



## Rural Women's Decision-Making Process in Smallholder Dairy Farming in Bangladesh

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### ABSTRACT:

In many nations, including Bangladesh, women are crucial dairy caregivers. They carry out a variety of dairy management tasks, such as milking, cleaning animal sheds, watering, and feeding animals. Their decision-making role in relation to these operations is dubious, however. Therefore, the current research aims to ascertain how much rural women contribute to dairy management decision-making. Using a straightforward random selection approach, 100 female respondents from Natore were chosen at random to comprise the sample. The data were examined by calculating the weighted score, rank order, mean values, and standard deviation. The data analysis reveals that the involvement of rural women in animal care, herd size decisions, animal purchases, animal product sales, and animal feeding was comparatively high. However, their involvement in animal breeding, animal sales, fodder production, and building animal barns was very limited. Approximately 66% of the participants expressed satisfaction with their current level of participation in livestock management decision-making. Approximately 75% of the participants believed that men should have the upper hand when making decisions. Rural women's age, male dominance, and traditional beliefs seemed to be the primary variables influencing their participation in decision-making.

**Keywords:** Women, Decision Making, Bangladesh, Smallholder Dairy Farming

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## 1. Introduction

The agricultural industry in Bangladesh is a substantial contributor to the country's economy, and dairy farming plays a crucial part in the lives of rural people. Smallholder dairy farming is vital in providing money and nourishment and working for many rural households. Rural women have a crucial role in this environment, often overseeing the daily activities of dairy farms. This paper examines the decision-making processes of rural women involved in smallholder dairy farming in Bangladesh, specifically focusing on their responsibilities, problems, and contributions.

In Bangladesh, women from rural areas are very important to small-scale dairy farming. By actively participating in farming activities, they can fully realise their full potential for long-term growth and better quality of life. Women make up almost half of the population and have a good effect on everyone else's growth. This means that the success of a country rests on how well its women are treated and how much they improve their lives (Jackson, 2010). Sustainable development is impossible without the active participation of women in all areas, such as family, society, and the economy (Ryder & Boone, 2021). Women's participation is important for their own growth. From the time they were very young, rural women did not have any rights in the family. In most countries, women have to do housework and dairy farming, which is a lot of work. In Bangladesh, village women usually do most of the work that goes into dairy farming. They mix food ingredients, cut up straw, water and feed animals, clean the stalls, milk, and pick up dung. The society's male system means that their hard work and input to family costs are not respected enough, and they do not get the respect they deserve for their job. Even now, they are still working without being seen.

## 2. Literature Review

A woman living in a rural area has many phases during her life. Before marriage, she fulfilled the role of a daughter. Following marriage, she assumed the position of a reliant housewife, responsible for all domestic duties, including cooking, child-rearing, and tending to her husband's and other relatives' needs. Owing to societal and customary constraints, Rural women lack the opportunity to engage in employment outside of their households. As a result, their potential is often not achieved (Singh et al., 2021). Women have several disadvantages regarding education, autonomy, managing their resources, and making decisions inside their households (Ryder & Boone, 2021). Presently, rural women are more aware of their lifestyle choices, children's education, health, and financial stability. Rural women have emerged as proficient participants in both generating revenue and managing households. They are exerting significant effort to enhance their standard of living and striving to transcend poverty by engaging in small-scale dairy production.

Rural women have a significant impact on both farms and domestic tasks. According to Arshad et al. (2013), they excel in caring for livestock and do a range of tasks related to livestock management, including cutting fodder, providing water and food to animals, cleaning animal sheds, and milking (Singh et al., 2021). Women's involvement in livestock management is both efficient and cost-saving since it eliminates the need to hire additional workers. The involvement and contribution of women in livestock management is highly valued. On average, women dedicate around 5 to 6 hours daily to different livestock-related tasks, such as cleaning sheds, washing animals, feeding, and milking (Mwambi et al., 2020). Although women play a significant role in the livestock industry, their participation in decision-making related to livestock management remains uncertain (Gichohi, 2020). Despite women being the primary labour providers in certain areas, male dominance persists in decision-making within

households and the economy. This is due to the lack of recognition of women's influence and their exclusion from important decision-making processes despite ultimately bearing the responsibilities (Olenje, 2022). They cannot make choices for several reasons, such as insufficient education, limited mobility, lack of control over resources, poor understanding of their civic and human rights, and absence of credit facilities from the government (Thu et al., 2023).

The significance of women's involvement in family decision-making in developing nations is rather restricted (Olenje, 2022). The presence of discriminatory social norms in many cultures, together with the uneven distribution of power between genders within homes and communities, as well as the unequal access to resources and opportunities, all have a significant influence on the degree of engagement of women in decision-making processes (Thu et al., 2023). The involvement of women in the decision-making process for big family purchases is strongly correlated with their socio-background characteristics, as shown by Acharya et al. (2010). The absence of self-assurance in public decision-making hinders several women from pursuing leadership positions in Natore, Bangladesh (Njogu et al., 2024). Women in Myanmar have a significant workload, including both productive and reproductive tasks. Therefore, including women from Natore in creating, implementing, monitoring, and evaluating policies and programs may enhance their abilities and leadership positions (Olenje, 2022). Currently, there is a frequent contention that the contributions of women are undervalued and their participation in decision-making processes is limited. There is a lack of information about the level of women's involvement and authority in livestock and home management in Myanmar. There is a lack of scholarly investigation and inquiry into the involvement and actions of women in cattle management with regard to their decision-making behaviour. The research aimed to evaluate the variables that influence the amount of engagement and decision-making behaviour of rural women in livestock management and household activities. More precisely, the objective of the research was to:

### **2.1. Research Objectives**

- (a) Investigate rural women's livestock-producing livelihoods, social norms, and beliefs.
- (b) Examine rural women's involvement in domestic chores, livestock management, and decision-making tendencies.
- (c) Evaluate rural women's involvement in domestic chores, livestock management, and decision-making tendencies.

### **3. Research Methodology**

The research follows a quantitative method. The data was collected randomly from local farmers in Pabna, Bangladesh, using a survey questionnaire. There are a total 73 number of registered farmers in Natore, Bangladesh. According to Krejcie & Morgan's table, the total sample size is 60. The researcher self-collected the questions. The study included descriptive analysis and inferential statistics using the statistical software SPSS. The Chi-Square test was conducted, along with the application of Goodman and Kruskal's Lambda Coefficient correlation and stepwise regression procedures. These techniques were employed to ascertain the connection between the dependent and independent variables.

Although women manage households, their labour is seen as unproductive, irregular, and undocumented. In wealthy nations, their share of the agricultural labour force is 36.7%, but in poor countries, it is around 43.6% government. (Thu et al., 2023). Women make up about 60 to 80 percent of the workforce in animal husbandry and contribute more to animal care and administration than males (Younas et al., 2007). In addition to raising cattle, women tend to other home responsibilities like cooking, cleaning, sewing, needlework, collecting firewood

water, and taking care of the children. Due to their intimate engagement in animal husbandry-related activities, women are crucial to the success of livestock enterprises, government (Thu et al., 2023).

However, despite women being the primary labour providers and doing most of the home tasks, gender biases in some areas have resulted in the ongoing dominance of males in decision-making within the family (Farnworth et al., 2020; Njogu et al., 2024). The primary elements that have influenced the participation of rural women in the decision-making process are male domination and traditional belief systems. According to Lemlem et al. (2010), men assume the primary responsibility for making decisions in their homes. Women are excluded from significant decision-making processes primarily because of their limited education, restricted mobility, lack of control over resources, little understanding of their human rights, and absence of credit facilities provided by the Government (Thu et al., 2023).

## 4. Findings

### 4.1. Age

The average age of the participants was 51 years, ranging from 17 to 73 years (refer to Table 1). In addition, the respondents' age was classified into three categories: young, middle-aged, and elderly. Most of the respondents belong to the middle age group, comprising 70% of the total, and fall within the age range of 38-64 years. Subsequently, the group of individuals under the age of 38 and those aged 64 and above accounted for 15% of the total. The data aligns with the research conducted by the Australian Center for International Agricultural Research (2011), which reported that the average age of farmers in the CDZ of Natore is 48.8 years (Farnworth et al., 2020).

### 4.2. Education

Approximately 46% of the respondents did not get any formal education, whereas around 26% had completed elementary-level education and 20% had completed intermediate-level education (Table 1). Over 6% of the participants have a monastic education.

### 4.3. Occupation

Table 1 shows that all participants are engaged in animal farming. However, respondents also engage in cooperative work in various occupations such as agricultural labour (35%), building sites as hired labour, and working in grocery stores. 55% of the respondents dedicated their whole working time to livestock activities inside their households. These tasks included chopping fodder, watering and feeding animals, cleaning animal sheds, and milking. Livestock activities served as their primary activity. A small percentage of respondents (3.3%) said that they are allowing their animals to graze on pasture due to the abundance of food available.

### 4.4. Household Size

The majority of respondents, namely 53%, have a household size ranging from 5 to 8 individuals. Additionally, 46.8% of respondents have a household size between 1 and 4 persons. According to Table 1, the mean household size in this research is 4.6.

Table 1: Demographic Information

Age	Frequency	Mean	Std. Dev.	Percentage
Young	9			15
Middle	42			70
Old	9			15
Total	60			100

		51	13	
<b>Education</b>				
Illiterate	7			46.7
Primary	4			26.7
Middle	3			20.0
Monastery	1			6.7
Total	15			100
<b>Occupation</b>				
Agricultural	21			35.0
Construction worker	1			1.7
Labourer	2			3.3
Livestock activities	33			55
Livestock grazing	2			3.3
Selling	1			1.7
Total	60			100
<b>Household Size</b>				
Small (below mean)	28			46.8
Large (above mean)	32			53.2
		4.6	1.7	
Total				

#### 4.5. Women's Involvement in Household and Livestock Management Decision-Making Behaviour

According to Table 7, the analysis revealed the distribution of tasks related to livestock work based on gender. The table displays the respondents' involvement in cattle husbandry activities. Findings indicate that women are mostly responsible for carrying out livestock-related tasks, particularly in the household setting. Women have a higher proportion of involvement in various livestock-related tasks compared to males. Specifically, 31.7% of women feed livestock, 38.3% give water, 46.7% care for young animals, 83.3% clean shelters, 53.3% care for ill animals, and 45% acquire fodder. According to Awan et al. (2021), women are more involved than males in managing livestock. This includes tasks such as maintaining clean shelters for livestock, taking care of ill animals, and looking after young animals. Harvesting and transporting fodder, which accounts for 43.3% of the workload, is evenly distributed between men and women in families that own sheep. This observation is consistent with the findings of Fischer et al. (2018), which indicate that both husbands and wives mostly carry forage chopping out in domestic groups. It is seen that male households are predominantly engaged in operating chopping machines, whereas female homes choose to chop forage manually. Men have a greater impact in the decision-making process for the sale of cattle (58.3%), agricultural activity related to fodder crops (51.7%), and the transportation of manure to fields for use as fertilizer (50%) compared to women. This data corroborates the findings of Arshad et al. (2010), which indicate that around 74% of male individuals exert dominance in the decision-making process for livestock operations, such as selling animals, producing fodder, and selling animal output for utility purposes. If a family member carries out the act of shearing (1.7% of homes), it is more probable that women will be responsible for this task. It was presumed that responders in this location seldom shear their sheep. WorkSafe New Zealand (2014) and the National Centre for Farmer Health (2023) state that shearing and crutching are considered high-risk occupations requiring significant physical labour. Workers who engage in these tasks, shearing or crutching thousands of sheep annually, are at a heightened risk of sustaining injuries. The data indicates that a mere 2% of both men and

women collect milk from their livestock, and a similar percentage sell their livestock milk. This is mostly since they predominantly use the milk for their own household usage. According to van der Lee et al. (2014), dairy milk is the primary source of animal milk production. Only 6% of dairy cow milk production occurs in the central dry zone. This observation is consistent with van der Lee's discovery that livestock producers in the dry zone region seldom gather milk from their cattle and infrequently sell it in the market.

Table 2: Dairy Farming Decision-Making Outcomes

	Neither	Men	Both	Women	Other
Take the livestock grazing	25.0(15)	36.7(22)	8.3(5)	30.0(18)	
Feed livestock	6.7(4)	28.3(17)	33.3(20)	31.7(19)	
Provide livestock with water	28.3(17)	33.3(20)	38.3(23)		
Care for young cattles	10.0(6)	20.0(12)	23.3(14)	46.7(28)	
Buy livestock	48.3(29)	36.7(22)	6.7(4)	8.3(5)	
Sell livestock	11.7(7)	58.3(35)	11.7(7)	18.3(11)	
Clean livestock shelters		6.7(4)	10.0(6)	83.3(50)	
Care for sick livestock	3.3(2)	20.0(12)	23.3(14)	53.3(32)	
Buy forage for livestock	23.3(14)	26.7(16)	5.0(3)	45.0(27)	
Chop and carry forage for livestock	8.3(5)	26.7(16)	43.3(26)	21.7(13)	
Agricultural work for forage crops	15.0(9)	51.7(31)	30.0(18)	3.3(2)	
Collect milk from livestock	98.3(59)	1.7(1)			
Sell milk collected from livestock	98.3(59)			1.7(1)	
Dairy cow/buffalo Shearing	75.0(45)	5.0(3)	3.3(2)	15.0(9)	1.7(1)
Take manure to fields for fertilizer	8.3(5)	50.0(30)	35.0(21)	6.7(4)	

## 5. Conclusion

Rural women in Bangladesh have a crucial impact on smallholder dairy farming, contributing considerably to their families' and communities' economic and social welfare. An intricate interaction of cultural, economic, and social influences shapes their decision-making processes. To fully unlock the potential of smallholder dairy farming and achieve sustainable agricultural development in rural Bangladesh, addressing the problems women encounter and empowering them via focused interventions is crucial.

Women's involvement becomes important not only in taking care of animals but also in doing things around the house. Even though the interviewees are in their middle years, they did not have a say in making decisions because they did not have access to tools or go to regular school. Almost 60% of those who answered are small farmers, and the average size of their family is two people is 4.6, and most of the things they grow are fruit, nuts, and seeds from tropical plants. The people who answered mostly have small adult male cattle, and they put their animals into groups based on tercile analysis and how long the animals live. Also, the people who answered were good women who did chores around the house. In this case, men's households make most of the decisions because they have easier access to resources than women. However, women's households have better access to money and more family income to spend on costs.

The decision-making accounts of the families were affected by their access to resources in a big way. The people who answered also had to own their own livestock farms and manage their animals and tools. The knowledge mostly came from family, friends, and traders are useful for buying and selling livestock, spending the money made from livestock, getting

livestock medical care, and giving livestock food. Women can be more involved and make better choices about how to make money if they have access to loans, traders, market knowledge, and information from family and friends. This means that decisions will be more important when people have more access to resources. So, giving women more power in livestock farming can help them make better decisions about caring for their animals for the family.

The correlation and multiple regression analyses helped find and organize women's activities that need to be emphasized for making good decisions in livestock farming. This should be a concrete guide for the villages involved, their officials, the Government of Natore, Bangladesh, and everyone working on the project. In the long term, getting women involved and giving them access to tools is important for getting people to make decisions about animal farming. By giving women the tools they need to farm livestock, you can make their actions with the animals easier and improve their performance. This study found some problems that policymakers need to consider to help women farmers get the tools they need, teach women how to be leaders in their own homes and develop rules for long-term livestock production not just in the central dry zone but all over the country. Gender-based fair chance can be promoted through a strategy that encourages more women to participate and helps them learn how to make decisions on a national level.

## 6. References

1. Farnworth, C. R., San, A. M., Kundu, N. D., Islam, M. M., Jahan, R., Depenbusch, L., Nair, R. M., Myint, T., & Schreinemachers, P. (2020). How will mechanizing mung bean harvesting affect women hired laborers in Myanmar and Bangladesh? *Sustainability*, 12(19), 7870. <https://www.mdpi.com/2071-1050/12/19/7870>
2. Gichohi, P. M. (2020). The role of record keeping and maintenance in enhancing decision making among smallholder dairy farmers in Gitugi Ward in Murang'a County, Kenya. *Information Development*, 36(4), 535–545. <https://doi.org/10.1177/0266666919879728>
3. Jackson, R. M. (2010). *Destined for Equality: The Inevitable Rise of Women's Status*. Harvard University Press. <https://books.google.com/books?hl=en&lr=&id=3ytJEAAAQBAJ&oi=fnd&pg=PP1&dq=Women+make+up+almost+half+of+the+population+and+have+a+good+effect+on+the+growth+of+everyone+else.+This+means+that+the+success+of+a+country+rests+on+how+well+its+women+are+treated+and+how+much+they+improve+their+lives+&ots=3INWMSBw-s&sig=wCiZ6QTW6ppId6qhEbfF6yRnjfw>
4. Mwambi, M., Bijman, J., & Mshenga, P. (2020). Which type of producer organization is (more) inclusive? Dynamics of farmers' membership and participation in the decision-making process. *Annals of Public and Cooperative Economics*, 91(2), 213–236. <https://doi.org/10.1111/apce.12269>
5. Njogu, L., Adam, R., & Farnworth, C. R. (2024). Assessing women's empowerment, participation, and engagement in aquaculture in Bangladesh. *Aquaculture International*. <https://doi.org/10.1007/s10499-024-01467-7>
6. Olenje, S. (2022). THE ROLE OF WOMEN IN LIVESTOCK DECISION MAKING IN AGRO-PASTORAL SYSTEMS IN KENYA. A CRITICAL LITERATURE REVIEW. *American Journal of Livestock Policy*, 1(2), 1–13. <https://www.ajpojournals.org/journals/index.php/AJLP/article/view/1091>
7. Ryder, S., & Boone, K. (2021). Intersectionality and Sustainable Development. In W. Leal Filho, A. Marisa Azul, L. Brandli, A. Lange Salvia, & T. Wall (Eds.), *Gender*

- Equality (pp. 878–888). Springer International Publishing. [https://doi.org/10.1007/978-3-319-95687-9\\_51](https://doi.org/10.1007/978-3-319-95687-9_51)
8. Singh, A., Singh, S. K., & Tiwari, M. (2021). Decision making ability of women entrepreneurs involved in dairy farming. *Bhartiya Krishi Anusandhan Patrika*, 36(1), 72–75.  
<https://www.indianjournals.com/ijor.aspx?target=ijor:bkap&volume=36&issue=1&article=014>
  9. Thu, Y. M., Htwe, N. N., & Gomersall, K. (2023). Rural Women’s Participation and their Decision Making Behavior in Livestock Management and Household Activities in Central Dry Zone Area of Myanmar. *Agricultural & Rural Studies*, 1(1), 0004–0004.  
<https://sccpress.com/index.php/ars/article/view/8>