

DIFFERENT DIMENSIONS OF GENDER INEQUALITY**Anushka K. Sinha¹, Narendra Singh² and Tanvi D. Ganvit³**

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ABSTRACT

Women play an indispensable role in agricultural activities worldwide, yet they often face inequalities in decision-making processes within the sector. It is known that 78 percent of India's employed women work in agriculture. As per the Annual Periodic Labour Force Survey, 2021-2022, agriculture has the highest estimated female labour force participation of 62.90 per cent. Women remain engaged with home, crops and livestock management throughout the day. Thus, study was conducted in North Gujarat region of Gujarat. The objective of the study also examines the participation of farm women in decision making related to home, farm and animal husbandry practices. The study was based on the primary data of 100 agricultural households. The chi-square test was used to determine whether the distribution of decision-making among female, male and joint involvement differed significantly from an equal or uniform distribution. Results of the study reveals that majority of the farm women's educational status is illiterate and primary education with 35.00 and 43.00 per cent respectively. This study also concluded that in process of decision making, food purchasing and meal planning with 93.00 per cent followed by cooking with 90.00 per cent was involved and also concluded that women's role in borrowing money for home management and repayment of loan is very less. Farm women's involvement in the process of decision making for farm management is very low. In animal husbandry sector, women role in decision making is higher than man but in decision of sale and purchase of animal, selection of animal breed, this type of decision is mostly taken by the man. So, this study indicates that farm women role in financial and marketing management is very less. Therefore, it's an uphill task for government, policy makers and for all to empower the farm women from each and every corner.

Keywords: decision-making, inequalities, farm women and Management**INTRODUCTION**

Agriculture stands as the cornerstone of the Indian rural economy, functioning as both a family enterprise and a significant driver of rural growth and poverty alleviation. India's economic stability heavily relies on agriculture, serving as the primary source of employment, particularly for rural women. Despite this, agricultural production contributes only 17-18 per cent to India's Gross Domestic Product (GDP). India ranks fourth worldwide in terms of agricultural sector size, encompassing roughly 180 million hectares of farmland, of which 140 million hectares are actively cultivated.

Women farmers play an important role in agricultural development and allied fields. The sustainability of any community cannot be understood without considering the role of rural women in societal progress (Bhati *et al.*, 2022). These include crop production, livestock care, food preparation, participation in rural businesses, involvement in trade and marketing, family caregiving and household maintenance. While 63.00 per cent of economically active

men are involved in agriculture, a higher proportion, about 78.00 per cent, of women participate in these activities. Apart from this, women face many challenges due to limited access to productive resources in agricultural production which prevent them in enhancing their productivity (Slathia, 2015). In developing nations such as India, agriculture remains a major employer, absorbing two-thirds of the female workforce, yet often without granting them due recognition as employed laborers. (Ghosh and Ghosh, 2014). The multifaceted capabilities of female labor bring significant benefits to agricultural productivity, rural production, economic resilience, household food security, family health, economic stability and welfare. According to the Economic Survey 2017-18, an analysis conducted by the Organisation for Economic Cooperation and Development (OECD) reveals a steady decline in the proportion of women in the workforce over the past decade. This decline, from 36.00 per cent to 24.00 per cent between 2005-06 and 2015-16, indicates a 33.3 per cent decrease in Female Labor Force Participation (FLFP) in ten years. Furthermore, the gender gap in Labor Force Participation Rate (LFPR) exceeds 50.00 percentage

points in India. The survey underscores that women workers often occupy the most vulnerable positions in the workforce, being predominantly employed in insecure, informal and unskilled jobs with low productivity and wages. Women contribute to the sustainable development of the economy through their multifaceted roles in both household and agricultural activities (Singh *et. al*, 2013).

In the Indian agricultural labor market, there is a perception that female agricultural workers are unable to perform strenuous tasks due to their lower muscle strength and malnutrition. There is a common argument that male laborers, attributed to their higher physical strength and energy, exhibit greater productivity and efficiency compared to female laborers. Consequently, employers often believe that male labours merit higher wage rates and more workdays for the same agricultural tasks than their female counterparts. (Kundu, 2013).

Numerous studies identify various obstacles, such as inadequate infrastructure and technology, complex procedures and insufficient access to secure financing, as contributing factors to the financial struggles experienced by women in their entrepreneurial endeavors (Blau and Kahn, 2003). This issue is particularly pronounced in developing countries, where gender inequality is deeply ingrained in societal norms.

OBJECTIVES

- (1) Education statuses of farm women
- (2) Farm women's involvement in the process of decision making for home management
- (3) Farm women's involvement in the process of decision making for farm management
- (4) Farm women's involvement in the process of decision making for animal husbandry

METHODOLOGY

Keeping in view the objectives of the study a multistage random sampling technique has been adopted for the selection of sample. The study was conducted in Banaskantha district of Gujarat state for the year 2022-23. In the second stage, two talukas from Banaskantha district, namely tharad and vav were selected. In the third stage, from each talukas, five villages were randomly selected for the study. In the fourth stage, ten agricultural households from each of the ten chosen villages were selected randomly. Thus, a total of 100 agriculture households were selected for collecting the required information for the study. The selected farmer families and list of landless labourers from each village were selected through random procedure.

A well-structured interview schedule was used for

the collection of data. The schedule was prepared taking into consideration the objectives of the study. The schedule was pre-tested, modified and then the personal enquiry was conducted in the selected village for obtaining information. Head of the family and the family members of the concerned landholders and landless families were contacted personally and interviewed so as to get reliable information. The data collected from the respondents included general information, their education level, their involvement in the process of decision making for home management, their involvement in the process of decision making for farm management and their involvement in the process of decision making for animal husbandry. Frequencies and percentages were used to describe the pattern of decision-making across the three domains. The chi-square test was used to determine whether the distribution of decision-making among female, male and joint involvement differed significantly from an equal or uniform distribution. Since each decision-making area included three categories of respondents (Female, Male, Joint) and the total sample size for each activity was $n = 100$, the test allowed evaluation of whether the observed variations were statistically meaningful. Formula used:

$$\chi^2 = \sum \frac{(O-E)^2}{E}$$

O = observed frequency

E = expected frequency

The test was performed at a 5 per cent significance level ($p < 0.05$).

RESULTS AND DISCUSSION

Table 1 : Education statuses of Farm women (n = 100)

Sr. No.	Education status	Frequency	Per cent
1	Illiterate	35	35.00
2	Primary school (up to 8 th standard)	43	43.00
3	Middle school (9 th to 10 th standard)	08	8.00
4	High school (11 th to 12 th standard)	12	12.00
5	Graduate and higher studies	02	2.00

Table 1 presents data on the educational status of farm women. The results reveal significant variations in educational attainment within this demographic, highlighting areas for potential policy focus and development.

The table 1 indicates that the highest percentage

(43.00%) of women have completed primary school (up to 8th standard) education. This level of attainment, while providing basic literacy and numeracy skills, suggests limited educational progression and highlights the need for targeted interventions to encourage further education, followed by 35 per cent of women were illiterate. This points to the persistent challenge of illiteracy among rural women, which can hinder their access to information, agricultural knowledge and opportunities for economic and social empowerment. The number of respondents with high school education (11th to 12th standard) indicating a gradual increase in higher educational attainment. However, this figure still represents a relatively small fraction of the population, emphasizing the need for supportive measures to enable more women to

pursue higher education.

Only 8.00 per cent of the respondents have reached middle school education (9th to 10th standard), suggesting that many farm women face obstacles in continuing education beyond the primary level. Challenges such as financial constraints, cultural expectations and the necessity to contribute to household labor may play a significant role. Only 2.00 per cent of respondents have attained graduate-level education or higher. This low figure underscores the considerable challenges that rural women face in accessing advanced education, which could be attributed to factors such as economic limitations, lack of infrastructure or socio-cultural barriers.

Table 2 : Farm women’s involvement in the process of decision making for home management

(n = 100)

Sr. No.	Home Management	Women	Husband	Joint Decision	value	p-value
1	Food Purchasing and meal planning	93 (93.00%)	02 (2.00%)	05 (5.00%)	160.34**	<0.001
2	Cooking	90 (90.00%)	04 (4.00%)	06 (6.00%)	144.56**	<0.001
3	Household Budgeting	34 (34.00%)	42 (42.00%)	24 (24.00%)	4.88	0.087
4	Children’s Education	17 (17.00%)	65 (65.00%)	18 (18.00%)	45.14**	<0.001
5	Social Activities	25 (25.00%)	60 (60.00%)	15 (15.00%)	33.50**	<0.001
6	Construction of new house	12 (12.00%)	69 (69.00%)	19 (19.00%)	57.98**	<0.001
7	Borrowing money for home management	04 (4.00%)	84 (84.00%)	12 (12.00)	116.48**	<0.001
8	Repayment of loan	07 (7.00%)	85 (85.00%)	08 (8.00%)	120.14**	<0.001
9	Manner of saving	28 (28.00%)	45 (45.00%)	27 (27.00%)	6.14	0.046

** represent significant at 1 per cent level and * represent significant at 5 per cent level

Table 2 provides insights into the level of involvement of farm women in decision-making processes related to various aspects of home management. The data is categorized based on whether decisions are made solely by the women themselves, by their husbands or through joint decision-making.

Majority (93.00 %) of the respondents reported making decisions independently regarding food purchasing and meal planning with very high chi-square values indicating that women overwhelmingly take the decisions, far more than expected if the decision-making were equal between household members. Whereas 5.00 per cent reported joint decision-making and only 2.00 per cent respondents noted that their husbands made these decisions.

Cooking decisions were predominantly made by the farm women themselves (very high chi-square values), with 90.00 per cent respondents indicating sole responsibility. This emphasizes traditional roles where women are primary decision-makers in meal preparation. Joint decisions (6.00 %) played a role and only a few respondents (4.00 %) indicated that husbands participated in cooking decisions.

The decision-making for household budgeting showed a more distributed pattern. While a larger number (42.00 %) reported that their husbands managed budgeting and 34.00 per cent women made independent decisions and 24.00 per cent cited joint decisions. This suggests that financial management in the household is often shared or controlled by husbands.

Most decisions regarding children's education were reported as being made by husbands (65.00 % highly significant chi-square values). 18.00 per cent cited joint involvement highlighting a tendency for male predominance in educational choices and only 17.00 per cent farm women indicated sole decision-making.

Decisions about social activities were mainly made by husbands (60.00 % highly significant chi-square values), with only 25.00 per cent women making these decisions independently and 15.00 per cent participating in joint decision-making. This suggests that social aspects may be influenced by broader family or societal norms.

The majority of respondents (69.00 %) stated that their husbands were the primary decision-makers in construction-related decisions with highly significant chi-square values. 19.00 per cent mentioned joint decision-making and only 12.00 per cent women made decisions independently.

Decisions regarding borrowing money were primarily made by husbands (84.00%, highly significant chi-square values) followed by 12.00 per cent joint decision-

making and 4.00 per cent women making such decisions independently. This highlights men's control over financial borrowing decisions in rural households.

Similar to borrowing, repayment of loans was predominantly managed by husbands (85.00 %, highly significant chi-square values). While 8.00 per cent noted joint decision-making and only 7.00 per cent women reported handling loan repayment by themselves.

Decision - making about saving methods was somewhat more balanced, with 45.00 per cent attributing the role to their husbands, 28.00 per cent women making independent decisions and 27.00 per cent reporting joint decision-making. This shows that saving practices may involve more collaboration or female participation compared to other financial activities.

So, women are primary decision-makers for routine domestic tasks. Husbands dominate decisions involving finances, external interactions and long-term investments. Only household budgeting shows a relatively balanced pattern.

Table 3 : Farm women's involvement in the process of decision making for farm management

(n = 100)

Sr. No.	Decision-Making Area	Female Involvement	Male Involvement	Jointly involvement	value	p-value
1	Crop Selection	24 (24.00%)	58 (58.00%)	18 (18.00%)	25.44**	<0.001
2	Planting Schedule	20 (20.00%)	68 (68.00%)	12 (12.00%)	45.41**	<0.001
3	Pest and Disease Control	07 (7.00%)	82 (82.00%)	11 (11.00%)	94.75**	<0.001
4	Irrigation Methods	12 (12.00%)	80 (80.00%)	08 (8.00%)	81.48**	<0.001
5	Harvesting Techniques	16 (16.00%)	70 (70.00%)	14 (14.00%)	40.86**	<0.001
6	Marketing Strategies	02 (2.00%)	95 (95.00%)	03 (3.00%)	161.49**	<0.001
7	Financial Management	05 (5.00%)	78 (78.00%)	17 (17.00%)	66.55**	<0.001
8	Equipment Maintenance	20 (20.00%)	51 (51.00%)	29 (29.00%)	11.00*	0.004
9	Sustainable Practices	35 (35.00%)	47 (47.00%)	18 (18.00%)	10.98*	0.004

** represent significant at 1 per cent level and * represent significant at 5 per cent level

Table 3 illustrates the participation of farm women in decision-making related to various aspects of farm management. The responses are categorized into decisions made by women independently, by men or jointly. The findings highlight the extent of gender dynamics in farm

management roles.

A significant portion of crop selection decisions is made by men (58.00 %) showing strong and statistically significant dominance of men, with only 24.00 per cent

women participating independently and 18.00 per cent reporting joint decision-making. This suggests that while some women contribute to these choices, men typically hold primary control over crop selection.

The majority (68.00 %) indicated that men decide on planting schedules (strong and statistically significant), with only 20.00 per cent women making these decisions independently and 12.00 per cent indicating joint involvement. This shows that women have limited influence over the timing of planting activities.

Decisions regarding pest and disease control are overwhelmingly made by men (82.00 %, strong and statistically significant). Joint decision-making is reported by 11.00 per cent, with minimal independent involvement by women (7.00 %) indicating that men are primarily responsible for managing crop protection strategies.

The choice of irrigation methods also tends to be male-dominated, with 80.00 per cent indicating male involvement (strong and statistically significant), compared to 12.00 per cent women making these decisions independently. Joint decision-making is noted by 8.00 per cent, showing limited shared responsibility.

Decisions about harvesting techniques see men as the main decision-makers (70.00 %, strong and statistically significant). However, 16.00 per cent women indicated independent involvement and 14.00 per cent cited joint decision-making, suggesting a slight increase in women's participation compared to other areas of farm management.

Marketing decisions are the most male-dominated, with 95.00 per cent indicating that men manage this aspect showing strong and statistically significant dominance of men. 3.00 per cent cited joint involvement and 2.00 per cent women reported independent decision-making underscoring

limited female participation in market-related strategies.

Financial decisions related to farm management are primarily controlled by men (78.00 %, strong and statistically significant dominance of men) with 17.00 per cent reporting joint decision-making and 5.00 per cent women involved independently. This highlights the significant gender gap in managing farm finances.

Equipment maintenance shows a more balanced distribution compared to other categories. While 51.00 per cent indicated male involvement, 29.00 per cent participated jointly and 20.00 per cent women reported independent decision-making. This suggests that women are somewhat more engaged in decisions about farm equipment maintenance.

Nearly half percentage (47.00 %) of male involved in sustainable practices, with 35.00 per cent women reporting independent decision-making and 18.00 per cent showed joint involvement. This indicates that women may have greater influence in decisions that align with long-term farm sustainability.

Across all farm management activities, men overwhelmingly dominate decision-making, women's involvement is consistently low (except sustainable practices) and joint decision-making rarely exceeds 30 per cent. The chi-square test confirms that the observed distribution is not equal in any activity.

Similar findings align with Gondaliya (2012) and Thakur and Patel (2020). Women's limited access to skills training, income-generating opportunities and entrepreneurial support reinforces gender inequality; however, targeted capacity-building initiatives can significantly enhance women's economic independence, social participation and decision-making power. (Shahi *et al*, 2018).

Table 4 : Farm women's involvement in the process of decision making for animal husbandry (n = 100)

Sr. No.	Decision making area	Female Involvement	Male Involvement	Jointly involvement	value	p-value
1	Selection of animal breed	24 (24.00%)	46 (46.00%)	30 (30.00%)	8.14*	0.017
2	Selection of fodder and feed	82 (82.00%)	04 (4.00%)	16 (16.00%)	93.12**	<0.001
3	Sale and purchase of animals	11 (11.00%)	76 (76.00%)	13 (13.00%)	77.38**	<0.001
4	Sale of milk and its products	53 (53.00%)	07 (7.00%)	40 (40.00%)	30.09**	<0.001
5	Keeping size of herd	35 (35.00%)	18 (18.00%)	47 (47.00%)	8.98*	0.011

** represent significant at 1 per cent level and * represent significant at 5 per cent level

Table 4 details the level of involvement of farm women in decision-making areas related to animal husbandry. The responses are divided among independent female involvement, male involvement and joint involvement, illustrating how roles are distributed within rural households.

The data shows that decision-making regarding the selection of animal breeds is somewhat balanced, with 46.00 per cent reporting male involvement, 30.00 per cent mentioning joint decision-making and 24.00 per cent women indicating independent involvement.

Majority (82.00%) female involved in selection of fodder and feed with highly significant chi-square values whereas 16.00 per cent took joint decision. Only 4.00 per cent male involved in decision-making. The significant female participation here points to the traditional role of women in managing animal care, specifically in providing appropriate nutrition.

The sale and purchase of animals are primarily managed by men (76.00 %, highly significant chi-square values). While 13.00 per cent mentioned joint decision-making and only 11.00 per cent women reported independent involvement. This reflects the limited control that women have over financial transactions related to livestock, reinforcing the trend of male dominance in market-related decisions.

A substantial number of women (53.00 %) independently manage decisions related to the sale of milk and milk products with highly significant chi-square values, indicating an essential role in dairy product handling and revenue generation. Joint decision-making is fairly significant (40.00 %) and male involvement is low (7.00 %) showcasing collaborative decision-making in this area.

Decisions about the size of the herd see balanced participation with 47.00 per cent citing joint decision-making, 35.00 per cent women indicating independent involvement and 18.00 per cent reporting male involvement. This balance suggests that herd management is an area where joint decision-making is common potentially due to the shared interest in maintaining an optimal herd size for productivity and economic sustainability.

Therefore, women play a major role in selecting fodder and feed, selling milk and dairy products. Men dominate sale and purchase of animals. Joint decision-making is notable in keeping herd size and selection of animal breed. Chi-square results confirm that decision-making responsibilities are not equally shared among household members in animal husbandry. Similar result have been

reported by Chaudhari *et al.* (2022) and Patel *et al.* (2017).

CONCLUSION

The study clearly highlights that farm women possess varied educational backgrounds with a majority having only primary schooling which shapes the extent and nature of their participation in decision-making. Their involvement is strongest in home-based activities where they dominate decisions related to food preparation, cooking and day-to-day consumption planning. These areas show extremely high chi-square values, affirming that women are the primary decision-makers. However, in financial and long-term household decisions, husbands continue to hold greater authority, indicating a persistent gendered division of responsibilities.

In farm management, women participate actively in certain areas, particularly those linked with sustainability and routine tasks, yet major technical and financial decisions remain largely male-driven. This suggests that traditional norms still restrict their decision-making power in key agricultural domains.

In animal husbandry, women play a highly significant role in feed management and milk-related activities, demonstrating their practical expertise in livestock care. Joint decision-making is visible in several areas, signaling gradual shifts toward shared responsibilities within households.

RECOMMENDATIONS

- (1) Authenticating farm women as farmers and ensuring they have access to credit, assets and land rights is crucial. The farming community should be motivated to promote gender equality through community programmes.
- (2) Extension agencies, dairy cooperatives and training institutes should focus on empowering farm women to enhance their efficiency and skill in decision-making related to dairy activities.

ACKNOWLEDGEMENT

This research was supported by Sardar Krushinagar Dantiwada Agricultural University, which offered insights and expertise that significantly contributed to the research.

CONFLICT OF INTEREST

All authors declare that they have no conflict of interest.

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Received : October 2025 : Accepted : December 2025