Exploring Women's Involvement in Agriculture and Livestock Sectors: A Study of Punjab Province, Pakistan''

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Abstract

This paper presents a quantitative study on the pastoral women's part in Pakistan cutting-edge the area of agriculture and livestock. As Pakistan is an agricultural country therefore ladies also performance an imperative role in agronomy growth of Pakistan by actively participating in various crops and livestock activities. Despite this role, this contribution by women is not duly acknowledged and often underestimated and results in low rewards. The paper describes the landscape and scope of ladies' contribution in agronomy and cattle activities in selected rural areas of Punjab, a major agriculture province of Pakistan. Semi-structured interviews of randomly selected 400 women respondents and 5 focus group discussions support in-depth and meaningful conclusions based on both quantitative and qualitative data. The findings of the training reveal the level of females' active partaking in farm actions in addition to their household responsibilities that ranges from the acquisition of farm supplies to the product sale. However, the share of women in the income is found quite low compared to their contribution. Limited involvement in the judgement manufacture activities associated to agronomic and cattle is the major factor hampering women's empowerment in the areas. Therefore the study

suggests appropriate participation in decision level activities, just monetary rewards and equipment with modern farming skills for increasing their empowerment.

Keywords: Rural Women, Agriculture & Livestock, Women empowerment, Pakistan

Introduction

Females play a significant character in agri-food construction, both as paid and unpaid labor worldwide (FAO, 2010). Rural women participate in several productive activities and contribute to everyday wellbeing, agricultural production and pecuniary growth. However, the substantial contribution of women is often under-valued in conventional economic analyses and policies (Zahoor et al., 2013).

In Pakistan, women constitute half of total population of 194.9 million. However, overall employment rate for women is 20 percent with a rural and urban share of 23.30 and 10.00 percent respectively (Bureau of Statistics, 2017). The participation of women in labor force is gradually increasing in various sectors such as agriculture, fishery and telecommunication sectors. However, the increase in rural female employment is mainly in the category of unpaid family helpers that is 61.9 percent followed by employers (24.6 percent), self-employed (13.4 percent) and 0.1 percent of employees (GOP, 2011). The extremely meager figure of 0.1 percent for female employees indicates prevalent conservative/traditional norms of the society and cultural constraints. Due to these limitations, the women are still discouraged to actively join work force rather they are heavily involved as unpaid family helpers especially in the agro based rural families.

The rural women in Pakistan are among millions of landless laborers and small farmers, who are fighting against rural poverty and toil hard to meet their basic human needs through their reliance on crop production and livestock farming. Although rural women comprise a big proportion of agricultural labor force in the rural areas but these are seen as invisible farmers working in the field and their participation is grossly underestimated (Mohiuudin et al., 2020). Generally, it is perceived that the women living in the rural areas of Pakistan are not involved in gainful employment and not considered in the category of full time workers.

The work is an extension of research studies (Nosheen F., 2008, 2009a and 2011) focusing on recording the amount of time devoted by rural women in agriculture and livestock activities. Information is gathered in such a way that the authors are able to relate gender involvement in decision making and the activities. This work provides an opportunity to validate the findings of research studies (Nosheen F., Nosheen F., 2008, 2009a and 2011) with rain fed and surface water fed areas for conclusions. This paper is organized in three sections. First section provides an introduction of the study. In the second section, research methodology is explained in detail. Third section presents discussions and results with tables and figures. At the end, a list of references is given.

Review of Literature:

One study was planned to analyse the contribution of women in farming area (harvest and cattle happenings). The study was conceded out in Tehsil Taunsa of region D.G Khan in South Punjab. A major figure for study was assembled by spending a well-structured and pre-tried survey. Simple expressive statistics, contribution directories and Undeviating Regression

investigation were rummage-sale to analyse the information. The study exposed that females were involved in all sorts of yield manufacture and cattle management actions. Strength of females contribution was extraordinary in such happenings as cotton preference, cotton lint spring-cleaning, collecting, watering faunae, milking, dusting sheds, nursing, care of sick faunas and groundwork of ghee. Grand unkind values presented that females contribution was rare in farming and cattle actions but their contribution was upper in cattle management as associated to their contribution in crop- manufacture. The reversion consequences exposed that age, teaching, extension associates, farm revenue, access to praise, landholdings, involvement, domestic size and employed hours and cattle contribution were noteworthy influences manipulating the participation of females in yield production actions. Furthermore, age, learning, skill, family category, salaried hours and agronomic contribution were substantial factors manipulating the engrossment of women in cattle actions. Females partaking in farming sector was unrushed by building two catalogues i.e. crop contribution index and cattle contribution index in which postponement contacts, oldness, knowledge, farm revenue, land assets, access to praise and employed hours came out as important factors upsetting womenfolk contribution in farming sector. It is optional that exercise needs of rural womankind must be understood. Females should be providing with acknowledgment amenities, extension amenities and agrarian education services (Zahoor et al., 2013).

One more study was showed In rustic Punjab of Pakistan, womenfolk from small homestead children have a huge part to play in apprehending the probable that the nation has in cattle sector to embellishment. The study offerings the existing socio-economic complaint of womanhood cattle raisers, the amount and natural surroundings of their contribution in livestock administration accomplishments, the influence of females' contribution on their folks' welfare, and the influences heartrending their input in cattle administration happenings. The category and magnitude of the household, defendant's age, detached location of the township from the town, and the overall developing rank of the region had their effect on diverse features of rural ladies' status. At apiece of the three topographical levels, womenfolk defendant's contribution level in cattle administration happenings was manifold of that of their spouses' level. National norms, gendered partition of labor, obtainability of domestic labor, and the corporeal disorder of the contributor were institute more functioning in decisive the countryside and level of contribution of the domestic labor in cattle organization happenings. Contribution of the household labor, various features of women's position, cattle related factors, and financial features were the foremost grounds recognised as the features upsetting women's contribution in livestock administration happenings. Refining women's part in livestock organization and construction is crucial in refining overall family's health, teaching, revenue, and food safety. The results mean the essential for geographical directing and the rank of using a gendered method in the agrarian growth sequencers (Ahmad., 2013).

Another Writer studied Agrarian labour is mainly relaxed, chiefly for female agrarian labour in emerging republics. Notwithstanding significant contribution in the agrarian labour force in Pakistan, ladies' contribution is not correctly recognised and content. The question is further heightened by the drought of literature on femininity—labour relations in harvesting and cattle doings. Considering this hole in the works, the current study was accompanied with the precise objective of reconnoitring the labour configuration of dissimilar agricultural doings in different

farmhouse size groups in overall and, chiefly, female farming labour (family and employed labour) contribution and its causes in the rice—wheat collecting scheme of the Punjab sphere, Pakistan. The statistics were composed from 300 households crossways four areas of the province. Labour contribution was intended on an official farm scope organization foundation, i.e., minor (<12.5 acres), average (12.6–25 acres) and big (>25 acres) farmhouses. The answers show that feminine labour is mainly demanded in the physical reaping of wheat, rice plant sales outlet relocation and reaping, and the mainstream of the livestock-related happenings. The deterioration model consequences presented that family feminine labour and hired feminine labour contribution meaningfully be contingent on the landholding position of agriculturalists, domestic size, family kind and level of schooling. The meetings also exemplified that labour relatives are fast changing—continuing automation looms conventional feminine labour doings due to the absence of equipment operation services among ladies, caused by relaxed national policies and social fences. The results of the schoolwork have significant rule insinuations for mainstreaming masculinity rank in agrarian rule and rural growth and donate directly to the Sustainable Development Goals on Gender Equivalence (SDG#5) and Decent Effort and Financial Growth (SDG#8), and circuitously to No Poverty (SDG#1), Zero Malnutrition (SDG#2), Accountable Feeding and Manufacture (SDG#12) and Climate Exploit (SDG#13) (Mohiuddin et al., 2020).

Nazir and His Co-workers studied The character of rural ladies' in agricultural activities is considerable in Pakistan in overall and in the Punjab area in specific. Their influence in the farming and cattle is undervalued. In this milieu, this study was deliberate with the impartial to control the glitches confronted by rural females during agrarian doings. Region Nankana Sahib was designated as circumstance study. Multistage test group method was rummage-sale for this study. At the initial stage, out of three Tehsils, two Tehsils were designated randomly. Then from two particular Tehsils, six communities were nominated. Lastly at the third stage, 120 defendants (rural females) were designated by using suitable sample. The data thus composed were analysed and understood by using fitting statistical bundle to draw the assumptions. The results discovered that that middle-of-the-road of the working womankind were partaking in sundry cultivated happenings counting spreading, reaping and option. Mainstream of the employed females were responsibility exertion to upsurge their domestic revenue but they were opposite numerous problems in observing afterward their broods and domestic errands. Negative boldness of the property-owner is originate to be one of the chief glitches. It is optional that undesirable typecast image of employed females in rural parts should be altered with the assistance of mass broadcasting (Nazir et al., 2013).

Research Methodology

The present learning was aimed to evaluate the female partaking in agriculture and livestock salary engendering doings and its socio-economic impact on their livelihood in rural areas of Districts of Punjab, Pakistan. Cross-sectional instruction was directed in selected rural zones of Punjab, Pakistan. A sample of 400 respondents was collected through multistage sampling technique from different cropping patterns of Punjab. At first stage Districts were selected, at second stage towns were selected and third stage villages were selected randomly. Adult females were interviewed randomly. Quantitative approach was applied to get meaningful and

in-depth information. A fine semi-structured interrogating calendar entailing of exposed and close-ended inquiries was equipped in the bright of exploration

objectives. Pre-testing with some randomly selected respondents in the field was done to examine the workability of the interview schedule. Quantitative statistics was examined through countless statistical practices such as unis-variate techniques.

Results and Discussion

Land ownership status, cultivation of crops, participation in care and management of livestock, involvement in agricultural activities, and share they received (economic gain) due to their participation are discussed.

i.) Landholding Size.

In Pakistan, few women hold land in their names and majority of the women work on landholdings of their husbands. In data, the husbands of 37.5 percent women were landless and among those who had land, 39.3 percent had up to 5 acres land, 13.8 percent had 6-10 acres and 6.7 percent reported 11-20 acres. The remaining 2.7 percent were cultivating more than 21 acres land.

Table 1: Circulation of the defendants rendering to their husband's land holdings (acres) n=400

Size of land holding (acres)	Frequency	Percent
Landless	150	37.5
Up to 5	157	39.3
6-10	55	13.8
11-20	27	6.7
21 and above	11	2.7

Research indicates that mainstream of the agriculturalists had minor landholding i.e. fewer than 10 acres. So in essence 90% of the women, whose husbands own land, have small holdings of less than 10 acres with some 37.5% being landless.

Table 2: Circulation of the defendants rendering to their present work for paid employment, their profession and working hours n=400

Paid employment	Frequency	Percent
Yes	124	31.0
No	276	69.0
Professions		
Housewife	276	69.0
Working outside home	35	8.8
Self employed	26	6.5
Paid farm worker	60	15.0
Others (threading, weaving and cleaning etc.)	3	0.8
Working Hours n=124		
1-3	25	20.2
4-6	80	64.5
7+	19	15.3

The respondent women were finding it quite difficult to raise sufficient production/food from these landholdings. The small farm holders also indicated water scarcity, expensive inputs and inadequate access to technology and credit facilities as the other major reasons for low productivity. So farmers are selling their land to landlords and work on wages and they also engage in other non-agriculture activities. The consequences of such small holdings means land for family food production is scarce and frequently sees small holders selling what little land they have.

i.) Women employment, profession and working hours

Women production a key part in the reduced of Pakistan by participating in farm operations. In the study area, 48.8 percent of the respondents reported working as farm labour. The remaining 51.2 percent did not work at farm mostly due to cultural restriction. The women in rural areas live a very busy life and contribute in a extensive variety of work actions from dawn to dusk. One lady farmer reported during the survey her hectic life in the following words,

"I get up early in the morning and run either to the fields or to the animal shed. Who has the time to wash one's face? We do not even have the time to offer our prayers, the workload is so much."

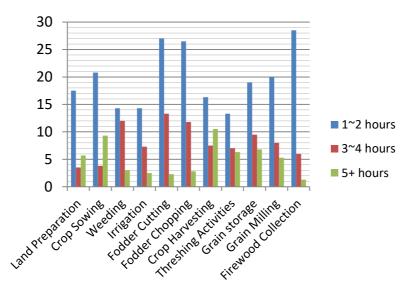


Figure 1: Percentage of the respondents according to the extent of women's daily involvement in agriculture

The women mostly work as family labor and are not paid in cash. According to findings of the study only 31 out of a hundred of the defendants had paid employment and popular i.e. 69 percentage of the women were not involved in any type of paid activity. In terms of profession, majority of the respondents were housewives, 8.8 percent were working outside the home, and 15.0 percent worked on farm or cared livestock. Although woman's traditional roles are changing, the pace is slow because the traditional values attached to women's lives such as bearing and rearing of children, conjugal loyalty and performing household chores are still honored by the husband, family and society.

In small land holding families, women are engaged in livestock and farms related activities. Statistics show that 20.2 percent of the respondents who viewed their job as paid job, worked

for 1-3 hours, 64.5 percent engaged 4-6 hours and 15.3 percent of them worked for more than 7 hours to earn their livelihood. Women also generate income through various non-farm activities such as threading, weaving and sewing activities. Nevertheless, there is important difference by agro-ecological regions in chances for wage service (MFD, 2017).

a. Women Daily participation in agriculture activities

Women participate in both pre-harvest and post-harvest agricultural doings such as soil preparation, planting, weeding, harvesting and grain storage (Habib et al., 2022). The women in the study were also found participating in all these activities as part of their daily routine activities. Most of the respondents had an engagement of 1-2

hours in various agricultural and allied activities. The firewood collection, fodder cutting and fodder chopping were the major activities on which relatively high number of women spent 1-2 hours on daily basis. Other activities where women spent 1-2 hours included grain storage, milling of grains, training of land-living, spreading of yields, collecting of crops, irrigation, threshing activities, weeding, respectively. This preference for working just 1-2 hours daily is due to the multiple functions of the women as wife, social worker, household responsibilities and social constraints. It can be clearly observed from the data in the table that women's engagement of more than 2 hours in various farm operations was relatively more in the study areas. The main reasons for long hour involvement in the farm operations was due to this their sole profession and off farm job of their male counterpart (Habib et al., 2022).

b. Contribution in agronomic activities related decision making

Ladies' partaking agricultural decision making can contribute in boosting productivity in agriculture (Pervez, 2012) as they work on the farm and have in depth understanding of agriculture activities. However, in the study areas additional than partial of the defendants had no participation in decision making of various agricultural activities as indicated, who reported frequent involvement in decision making 24.8, 21.5, and 19.5 percent did so in relation to harvesting, crop cultivation and seed purchase respectively. Whereas in other operations of agriculture like sales of produce, purchase of fertilizer, irrigation, the women percentage with frequent involvement in decision making varied from 13 to 19 percent. It is clearly evident from results that in spite of their extensive contribution to different agricultural related activities, they are largely excluded from decision making in male dominant society.

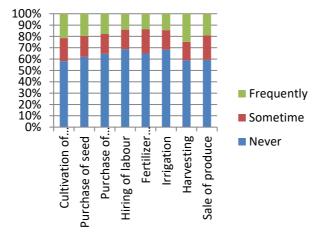


Figure 2: Percentage of the defendants rendering to their participation in decision making doings

a. Women daily participation in livestock activities

Livestock is an important subdivision of agronomy in Pakistan, which versions for around 55 percent of agricultural charge additional and 11.5 percent of the GDP (GOP, 2011). Majority of the farmers own some livestock depending on their farm size, cropping pattern and fodder availability. Various animals such as cows, buffaloes, sheep, goats and horses are kept as status symbol, source of income and meeting food needs of the family. Often the responsibility of livestock management and care is left on the women due to male engagement in other farm and non-farm activities.

The data presents ladies' involvement in care and management of various animals. Women in the education area were considerably complicated in the care and management of buffaloes and cows. These two animals are considered very important in the rural setup as a source of milk, meat and draught power generation. Some 86 and 69 percent women reported involvement with cows and buffaloes respectively as Table 6 indicates. Similarly 57 percent women care for goats and to lesser extent other animals. Donkeys, the main draught animals for households, are almost exclusively cared for by women as indicated.

Table 3: Circulation of the defendants bestowing to their engrossment in upkeep and managing of different cattle animals

Type of Animals	To great extent (%)	To some extent (%)	Not at all (%)
Donkey	74.3	25.3	0.5
Buffalo	58.3	10.0	30.8
Goat	46.8	9.5	43.8
Cow	44.0	41.5	14.5
Sheep	15.0	2.8	82.2
Bull	9.8	0.3	90.8
Horse	2.8	1.2	96.0

The results from the current study supported higher contribution of females in cattle organization actions. In rapports of daily time spent, more than 50 percent of the women reported 1-2 hours daily engagement in numerous cattle managing activities. These results are in streak with the verdicts of Awan et al, (2021). The daily time allocation of 3-4 and above 5 hours was less reported by the respondents in livestock management activities as shown.

Table 4: Fraction of the defendants rendering to their everyday participation in cattle care activities

Activities	None %	1-2 hours %	3-4 hours %	5+ hours %
Cleaning of animal room	26.3	70.5	2.5	0.8
Cleaning of animals	27.0	67.3	5.0	0.8
Bathing of animals	30.5	63.0	5.0	1.5
Preparation of feed	38.3	48.0	10.5	3.3
Grazing	46.3	41.5	10.3	2.0
Housing the animal for milking	36.5	50.5	11.3	1.8

Water animal	35.8	54.8	8.3	1.3
Milking	33.5	50.8	14.3	1.5
Feeding	38.0	52.0	7.8	2.3
Milk processing	33.3	50.8	14.8	1.3
Livestock product selling	42.0	49.8	6.9	2.3
Dung cake making	39.0	54.0	5.8	1.3

On the other hand, on an average less than forty percent of the respondents reported that they were not involved in livestock caring activities.

a. Participation in livestock related decision making

Ladies' sharing in choice making progression in various matters related to bullocks is very important. According to finding of the study in table 8, around two thirds of the women respondents reported that they are consulted in livestock related decisions to varying degrees. In case of always consulted, the greatest percentage (40.8) of females was found in animal feeding while minimum percentage (30.0) in purchase of new animals. More than one third respondents reported that they were sometimes involved in matters of purchasing, selling, spending money from animal sale, slaughtering, treatment and feeding of animals, respectively. It is evident from the results that females were given more credence in consultation regarding animal activities than other agricultural decision. This is perhaps related to their greater role in caring for and managing of animals.

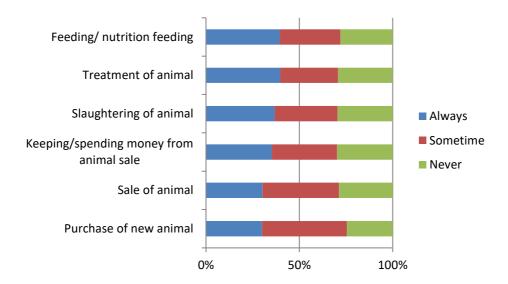


Figure 3: Percentage of the defendants rendering to their scope to consult dissimilar activities related to cattle.

i.) Women share in agriculture and livestock earning

In Pakistan, the demand for various high value agricultural and livestock products is rapidly increasing due to income growth, urbanization and globalization impacts. This is likely to have positive impacts on income earning opportunities in all sectors particularly for women. The

quickly cumulative demand for cattle products generates chances for enablement of females (Taneja, 2013).

Table 5: Percentage of the respondents on the basis they receive any share from agriculture and livestock activities

Women income earning source	Percentage share			
	No%	25%	50%	100%
Farm produce	43.3	26.0	14.5	16.3
Sale of animal	49.3	18.0	13.8	19.0
Livestock products	40.8	24.5	14.5	20.3
From your own income	48.0	21.8	15.8	14.5
From the income of your son/daughter	61.8	12.5	11.3	15.0

The consequences of the education exposed that a sizable number of female defendants did not get any share from livestock production and agricultural activities. This indicates that rural women were deprived in access to financial matters that led to weaker empowerment in decision making. It is also evident from the results that highest percentages particularly in farm produce and livestock products of female respondents just had one fourth share in total income at best. Table 9 indicates this and clearly demonstrates the inequitable distribution of family income in respect of work contribution of women.

Conclusion and Recommendations

The current education was framed with the main impartial to appraise and highlight ladies' contribution in the development and organization of agriculture and cattle in selected rural areas of districts Punjab, Pakistan. The findings of the study indicate that females are heavily complicated in farm actions in addition to their genuine characters as wives and moms. They are unquestionably causative near socio-economic expansion of relations, communities and the state.

It is decidedly favourite that all kinds of discernment as social, pecuniary and traditional against women would be removed in order to warrant women's active and significant sharing in all types of household and non-family materials and conclusions. Also that working out of females in farming and livestock sector on technical grounds develops a policy importance in instruction to reduce lack. The woman agriculturalists feel pleased to engage in farming and cattle doings. Thus, it is vitally significant to equip females agriculturalists with contemporary skills and information about crop manufacture, crop defence, marketing harvests, animal manufacture, animal defence, advertising of animals/products, cattle management, poultry farming, water organization, home administration, education and socialization of offspring and conflict organisation. The inequality of input amongst the rural females' domestic callings and on-farm (agriculture and cattle- related) projects is one of the main reasons which is foremost to not only make social glitches but also pampering their own fitness. Consequently, it is recommended that there would be a equilibrium upheld between the ladies' role in family/household projects and agrarian and livestock administration practices so that a fit and creative setting can embellishment.

It can be concluded from the findings of the study, that ladies' contribution in farming and cattle is ingenious and effective in enhancing rural incomes, ultimately uplifting and improving the living standards of the families involved.

- Women capacity building is vitally important for food security, poverty, rural development. Training programs specifically designed for rural women should be launched to enable them to learn and apply improved technologies in farming and cattle sector.
- Role of credit at affordable markup is a key for development of agriculture and livestock sector, it is suggested to launch special credit programs for women, so they are able manage economical livestock unit to enhance their earnings.
- Awareness about marketing and entrepreneurial issues is extremely poor among women farmers. Women farmers should be assisted in advertising their goods though the founding of collectives.
- NGO support to rural women is minimal in rural areas just in welfare-type institutions, with objectives geared to education, health, and family planning. So need in promoting small-scale income-generating activities for women giving them loan on low mark up.
- Project leaders, NGOs and Governmental organizations should highlighted real picture of women participation in livestock and agriculture production labor force to government and policy makers through TV and cable channels.
- In developing societies like Pakistan, the eminence and measure of exploration related to womenfolk issues is questionable, it is advocated to demeanour basic surveys at large scale to classify the changing glitches of rural females in diverse agro-ecological and socio-economic circumstances, so that suitable intervention requirements could be recognized.

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