest participation in agricultural and allied activities. Table 7 indicates the frequency of different categories of women facing different constraints. Illiteracy and lack of knowledge about various technologies on agriculture and allied activities was the number one constraint faced by highest (87.3%) number of respondents followed by other c9nstraints like weak financial condition of women (82.4%) and conservative attitude of our society towards women (81.3%). Similarly, high input cost and cheap price of produce resulting into low profit margin was another constraint faced by 65.3 percent of women and lastly the proble3m caused by their liquor addict male counter parts was felt as inherited constraints by 34.7% of respondents.

Training is one of the most important inputs required to aquint the women with modern technology on agriculture and allied sectors. Table 8 indicates various training needs required by the respondents to bring them into the mainstream. According to the table, training on various components and patterns of

Table 7. Constraints faced by women in agriculture and allied activities

(N=150)

Sl. No	Variable	LL (n=30)		MF (n=56)		SF (n=43)		BF (n=21)		Total	
		F	%	F	%	F	%	F	%	F	%
1	Illiteracy and lack of knowledge	28	93.0	54	96.4	37	86.0	12	57.1	131	87.3
2	Conservative attitude	21	70.0	52	92.0	40	93.0	9	42.8	122	81.3
3	Financial constraints	30	100.0	56	100.0	33	76.7	6	23.8	124	82.6
4	Rising price of farm inputs and low price of produce	0	0.0	49	87.5	41	95.3	8	38.1	98	65.3
5	Liquor addiction by male counter parts	21	70.0	17	32.9	12	27.9	2	1.0	52	34.7
6	Lack of appropriate technology and infrastructure	28	93.0	30	53.6	26	60.5	5	23.8	89	59.3

Table 8. Training needs of women in agriculture and allied activities

(N=150)

Sl. No	Variable	LL (n=30)		MF (n=56)		SF (n=43)		BF (n=21)		Total	
		F	%	F	%	F	%	F	%	F	%
1	Seed treatment	0	0.0	48	85.7	40	93.0	10	47.6	98	65.3
2	Safe storage of grains	0	0.0	30	53.6	20	46.5	10	47.6	60	40.0
3	Preservation of fruits and vegetables	6	20.0	45	80.4	34	79.0	17	81.0	102	68.0
4	Kitchen gardening	30	100.0	56	100.0	43	100.0	9	42.8	136	92.0
5	Cattle management	1	3.00	43	76.8	41	95.3	13	61.9	98	65.3
6	Goat rearing	18	60.0	43	76.8	31	72.1	14	66.7	106	70.7
7	Poultry rearing	18	60.0	43	76.8	31	72.1	14	66.7	106	70.7
8	Mushroom cultivation	14	46.7	34	60.7	29	67.4	18	85.7	95	63.3

kitchen gardening is the top most areas needed by 92% respondents for training. This followed by goat rearing (70.7%), preservation of fruits and vegetables (68%) and cattle management (65.3%), are some of the other training needs felt by majority of respondents. Training on safe storage of grains (40%) and poultry keeping (25.3%) are the areas of training felt by lowest number of respondents. However, Satapathy (1996) in his study found that tailoring and stitching was the most important training needs required by the farm women followed by dairy management and preparation of milk and milk product.

Conclusion

Thus from the above discussion, it has been learnt that despite of their weak socio-economic status, the rural women in Kalahandi district have significant contribution in the decision making process of the family. Besides having an anchoring role in the family, rural women in the district are actively engaged in various operations based on crop production, horticulture, animal husbandry and also in various income generating activities. In spite of several constraints like lack of knowledge and conservative attitude of the society towards them, there is an urgent need to involve the women force in the developmental mainstream through fulfilling various training needs such as that on kitchen gardening, goat rearing, cattle management, mushroom cultivation etc. inspite of all these it is imperative to build a suitable framework for strengthening the rural women folks for accelerating the developmental process of the society at the grass root level.

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