

# Livestock Farming and Participation of Women A Case study of District Charsadda Pakistan

Huma Liaqat Ali Department of Applied Economics, Institute of Management Sciences 1-A, Sector E-5, Phase VII, Hayatabad, Peshawar, Pakistan

#### **Abstract**

The present study is carried out to analyze the participation of rural women in livestock farming and To inquire that level of education affects the participation of rural women in livestock farming and its effect on household's income in District "Charsadda". This study will help in the implementation of future policies for development of the rural women in particular and rural livestock in general.

Keywords: Livestock, Women participation,

# INTRODUCTION

Pakistan is located in the south Asia, comprising a total geographical area of 80.61 million hectare with a human population of 135.28 million. (*Population Census Report, 1998*).

Pakistan is a developing country. Pakistan has basically an agro-based socio-economic structure and offers a considerable scope for the live stock. Importance of live stock can not be over emphasized in a country like Pakistan, whose economy largely depends upon agriculture. It serves as a backbone of Pakistan's economy, which accounts for 39% percent of agricultural value added and about 9.4% of GDP. It also earned foreign exchange of Rs. 51.5 billion for the year 2002-2003 through exports. Their percentage share in visible exports is around 13%. (Agricultural *Statistics of Pakistan*, 2004).

According to live stock census we came to know that animals population comprises of 26.5 million Buffaloes, 55.7 million of Goats, 24.8 million cattle, 26.7 million Sheeps, 24.4 million of cows, and 0.7 million of camels. They produced 28634.0 million tones of milk and 1097.0 million tones of beef, and 727.0 million tones of mutton. (Economic survey of Pakistan 2004-2005).

Among total population women population is 49% of the total population having a literacy rate of 7%. Women constitutes 42.6% of all family workers in agriculture (consisting of crop and live stock households) in which 25.1% are full time workers and 75.1% are part time workers.( Population census report, 1998),

Both men and women are engaged in carrying out multiple agricultural crops and live stock operations. Nevertheless, each of the two genders contributes in their own ways. Men have assumed greater responsibilities outside the house, while women are confined within the house. The participation of women thus has been highlighted much more which has rather eclipsed the participation of women, who along with their households and socio-cultural responsibilities are performing other important activities. Such participation of women in multiple activities generally adds to household's earning, but they are not paid for their work neither recognized nor given any remuneration. The workload of women varies in different regions of Pakistan. In NWFP, women perform less out side the household due to socio-economic and cultural restrictions like, Parda, low literacy rate, low health standards and opportunities for the improvement of skills, which lessons actual output. However in the hilly areas women are almost involved in livestock operations. The rural women labour helps their men in field operations etc...

Thompson and Hart (1994) document livestock keeping system operated in the eastern provinces, Turkey. He surveyed village livestock farmers, had farms with 30% of the sheep and cattle. Stock was housed for winter and grazed on community owned and managed pastures for the remainder of the year. Typical farmers had 1 to 6 cows and 30 to 100 sheep or goats. The results showed that 55% of the cattle were of local breed and 37% were of exotic cross. Women progeny were retained as herd replacements while males were sold between the age of 8-18 months to cattle finishers. Sale of surplus lambs and –milk products were the main source of income for sheep farmers. Flocks and herd 80 to 100% lambing on average with lamb mortality ranging from 5 to 40% depending on the level of winter feeding.

**Zemmelink (1999)** surveyed 60 male and women in Sri Lankan and categorized farmers as with and without off-farm income for livestock feeding practices. Data on herd size, feed offered, milk production, chest girth, reproduction and management were collected on monthly basis for the whole year. Only the male farmers without off-farm income achieved higher feeding levels, 84.4 vs. 65.6 - 72.1g digestible organic matter /kg, 0.75 daily and milk yield (6.4 vs.5.3-5.7 litters /lactating cow). Women farmers without off-farm income did not collect extra feed in response to higher levels of production.

Davis (1995) described the role of Afghan Pashtuns nomad women was conventially having very little to do with the family's livestock, except for milking the animals and processing milk products. These implied that women's knowledge of animal health care was limited, or in any case more limited than that of men.



However in recent ethno veterinary research among Afghan Pashtun nomads not only shows that the women played a great role in the care of livestock than previously described but suggests that they also know sometimes more about livestock health and diseased than men. In generally the marginally superior ethno veterinary knowledge displayed by women, correlates and with the responsibilities of women in Koochi society, namely the care of newborn and diseased animals, preparing slaughtered animals, cleaning out sheds and providing health care to animals. Together these responsibilities provided and opportunity for women to observe at cost hand the symptoms of livestock diseases, as well as the internal pathology visible at slaughter.

Curry et al. (1996) presented paper for the analysis of gender aspects of livestock diseases control based using house based data on livestock disease control (particularly that of cattle) collected from central Kenya. Adult women and elderly men had primary responsibilities for livestock care, and were therefore well placed to diagnose illness. Dipping and spraying of animals to prevent tick borne and other diseased was the primary responsibilities of adult males. The knowledge of livestock diseases did not appear to vary significantly by gender, although some elderly men did possess extensive knowledge of indigenous diseases categories and traditional remedies. The study also examined decision regarding use of milk form the morning milking and more likely to be made by adult men and it is the morning milk that was most often sold. Adult women were however used to make decision about use of evening milk, which is most often kept for household consumption. The results suggested that it is important to recognize gender issues in planning and implementing livestock disease control program.

Regender and Singh (1999) study was conducted in three districts of Haryana, India. The data was collected from 300 respondents in categories of landless, marginal, small, medium and large farmers on a random basis. Districts and cast had a significant (p<0.01) association with gender of milkier. Education significantly (P<0.01) affected the method of milking. The percentage of milkier practicing the "Knuckling" method was 100, 95.3, 1000 and 96.4 respectively in illiterate, primary, middle and above. However age and family size did not show any significant effects on milking practices under different farming system. The author also examined women's rights to inherent or preinherits animals, manage animals given to them as dower and generate income through the sale of milk products. The comparative data showed that cultural, socio-economic and ecological factors have a strong influence on the role of women in pastoral production. Fulani women can often choose from a range of strategies within their cultural framework.

**Akhtar (1989)** documented a study on the utilization of daily time by rural women in NWFP, Pakistan. Data was collected through observation, content analysis and interviewing methods. The selected villages were completely rural and had a joint family system. Women literacy rate was 2% and the women were only skilled in household work, rearing children and keeping livestock. The women worked from 5:00 am to 9:30 pm with 1-2hrs.leisure time per day. Women were facing several constraints concerning employment, social taboos, Purdah and no facilities for skill learning. Women have no concept of planning their work according to proper time schedule as a result of poor education.

**Azhar and Hawitt (1995)** reported the status of rural women and their role in agriculture, income generating activities and decision making in Bangladesh. It was found that the women's working day was between nine and thirteen hours. Most of these working hours were employed in economic and expanded economic activities. However, the productivity of economic activities such as livestock rears and kitchen gardening was very low, mainly due to lack of technical knowledge.

# SAMPLE SIZE AND DATA COLLECTION:

Considering the limited resources, the geographical coverage of the study was confined to two purposively selected villages namely village Abazai, and village Tangi in district Charsadda with the assumption that rural areas of districts Charsadda have the same demographic feature compare with the other rural areas of the NWFP province.

We have selected two villages, village Abazai and village Tangi. As there are a number of houses in both the rural areas of the two villages. But we select thirty (30) households in Abazai and thirty (30) households in Tangi. Total sixty samples were collected with the coverage of two villages in districts Charsadda. For data collection an interview and questionnaire schedule was evolved. Besides this, personal observations were also recorded to supplement the primary data collected through survey.

# RESULT AND DISCUSSION SIZE OF SAMPLED HOUSEHOLD

Distribution of households (HH) on the basis of family size in two areas of Charsadda is given in table 1. The proportion of small HH size varying from 1 to 4 members was 16.66% in Abazai and 13.33% in Tangi. The proportion of medium size HH with 9-12 family members was close and averaged 33.33% and 23.33% respectively. In small size household (HH) traditionally women have to bear greater burden of livestock activities. Nevertheless no relationship of HH size and number of livestock units was found in the present study.



This suggests that, factors other than labour force determine the livestock population per HH. According to the population census report (1998) annual population growth rate was 3.42% and 2.8% in Abazai and Tangi respectively. In villages of Abazai and Tangi present family size, which is large than thirteen members, were 20% and 26.66% respectively.

TABLE .1 CLASSIFICATION OF HOUSEHOLD (HH) BY FAMILY SIZE

	ABAZAI		TANGI			
Household range	House hold Numbers	%Age	House hold numbers	%Age		
1-4	5	16.66	4	13.33		
5-8	9	30	11	36.66		
9-12	10	33.33	7	23.33		
>13	6	20	8	26.66		
Total	30	100%	30	100%		

**Source: Field Survey** 

#### SOCIAL PROFILE OF RURAL WOMEN

In order to analyze the socio-economic status of women participated in livestock rearing, information on their age, education level and maximum labour work were collected and the findings are tabulated in table 2.

# I. AGE

Most of the livestock farming activities were performed by either young girls of 16-25 years age in Abazai (33.33%) and in Tangi (30%) shown in table 2. Women of more than 26 years of age were responsible to a maximum extent (53.33%) in Abazai. The women of same age were sharing livestock farming activities in Tangi (43.33%). The difference in age, for sharing live stock activities was considered mainly due to socio-cultural set up. In older age women were busy in performance of livestock related activities with having less participation of young girls. In contrast to young girls were mainly involved in performance of all live stock activities having older age women participation limited only for making decisions in generating income from livestock products and others a like.

# II. EDUCATION LEVEL AND LIVESTOCK PARTICIPATION

It is evident from (Table 2) that most of the respondent women were illiterate and the proportion was higher in Abazai (83.33%) as compared to Tangi (73.33%). Only (6.66%) of women had secondary or higher education in Tangi. The overall literacy ratio of women was higher in Tangi than Abazai.. Women were mostly involved in farming activities and may not afford to send daughters to school. High illiteracy describes women intense participation in household works, rear children, and fetches water from far-flung areas, performing farm activities and also off farm labor, managing livestock activities for production both for house consumption and income generating. As women are mostly involved in livestock raising activities, their education level would have great impact on development of livestock sector. Improved literacy ratio among women of Tangi area has helped the rural women to adopt new techniques of livestock health and management, provided through extension services employed by both the government and non-government organizations. A part from farming, women education is also important for increasing their role in economic uplift of HH. It has been observed that education up to primary level had not affected the participation of rural women in livestock farming but above or up to secondary level educated women highly denied participating in the livestock farming. With the increase in level of education the participation of women in livestock decreases because educated women then participate in other activities like teaching small children, making tuition to kids in the villages. According to interview, the abstaining of educated women from livestock participation was because of the dirty environment of livestock and a matter of disgrace for young educated girls participating in livestock activity. In fact the low participation of women in livestock farming in Tangi (Table 2) may support this concern. Strong (1989) stated that having no education and skills in the conservative socio-cultural set-up would restrict women only involve in farm labor activities conducted inside home or in the close compound. The data collected shows that level of education discourages rural women participation in livestock farming.

# III. STAGES OF PARTICIPATION

In Abazai and Tangi most households were keeping livestock inside or near to their home. Therefore livestock rearing was considered as an extension of women household work. Table 2 shows that women participation in livestock practices from young unmarried stage was found higher in Tangi than Abazai 16.66% vs 20%.



However the participation of young married women in live stock was greater in Abazai (40%) than Tangi (33.33%). Similarly old married women participation in livestock farming was found higher in Tangi (46.66%) than Abazai (43.66%). Age difference in taking care of animal activities demonstrated the socio-cultural setup of the area, where young girls were not allowed to perform off-farm labour, while mid and old age women were allowed to do so.

# IV. REASONS FOR WOMEN PARTICIPATION IN LIVESTOCK FARMING

The socio-economic status of the areas demands women participation in livestock sector. Findings of the present study showed that poverty was the main cause of women participation in live stock practices, (60% to 50% table 2) in Abazai and Tangi areas. By choice participation of women in livestock husbandry practices were found limited in Abazai than Tangi (16.66% vs 13.33%). Traditionally they were about to practice livestock keeping as reported by 23.33% and 36.66% respondent women in both Abazai and Tangi respectively.

# V. DIVISION OF LABOUR WORK

In the both areas, women spent most of their time in carrying out livestock activities. In Abazai and Tangi 76.66% and 63.33% respondent women respectively reported that they spent greater part of their time in caring animals and processing produce. Cleaning sheds, feeding animals collecting manure for fuel or fertilizer and processing the milk were found exclusive women domain. Next to live stock activities maximum time was devoted to household work especially in Tangi, where participation of women in household activities was relatively greater (Table 2). The household activities included food preparation, cooking, serving, fetching water, bringing fuel, and cleaning utensils and kitchen.

TABLE 2
SOCIAL PROFILE OF RESPONDENT WOMEN IN TANGI AND ABAZAI

INDICATORS	ABAZAI		TANGI	
Age in Years	Numbers	Percentage	Numbers	Percentage
10 to 15	4	13.33%	8	26.66%
16 to 25	10	33.33%	9	30%
> 26	16	53.33%	13	43.33%
Total	30	100%	30	100%
	EDU	CATION		
Illiteracy	25	83.33%	22	73.33%
Primary	4	13.33%	6	20%
Secondary	1	3.33%	2	6.66%
Total	30	100%	30	100%
PARTICI	PATION STAGE	S IN LIVESTOCK	ACTIVITIES	_
Young unmarried	5	16.66%	6	20%
Young Married	12	40%	10	33.33%
Old married	13	43.33%	14	46.66%
Total	30	100%	30	100%
REASONS I	FOR PARTICIPA	TION IN LIVEST	OCK FARMING	
Poverty	18	60%	15	50%
Choice	5	16.66%	4	13.33%
Traditional	7	23.33%	11	36.66%
Total	30	100%	30	100%
	LABOU	R DIVISION		
Livestock	23	76.66%	19	63.33%
Household	6	20%	10	33.33%
Agriculture	1	1.8%	1	3.33%
Total	30	100%	30	100%

**Source: Field Survey** 

# DISTRIBUTION OF LIVESTOCK PER HOUSE HOLD.

The distribution of buffaloes, cows, goats and sheeps per household in Abazai were 33.33%, 25%, 33.33% and 8.33% respectively, while in Tangi, distribution of buffaloes, cows, sheeps and goats were found 30%, 40%),



10% and 20% respectively as shown in (Table 3). The study shows that buffaloes, cows and goats in both the areas were dominant livestock species while farmers less prefer sheeps. The climatic conditions of areas were found favorable to buffaloes, cows and goats. These were primarily kept to provide milk for consumption.

DISTRIBUTION OF LIVESTOCK UNIT PER HOUSEHOLD IN ABAZAI AND TANGI

SPECIES	ABAZAI		TANGI	
SPECIES	Numbers	%Age	Numbers	%Age
Buffalo	4	33.33%	3	30%
cows	3	25%	4	40%
Sheep's	1	8.33%	1	10%
Goats	4	33.33%	2	20%
Total L.S (HH)	12	100%	10	100%

**Source: Field Survey** 

# FEEDING PRACTICES AND LIVE STOCK PRODUCTION SYSTEM:

Both the selected areas are naturally fertile, provide range and crop based feed resource for livestock feeding. Traditionally, range grasses, cultivated fodder, crop residues and tree leaves are used for livestock feeding in Charsadda. The common feeding practices in both the selected areas included combination of both grazing and stall-feeding. Because of the extended green rangeland, farmers commonly practiced Grazing of livestock, 53.33% to 46.66% in Abazai and Tangi as shown in table 4. Stall feeding system of livestock was also practiced when there was no green fodder available. The stall feeding in Abazai was 33.33% and in Tangi it was 36.66%. While some people practiced both. Ali (1995) reported that livestock production system vary with the climate altitude, social system, physical infra structure, and general economic status of the area. One distinctive livestock production system is sedentary which is prevailed in the study areas that are Abazai and Tangi. This system is mostly practiced in both the areas.

TABLE 4
FEEDING PRACTICES OF SEDENTARY LIVE STOCK IN ABAZAI AND TANGI

PRACTICES	ABAZAI		TANGI				
	Number of HH	%Age	Number of HH	%Age			
Grazing	16	53.33%	14	46.66%			
Stall feeding	10	33.33%	11	36.66%			
Both	4	13.33%	5	16.66%			
Total	30	100%	30	100%			

**Source: Field Survey** 

# LIVESTOCK HEALTH CARE

The second most important thing, which was the concern of the farmers, was livestock heath care after the feeding problem. Having diseased herds with crippled animals caused great economic loss to farmers in the farm of treatment cost, death toll and very low milk production. Those animals that have some sort of disease fetched very low prices, almost less than half of the normal price. Major disease of large and small ruminations in the areas were reported as anthrax, black quarter, pneumonia, foot and mouth, metritis, pleuropneuminia hemorrhagic septicemia, bloat, liver fluke and intestinal worms.

As shown in table .5, Majority of the HH (56.66% in Abazai and 86.66% in Tangi) used traditional home remedies for treating animals. Generally the farmers try their own treatment first and when animals do not recover then they seek help of veterinarian or stock assistant. Veterinary facilities were inadequate in the area because of very limited availability of govt. funds, lack of mobility of veterinary staff and seasonal movement of livestock. Nevertheless it was found that limited number of farmers on the average (about 10%HH) approached veterinary hospital for treatment of their animal. This was mainly due to inaccessibility of farmers to distantly located limited hospital in the selected areas. At the homes diseased animals were generally kept with healthy animals within the same room. Drugs were expensive and owner mostly relied on herbal drugs prepared by village quacks and/or home—made curatives. The cost of veterinary treatment was also a problem, most of the farmers in the rural areas were poor and they could not afford to purchase costly veterinary medicines. The high incidence of disease and animal mortality results in major financial setback to livestock owners mainly rely on this asset for their livelihood. Mostly religion clerics act as medical practitioners because livestock is considered valuable asset of the family and to take proper care of them, they used "Taweez" and others alike. Households



located near the veterinary institution had knowledge of facilities, vaccination and deworming services were dispensed by the government. Relatively more HH in Abazai (40%) used dewormers than the Tangi (33.33%). Mostly cattle, buffalo and small ruminant were treated with dowermers. According to the farmer's report, deworming use had considerable positive effect on animal health. In both areas, some of the respondent HH about 40% in Abazai and 36.66% in Tangi irregularly practiced vaccination of their animals. Farmers were asked for their suggestions for bringing improvement in animal health. Overall on average 80% HH opted for creation of adequate veterinary facilities in the form establishing more dispensaries/hospital with adequate staff in the area. Some farmers (20% HH), particularly in Tangi suggested that they should be given training /education on livestock health care.

TABLE 5
DIFFERENT ADOPTED VETERINARY HEALTH CARE PRACTICES

	ABAZAI			TANGI				
Health practice								
	Yes		No		Yes		No	
	Numbers   %Age		Numbers	%Age	Numbers	%Age	Numbers	%Age
Deworming	12	40	18	60	10	33.33	20	66.66
Vaccination	12	40	18	60	11	36.66	19	63.33
Treatment at hospital	4	13.33	26	86.66	3	10	27	90
Treatment at home	17	56.66	13	43.33	26	86.66	4	13.33

**Source: Field Survey** 

# GENDER WISE ROLE IN LIVESTOCK FARMING

The gender division of labour in livestock farming in Charsadda summarized in Table 6.

Finding of the present study showed that women participation in livestock feeding was very high and 86.6% of the respondent women were engaged in livestock farming activities for both areas. Fodder chopping and storage were also found women oriented activities. 50.9% and 61.8% women were participated in these activities in Abazai and Tangi respectively. Fodder sowing and harvesting on the other hand were men responsibility and performed by (30.9% and 27.3% men) in Abazai and Tangi. Men and women in Abazai almost equally shared grazing of animals while relatively fewer women (13.3%) were involved in grazing then men (40%) in Tangi. In both the selected areas both men and women were responsible for grazing but women were mostly above 60 years of age. In Tangi it is 46.6% and Abazai it is 36.6%. It was observed that most of the time cows, buffaloes, goats, were free to graze without any attendant specifically in the Tangi area. This was mostly prevalent in responded households having no male head at home. The conservative socio-cultural conditions in Tangi do not encourage young married and unmarried women to take animals outside for grazing. An interesting feature of the area was that most of the time old married women (above 60 years age) in company of very young family members (children) preferred the task of grazing animals, especially in households having no adult male at home. Table 6 shows that the proportion of women involved in milk processing was greater in Abazai and Tangi (76.6 Vs. 66.6%). Milk selling and milk products was regularly practiced in the area, 93.3 to 86.3% women in both the areas performed this. Watering of indoor animals was the prime responsibility of women, in both area and preferred by 76.6% and 66.6% respondent women in Abazai and Tangi respectively. There were responsible to fetch water 2 to 3 times a day from near canal of river swat especially in Abazai. Being a heavy labor intensive job, Shed construction for livestock was mainly performed by men and their participation ranged from 73.3% to 83.3% (table 6). Animals shed were mostly constructed inside the house premises. Shed cleaning was entirely an activity of women and 83.3% and 86.6% respondent women in Abazai and Tangi respectively were doing it once or twice on daily basis. This was a repeated, time consuming, routine activity and almost took 60 to 90 minutes a day. The manure collected was usually heaped in a pit or on the top of the ground outside the home, for using as farmyard manure. In case of cows and buffaloes, a part of the dung was used for making dung cake by women. As discussed earlier, the use of dung cake as fuel was a common on farm activity in Tangi. Dung disposal was mainly women activity in Abazai as reported by 81.8% HH while in Tangi it remained the responsibility of 86.6% women. The higher participation of women in dung disposal in Abazai and Tangi could be logically linked with the high practice of making dung cake by women that made the women responsibility for deciding disposal of dung for fuel or manure or both in proportion. Animal health care was the domain of both sexes. However where, modern medicines were used, it was usually procured and administrated by men. In conventional home treatment women played an important role especially in taking care of pregnant animals and young calves. Relatively smaller proportion of respondent women (56.6%) in Abazai than Tangi 66.6% reported that they took care of treatment of their animals at home. On the other hand outdoor treatment of sick animals such as taking animals to veterinary dispensary or to a village practitioner though practiced by few HH it



remained the job of men in Abazai and was almost equally shared by both sexes in Tangi. Similarly, more than 90% respondent women in both areas looked after the pregnant cows and newly born calves. It is important to feed colostrums to newly born calves for transferring immunity from dam to the calf. It was appreciating to note that women in charsadda area know the importance of feeding of colostrums to newly born calves. It was noted that 83.3% and 86.6 women in Abazai and Tangi respectively practiced. The large share of women in livestock rearing found in the present study suggested that similar study is needed in other parts of NWFP so as to highlight and appreciate the role of women in raising livestock and livestock related activities.

Milk marketing was common in Charsadda. The produced milk was used not only for household consumption but also for surrounding locality. Inspite of selling milk, milk products like yogurt, butter and ghee were also used to sell in the selected areas. The milk marketing is mainly a job of old women inside the locality. While selling milk in far flung areas was a job of men. The share of women in milk marketing was 46.66% in abazai than tangi 50% as shown in table 7. This is also showed that in both areas, selling of milk was women dominant activity. Similarly, women also performed marketing of milk products in both abazai and tangi. Marketing of live animal is always a difficult task, need big deal of negotiation and was considered men dominant activity.

TABLE 6
AREA WISE RURAL GENDER WORK AND DIVISION OF LABOUR IN LIVE STOCK FARMING

ACTIVITIES	ABAZAI						TANGI					
	Woı	men	Men Both			Women		Men		Both		
	No	%	No	%	No	%	No	%	No	%	No	%
Feeding	26	86.6	4	13.3	0	0.0	26	86.6	2	6.66	2	6.66
Grazing	5	16.6	11	36.6	14	46.6	4	13.3	12	40	14	46.6
Watering	23	76.6	5	16.6	2	6.66	20	66.6	7	23.3	3	10
Fodder harvesting	16	50.9	13	30.9	1	3.6	17	61.8	11	27.3	2	5.5
Fodder storage	17	50.9	8	27.3	5	3.6	19	56.4	7	25.5	4	7.3
		HOU	SING	!								
Shed construction	4	13.3	25	83.3	1	3.33	6	20	22	73.3	2	6.66
Shed cleaning	25	83.3	4	13.3	1	3.33	26	86.6	3	10	1	3.33
Dung disposal	24	80	3	10	3	10	26	86.6	2	6.66	2	6.66
		MIL	KINC	j								
Milking treatment	28	93.3	1	3.33	1	3.33	26	86.6	3	10	1	3.33
Milking processing	23	76.6	5	16.6	2	6.66	20	66.6	6	20	4	13.3
HEALTH CARE												
Home treatment	17	56.6	8	26.6	5	16.6	20	66.6	9	30	1	3.33
Pregnant care and calve care	28	93.3	1	3.33	1	3.33	29	96.6	1	3.33	0	0
colustrumfeeding	25	83.3	3	10	2	6.66	26	86.6	2	6.66	2	6.66

Source: Field Survey



TABLE 7
MARKETING OF MILK AND MILK PRODUCTS

	ABAZAI						TANGI					
	Wor	Men			Both		Men Vomen		Both			
	WOI	пеп			]		l as om	ш				
Activities	No	%	No	%	No	%	No	%	No	%	No	%

Marketing												
Milk marketing	16	46.66	10	50	4	3.33	15	50	13	43.33	2	6.6
Milk product	23	76.66	5	16.6	2	6.66	20	66.6	6	20	4	13.3
Live stock marketing	10	33.3	18	60	2	6.66	11	36.6	18	60	1	3.33

**Source: Field Survey** 

#### WOMEN SHARE IN HOUSEHOLD'S INCOME

The present findings revealed that in both the areas the livestock had contributed to the household income, which was higher than agricultural crop income in few cases. In the two selected locations, Abazai and Tangi relatively more number of households reported greater income from livestock than agricultural crop. Similarly income from agricultural crops was found higher in Abazai than Tangi as shown in table 9. 60% of the respondents in Abazai were of the view that agricultural crop income was greater than livestock income. In Tangi 83.3% of the respondents were of the opinion that their income from livestock is greater than agricultural crop income. Women have a share in household income was reported greater in Tangi than Abazai. In Tangi 80% of the respondents were of the view that women have share in household income while in Abazai it was 60%. The greater share of women in household income than men was reported (56.66%) in Tangi than Abazai (50%) but overall the share of women in the household's income was greater in the two selected areas through participating in livestock farming. So the income of the household has increased because of rural women participation in livestock farming.

TABLE. 9
CONTRIBUTION OF WOMEN IN HOUSEHOLD INCOME THROUGH LIVESTOCK FARMING

	Abaza	i			Tangi				
	Yes No			Yes			No		
Question	Num	%age	Num	%age	Num	%age	Num	%age	
Do women have share in household income?	18	60	12	40	24	80	6	20	
Do Women contribute more to HH income than men do?	15	50	15	50	17	56.66	13	43.33	
Is income of livestock is greater than agricultural crop?	12	40	18	60	25	83.33	5	16.66	

**Source: Field Survey** 

# CONCLUSION

Results of the present study led to the following conclusions. As

In the district Charsadda women participation was significantly high in livestock farming. The level of education was one of the determinants of women participation in livestock farming. High level of education reduces women participating in livestock farming. Livestock was the second most important source of income in district Charsadda, which contributed to household income more than agricultural crop income in case some households. Women in district Charsadda were ignorant of the modern methods of livestock farming. They are required education up to some level and modern methods of farming so to increase their productivity in the livestock farming.



# RECOMMENDATIONS

Special incentives should be given to the livestock farming in order to make more attractive for rural women to participate and increase their household's income. Special institutions should be established in every district to enable rural women more productive and increase her and her family's living standard. More veterinary hospitals should be established in order to provide those better treatment facilities at doorstep for their livestock. Special livestock education centers should be established and in that lady instructors should be appointed in order to educate rural women about the modern methods of livestock farming. More markets should be established in each village of the N.W.F.P so that to increase the business of the livestock and increase the incomes of the rural people. The existing traditional knowledge of rural women about livestock farming should be enhanced on modern basis like training in disease control, clean feeding practices and the provision of clean environment to the livestock.

#### **BIBLIOGRAPHY**

- 1. Agricultural Statistics of Pakistan. 1996-97. Government Pakistan, Ministry of Food Agriculture and Livestock, Food, Agriculture and Livestock Division Islamabad.
- 2. Ajala, M.K, B.I Nwagu and C.U. Osuhor. 1997. Socio-economics of free guineas fowl production among agro-pastoral Fulani women International Journal of Tropical Agriculture. 15 (4):37-44.
- 3. Akhtar, S. (1989). Socio-economic amelioration of rural women: a tentative module for rural development. Journal of Rural Development and Administration. 41-49.
- 4. Ali, M.M and A.H. Qureshi. 1995. Role of landless rural migrant women in non-farm sector's case study of Islamabad city. Journal of Rural Development and Administration. 24 (1): 80-97.
- 5. Azhar, K and F. Hewitt. 1995. Women of the high pastures and global economy. Reflections on the impacts of modernization in the Hush valley of the Karakorum, Northern Pakistan Mountain Research and Development. 19 (2): 141-151..
- 6. Budvytiene, B. 1993. Gender roles in agro forestry systems in the hills of Nepal. Researches System of Agriculture Rural Development 420-424.
- 7. Coppock, D.L. 1991. Haymaking by pastoral women for improved calf management in Ethopia Journal for Farming Systems Research Extension. 32: 51-68.
- 8. Curry, J., Huss-Ashmore, B. Perry and A. Mukhebi. 1996. A framework for he analysis of gender, intrahousehold dynamics and livestock disease control. Human ecology New York. 36: 161-189.
- 9. Davis, D.K. 1995. Gender based differences in the ethno-veterinary knowledge of Afghan nomadic pastorilists indigenous knowledge and Development Monitor 3(1): 3-5.
- 10. Casson, R 1990. The hidden work force, a survey of the spouses contribution to the family farm business. Report for the women's farm and garden association. UK.
- 11. Katuwal, S. 1990. The role of women in livestock production. PAC, Technical paper at Pakhribas Agricultural Center. Kathmandu. Nepal.
- 12. Kaur, M. and M.L. Sharma. 1991. Role of women in rural development. Women in agriculture. Journal of rural studies. 7: 11-16. Bologna Italy.
- 13. Khan. 1992. Women in Agriculture. A survey of women's role in agriculture in three selected villages of NWFP. Pakistan academy for rural development, Peshawar.
- 14. Nielsen, H.F and Dolberg and P.H Ptersen. (1997). Socio-economic impact of smallholder livestock development project. Bangladesh. Integrated in human development Proceedings of a workshop tune landbaskole. Denmark. 64-70.
- 15. Obinne, C. 1995. Rural women in food chain activities: a case of Ibo-speaking ethnic community of Delta state, Nigeria. Agroserach. 1 (1): 35-40.
- 16. Onwubuya, E.A. and J.C. Umeh. 1999. Extension potentials of Turkey production among Smal-scale farmers. Journal of agriculture Technology and Education. 9:12-19.
- 17. Pandey, S. and G.N. Yadama. 1990. Conditions for local level community forestry action; A theoretical explanation. Mountain Research and Development 10 (1): 88-95. U.S.A.
- 18. Pakistan Agricultural Research Council (PARD). 1988. Rural women in Pakistan Farming Systems Research. Proceedings of the workshop on role of rural women in farming system research, Islamabad.
- 19. Population Census 1998. Population census organization. Statistics Division Government of Pakistan, Islamabad.
- 20. Rajender, S. and N. Singh. 1999. Effect of socio-economic variables on management of farmwomen in household, agriculture and dairying activities. Journal of Dairying, Food and Home Sciences 17 (1): 55-59.
- Rani, U and D.L. Vyas. 1993. Gender differential in work participation in various operations of crop and livestock enterprises in semi-arid areas of Rajeasthan. India. Journal of Agricultural Economics 48 (3): 482-487.
- 22. Rangnerkar, S. 1992. Women in livestock production in rural India animal production and rural



- development. Proceedings of sixth AAAP animal science congress. (39): 271-285. Thailand.
- 23. Roberts, B.D. 1996. Livestock production, age and gender among the Keiyo of Kenya. Human Ecology. 45: 215-230.
- 24. Sajid, M.A. 1998. The AKRSP and livestock management in Northern areas; the role of women organizations. Sarhad Journal of Agriculture. 14 (5): 487-491.
- 25. Stephens, A. 1992. Women her family and her animals. Animal production and rural development. animal production and rural development, Proceedings of sixth AAAP animal science congress. Vol. 1.4: 241-245. Thiland.
- 26. Thompson, KF. and N.D. Hart. 1994. Animal production in eastern Turkey. Proceedings of the New Zealand society of animal production. 1: 189-191
- 27. Xuto. N. and F. Bell. 1992. Gender issues in livestock production. Animal production and rural development. Proceedings of sixth AAAP animal science congress. (12): 287-299. Thailand.
- 28. Zemmelink. P. 1999. Farm women and animal husbandry practices in paddy belt of Haryana. Journal of Dairying, Foods and Home Science. 18 (2): 85-91.