

WOMEN'S PARTICIPATION IN LIVESTOCK FARMING ACTIVITIES

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ABSTRACT

Women play a major role in livestock farming in Pakistan. They assume many activities relating to livestock production like feeding of animals, cure of animals, watering of animals, collection of fuel, milking, feeding, and cleaning of animal sheds. The present study focuses on the participation of rural women in different activities relating to livestock farming. A sample of 120 female respondents was selected randomly from Tehsil Jhang using multistage random sampling technique. They were interviewed through a reliable and validated interview schedule. The data collected, were processed through a computer software i.e. Statistical Package for Social Sciences (SPSS). The results show that milk processing, making and storage of dung cakes, collection of manure and caring of diseased animals, cleaning of animals' sheds, watering of animals, making feed concentrates and feeding of livestock performed were the main activities performed by rural women. However their participation in most of the livestock management practices was medium to very low.

Key words: Livestock farming, rural women, participation

INTRODUCTION

It is widely accepted that most of the critical roles related to livestock farming are played by the women (Moser, 2007). Rangnekar (1992) claimed that livestock management has always been perceived as the traditional responsibility of women. Pakistani rural women involved themselves in agricultural activities by playing their role in livestock promoting activities by availing credits (Todd, 1998). Livestock farming become more attractive for women when they are in cash strapped (Mendoza, 2003). They have to work harder and more intensive in order to make agriculture economically affordable (Arun, 1999). Women generally contribute more labour inputs in areas of fodder cutting, watering, cleaning of animals and their sheds etc. Milking the animals and milk processing has also been attributed to the women folks. Manure collection, preparation of dung cakes and maintenance of animal sheds are also the exclusive activities of rural women (Akmal and Sajida, 2004). Managing and herding large stock and other animals and processing livestock products are also considered the sole responsibility of women in the Punjab (Niamir-Fuller, 2000). Paudel *et al.* (2009) claimed that women in Nepal contribute in livestock farming tasks like cleaning of sheds (80%), forage collection (93%), and feeding of animals (73%).

Pakistani women are playing a significant role in livestock management practices. They spend a lot of time in performing different activities of livestock management like fodder cutting, fodder chopping, watering and feeding of animals, animal shed cleaning, milking, making dung cakes and looking after the health

of the herd. Women alone or together with men also participate in most of the decisions related to livestock management (Arshad *et al.*, 2010). Hashmi (2009) also reported that Pakistani rural women are intensively involved in many livestock management activities including milking, fodder chopping, feeding, collecting eggs, watering, making and storage of dung cakes, cleaning animals' sheds. They are also responsible for collection of cow drops and preparation of dung cakes, an activity that adds to the income of poor families. Their contribution was 67.0, 38.4, 33.0 and 4.0% in marketing of animals' produce, fodder carrying, brooding and breeding and grazing of animals, respectively (Sadaf, 2005). They also have to perform domestic chores of cooking, cleaning of house, washing of clothes, taking care of children and fetching of water and fuel (Iftikhar, *et al.*, 2007). Rural women play an integral role in agriculture. But they have to face a lot of problems. They have no access to modern sources of information (Chaudhry *et al.*, 2008).

The Government of Pakistan (2009) revealed that women contribute 74.0% in agricultural sector. In spite of their major contribution in this sector, they are always pushed back by the policy makers. Unfortunately, due to patriarchal system of our society, women are always bounded in the four walls of their houses. They have no right to avail the chances to improve/enhance their skills related to livestock farming. Their role in livestock production has often been underestimated or worse, ignored. However, Govt. should take initiative and formulate policies keep in view their need and role in country's' economy for sustainable development (Ali *et al.*, 2006).

MATERIALS AND METHODS

The study was conducted in tehsil Jhang which consists of 32 rural union councils, of which 5 union councils were selected randomly. From each selected union council, 2 villages were selected at random and from each village 12 women respondents involved in livestock management were selected randomly, thereby making a sample of 120 respondents. The data were collected with the help of a pre-tested and validated interview schedule. The data thus collected were analyzed with the help of a computer software i.e. Statistical Package for Social Sciences. A five point Likert scale was used (1 being very low and 5 being very high) to determine the extent of respondents' involvement in decision making. In order to determine weighted score, the frequencies were multiplied with the corresponding score value allotted to each category of the scale. Means and standard deviations were worked out and ranking was done on the basis of mean values.

RESULTS AND DISCUSSION

Nature of livestock farming: Livestock contribute to the livelihood of more than two-thirds of the world's rural poor and to a significant minority of the suburban poor. Livestock contributes to food and nutritional security, provides draught power and also serves traditional social functions. In some situations, the "livestock ladder" may allow the poor to progress from modest livestock holdings, such as a few poultry birds, to acquire sheep and goats or even cattle. Livestock production provides a constant flow of income and reduce the vulnerability of agricultural production (Holmaan, 2005). Domestic farming of livestock means rearing of animals on small scale for domestic production consumed in the family while, commercial farming means rearing of animals on large scale for production to be sold out in the market for earning money. Keeping in view the importance of livestock farming the respondents were asked about the nature of livestock farming. The data in this regard are presented in Table 1.

The data recorded in Table 1 indicate that a vast majority (86.7%) of the respondents was doing livestock farming for their domestic needs and only 13.3% respondents were raising livestock on commercial basis.

These findings are contradictory to those of Jamal (2005) who found that half (50.4%) of the respondents were raising livestock for their domestic purposes and the remaining half (49.6%) were doing livestock farming for both domestic and commercial purposes.

Types and number of heads of livestock: Farmers are maintaining a number of animals of different types including buffaloes, cattle, sheep, goats, horses, donkeys,

mules and camels. Buffaloes and cows are good source of income for the farmers. Some animals are used for transportation purposes. More number of heads of livestock maintained by a farmer indicates his/her interest in animals. Keeping in view this aspect, the respondents were asked about the number of livestock they had maintained. The data in this regard are presented in Table 2.

Data given in Table 2 show that total population of livestock raised by the respondents was 375. Total number of heads of buffaloes, cattle, sheep and goat maintained was 162, 96, 32 and 47, respectively. Adult stock in all cases was more in number as compared to other categories. Total number of heads of donkeys, horses and camels maintained was 38.

These findings are contrary to those of Jamal (2005) who found that total population of livestock was 770 (where sample size= 125) out of which buffalo calves were 13.1%, heifers were 5.2% and adult buffaloes were 35.1%. The difference in study findings may be due to different areas of study.

Distribution of respondents according to number of animals: On the basis of number of heads maintained, the respondents were classified into three categories i.e. 1-2, 3-4, 5 and above respectively. Results show that most (45.83%) of the respondents had 1-2 animals. One third (33.33%) respondents had 3-4 animals while, about one-fifth (20.83%) had five or more animals.

Women and livestock production activities: The rural women are said to play a pivotal role in livestock production activities. Their participation is well dispersed and less perceived. They are actively involved in livestock care and management. An attempt has been made to assess their involvement in various livestock management practices. The data in this regard are presented in Table 4.10

Table 3 reveals that rural women were engaged in a wide range of livestock management practices such as milk processing (100%), making and storage of dung cakes (90%), collection of manure (87.5%), caring of diseased animals (82.5%), watering of animals (77.5%), making feed concentrate, and feeding of livestock (75.8%), cleaning of animal sheds (72.5%), fodder chopping (68.3%), calf rearing (67.5%), marketing of animals, brooding and breeding (64.2%), making animals sheds, and fodder cutting (63.3%), marketing of animals' produce (60%), bathing of animals (26.7%) and grazing of animals (0.8%).

Ranking of rural women's participation in livestock activities; Respondents were interviewed to assess their level of participation in performing various tasks related to livestock production. Using five point Likert scale the weighted scores were computed by multiplying the score value allotted to each category of the scale with the

frequency counts. The weighted scores computed in this way, means, standard deviations, and rank order are presented in Table 4.

Comparison of results of present study with other:

The present findings with regard to most of the tasks performed by rural women are more or less similar to those of Rehman and Gulgoona (2000), Saima (2005), Luqman *et al.* (2006), and Narmatha *et al.* (2006). However in some cases the results of the study are contradictory to the above mentioned studies. For example there is a lot of variation in the results of present study and that of Rehman and Gulgoona (2000) with regard to fodder cutting, grazing of animals, bathing of animals and milking. Similarly the results of the present study differed from those of Saima (2005) with regard to marketing of animals. A wide variation was found in case of Luqman *et al.* (2006) and Narmatha *et al.* (2006) regarding grazing of animals and milking. These contradictions in results may be attributed to the socio-economic. Norms of the study areas and specific patterns of animals feeding like grazing.

Table 1 Distribution of respondents according to their nature of livestock farming.

Nature of livestock farming	No.	%
Domestic	104	86.7
Commercial	16	13.3
Total	120	100

Table 2 Types and number of heads of livestock maintained by the respondents

Livestock	Category	Number of heads	%	
Buffaloes	Calves	39	10.5	
	Heifers	14	3.74	
	Adult	109	29.0	
Cattle	Calves	22	5.86	
	Heifers	10	2.67	
	Adult	64	17.0	
Sheep	Lambs	7	1.87	
	Adult stock	25	6.67	
	Goat	Kids	6	1.60
Goat	Adult stock	41	10.9	
	Others	Donkeys	31	8.26
	Horses	5	1.34	
Others	Camels	2	0.54	
	Total	375	100	

The data presented in Table 4 depict that milk processing was the main activity performed by rural women which was ranked 1st with mean value 4.83. The other livestock activities performed by women were making dung cakes, storage of dung cakes and collection of manure which fell between high and very high categories with the mean values 4.23, 4.22 and 4.16, respectively. Caring of diseased animals fell in between medium and high categories with mean value 3.2. Cleaning of animals' sheds, watering of animals, making

feed concentrates and feeding of livestock were the activities where respondents' participation level fell in between low and medium categories with mean values 2.57, 2.46, 2.25 and 2.24, respectively. Activities performed by rural women like brooding and breeding, fodder chopping, fodder cutting, and fodder carrying, calf rearing and making animals' sheds, marketing of animals' produce, milking, marketing of animals, bathing of animals and grazing of animals were the areas which fell in between very low and low categories.

Table 3 Distribution of respondents based on specific agricultural tasks performed by them related to livestock

Tasks related to livestock production	No.	%
Fodder cutting	76	63.3
Fodder carrying	70	58.3
Fodder chopping	82	68.3
Feeding of livestock	91	75.8
Grazing of animals	1	0.8
Making feed concentrate	91	75.8
Making animals' sheds	76	63.3
Cleaning of animals' sheds	87	72.5
Watering of animals	93	77.5
Bathing of animals	32	26.7
Collection of manure	105	87.5
Making dung cakes	108	90.0
Storage of dung cakes	108	90.0
Milking	43	35.8
Milk processing	120	100.0
Marketing of animals' produce	72	60.0
Marketing of animals	77	64.2
Caring of diseased animals	99	82.5
Calf rearing	81	67.5
Brooding and breeding	77	64.2

Table 4 Ranking of livestock management practices based on rural women's participation

Livestock management practices	Rank order	Mean	S.D.	Weighted score
Milk processing	1	4.83	0.39	580
Making dung cakes	2	4.23	1.54	508
Storage of dung cakes	3	4.22	1.55	507
Collection of manure	4	4.16	1.65	500
Caring of diseased animals	5	3.20	1.67	384
Cleaning of animals' sheds	6	2.57	1.79	309
Watering of animals	7	2.46	1.68	296
Making feed concentrate	8	2.25	1.48	271
Feeding of livestock	9	2.24	1.49	269
Brooding and breeding	10	1.81	1.63	218
Fodder chopping	11	1.77	1.52	213
Fodder cutting	12	1.67	1.66	201
Fodder carrying	13	1.56	1.65	188
Calf rearing	14	1.53	1.48	184
Making animals' sheds	15	1.47	1.52	177
Marketing of animals' produce	16	0.87	1.00	105
Milking	17	0.85	1.46	102
Marketing of animals	18	0.84	0.89	101
Bathing of animals	19	0.58	1.17	70
Grazing of animals	20	0.02	0.27	3

Table 5 Comparison of results of present study with other

S. No.	Tasks related to livestock production performed by rural women	Present study %	Rehman and Gulgoona (2000) %	Saima (2005) %	Luqman <i>et al.</i> (2006) %	Narmatha <i>et al.</i> (2009) %
1.	Fodder cutting	63.3	16.5	71.2	-	-
2.	Fodder chopping	68.3	53.3	73.6	-	100.0
3.	Feeding of livestock	75.8	91.6	91.2	91.7	98.9
4.	Grazing of animals	0.8	9.4	4.0	83.3	100.0
5.	Making feed concentrate	75.8	-	71.2	97.3	-
6.	Cleaning of animals' sheds	72.5	94.4	88.8	97.5	98.0
7.	Watering of animals	77.5	97.2	91.2	95.0	100.0
8.	Bathing of animals	26.7	90.7	-	-	-
9.	Collection of manure	87.5	-	83.2	-	-
10.	Making dung cakes	90.0	-	78.4	-	-
11.	Storage of dung cakes	90.0	-	78.4	-	-
12.	Milking	35.8	91.6	56.0	89.2	94.0
13.	Milk processing	100.0	100.0	71.2	86.7	-
14.	Marketing of animals' produce	60.0	-	66.4	-	-
15.	Marketing of animals	64.2	-	37.6	-	98.0
16.	Caring of diseased animals	82.5	-	91.2	-	-
17.	Calf rearing	67.5	-	73.6	-	-

Conclusions: The results of the present study show that a large majority (86.7%) of the respondents was doing livestock farming for domestic purpose. Women contribute in livestock management activities in addition to their routine household duties. They spend plenty of time in different activities of livestock management by providing major labour inputs in areas specially milk processing, making and storage of dung cakes, collection of manure and caring of diseased animals. Cleaning of animals' sheds, watering of animals, making feed concentrates and feeding of livestock were the activities where their contribution was medium. They also undertake most of the difficult tasks like brooding and breeding, fodder chopping, fodder cutting, and fodder carrying, calf rearing and making animals' sheds, marketing of animals' produce, milking, marketing of animals, and bathing of animals. Evidently, rural women get themselves involved in almost all livestock related activities.

Recommendations: It is evident from that study that a meager number of the respondents keep animals for commercial purposes. Therefore it is recommended that female farmers should be facilitated and encouraged particularly by the private sector for the commercialization of livestock farming as the crop of livestock can be harvested twice a day in the form of milk which can be helpful for poverty alleviation. The livestock department must provide cross breed cattle to the farmers on subsidized rates to increase milk production. It is evident from the study that female farmers are performing almost all the tasks relating to livestock management. Their participation was maximum in milking process (100%), caring of diseased animal (82.5%), and watering of animals (77.5%). It is therefore,

recommended that due attention should be given to create awareness among them about sanitary measures to be taken in the said tasks. However their participation was medium to very low in most of the livestock management practices, which need special attention of extension agencies. As rural women are playing an important role in livestock sector by working side by side with their male counterparts. But so far little attention is paid by the government and private sector towards their education. Therefore, government along with NGOs and other rural development agencies should take initiative to impart education to rural women.

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