

# Gender Differentials in Labour Allocation in Farming Systems of Jharkhand

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Jharkhand, a newly created state in eastern India is primarily an agricultural region where 71% of the population depends on agriculture (Singh 2002). The economy depends on subsistence agricultural practices mostly in rainfed conditions. Majority of the farmers belong to small and marginal farmers group. Farm women play a significant role in agriculture and have a major share of the responsibility for enhancing production, productivity and sustainability. They play a vital role at every step of agricultural activities. Despite their significant participation in farming, they are not being involved in the mainstream of development. Keeping these facts in view, the study was conducted with the objectives of understanding. To study the socio-economic characteristics of the farmers and gender differentials in Labour allocation.

# Methodology

The study was carried out purposively in Hazaribagh district of Jharkhand. Out of 14 community blocks, six were selected as the universe of the study. Two villages from each block were randomly selected for the study. In each sampled village, farmers were stratified into farm size classes as marginal, small, semi-medium, medium and large farmers. Proportional to farm size classification, 25% of the farmers listed in each sample village were interviewed. A total of 300 respondents were selected for the study. In the initial stage, pre-testing of the instrument was conducted for validity and reliability. Four data collection procedures such as, key informants interviews, direct observation, in-depth interviews which included formal and informal interviews, and secondary data were used in the study.

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# Findings and Discussion

#### Socio-Economic Characteristics of the Farmers

There were 74% respondents under small farmers group, 14% under semi-medium farmers group and 12% under medium farmers group (Table 1). There were no farmers under large farmers group. Results indicate that majority of the farmers were in the small farmer category.

#### Farm Labour

It was found out that there were three types of farm labour engaged by the respondents: hired labour, exchange labour and family labour (Table 1). Hired labour was used by 39% of the respondents while exchange labour and hired labour were used by 32% of the respondents. The use of exchange labour was practiced mostly by the tribal households, but they also hired labour. Thirty nine percent of the respondents, mostly from small farmers group, used only family labour in their farms. They did not use hired or exchange labour.

### Availability of Farm Labour

Regarding the availability of farm labour, 72% of respondents reported that labour was always available whenever needed, whereas 19% mentioned that farm labour was available most of the time when needed. Only during peak periods, i.e. during harvesting, it was not available as needed. In 9% of the cases, farm labour was less frequently available. This problem was encountered mostly by the semi-medium and medium farmer groups.

# **Labour Allocation of Respondents**

Table 2 shows the type of farm works assigned to male and female labour of various age categories.

Male labour 12 to 15 years old were engaged in three types of farm activities viz.: ploughing, animal care and post-harvest. Animal care was most common activity performed by a great majority (67%). This was followed by ploughing (41%) and post harvest activity (11%). In case of semi-medium and medium farmers group, majority of the males involved in ploughing.



Table 1. Socio-economic characteristics of the farm

Factor	Farmer Categories								
	Small		Semi-Medium		Medium		Total		
	No.	%	No.	%	No	. %	No.	%	
	n=224		n=41		n=35		n=300		
Farm size									
1-2 hectares of land	224	100	00	00	00	00	224	74	
2-4 hectares of land	00	00	41	100	00	00	41	14	
4-10 hectares of land	00	00	00	00	35	100	35	12	
Type of farm labour									
Hired labour	78	35	17	41	20	5 <i>7</i>	115	39	
Exchange labour+									
hired labour	59	26	24	59	14	40	97	32	
Family labour	87	39	00	00	01	03	88	29	
Availability of farm labour									
Labour always available when needed	201	89	09	22	06	1 <i>7</i>	216	72	
Labour available most of the time when needed	21	09	22	54	16	46	59	19	
Labour less frequently available when needed	02	0.9	10	24	13	37	25	09	

All the respondents (100%) reported that 12-15 year old female labour were mostly engaged in household work. However, 23%, of females were also assigned the work of animal care. Farmers who were residing in the forest area reported that usually they did not prefer to assign female members for animal care. Families who were staying near the city of Hazaribagh sent their female members to school. Consequently, they did not expect much labour from them.

There were six types of agricultural activities performed by male labour 16 to 55 years old. Among those activities ploughing, land preparation, seeding



Table 2. Labour allocation of the respondents

Factor	Farmer Categories									
	Small		Semi-Medium		Medium		Total			
	No.	%	No.	%	No.	%	No.	%		
	n=224		n = 41		n = 35		n=300			
	No.	%	No.	<u></u> %	No.	%	No.	%		
Males from 12 to 15 years of ag	e*									
Ploughing	76	34	28	68	21	60	125	41		
Animal care	147	63	30	61	25	71	202	67		
Post harvest activity	11	05	80	20	15	42	34	11		
Females from 12 to 15 years of	age*									
Household work	224	100	41	100	35	100	300	100		
Animal care	06	03	02	05	04	11	68	23		
Males from 16 to 55 years of ag	e*									
Ploughing, land preparation,										
seeding &post harvest activity	224	100	41	100	35	100	300	100		
Harvesting & Animal care	25	11	06	15	16	46	47	16		
Females from 15 to 55 years of	age*									
Manuring, weeding, transplanting	g,									
harvesting, post harvest activity,										
household work & animal care	224	100	41	100	35	100	300	100		
Males above 55 years of age*										
Post harvest activity,										
animal care	224	100	41	100	35	100	300	100		
Ploughing and seeding	17	80	03	07	02	06	22	08		
Females above 55 years of age*										
Post harvest activity, animal										
care and household work	224	100	41	100	35	100	300	100		
Harvesting	31	14	18	44	26	74	75	25		

<sup>\*</sup> Multiple response

n = No. of households



and post harvest were common for all (100%) of the respondents, while 16% of them added harvesting and animal care also. About 16% of the respondents belonging to small farmers category undertook harvesting of crops themselves clue to urgency or lack of capacity to hire labour.

All the respondents (100%) reported that female labour 16 to 55 years old were engaged in agricultural activities such as manuring, weeding, transplanting, harvesting, post harvest activities, household work and animal care. Weeding, harvesting and transplanting are mostly done by female labour, but males also help females in those activities, for example, they bring the rice seedlings to the transplanting field and carry the harvested rice to the threshing yard. All the respondents agreed that ploughing, and seeding were exclusively performed by men. In case of tribal farmers, ploughing by females is culturally considered as a taboo and women are not even allowed to touch the ploughing equipment.

All of the respondents (100%) indicated that male labour above 55 years of age were mostly engaged in post harvest activities (threshing and winnowing) and in animal care. However 8% of the respondents reported that ploughing and seeding were also performed by aged males, in case of lack of manpower and capacity to pay for labour.

All the respondents (100%) mentioned that the post harvest activities, household work and animal care were mostly performed by female members above 55 years of age. There were 25% respondents who reported that aged female labour were also engaged in harvesting of the crops. The data shows that 26 members out of 35 in medium land holding group and 18 out of 41 in semi-medium land holding farmers groups reported that the females above 55 years of age were also engaged in harvesting of crops. This means that for those who have more land, women cannot avoid performing even difficult activities in order to save the labour costs.

# **Gender Participation in Animal Care**

The study revealed five types of activities in animal care. Opinions of gender participation were sought in each of the activities. Regarding feeding of animals the data shows that, a great majority (81%) of the females were



engaged in feeding of animals. Regarding cleaning of animal sheds it was exclusively female dominated (100%) activity. Similarly health care was also a male dominated (100%) activity. Regarding cutting and bringing fodder from the field, a great majority (78%) of females agreed that it was mostly done by women. About 93% of the males agreed that they participated in marketing of small animals. The data on gender participation in animal care revealed that, majority of the activities were performed by women.

Table 3. Gender participation in animal care

Factor	Farmer Categories										
	Small		Semi-	Medium	Medium		Total				
	No.	%	No.	%	No.	%	No.	%			
	n=	n = 224		n=41		n = 35		n = 300			
	No.	%	No.	%	No.	%	No.	%			
Feeding of animals											
Males	42	19	09	22	06	17	57	19			
Females	182	81	32	78	29	83	243	81			
Cleaning of animal sheds											
Males	-	-	-	-	-	-	-	-			
Females	224	100	41	100	35	100	300	100			
Health care											
Males	224	100	41	100	35	100	300	100			
Females	-	-	-	-	-	-	-	-			
Cutting & bringing fodder from field											
Males	51	23	08	19	07	20	66	22			
Females	173	77	33	81	28	80	234	78			
Marketing of small animals											
Males	208	93	39	95	30	86	277	93			
Females	16	07	02	05	05	14	23	07			
Grazing of animals											
Males	166	74	32	78	29	83	227	76			
Females	58	26	09	22	06	17	73	24			

n = No. of households



#### Discussion

The data on farm size of the respondents revealed that 74% of the respondents had 1-2 hectares of land. This means that, a great majority of the farmers in the study area belong to small farmers group. Regarding type of labour it was reported that, about 71% of the respondents used hired labour. and exchange labour was used by 32% only. It might be due to the fact that. exchange labour is practised by scheduled tribes only. Data on labour allocation revealed that 67% of males from 12 to 15 years of age group devoted their time to animal care, while females (100%) belonging to the same age group remained busy in household work. Adult males (100%) from 16 to 55 years of age performed ploughing, land preparation, seedling raising and post harvest activities while cent percent of females performed manuring, weeding, transplanting, harvesting, post harvest activities, animal care and household work. Males above 55 years of age devoted their time in post harvest activities and animal care (100%) while females belonging to same age group were involved in post harvest activity, animal care and household work (100%). With reference to animal care, daily operations like, feeding of animals (81%), cleaning of animal sheds (100%) and cutting and bringing fodder from the field (78%) were carried out mostly by females whereas men were only involved in less frequently performed activities like health care (100%) and marketing of small animals (93%).

In animal care activities, major works were performed by women members. Health care and marketing of small animals were performed by men. This might be due to the fact that females are mostly illiterate and hence did not involve themselves in health care activities.

#### Conclusion

Indian economy is largely based on agriculture. Women are involved in farming and food production activities not only in India but all over the world. Gender differentials are more prominent in our country. In case of Jharkhand, women are less educated than men. They are unskilled labourers and are assigned tasks such as weeding, transplanting and harvesting. It is a common



feature that women are ignored and have no access to training in agriculture, yet they perform a significant role in the farming system.

This study emphasizes that women of Jharkhand play a vital role in all the agricultural activities as well as in animal care. Despite their significant importance to agricultural production, women have little real security. Hence there is need to make sincere effort to generate women specific farm technologies to increase their efficiency, effectiveness and to reduce their drudgery. Thus, agricultural education/training must be made necessary to all. Policies must be made to enhance participation of women in agricultural research, training on new technologies and to increase focus on women friendly technology development in order to achieve food security.

#### References

Singh, Sunil Kumar (2002) Jharkhand 2002. Readers Corner, Fressure Road, Patna 800 001. P = 419.