



RESEARCH PAPER

Gender Disparities in Access to Agricultural Modes of Production and Impediments in rural Women Empowerment

¹Hira Nasir, ²Farkhanda Anjum and ³Kanawal Asghar*

1. M. Phil Scholar, Department of Rural sociology, University of Agriculture, Faisalabad, Punjab, Pakistan
2. Assistant Professor, Department of Rural sociology, University of Agriculture, Faisalabad, Punjab, Pakistan
3. Assistant Professor, Department of Rural sociology, University of Agriculture, Faisalabad, Punjab, Pakistan

*Corresponding Author

kanwalawan@gmail.com

ABSTRACT

The objective of this research is to investigate the intricate relationship between gender inequality and limited access to fundamental agricultural resources such as land, seeds, fertilizer, credit, technology, and training, along with the ultimate impact on rural women's empowerment. Gender disparities in access to the agricultural modes of production are recognizing as an essential impediment to rural women's empowerment in Pakistan. The cross-sectional survey was conducted in research. A multistage sampling technique was used to take the sample from this study. The total sample size was 180 respondents. Data was collected through an Interview schedule by using a questionnaire. The statistical tool for social sciences, SPSS, was used to analyze the data. The data indicate that more than half women in the Gujranwala district of Pakistan do not have access to agricultural modes of production. Policy interventions should be prioritized by giving women fair access to land, seed, fertilizer, financing, technology, and training, as well as fighting against discriminatory practices.

KEYWORDS

Access to Technology, Agriculture Resources, Gender Disparities, Sustainable Development

Introduction

All human capital has equal importance for both sexes like access to land, water, and pastures. Poor women have no access to land, Labor, health, education, and capacity to work these are essential tools for livelihood. They also have to go through form gender literacy gaps (Israr, 2010).

Our focus is only on women's economic empowerment, nations that are powerful in economic outcomes. They are generally connect to social and psychological empowerment. We consider two indicators of the agricultural women's empowerment index with intentionally limited scope: Women's access to the agricultural modes of production, and profitability. The study pointed out the theoretical causal direction for each measure, including how changes in women's empowerment due to gender-based differences and barriers are expected to affect short-term and long-term financial benefits (Anderson,2021).

Empowerment serves as a strategy and an accomplishment. These two can be use interchangeably depending on the situation. Most often, empowerment has stayed rooted in local communities and the needs of the "poorest of the poor," particularly women.

Therefore, development entities, the word "women's empowerment" means more than exclusively" motherhood (Mensah & Yankson, 2013).

Pakistan is a developing and agricultural country. Most of the inhabitants depend on the agro-based economy. The agriculture sector in Pakistan does not just provide livelihood but also gives raw materials to the industries. It is highlighted that the mass of the South East Asian nations in rural areas are base on agriculture. In Pakistan, from the total population women's proportion that takes a part in agriculture is about 66% (Rehman *et al.*, 2015).

Women are contributing two-thirds of the GDP. Jobs are divide for males and females on farmland. In general, men's contributions are more noticeable like manual tasks, such as clearing land. Especially at home, women frequently do time-consuming and repetitive duties. Planting and weeding are viewed as feminine tasks. But the use of technology may reassign these positions that women already have (Begum *et al.*, 2011).

Women's participation in agricultural development not only supports them but also subsequent generations. Effects of evaluations in domestic food production indicate that women's decision-making power in connection with child nutrition and health is improve by their control over production, decision-making, and income. Complementary schemes are require that encourage women's involvement in agriculture. A foundation of social progress and long-term economic prosperity is now widely understood to be women's empowerment. (Mwambi, 2021)

Rural women perform homogeneous tasks. They have multiple tasks and roles in occupation as well as they are doing household chores. Their interests are base on their generation, financial condition, family background, and number of children. The chance of getting facilities will bring different challenges for all. Despite having facilities the women are performing multiple tasks for their self and the wellbeing of their family. They are facing a lack of access to the resources. There are discriminations in health, land education, and employment opportunities (Mare, 2016).

Food supply and agriculture prosperity are in the hands of livelihood peasants in the agriculture industry. Especially women were more interested in contributing than men. They lead the agricultural work engaging up to 60% to 80% of laborers. Although women's participation in food production is remarkable, they have no rights to Agricultural resources. Female face this type of deprivation that are influence by socio-economic barriers. Level of their education, awareness and corporation, farming experience, and decision-making powers. These factors affect their availability of agricultural resources (Ojo *et al.*, 2012).

All 189 UN nation members, as well as 23 international development organizations, were committed to accomplish SDG goals by 2030. They are typically referred to as sustainable development goals. Despite having many other objectives, The Sustainable Development Goals (SDGs) also include gender equality and women's empowerment. The issue arises that women lack the socioeconomic power which is required to obtain land in a pseudo-capitalist system. Women cannot compete with males in the market of land, for instance, because their earning potential is lower than that of men (Njoh & Ananga, 2016).

Due to the increase in population, most of the people are involve in agriculture for income generation. It is the basic source of subsistence for the lower class. Both males and females work as essential bodies but in rural areas, the contribution of women cannot be denied as most of the activities evolve around them. Women's role in agriculture is

remarkable. Their contribution is acknowledged by their generation, social class, and the sort of crop in which they work. They almost work 12 to 15 hours a day. They are very passionate at the time of sowing and cultivation. Production outcomes should be equal for all the members of society because it will show their efforts are acknowledged. Due to the cultural norms, men are the head of the household and they are the owner of the land. In this way, men control the income and profit. In many societies, the roles and responsibilities of women are described (Ishaq *et al.*, 2016).

Understanding the mechanisms behind the gender gap is crucial for assisting women farmers through legislative initiatives. Numerous studies contend that problems with women's engagement and empowerment are mostly responsible for the gender gap. Numerous individual, social, and societal traits are likely to have an impact on how empowered women are. The first step in investigating measures to lessen gender disparity and advance food and nutrition security is to identify, investigate, and comprehend these drivers. Therefore, an important component of any effort on agricultural development needs to include an analysis of women's empowerment (Sella & Minot, 2018).

Increasing women's participation in agriculture is a crucial approach for lowering poverty and boosting food security since gender roles and norms in agriculture are thankfully changing. To accomplish sustainable farming, it is a commitment outlined in the National Agricultural Policy and the National Strategy for Accelerated Poverty Reduction to guarantee that women have access to agricultural extension, productive resources, inputs, and services. The success of the agenda for agricultural development is seriously threat by a failure to recognize the roles, distinctions, and disparities. In reality, both men and women require stable housing, access to knowledge, and other supportive resources to attain sustainable food security. It is more difficult to boost production and combat hunger and poverty when there is a high level of inequality. To achieve sustainability in agriculture, gender relations in farming must be addressed (Rahman *et al.*, 2020).

Literature Review

Umer *et al.* (2021) Women contribute invisibly to the agriculture economy of 10,000-50,000,000 every year. Men are only engaging in tree cutting and water fetching. Comparatively, 84.1% of female respondents work 5 to 7 hours every year, which has an economic worth of 50,000 to 100,000 households, as compared to about 80.5% of male respondents who spend less than 10,000,000 households annually in unpaid work.

Mwambi *et al.* (2021) Women's participation makes them independent in making decisions about crop yield and maintaining independent control over resources, particularly when it comes to buying or selling land and cattle, taking out loans, and receiving income from the milk industry. We should focus on strategic planning for women's empowerment.

Jabeen *et al.* (2020) concluded that the education system gives researcher attention to local realities and offer suggestions for formulating policies that are equal and fair for empowerment. More importantly, the types and amounts of obstacles faced by women vary based on age, education, family, structure, amount of household income, caste, ethnicity, place of residence (rural vs. urban), and parental status. Each factor has the potential to provide facility or complication. To do a gender-sensitivity analysis in this context it is extremely necessary for comprehending women's capacity of choice in connection to economic, social, and political lives. All of the society's stakeholders must also do in-depth research and demonstrate a greater level of commitment.

Rahman et al.(2020) Women who work on farms they are tend to participate longer than in farming rather than in decision-making processes. More significantly, women who are educated and affiliated with an NGO have a greater chance of taking part in and having an impact on decision-making. Bangladeshi NGOs provide a variety of programs (loans, savings, and social services) are mostly for women that encourage them to engage in income-generating activities and support their families. Thus, involvement in NGO activities and education (many years of schooling) may make it possible for women to participate in choices on the farm and at home.

Mulenga (2020) pointed out that finally, it should be noted that in some communities, women's financial independence and the growth of small-scale farmers' economies are strongly needed. The results of this study demonstrate that, women farmers may experience economic growth and development via the promotion and implementation of excellent agricultural empowerment. From land preparation to marketing, women are essential in all aspects of farming. They provide more labor than men do in the agricultural industry. Despite being challenging for them to take accurate measures, the contribution of women to agricultural productivity is unquestionably enormous. Women are said to generate between 60 and 80 percent of all food.

Muhammad *et al.*(2020)pointed out that Pakistani women work in farming, animal husbandry, and agriculture these sectors are indisputable in rural areas. They participate directly or indirectly in farming. Due to socio-economic and cultural barriers, they are facing obstacles in decision-making, lack of knowledge, and not access to modernized technology. They lack access to opportunities for training and remain behind in the innovative trends that launched. These initiatives increase the production for sustainable development and encourage microfinance to help small farmers in rural regions become independent.

Sella & Minot (2018) For instance, 50 percent of women in households who grow cash crops claim to be engaged in all production choices. Similarly, this may be a less prevalent issue, agents who give women-only advice on planting food crops will not reach to fulfill their necessities. There are many males involved in these decisions and suggestions. The degree of women's empowerment across many areas may be important when engaging farmers through better extension programs like Innovation platforms.

Akhtar *et al.*(2017) explore the empirical data from Myanmar, Indonesia, and the Philippines which assist us in understanding the geographic coverage of the gender difference in agriculture. These findings make assumptions about gender discrimination in agriculture. Their study territories and places are the areas where men and women have almost equal control over resources and income. There are local variations in terms of time, labor, access to extension services, and leadership.

Ishaq (2016) pointed out that rural women have great participation in crop production, livestock, and household chores but their work is always unacknowledged and hidden. They always get involved in substandard activities. Meanwhile, their work in pest control, irrigation, transplanting, and soil preparation is splendid. They are bearing impediments in socio-economic conditions and technological constraints likewise, unawareness of modern technology and patriarchal family systems. They lacked information, training opportunities, and access to microcredit. Women were also unaware of their rights and had little exposure to them. They had no participation in formulating decisions in agriculture marketing. So, there is a need for improvement in agriculture extension and training session arrangements for them to uplift rural women.

Aderinoye *et al.*(2016) explored that families are highly dependent on women's careers. Sampled women from the population are dependent while few of them are independent. Half of the women are working in the professions that generate revenue. They earn 0.70 US dollars daily. They have no access to social facilities and extension services which tend to low production, refining, and preserving. It is extensively seen females are not given access to resources, assets, ownership, and capital. These factors create hurdles in their income level.

Mare *et al.* (2016) pointed out that female farmers have limited access to resources according to the survey they have no authority or services for lending money in agriculture production. These are all the consequences of low structure, sculptural obstacles, and lower levels of the educational system. Moreover, many other barriers play an unendurable role.

OZOYA (2016) pointed out that land ownership and access are determined by the components of patriarchy. It was not discovered that patriarchy was absent from the limitations experienced by rural women farmers. It must be acknowledged that sexism restricts women farmers since it only gives them the right of access to land, not the right to possess it. This was clear from the study's results, which showed that just 17.9% of the women were landowners and 71.8% of them received their lands from their husbands. Only men are eligible for land ownership. These results are from the spiritual significance associated with land ownership in rural areas.

De Marco *et al.* (2016) concluded that the absence of a gender perspective in ecological agriculture creates gender disparities in agriculture. It has become harder to see and comprehend the sustainability of the system. Since it leaves out the home and support components. That has an impact on peasant women within the framework of sustainability discussions in agroecology. Six fundamental parameters were developed with this objective that remain kept in mind after conducting a thorough literature assessment. The following components: (1) resource access, education, and interpersonal participation; (2) economic-personal autonomy, and high self-worth; (3) gender gaps (labor rights, health, work, and external violence); (4) technologically productive decision-making, and paid work; (5) possession of land, and transportation; (6) diversification of responsibilities, and societal and feminist consciousness.

Material and Methods

The cross-sectional survey was conducted to investigate the Gender disparities in women's access to the agriculture modes of production initiate impediments in rural women empowerment. A multistage sampling technique was employed for data collection. In the first stage, one Tehsil NosheraVirkan from District Gujranwala was selected among the five Tehsils through a sample random sampling technique. In the second stage, three union councils were selected through a simple random sampling technique. In the third stage, 2 villages from each Union council were selected by using a sample random sampling technique. In the last stage, 30 respondents were selected conveniently from each selected village. Therefore, the total sample size is 180 respondents. Data was collected through an Interview schedule by using a questionnaire. The statistical tool for social sciences, SPSS, was used to analyze the data by using descriptive statistics.

Results and Discussion

Table 1

Frequency Distribution of Socio-economic Characteristics of the respondents		
Variable	Frequency	Percentage
Occupation		
Housewife	134	74.4
Agriculture	18	10.0
Job	16	8.9
Laborer	12	6.7
Total	180	100.0
Family type		
Joint	119	66.1
Nuclear	48	26.7
Extended	13	7.2
Total	180	100.0
Caste type		
Jutt	78	43.3
Rajput	49	27.2
Gujjar	25	13.9
Mehar	16	8.9
Other (Insari, Mocha, Nae, Merasi)	12	6.7
Total	180	100.0
Age (in years)		
20-30	32	17.8
31-40	34	18.9
41-50	78	43.3
50 or above	36	20.0
Total	180	100

The frequency and percentage distribution of respondents by occupation, Family type, caste, and age is shown in Table 1 regarding occupation. According to the data, the majority were housewives. More than half of the respondents were from joint families. As the data was collected from the rural setting large population of the women was from the Jutt caste which varied a lot. Most of the respondents were between the ages of 41-50

These factors must be consider when analyzing the responses and comprehending the respondents' perspectives on Gender disparities in women's access to the agriculture modes of production initiate impediments in rural women empowerment

Tables 2
Association between Gender disparities in women's access to agriculture modes of production and women empowerment

Women Access to agricultural modes of production	Women empowerment			Total
	Low	Medium	High	
Low	5 31.3%	4 25.0%	7 43.8%	16 100%
Medium	28 62.2%	10 22.2%	7 15.6%	45 100%
High	112 95.7%	3 2.6%	2 1.7%	117 100%

Total	145 81.5%	17 9.6%	16 9.0%	178 100%
Chi-square = 58.02	d.f. = 4	P-value = .000	Gamma = -.842	

The bivariate table 2 shows the association between gender disparities in women's access to agricultural modes of production and their opinion on increasing women's empowerment. The chi-square statistic is calculate as 58.02 with 4 degrees of freedom, and the p-value is find to be .000. This indicates a highly significant relationship between gender disparities in women's access to agricultural modes of production and their opinion on increasing women's empowerment. Additionally, the gamma coefficient is compute as -.842, which further supports the significant negative relationship between the two variables. The analysis demonstrates a strong association between gender disparities in women's access to agricultural modes of production and their opinion on increasing women's empowerment. Women with higher access to agricultural modes of production are more likely to support the idea of enhancing women's empowerment. This finding emphasizes on the importance of improving women's access to agricultural modes of production to promote and strengthen their empowerment.

Table 3
Association between occupation and relation between Gender disparities in women access to agricultural modes of production initiate impediments in rural women empowerment

Occupation	Women empowerment			Total
	Low	Medium	High	
Housewife	116 87.2%	12 9.0%	5 3.8%	133 100%
Agriculture activity	11 64.7%	1 5.9%	5 29.4%	17 100%
Job	12 75.0%	2 12.5%	2 12.5%	16 100%
Laborer	6 50.0%	2 16.7%	4 33.3%	12 100%
Total	145 81.5%	17 9.6%	16 9.0%	178 100%

Chi-square = 23.79 d.f. = 6 P-value = .001 Gamma = .528

The bivariate table 3 presents the association between occupational status and the relation between Gender disparities in women's access to agricultural modes of production initiate impediments in rural women's empowerment. The chi-square statistic is calculated as 23.79 with 6 degrees of freedom, and the p-value is found to be .001. These results indicate a statistically significant relationship between occupational status and women's empowerment. Furthermore, the gamma coefficient is computed as .528, supporting the positive relationship between the two variables. The analysis reveals a significant association between occupational status and women empowerment. Housewives, women engaged in agriculture activities, those with jobs, and laborers all show varying degrees of support for increasing women's empowerment. These findings emphasize the importance of considering occupational status as a factor in promoting women's empowerment.

Conclusion

The data presented highlights on the significant of Gender disparities in women's access to agricultural modes of production initiate impediments in rural women's

empowerment, women's access is crucial for their empowerment and economic independence. Across various categories such as ownership of land, access to good quality seeds for production, water for irrigation, fertilizers for quality inputs, livestock rearing, credit, technology, market information, training, education, and healthcare, it is evident that a substantial majority of respondents lack access to these resources. This situation underscores the existing gender-based inequalities that hinder women's ability to participate fully in agricultural activities and improve their livelihoods.

The data portrays a clear picture of limited access to resources required for successful agricultural and income-generating activities. While a minority of respondents have access to some critical resources, limiting their potential to engage in productive and sustainable practices. The disparities are particularly pronounced in terms of access to land, water, quality inputs, credit, and training.

Recommendations

Efforts should be directed towards redistributing in access to the agricultural modes of production ensure a more equitable distribution among women. Policies should promote land ownership, access to water, and quality inputs. These should be implemented to provide opportunities to a larger proportion of women.

Facilitating comprehensive training programs on modern agricultural techniques, financial management, and other relevant skills can empower women to effectively utilize available resources. These trainings should be accessible to a larger percentage of women to bridge the existing knowledge gaps. Collaborations between financial institutions, governments, and NGOs can help to establish accessible credit and financial services tailored to the needs of women in agriculture. This will enable them to invest in their farming activities and generate sustainable income. Efforts should be intensified to bridge the technological gap. This includes providing access to technology and information about market prices, demand, and innovative farming practices. Mobile phones and internet connectivity can play a significant role in connecting women to vital information. Initiatives that facilitate access to poultry and goat rearing can provide an additional source of income for women. Improving access to healthcare services and education is essential for women's overall well-being and empowerment. Stakeholders should advocate for policy changes that support gender equality in resource distribution and economic opportunities. There is a significant need for counseling by the Government of the stakeholders that they should treat their sons and daughters equally in terms of land allocation and other resources. Advocacy efforts can contribute to create an enabling environment for women's economic empowerment. Stakeholders should advocate for policy changes that support gender equality in resource distribution and economic opportunities. Advocacy efforts can contribute to create an enabling environment for women's economic empowerment.

Continuous research and data collection are crucial to monitor progress and identify areas where interventions are most needed. Regular assessments can guide the implementation of effective strategies.

In conclusion, the presented data underscores the urgent need to address the disparities in access to agricultural modes of production for women. Efforts should be made to enhance access to land, water, quality inputs, credit, training, technology, market information, education, and healthcare are essential for achieving gender equality, women's empowerment, and sustainable economic development. Collaborative actions

from governments, NGOs, financial institutions, and communities are vital in creating a more inclusive and equitable environment for women in agriculture and beyond.

References

- Akter, S., P. Rutsaert, J. Luis, N.M. Htwe, S.S. San, B. Raharjo & A. Pustaka. (2017). Women's empowerment and gender equity in agriculture: A different perspective from Southeast Asia. *Food Pol.* 69, 270-279
- Aderinoye-Abdulwahab, S. A., Dolapo, A. T., Matanmi, B. M., & Adisa, R. S. (2016). Ownership of productive resources: a panacea for empowering rural women in Kwara state, Nigeria. *J Prod Agric Technol*, 12(1), 17-26.
- Anderson, C. L., Reynolds, T. W., Biscaye, P., Patwardhan, V., & Schmidt, C. (2021). Economic benefits of empowering women in agriculture: Assumptions and evidence. *The Journal of Development Studies*, 57(2), 193-208.
- Begum, R., & Yasmeen, G. (2011). Contribution of Pakistani women in agriculture: productivity and constraints. *Sarhad Journal of Agriculture*, 27(4), 637-643.
- de Marco Larrauri, O., Pérez Neira, D., & Soler Montiel, M. (2016). Indicators for the analysis of peasant women's equity and empowerment situations in a sustainability framework: A case study of cacao production in Ecuador. *Sustainability*, 8(12), 1231.
- Ishaq, W., & Memon, S. Q. (2016). Roles of women in agriculture: A case study of rural Lahore, Pakistan. *Journal of Rural Development and Agriculture*, 1(1), 1-11.
- Israr, M., & Khan, H. (2010). Availability and access to capitals of rural households in northern Pakistan. *Sarhad J. Agric*, 26(3), 443-450.
- Jabeen, S., Haq, S., Jameel, A., Hussain, A., Asif, M., Hwang, J., & Jabeen, A. (2020). Impacts of rural women's traditional economic activities on household economy: Changing economic contributions through empowered women in rural Pakistan. *Sustainability*, 12(7), 2731.
- Mare, Y., & Girmay, G. (2016). Rural womens access to productive resources: Implications for poverty reduction-the case of Gamo Gofa Zone, Southern Nations, Nationalities, and Peoples Region (SNNPR). *African Journal of Agricultural Research*, 11(4), 221-227.
- Muhammad, F., Hassan, M. A., & Mehmood, T. (2020). An overview of the existing problems faced by Pakistani women in agriculture: conclusion and recommendation. *Ecofeminism and Climate Change*, 1(2), 97-104.
- Mwambi, M., Bijman, J., & Galie, A. (2021, July). The effect of membership in producer organizations on women's empowerment: Evidence from Kenya. In *Women's Studies International Forum*, 87, 102492.
- Ojo, C. O., Bila, C. Y., & Iheanacho, A. C. (2012). Agricultural resource access and the influence of socioeconomic characteristics among rural women in Borno State, Nigeria. *Agris on-line Papers in Economics and Informatics*, 4(665-2016-44887), 27-33.
- Rehman, A., Jingdong, L., Shahzad, B., Chandio, A. A., Hussain, I., Nabi, G., & Iqbal, M. S. (2015). Economic perspectives of major field crops of Pakistan: An empirical study. *Pacific science review b: humanities and social sciences*, 1(3), 145-158.

- Njoh, A. J., & Ananga, E. (2016). The development hypothesis of women empowerment in the millennium development goals tested in the context women's access to land in Africa. *Social Indicators Research, 128*, 89-104.
- Rahman, M. W., Palash, M. S., Jahan, H., Jalilov, S. M., & Mainuddin, M. (2020). An empirical investigation of men's views of women's contribution to farming in Northwest Bangladesh. *Sustainability, 12*(9), 3521.
- Ozoya, M. I. (2016). Empowerment of rural women farmers and food production in Esan West Local Government Area of Edo State, Nigeria.
- umer, g., tunio, s., & thontya, m. d. (2021). An analysis of the role and economic contribution of rural women in different sector of the economy—a case study of pakistan's badin and matiari districts. *journal of business, 15*(1), 93-108.