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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's cutting-edge cutting-edge area of agriculture and livestock. As Pakistan is an agricultural country, ladies also perform an important role in Pakistan's agronomy growth by actively participating in various crops and livestock activities. Despite this role, this contribution by women is not duly acknowledged, is often underestimated, and results in low rewards. The paper describes the landscape and scope of ladies' contribution to agronomy and cattle activities in selected rural areas of Punjab, a major agriculture province of Pakistan. Semi-structured interviews of randomly selected 400 female respondents and five 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 range from the acquisition of farm supplies to the product sale. However, the share of women in the income is found to be quite low compared to their contribution. Limited involvement in the judgement manufacturing activities associated with 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, to increase their empowerment.*

Key Words: Rural Women, Agriculture & Livestock, Women Empowerment, Pakistan

Introduction

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

In Pakistan, women constitute half of the total population of 194.9 million. However, the overall employment rate for women is 20 per cent, with a rural and urban share of 23.30 per cent and 10.00 per cent, respectively (Bureau of Statistics, 2017). The participation of women in the labour 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 per cent, followed by employers (24.6 per cent), self-employed (13.4 per cent) and 0.1 per cent of employees (GOP, 2011). The extremely meagre figure of 0.1 per cent for female employees indicates prevalent conservative/traditional norms of society and cultural constraints. Due to these limitations, women are still discouraged from actively joining the workforce. Rather, they are heavily involved as unpaid family helpers, especially in agro-based rural families.

The rural women in Pakistan are among millions of landless labourers 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 the agricultural labour force in rural areas, these are seen as invisible farmers working in the field and their participation is grossly underestimated (Mohiuddin et al., 2020). Generally, it is perceived that the women living in the

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rural areas of Pakistan are not involved in gainful employment and are 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 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. The first section provides an introduction to the study. In the second section, research methodology is explained in detail. The third section presents discussions and results with tables and figures. At the end, a list of references is given.

Review of Literature

The contribution of females to farming doings (such as harvest and cattle events) was to be observed in one investigation. The study was conducted in the South Punjab area of D.G. Khan, Tehsil Taunsa. A detailed and well-tested review was used to assemble a noteworthy amount of statistics for the study. To learn the data, Unswerving Regression analysis, Contribution Directories, and Simple Impassive Statistics were rummaged-sale. The study displayed that womenfolk were active in all varieties of acts that produced produce and managed cattle. The strength of women's charities was remaining in tasks like selecting cotton, spring-cleaning cotton lint, collecting, watering animals, milking, dusting sheds, nursing, caring for ill animals, and laying the foundation for ghee. Grand unfriendly values presented that women's aids to farming and cattle management were infrequent but that their charities to cattle management were higher than those of crop manufacture. The return outcomes showed that distinguished effects on feminine engagement in yield assembly actions were age, teaching, extension associates, farm revenue, access to praise, landholdings, involvement, domestic size and employment hours, and cattle contribution. Age, education, skill, family status, salary hours, and agronomic influence were supplementary important variables that prejudiced the involvement of females in cattle actions. The connection of women in agriculture was not rushed by the edifice of two catalogues, the crop input index and the cattle influence index, in which late contacts, experience, age, knowledge, farm income, land assets, access to praise, and employment hours were recognised as significant barricades to women's participation in cultivation. Comprehending the workout necessities of rural females is not compulsory. The running of heading facilities, extension amenities, and agrarian education services should be made by womanhood (Zahoor et al., [2013](#)).

Another study revealed that women from tiny farm families in Pakistan's rural Punjab are critical to understanding the latent for the country to mature its cattle industry. The study discusses the socioeconomic difficulties that womenfolk who raise cattle presently face, the magnitude and framework of their charities to cattle management accomplishments, the impression of women's help on the welfare of their families, and the heartbreaking properties of their input on cattle management events. Different facets of rural women's situation were influenced by the generosity and size of the home, the respondents' age, the township's separation from the city, and the region's general expansion status. Womenfolk perpetrators made much more charities to livestock management events than their husbands did at each of the three geographical levels. Nationwide norms, gendered labour separation, domestic labour obtainability, and contributor corporeal disorder were introduced to make the countryside and quantity of domestic labour influence cattle organisation proceedings more functional. The primary reasons regarded as the elements discouraging women's participation in livestock administration events were the input of intimate labour, different aspects of ladies' status, variables involving cattle, and economic aspects. The organisation of livestock by females must be enhanced in order to improve the health, education, income, and food safety of the entire family. The findings designate the value of paying a gendered approach and topographical direction in agrarian growth sequencers (Ahmad., [2013](#)).

Another author investigated that in budding republics, agrarian labour is mostly loosened, especially for female workers. Despite the creation of a sizable influence on Pakistan's rural workforce, women's donations are not fairly recognised or valued. The lack of literature on femininity-labour exchanges in harvesting and cattle actions further intensifies the problem. Given this gap in the fiction, the current

study's unambiguous goal was to identify the labour formation of diverse agricultural doings in various farmhouse size collections overall and, in particular, the influence of female farming labour (family and employed work) and its causes in the rice-wheat group scheme of the Punjab region, Pakistan. Three hundred families from four different areas of the province made up the facts. An official farm scope officialdom groundwork, i.e., small (12.5 acres), average (12.6–25 acres), and large (>25 acres) farmhouses, was prearranged for the labour contribution. The results signpost that the physical picking of wheat, the relocation and reaping of rice plant sales outlets, and the majority of livestock-related activities are the key demands for feminine labour. The consequences of the degradation model showed that the influence of hired and domestic female labour was significantly partial by the degree of tutoring, domestic size, family type, and landholding status of agriculturalists. The negotiations also verified how the nature of work is rapidly changing. Increasing computerization threatens outmoded feminine labour practices since women are not qualified to operate equipment, which is an outcome of lax national legislation and societal barriers. The outcomes of the coursework have important rule implications for mainstreaming maleness rank in agrarian rule and rural development and contribute directly to the Sustainable Development Goals on Gender Equivalence (SDG#5) and Decent Effort and Financial Growth (SDG#8), as well as indirectly 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 studied with his co-workers. In Pakistan, generally and in the Punjab region specifically, rural womenfolk play an imperative role in agricultural actions. Their impact on farming and bulls is underappreciated. This study was strategic in this context with the objective of controlling the problems faced by rural women all through agricultural doings. The area of Nankana Sahib was chosen as the topic of the investigation. For this study, a hunting sale was used as a multistage test group method. Out of the first three Tehsils, two Tehsils were chosen by chance. Six settlements were then selected from two exact Tehsils. Finally, utilising a proper taster, 120 defendants (females from rural areas) were chosen in the third stage. The resultant data were then evaluated and made sense of by employing a statistically correct package to make the assumptions. The outcomes showed that middle-class at-work women contributed to a variety of farmed activities, including sowing, reaping, and selecting. The majority of working females were responsible for manufacturing efforts to upsurge their national income, but they met several challenges in caring for their broods and doing domestic chores. One of the main glitches is said to be the possessions owner's negative brashness. It is optional to alter the negative typecast image of employed women in rural areas with the help of broadcasting (Nazir et al., [2013](#)).

Research Methodology

The present learning was aimed to evaluate the females partaking in agriculture and livestock salary-engendering activities and their socio-economic impact on their livelihood in rural areas of Punjab, Pakistan. Cross-sectional instruction was directed in selected rural zones of Punjab, Pakistan. A sample of 400 respondents from different cropping patterns in Punjab was collected through a multistage sampling technique. In the first stage, Districts were selected. In the second stage, towns were selected, and in the third stage, villages were selected randomly. Adult females were interviewed randomly. A quantitative approach was applied to get meaningful and in-depth information. A fine semi-structured interrogating calendar entailing 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.

Landholding Size

In Pakistan, few women hold land in their names, and the majority of the women work on the landholdings of their husbands. In data, the husbands of 37.5 per cent of women were landless and among those who



had land, 39.3 per cent had up to 5 acres of land, 13.8 per cent had 6–10 acres, and 6.7 per cent reported 11–20 acres. The remaining 2.7 per cent were cultivating more than 21 acres of land.

Table 1

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

Size of land holding (acres)	Frequency	Per cent
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 the majority 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	Per cent
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, 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 farmholders 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 working for wages, and they also engage in other non-agriculture activities. The consequences of such small holdings mean land for family food production is scarce and frequently sees smallholders selling what little land they have.

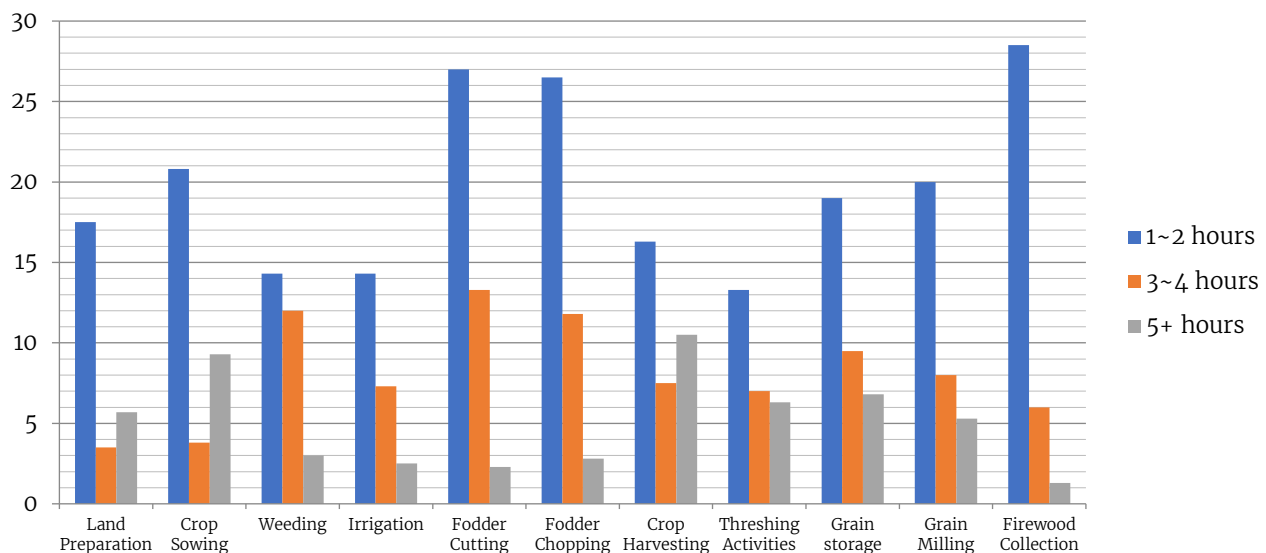
Women's Employment, Profession and Working Hours

Women's production is a key part of the reduction of Pakistan by participating in farm operations. In the study area, 48.8 per cent of the respondents reported working as farm labourers. The remaining 51.2 per cent did not work at the farm, mostly due to cultural restrictions. Women in rural areas live very busy lives and contribute to a wide 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, and 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 labourers and are not paid in cash. According to the findings of the study, only 31 out of a hundred of the defendants had paid employment and were popular, i.e., 69 per cent of the women were not involved in any type of paid activity. In terms of profession, the majority of the respondents were housewives, 8.8 per cent were working outside the home, and 15.0 per cent worked on farms or cared for livestock. Although women's traditional roles are changing, the pace is slow because the traditional values attached to women's lives, such as bearing and rearing children, conjugal loyalty and performing household chores, are still honoured by the husband, family and society.

In small land-holding families, women are engaged in livestock and farm-related activities. Statistics show that 20.2% of the respondents who viewed their job as a paid job worked for 1-3 hours, 64.5% engaged for 4-6 hours, and 15.3% 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 an important difference in agroecological regions in the chances for wage service (MFD, 2017).

Women's 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 a relatively high number of women spent 1-2 hours on a 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, and weeding, respectively. This preference for working just 1-2 hours daily is due to the multiple functions of women as wives, social workers, 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 farm operations were due to their sole profession and the off-farm job of their male counterpart (Habib et al., 2022).

Contribution in Agronomic Activities Related Decision Making

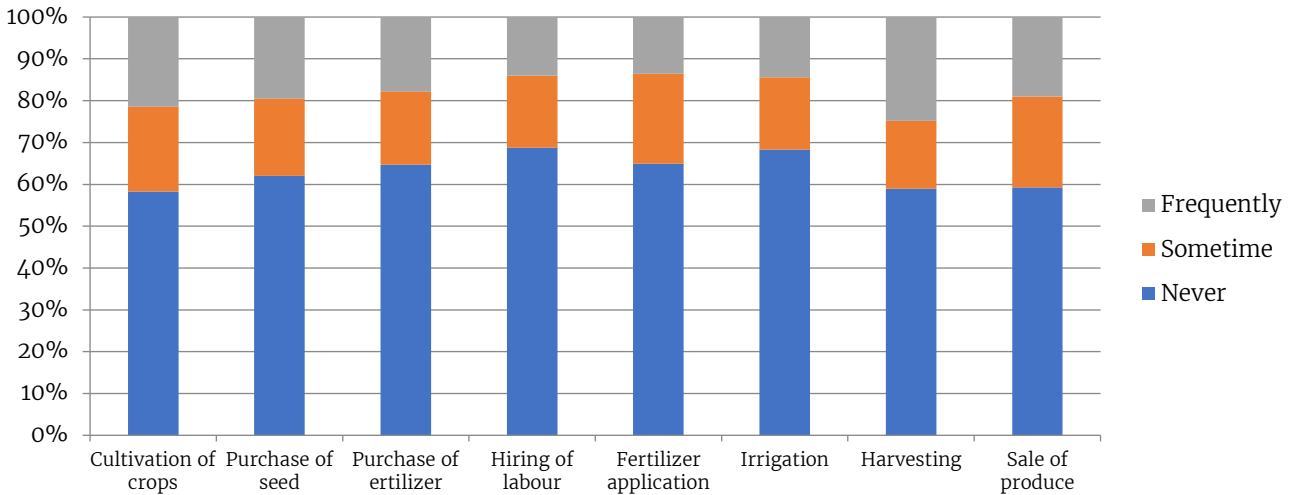
Ladies' partaking in agricultural decision-making can contribute to boosting productivity in agriculture (Pervez, 2012) as they work on the farm and have an in-depth understanding of agricultural activities. However, in the study areas, more than half of the defendants had no participation in the decision-making of various agricultural activities as indicated, who reported frequent involvement in decision-making 24.8,



21.5, and 19.5% did so in relation to harvesting, crop cultivation and seed purchase, respectively. Meanwhile, in other agricultural operations, like sales of produce, purchase of fertilizer, and irrigation, the percentage of women with frequent involvement in decision-making varied from 13 to 19 per cent. It is clearly evident from the results that in spite of their extensive contribution to different agricultural-related activities, they are largely excluded from decision-making in a dominant society.

Figure 2

Percentage of the defendants rendering their participation in decision-making doings.



Women's Daily Participation in Livestock Activities

Livestock is an important subdivision of agronomy in Pakistan, which accounts for around 55 per cent of agricultural charge additional and 11.5 per cent of the GDP (GOP, 2011). The 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 symbols, sources of income, and to meet the family's food needs. Often, the responsibility of livestock management and care is left to the women due to male engagement in other farm and non-farm activities.

The data presents ladies' involvement in the 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 per cent of women reported involvement with cows and buffaloes, respectively, as Table 6 indicates. Similarly, 57 per cent of women care for goats and, to a 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 the upkeep and managing of different cattle animals.

Type of Animals	To a 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 a higher contribution of females in cattle organization actions. In terms of daily time spent, more than 50 per cent of the women reported 1-2 hours of daily

engagement in numerous cattle managing activities. These results are consistent with the verdicts of Awan et al. (2021). The daily time allocation of 3-4 and above 5 hours was reported by the respondents less 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

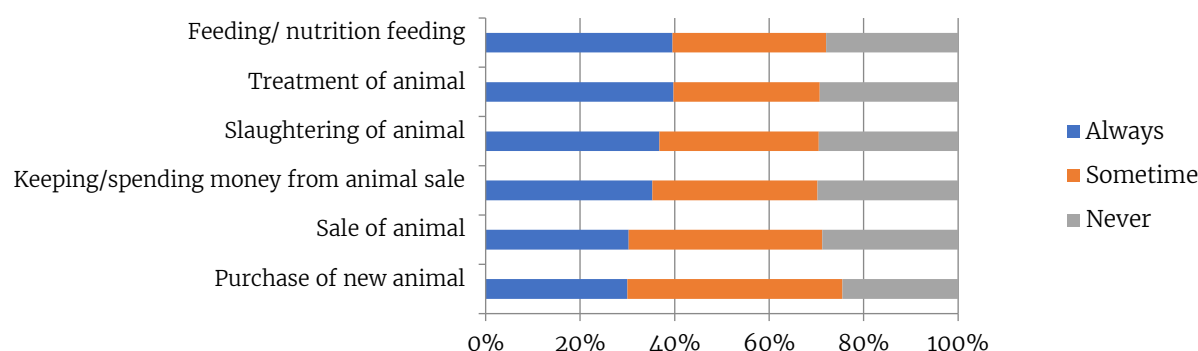
On the other hand, on average, less than forty per cent of the respondents reported that they were not involved in livestock caring activities.

Participation in Livestock Related Decision Making

Ladies' sharing in choice-making progression in various matters related to bullocks is very important. According to the findings of the study in Table 8, around two-thirds of the female respondents reported that they are consulted in livestock-related decisions to varying degrees. In the case of always consulted, the greatest percentage (40.8) of females was found in animal feeding, while the minimum percentage (30.0) was in the purchase of new animals. More than one-third of respondents reported that they were sometimes involved in matters of purchasing, selling, spending money from animal sales, 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 decisions. This is perhaps related to their greater role in caring for and managing animals.

Figure 3

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



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 females to be enabled (Taneja, 2013).

**Table 5**

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

Women's 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 of access to financial matters, which led to weaker empowerment in decision-making. It is also evident from the results that the 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 with respect to the work contribution of women.

Conclusion and Recommendations

The current education was framed with the main objective of appraising and highlighting ladies' contribution to the development and organization of agriculture and cattle in selected rural areas of 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 the 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, working out of females in the farming and livestock sector on technical grounds develops a policy importance in instruction to reduce lack. Female agriculturalists feel pleased to engage in farming and cattle raising. Thus, it is vitally significant to equip female 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 pamper their own fitness. Consequently, it is recommended that an equilibrium be upheld between the ladies' role in family/household projects and agrarian and livestock administration practices so that a fit and creative setting can be embellished.

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

- Women's capacity building is vitally important for food security, poverty, and rural development. Training programs specifically designed for rural women should be launched to enable them to learn and apply improved technologies in the farming and cattle sector.
- The role of credit at affordable markup is key to the development of the agriculture and livestock sector. It is suggested that special credit programs be launched for women so they are able to manage economical livestock units to enhance their earnings.
- Awareness about marketing and entrepreneurial issues is extremely poor among women farmers. Female farmers should be assisted in advertising their goods through the founding of collectives.
- NGO support to rural women is minimal in rural areas, only in welfare-type institutions, with objectives geared to education, health, and family planning. So, there is a need to promote small-scale income-generating activities for women, giving them loans on low markup.

- Project leaders, NGOs and Governmental organizations should highlight the real picture of women's participation in livestock and agriculture production labour force to government and policymakers 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 demean basic surveys at a large scale to classify the changing glitches of rural females in diverse agroecological and socio-economic circumstances so that suitable intervention requirements can be recognized.

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