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Extent of Rural Women's Participation in Agricultural Activities

Muhammad Luqman[1], Ejaz Ashraf[1], Muhammad Zakaria Yousuf Hussan[2], Tahir Munir Butt[3] and Naveed Iftikhar[4]*

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Abstract

Rural women in Pakistan, under a small holding system of farming, play a pivotal role in farming. They actively participate in a range of activities related to crop production and livestock management. Rural women remain busy from dawn to dusk in various agricultural activities, including pre-harvest, post-harvest and livestock management. Their participation is well dispersed but less perceived because of insufficient data to show their active involvement in various agricultural activities. Keeping these points in mind, this study was designed to explore the extent of women's participation in various agricultural activities in district Bahawalpur (Southern Punjab, Pakistan). A total of 125 rural women were selected through multistage random sampling technique and interviewed with a well-designed, pre-tested interview schedule, and the data was analyzed using SPSS. The results of the data analysis revealed that rural women's participation level was at the top (M = 2.87 and SD = 0.42) in picking of cotton while their participation level was found low (M = 1.78 and SD = 0.88) in broadcasting of seed/fertilizer among different crop production and management related activities. While on the other hand their extent of participation was found at the top (M = 2.90 and SD = 0.30) in cleaning of animal's sheds and found low (M = 2.02 and SD = 0.83) in calf rearing among different livestock production and management which were being performed by rural women. Regarding daily time given by rural women to perform various crop production, livestock production and household activities majority of rural women they devote > than 8 hours in a day to perform these activities as reported by 27.2%, 32.8% and 76.8% of the respondents, respectively. It is recommended that national commission should be established to recognize and documented the participation of rural women at various national and international forums. It is also recommended that women training wing should be established at national level under the supervision of district administration to train rural women in different areas of crop and livestock production so that they can contribute in a better way in the national economy.

Keywords:
Extent,Rural women, Crop production activities, Livestock production activities

[1] *University College of Agriculture, University of Sargodha, Pakistan.*
[2] *Agriculture Officer, Government of the Punjab, Pakistan.*
[3] *University of Agriculture, Faisalabad- Toba Tek Singh Campus-Pakistan.*
[4] *District Officer Planning, Toba Tek Singh-Pakistan.*
** Corresponding author's email: tahirmunir@uaf.edu.pk*

INTRODUCTION

Women along with men are the main actors in feeding the world. In fact women in most of the rural societies play a major role in crop production activities. Women work as mothers, household labourers, and as social production workers (FAO, 1983; CTA, 1993; FAO, 1995; Felsing & Baticados, 2001; FAO, 2002). Throughout the world rural farm women are involved extensively in agricultural operations. A number of research studies had proven women's participation in various agricultural activities having complementary roles, sharing agriculture related activities with her male counterpart (Franzel & Helen, 1992; Saito & Spurling, 1992; Sharma *et al.,* 1997; Ahmad & Ismail, 1998; Lovenbalk *et al.,* 2003; Oladeji, 2004; Oyesola, 2004). However, in some parts of the world women's participation in agricultural activities is higher than that of men (Prakash, 2003; Tacio, 2003).

Literature indicates that women's involvement in agricultural operations vary from country to country and region to region due to the change in social setup of every country (Ratna, 1991; World Bank, 1994; Karl, 1996; Huda, 1998; FAO, 1999; Ozcatalbas & Ozkan, 2000; FAO, 2002; Mohammed, 2002; Farrington & Deshingkar, 2003; Mwange, 2004; Manjula *et al.,* 2006; Farid *et al.*, 2009; Badodiya *et al.,* 2010). Women in rural areas are equally involved in pre-harvest agricultural activities like preparation of soil, planting, weeding, harvesting etc., and post-harvest activities like storage of food grains (Saini & Koppen, 2001).

Like agriculture rural women actively participate in activities related to livestock caring and management (Huss-Ashmore, 1996; Sharma *et al.,* 1997; IFAD, 1997; Amuguni, 2001). Women in most of the parts of world reported that they work in livestock in a better way than men (Ishani, 2004). Male person tend to own large animals but female person have control over the large animals (Flintan, 2003). In small land holder household women earn income by raising livestock and they were more likely to spend it for food of the households (Mullins *et al.,* 1996; Dolberg, 2001). In second and third world countries among all the livestock production and management, majority of them perform by rural women (Tulachan & Karki, 2000). Women are responsible for milking animals and caring for the young stock and any sick animals (Bekure *et al.,* 1991). In livestock production women spend 2.2 hours/day/household in animal care activities (Agarwal *et al.,* 1999).

Similar situation prevails in our beloved homeland, Pakistan, whose total population consists of 148.72 million people. Out of which 51.32% are male and 48.68% are female. Further about 49.09% females are residing in rural areas as compared to 50.91% males (Government of Pakistan, 2010). Majority of our population residing in rural areas whose livelihood depend directly or indirectly on agriculture sector. Like other parts of the world, rural women in Pakistan are among millions of landless male labourers and small farmers who are fighting back rural poverty and toil hard to meet basic needs of food, clothing and shelter through their reliance on crop production. Women play a major role in agriculture and livestock production, and in supplying food to men in the fields, hauling water, collecting fuel wood, and managing livestock. Rural women really supplement their efforts in cultivation of the crops right from the preparation of soil to the post-harvest operations (Habib, 1996). They are equally efficient in seed bed preparation, tilling, sowing, fertilizer application, fodder cutting, weeding, interculturing, transplanting husking, threshing, drying, storing cereals and fodder, selling produce and harvesting of crops, fruits and vegetables (Ahmed & Hussain, 2004). Rural women often devote more time to these tasks than men do. Surveys have revealed that a woman works 12 to 15 hours a day on various economic activities and household chores (ESCAP, 1997). According to another survey report women often devote more time from 16- 18 hours against 8-10 hours by men in a day to these tasks (FAO, 2001). According to the report of UNDP (1997) rural women's participation rate in crop and livestock production activities is about 79.4% which is higher than that of men (60.8%).

Rural women residing in rural areas of four provinces extensively involve in the production

of major field crops. With respect to crops, their participation is particularly high in cotton, rice, pulses and vegetables (Nosheen *et al.,* 2008). Rice and cotton cultivation in Sindh jointly account for more than one-third of women's annual agricultural activities. It has been estimated that women account for 29.28% of labour in rice production and 23.55% in cotton-wheat areas. One study in rice and cotton producing villages in Pakistan showed that in agricultural activities women spent 39.34 and 50.42% of their time in rice and cotton growing areas respectively (Shaheed & Mumtaz, 1990; Rashdi, 2002). In Baluchistan province most of the women do field work. They are equally responsible for managing pre-harvest, post harvest and food security activities. A large majority them are also engaged in poultry and livestock production (FAO, 1997).

Similarly, women's participation is the highest in cotton production in the Punjab. Picking cotton is exclusively a women's task (Qaudri & Jahan, 1982). About 35% of the women are engaged in pre-harvest field activities such as cottonseed preparation. In addition women are involved in various primary and secondary cotton operations, such as weeding and thinning (59.5%), manuring (29%), hoeing (52.5%), cotton cleaning (77%), and stick removing (72.5%) (Asghar, 1994). Actually their participation in production of major crops has been estimated to be approximately 30% in rice, 25% in cotton, 23% in sugarcane, 18% in wheat and 26% in vegetables (Ahmed & Hussain, 2004). A survey conducted in five districts of NWFP revealed that 82% of women participated in agro-based activities. They spent 45.0% of their time and were responsible for 25.0% of the production of major crops. They produced 30.0% of the total food (FAO, 1997).

In Pakistan, caring for livestock takes up 35.0% of a village women's time, and it is hard to walk around a village without seeing hens, goats, cows, and buffaloes etc. (Taylor, 1985). A rural woman in Pakistan works 15.50 hours a day, spending 5.50 hours in caring for livestock, but provides only 50 minutes for the care of her own children (ESCAP, 1997). Poultry, sheep and goats are very important to rural women for being the only source of income fully under their control. Women are responsible for 60.0 to 80.0% of the feeding and milking of cattle. Over 90.0% of the rural families keep an average of 12 adult birds per family and hatch chicks under a brood hen. The women apply their own methods of rearing, brooding, breeding, and management based on the experience handed down from the elder family members (Katuwal, 1991; ESCAP, 1996).

From the above mentioned facts it is crystal clear that women mostly participate extensively in crop production as well as livestock production and management. Although so many research studies had been designed to investigate the rural women' involvement in agriculture but there is still an inadequate database on 'what farm women do. To integrate women in any agricultural development project's design and implementation, it is essential to have a complete knowledge of 'what women do'. The single major reason attributed to this lopsidedness of development plans and policies is that economic contribution by women has not only been underestimated and unrecognized but very little has actually been written and known about what women do in different sectors of the national economy and particularly in agricultural sector (World Bank, 2003). So keeping in view the above facts, an attempt had been made by the researcher to explore the extent of rural women's participation in different agricultural activities related to crops, livestock and poultry production in district Bahawalpur.

MATERIALS AND METHODS

The study was conducted in district Bahawalpur located in Southern Zone of the Punjab, Pakistan. Whole of the district comprises of 78 rural union councils. Like other districts of Pakistan the literacy level of female was comparatively low than male in rural areas of Bahawalpur is also low as compared to male (Government of Pakistan, 2010). All the rural farm women residing in district Bahawalpur served as the population of the study. A multistage sampling design was used for the selec-

tion of study respondents using random sampling technique as adopted by Farindle & Ajayi, 2005 while determining the training needs of women farmers in livestock production in Oyo state of Nigeria. Out of the total 78 rural union five were selected through simple random sampling technique (Acharjee *et al.*, 2002). From each selected union council, one village was selected randomly, and from each selected village, 25 farm families were selected at random.

For random selection of a farm family list of farm families residing in the selected villages was prepared with the consultation of local management (councilor) and then got verified the list the local voters list. Then the names of farm families were written on the piece of paper and respondents were selected through lottery method from each farm family thereby, making a sample of 125 respondents. The data were collected during 2003 through a well-structured, validated interview schedule (Eck & Torres, 1996, Cho, 2002; Wingenbach *et al.*, 2003). The extent of rural women participation in agricultural activities was measured by using a three point continuum namely 'Mostly', 'Occasionally' and 'Not at all' which was assigned scores of 3, 2 and 1, respectively (Sailaja & Reddy, 2003). The ranking of activities was completed on the basis of the mean value. The study was descriptive in nature and reliability of data was checked through Crobbach's Alpha. The collected data were analyzed by using Statistical Package for Social Sciences (SPSS).

RESULTS AND DICUSSIONS

Rural women in Pakistan perform a variety of tasks in the field of agriculture. To determine their extent in crop production activities questions were asked to the respondents and tabulated in table 1.

The data presented in Table 1depicts that among crop production and management activities picking of cotton was at the top with highest mean value (M = 2.87 and SD = 0.42) as large majority of the respondents involve in cotton picking. This is due to the reason that the study area is important for cotton production and in cotton growing areas of Pakistan cotton picking is mainly the responsibility of rural female. Male person seldom involve in this activity. While on the other hand rural women's participation is low in broadcasting of seed/fertilizer in the field with lowest mean value (M = 1.78 and SD = 0.88) and ranked 9th among other crop production related activities.

Rural women's participation in Livestock management activities

Like crop production and other household activities Pakistani rural women are also playing a prominent role in livestock production and management activities. Keeping in view their contribution in livestock management questions were asked to the respondents to determine their extent of participation in different livestock related operations and tabulated in table 2 given below.

The data presented in table 2 showed that among various livestock production and man-

Table 1: Ranking of rural women's participation in crop production and management activities

Crop production and management activities	Mean	SD	Rank
Picking of cotton	2.87	0.42	1
Separation of wheat from chaff (Winnowing)	2.73	0.63	2
Storage of cereals	2.58	0.69	3
Drying and cleaning of seed	2.57	0.70	4
Intercultural operations	2.50	0.74	5
Harvesting operations related to crops/fruits/vegetables	2.46	0.79	6
Sowing operations related to crops/fruits/vegetables	2.33	0.77	7
Transplanting of rice	2.30	0.71	8
Broadcasting of seed/fertilizer	1.78	0.88	9

Scale: 1= Not at all, 2= Occasionally, 3= Mostly

Table 2: Ranking of rural women's participation in livestock production and management activities

Livestock and poultry production and management activities	Mean	SD	Rank
Cleaning of animals' sheds	2.90	2.90	1
Feeding and caring of Livestock/poultry	2.78	2.78	2
Watering of animals and poultry birds	2.72	2.72	3
Milking and milk processing	2.70	2.70	4
Fodder cutting and chopping	2.66	2.66	5
Making feed concentrate	2.64	2.64	6
Grazing of animals	2.46	2.46	7
Calf rearing	2.02	2.02	8

Scale: 1= Not at all, 2= Occasionally, 3= Mostly

agement activities the participation of rural women in cleaning of animal's sheds was at the top with highest mean score (M = 2.90 and SD = 0.30) as cleaning of home/ "Haveeli" (Residential) as well as the poultry and livestock sheds is the sole responsibility of rural women in traditional Pakistani society. While on the other hand feeding and caring of livestock and poultry birds ranked 2nd with mean value (M = 2.78 and SD = 0.42). The involvement of rural women is low and ranked 8th among other livestock related activities with lowest mean value (M = 2.02 and SD = 0.83) in calf rearing.

Time devoted to different agricultural and household activities by rural women

Women in rural areas of Pakistan involve in different agricultural and household activities. To determine their allocation of time to different activities question was asked to rural women and tabulated in table 3.

The data presented in table 3 given above showed that majority (27.2%) of the respondents devoted time more than 8 hours per day to crop production activities. Similarly to perform livestock related operations majority of rural women (32.8%) of the respondents allocate more than 8 hours in a day. On the other hand no rural women devoted time less than six hours a day to different household activities and large majority (76.8%) of the respondents give more than 8 hours in a day to perform household tasks.

CONCLUSIONS

From the results it was concluded that in the study area vast majority of rural women involve in picking of cotton as in traditional Pakistani culture in rural areas of cotton producing region especially Sindh and Southern region of Punjab it is the ole responsibility of rural women to pick the cotton the field. In the study area their participation of rural women was also found at the top (M = 2.87 and SD = 1.42). The similar results were also found by Nazar (2004) in which she found that an overwhelming majority of the female in rural areas of District Khanewal (Southern Punjab). It is widely accepted that most of the critical roles related to livestock farming are played by the women (Moser, 2007).

In Pakistan rural women generally contribute more labour inputs in areas of fodder cutting,

Table 3

Agricultural activities		Time (hours/day)									
		Up to 2		2-4		4-6		6-8		Above 8	
		No.	%	No.	%	No.	%	No.	%	No.	%
Crop activities	production	15	12.0	22	17.6	30	24.0	24	19.2	34	27.2
Livestock activities	production	-		23	18.4	28	22.4	33	26.4	41	32.8
Household activities		-	-	-	-	-	-	29	23.2	96	76.8

watering, cleaning of animals and their sheds etc. Milking the animals and milk processing has also been attributed to the women folks. In the study area majority of the respondents involve in cleaning of animal's sheds with highest mean score (M = 2.90 and SD = 0.30). This is due to the reason that cleaning of home, animal and poultry sheds is the principal responsibility of rural female in Pakistani culture like other Asian countries. The results of the present study were also in line with that of the results obtained by Akmal and Sajida, (2004) who reported tat women exclusively involve in cleaning and maintenance of animal sheds. The similar results were also found by Arshad *et al*., (2010) and Hashmi (2009) on national level. Internationally Paudel *et al.,* (2009) reported that women in rural Nepal vast majority (80%) of women contribute in livestock farming tasks like cleaning of sheds.

It was also concluded that rural women spend a lot of time (> 8 hours/day) in crop production and livestock management activities and household activities as reported by 27.2%, 32.8% and 76.8% of the respondents, respectively. Similar results were also observed by Sadaf (2005) and Saghir *et al.,* (2005) on national level.

RECOMMENDATIONS

In spite of the major contribution of rural women in agriculture 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 to access the agriculture extension services. Their role in agriculture sector has often been underestimated or worse, ignored by the management authorities. In the light of the results of the present research study it is recommended that a national commission is to be formulated to recognize their contribution at national and international forums. Other than that a female extension wing should be established at district level to trained and provide services to rural women. Women training centers should be established at national level whose responsibility to conduct training for rural women on different agricultural activities to enhance their knowledge and skills.

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