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Rural Women's Involvement and Their Constraints in Accessing Livestock Extension Services in District Faisalabad-Pakistan

¹Muhammad Luqman, ²Babar Shahbaz, ²Shoukat Ali, ³Tahir Munir Butt and ²Saleem Ashraf

¹University College of Agriculture, University of Sargodha, Pakistan ²Institute of Agri. Extension and Rural Development, University of Agri. Faisalabad, Pakistan ³University of Agriculture, Faisalabad, Toba Tek Singh Campus, Pakistan

Abstract: Livestock sector is not only most important source of rural livelihoods but also known as black gold of our country and usually this sector is under control of rural women at household level. But unfortunately they have least access to livestock extension services. There are many constraints which are being faced by farm women in attaining access to livestock extension services. To explore these obstacles and their extent of participation in different livestock management activities, the current research was planned in Tehsil Samundari of district Faisalabad. A multistage random sampling technique was employed to select the study respondents. Data were collected from randomly selected 80 farm women. Both qualitative and quantitative methods of data collection were used and analysis was done by using computer software (SPSS). The results showed that the participation of farm women was maximum in poultry raising. Among different obstacles which hinder their access to extension services, low literacy was at the top followed by non-availability of female extension staff in livestock extension department, non-availability of training facilities related to livestock management, lack of local women organizations, violence against women, social security, less authority in decision making regarding livestock management, limited access to credit facilities, less control over resources, social structure, limited access to market information, mobility and lack of self-confidence. Results of the chi-square test statistics showed that participation of rural women in livestock management activities is mainly affected by a number of constraints on the basis of their self-perception. But low educational level and lack of social security for women in rural areas were the leading constraints in gaining access to livestock extension services which hinders their participation in livestock management activities.

Key words: Livestock Management • Rural Women • Livestock Extension Services

INTRODUCTION

Livestock raising is largely a persistent activity to meet the food needs/demands of rural households [1]. It is also a type of financial capital and an important source of resistance to shocks especially for small farmer [2]. Pakistan is gifted with a large livestock population having adaptability according to the local climatic conditions [3]. This sector plays an important role in maintaining the rural livelihoods and it provides the high quality food for human population [4, 5]. It contributes approximately 55.1% of the agriculture value added and

11.6% to national GDP of our country [6]. Agriculture sector comprises of two main sub-sectors; crop and livestock. According to the Federal Bureau of Statistics 2008-09, overwhelming majority (85.0%) of rural women is engaged in agriculture as against only 54.0% of men. Same situation prevails in livestock sector. Both the genders (male and female) have made significant contributions in almost every field of life including livestock production and management. But livestock caring and management is women specialty [7]. As compared to men, contribution of women in livestock care and management is higher [8]. According to an

estimate they spend more than 6 hours in one day as compared to men who spend about 3 hours per day on livestock management activities [9].

Although the participation of rural women in maintaining livestock at rural household level is higher and they devote more time than men but their work has not been recognized and documented on national and international level [10]. Women have least access to information sources relating livestock care and their management on scientific lines. They have almost no access to veterinary extension services [11]. Most of the extension services and programmes that provide training and assistance are still targeting men by overlooking the fact that 70% of the world's farmers are women. Globally, only 5% of extension services are being provided to farm women [12]. Majority of the extension services address male community because the head of the household is usually man. Due to that reason, the working efficiency of females regarding different livestock operations is affected which is a big hurdle in achieving food security leading to sustainable development in the country [13]. In this situation in developing countries like Pakistan, poverty in rural areas persists and dominates due to which marginalized groups especially women become more vulnerable to poverty [14].

The main aim of agricultural extension services (crop and livestock sector) is to provide latest information to both the gender (male and female) at their door steps to eradicate poverty and hunger through sustained growth in the crop and livestock production sector [15]. But rural women who are the major silent contributors of agricultural production face many problems and obstacles in accessing extension education services related to livestock production, management and its care [14]. Keeping in view these facts the current research study was designed to find out those obstacles which are being faced by farm women in gaining access to livestock extension services.

MATERIALS AND METHODS

The methodology of research gives us direction to complete the processes of data collection, analysis and its interpretation. The study was conducted in district Faisalabad which comprises of five tehsils or subdivisions namely Chak Jhumra, Faisalabad, Jaranwala, Samundari and Tandlianwala. Out of these five tehsiles Tehsil Samundari was randomly selected as the study area. Out of 28 union councils of the Tehsil, four (4) were randomly selected. From each of the randomly selected

union council, two villages were selected randomly. From each of the selected village 10 women who were actively engaged in different types of tasks/activities related to livestock care and management were selected, thereby making a sample size of 80 respondents. A triangulation of both qualitative and quantitative methods was employed for the collection of data. Quantitative data was collected through interview schedule and qualitative data were collected through in-depth key informant interviews. To determine the extent of farm women's involvement in different livestock management activities, three point likert scale was used. A five point likert scale was used in determining the obstacles; while their prioritization was done on the basis of mean value. Data were analyzed through computer software SPSS for tabulation and interpretation. Aggregate mean of the likert scale regarding participation of rural women in livestock management activities was calculated which was 2. Activities obtaining mean value > the average mean of the likert scale were considered as the activities with maximum participation. Similarly average mean of the likert scale regarding constraints faced by rural women in accessing livestock extension services was calculated which was 3. The constraints having average mean > 3 were considered as the most important constraints.

RESULTS AND DISCUSSION

Demographic Profile of Respondents: In social science research, demographic characteristics of the respondents play an important role [16]. Keeping in view their importance some of the characteristics like age, education, were studied in the present research and discussed as under:

Age: Among all demographic factors, age is very important as it influences one's behavior and widens the vision of an individual through experience [17]. The affects of age are positive or negative on the basis of experience gained by an individual [18]. It is an important factor in taking rational decisions regarding the adoption of latest and improved agricultural technology [19]. In the research area the age of the respondents were studied and presented in the Table1 given below:

The data presented in Table 1 showed that in the research area, majority of rural women (47.5%) were having age between 31-45 years. It was also noted during data collection that in the research area women who had age more than 30 years; their involvement rate was

Table 1: Distribution of respondents according to their age

Age group	Frequency	Percentage
Young age group (Upto 30 years)	16	20.0
Medium age group (31-45 years)	38	47.5
Old age group (Above 45 years)	26	32.5
Total	80	100

Table 2: Distribution of respondents according to their education

Education	Frequency	Percentage
Illiterate	34	42.5
Upto Primary	20	25.0
Primary to Middle	12	15.0
Middle to Matric	6	7.5
Above Matric	8	10.0
Total	80	100

Table 3: Distribution of the respondents according to their extent of participation in different livestock management activities (n= 80)

Livestock management activities	Mean	SD	Rank order
Poultry raising	2.81*	0.393	1
Cleaning of animal and poultry sheds	2.58*	0.569	2
Making feed concentrate for animals	2.44*	0.672	3
Breeding of animals	2.41*	0.688	4
Taking care of lactating animals	2.15*	0.695	5
Taking care of sick animals	1.91	0.715	6
Vaccination to sick animals	1.89	0.729	7

³⁼ To great extent2= To some extent1= Never

higher in livestock related activities. The reason behind this reason might be due to the fact that the sense of responsibility to handle activities effectively and efficiently is higher in this age group than rest of the age groups. The results of present research are in line with the results obtained by Sadaf [20] who reported that rural women in rural areas of Tehsil Faisalabad who are engaged in different agricultural activities belonged to middle age category.

Education: The development of human resources in agriculture sector is also influenced by getting education [21]. It has so many social benefits like minimizing the child mortality rate, increase in marriage age, better hygiene and sanitation facilities, availability of good quality food, higher economic returns, better access to technology and sources of information [22]. In the present research educational status of female were studied and presented in the Table 2.

The data presented in Table 2 indicate that majority of the respondents (42.5%) were illiterate. This low level of education of rural women was the main factor behind their access to livestock extension services in the study area. The data was also showed that a minor number of

respondents (10.0%) had education matriculation or above. The result regarding the literacy level of rural women was also reported by Iftikhar et al. [23]. The main reason behind the low level of literacy of women in our rural area is that rural people give importance only to male to get education and rural women face a lot of problems in getting this facility [24]. Majority of our rural women are deprived of educational facility and they are illiterate in spite of their high contribution in agricultural and livestock production activities [25]. Due to that reason they are being faced by many problems and constraints [26]. Research studies proved that higher levels of women's education are associated with a higher probability of infant and child survival and with higher levels of school attendance among children [27]. The importance of female education had solid affects on increased economic productivity, improvement in health, lowering in fertility and delaying in marriage age which ultimately improves the social and political participation by women as defined by AUC. [28].

Extent of Rural Women Who Participate in Different Livestock Management Activities: In the Punjab province, majority of the households in rural areas are affiliated with livestock sector which is one of the major sources of their livelihoods. In this sector, as compared to men, participation of women is higher [29]. In the study area, the extent of rural women who participate in different livestock management and its care was determined and tabulated in Table 3.

Data presented in Table 3 showed that women's participation in the study area was maximum in poultry raising with highest Mean value (2.81) and ranked 1st among other activities. In connection with the results of current research, study conducted by Butt et al.[15] synthesized that in rural economy of countries where majority of the people adopt agriculture as their main source of income, poultry farming is one of the major source of income. Further, they concluded that rural women play a central role in poultry industry at household level. Similarly Lanz et al., [12] also reported that as compared to men, women in rural areas are frequently in charge of smaller animals especially poultry along with marketing and processing of animal products. More or less similar results were also found by Hassan et al., [30]. In the research area, contribution of women was found less in taking care of sick animals and vaccination to diseased animals having mean value 1.90 and 1.89, respectively. The reason behind their least involvement in these two technical aspects of livestock management is

^{*} Activities in which participation was maximum

Table 4: Prioritization of the constraints faced by farm women in gaining access to livestock extension services (n= 80)

Constraints	Mean	SD	Rank order
Low literacy rate	4.61*	0.665	1
Non availability of female extension staff in livestock extension department	4.55*	0.593	2
Non availability of training facilities related to livestock management	4.44*	0.744	3
Lack of local women organizations	4.20*	0.818	4
Violence against women	4.14*	0.882	5
Social security	4.06*	0.946	6
Less authority in decision making regarding livestock management	4.05*	0.940	7
Limited access to credit facilities	3.98*	0.941	8
Less control over resources	3.85*	1.104	9
Social structure	3.81*	1.159	10
Limited access to market information	3.46*	1.018	11
Limited access to proper transport facilities (Mobility)	3.45*	1.018	12
Lack of self confidence	3.03*	1.019	13

⁵⁼ S. Agree, 4= Agree, 3= Undecided, 2= Disagree, 1= S. Disagree

that women have no access to technical expertise and knowledge regarding vaccination techniques and management of livestock on scientific lines as reported by Nosheen *et al.*, [31].

Constraints faced by farm women regarding access to livestock extension services.

In the research area, women are facing multiple problems than those of men due to which they have least access to extension services related to crop and livestock production. Some of these constraints are social, some are economical and some are technical [15]. The extent of agreement about these obstacles or problems was calculated through the five point likert scale tabulated and ranked in the Table 4.

The data presented in Table 4 reveals that the most important obstacle which hinder women's access to livestock extension services was low literacy rate(M=4.61) among rural women. The low educational level of rural women in Pakistan leads to many problems and constraints as reported by Luqman et al., [32]. Among rural women low literacy is due to the reason that female gender in our society is getting lesser educational opportunities as compared to males [25]. In spite of the fact that female literacy rate was found to be an important determinant of food security at household level [12]. Non availability of female extension staff is also a big hurdle in achieving access to extension services with mean value 4.55 and ranked at 2nd number. In line with the current research results, Butt et al.[15] reported that non availability of female extension staff is one of the main technical constraints faced by rural women in agricultural extension education services. During in-depth qualitative discussion with the respondents, one of the respondents said that:

"For empowerment of rural women and provision of technology and information to female, it is necessary that government should hire female extension staff"

Non availability and access to training facilities was found at number 3 among other obstacles with mean value 4.44. Throughout the world, farm women have very limited access to training facilities regarding livestock production and management [33]. For example, in Karnataka state of India, women perform 10 activities out of 14 in dairy sector but these women didn't receive any training on dairy enterprise [34]. This is an obstacle to the development and uplifting of national economy. Access to training activities for rural women is important for overall crop and livestock production [35,36]. Similar situation prevails in Pakistan and inappropriate extension and training facilities are being imparted to rural women [37]. During discussion one of the respondents said that:

"We participate in the entire on farm and off farm activities but our society never allow us to take part in any educational and training activities"

The above remarks clearly validate the findings of our quantitative data regarding participation of female in variety of agricultural activities and their lack of access to educational facilities. Lack of women organizations was also found as one of the important obstacle with mean value 4.20. Throughout the global world, farmer unions/organizations/associations was found to be male dominant which is a missed opportunity for rural female to participate in national and international value chains [12]. It was concluded from the data given in Table 4 that

^{*}Important constraints being faced by rural women

Table 5: Chi-Square test for the relationship of level of participation in livestock activities by the rural women and their perceived constraints to access extension services

Constraints	Chi-Square Value	Level of Significance	Remarks
Low literacy rate	15.385	0.017	S
Non availability of female extension staff in livestock extension department	1.937	0.747	NS
Non availability of training facilities related to livestock management	2.468	0.872	NS
Lack of local women organizations	7.490	0.278	NS
Violence against women	3.005	0.808	NS
Social security	15.203	0.019	S
Less authority in decision making regarding livestock management	7.580	0.270	NS
Limited access to credit facilities	5.038	0.539	NS
Less control over resources	4.810	0.778	NS
Social structure	4.322	0.827	NS
Limited access to market information	5.789	0.447	NS
Limited access to proper transport facilities (Mobility)	5.417	0.492	NS
Lack of self confidence	8.255	0.409	NS

S = Significant; NS = Non significant Significance level = 0.05 and 0.01

all the constraints, which are being faced by rural women in gaining access to livestock extension services are important having mean value > 3.00.

Chi-Square Test Analysis: Chi-square test was employed to determine the relationship between participation level of respondents in livestock management activities and their perceived constraints in gaining access to livestock extension services in the study area. The results in this were given in Table 5 given below:

The results of the chi-square analysis as given Table 5 showed that all the self-perceived constraints which were faced by rural women in acquiring access to livestock extension services in the research area had non-significant relationship with their level of participation in different livestock management activities. But the perceived constraints like low literacy rate of women and social security had significant relationship with their level of participation. This significant relationship showed that rural women's participation or involvement in livestock management activities is still stressed and beleaguered due to their low educational level and lack of social security in access to livestock extension services. This clearly indicates the importance of education and access to extension services by rural women in order to achieve national food security. Similar observations were also recorded by Khan et al. [38]. Shrestha [39] also reported that there is direct correlation between educational level of women and their participation in livestock sector.

CONCLUSIONS

From the results obtained from the present study it was concluded that in the study area the age of majority of the respondents was between 31-45 years and majority them were illiterate. It was also concluded that rural women largely participate in poultry production activities and cleaning of sheds of animals and poultry. On the other hand their involvement was found very less in technical aspects of livestock management and care like caring of sick animals and vaccination of poultry and livestock. Among different constraints low literacy rate of women in rural areas is big constraint in access to livestock extension services. Further it is concluded that all the constraints are important because all of them got mean value > 3.00. Rural women's participation was still suffering due to a number of factors and constraints like low literacy rate of women in rural areas and social security showing significant relationship with their level of involvement.

Keeping in view the results of the present research following policy implications are formulated for national food security and food sovereignty:

- Emphasis should be given on providing maximum educational opportunities to rural female.
- Short and long term training programmes should be launched at village level to impart training to women.
- Livestock training centers especially for women with women training staff should be established at union council level.

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