



An Official Journal of Bangladesh Livestock Research Institute (BLRI)

Bangladesh Journal of Livestock Research

Journal Homepage: <https://www.banglajol.info/index.php/BJLR>



Review Article

Women empowerment and livestock development in Bangladesh: A Review

M. P. Mostari^{1,2,*}, S. B. Sadrul², M. H. Rahman² and M. S. Islam²

¹Animal Production Research Division, Bangladesh Livestock Research Institute, Savar, Dhaka-1341; ²Socioeconomic Research Division, Bangladesh Livestock Research Institute, Savar, Dhaka-1341

Abstract

Livestock is generally considered a key asset for rural livelihoods in Bangladesh. After crops, it is the second most significant agriculture-related subsector. In addition, livestock is a means of cash income, nutrition, and a good source of organic fertilizer that boost soil health and fertility. Women's participation in this sector is remarkable in the last decade superseding the history recorded. Adult women's involvement in the production of cattle and poultry increased from 43% in 1987 to 51% in 2000 and then to 69% in 2008. They play a pivotal role in livestock management, feeding, processing, and selling as well as acting as a care provider. Though they participated in all steps of livestock rearing, they have very little control over the income earned from livestock production. However, women's ownership, processing, and consumption of animal and poultry products enhance their capacity for making decisions. These are the essential elements of empowering women politically, socially, and economically; as a result, they offer a means for rural women to escape the cycle of poverty. The current study examined how women participated in the growth of the livestock industry and how they were empowered. Results based on the articles reviewed, almost cent percent of women were the decision maker for rearing livestock. In the overall decision-making process in livestock and poultry rearing 42% of women respondents were followed by 39% of men and 19% of both participated in this regard. Moreover, it is also clear that livestock rearing by women made positive changes in economic, social, and political indicators. This review also summarized some problems and constraints which were faced by the women involved in this sector. According to the discussion, the recommendation would be to encourage women's participation with utmost effort so that they can overcome challenges and build capacity with confidence in livestock production.

Key words: Women empowerment, livestock, income, employment generation, Bangladesh

Bang. J. Livs. Res. Vol. 28 (1&2), 2021: P. 1-15. <https://doi.org/10.3329/bjlr.v28i1.72014>

Introduction

The second-most significant agricultural subsector in Bangladesh is livestock production. It makes up roughly 1.9% of the

nation's GDP and 16.52% of its agricultural GDP (DLS, 2022). Currently, the livestock population in Bangladesh has calculated at 247 lakh cattle, 15.08 lakh buffaloes, 267.74

* Corresponding : adiba_blri@yahoo.com

lakh goats, 37.52 lakh sheep, 3118 lakh chicken, and 638.45 lakh ducks. On the other hand, the demand, production, and availability of milk are 156.68 lakh metric tons, 130.74 lakh metric tons and 208.61(ml/day/head), respectively. In the case of meat, the demand, production, and availability are 75.20 lakh metric tons, 92.65 lakh metric tons, and 147.84 (gm/day/head), respectively. For eggs, the demand, production, and availability are 1785.68 crores, 2335.35 crores, and 136.01 (number/year/head), respectively (DLS, 2022). About 20% of people directly and 50% of people partially depend on the livestock sector (DLS, 2022). But surprisingly, women's participation in livestock and poultry production increased from 43% to 51% between 1987 to 2000 which further increased to 69% in 2008. Conversely, men's time allotted to crop production decreased from 4.30 hours daily in 1987 to 2.27 hours in 2000 and 2.92 hours in 2008. However, in women, the allocation of time increased from 0.64 hours in 1987 to 0.84 hours in 2000 and 0.91 hours in 2008 for rearing livestock and poultry (Jaim *et al.*, 2011). Women engaged in livestock farming for an average of 4.81 hours per day (Andaleeb *et al.* 2017)

About 83.9% of all households in Bangladesh are either animal or poultry owners, or both. Households own approximately 45.9% of bovine animals and 76.3% of poultry. Each household typically has 6.8 chickens and ducks, 0.9 goats and sheep, and 1.52 bovine animals (LER, 2021). It is very essential that our men and women ratio is 100:100.2 (BBS, 2021). Based on Bangladesh's current demographic structure, the sex ratio shows that women make up 50% of the population. They constitute a vital component of the country's

human resources. The majority of women in rural areas are involved in the livestock production process. Any nation's socioeconomic development is greatly influenced by the empowerment of women, which includes decision-making, income control, raising awareness of individual rights and freedoms, and strengthening the position of women within the family. Livestock sector contribution includes household income, food security, women's empowerment and gender parity within the livestock farming households (Arshad *et al.*, 2013). Giving women the ability to decide how to live their lives in response to various societal issues is known as women's empowerment (Bayeh, 2016). Though local cattle are owned by a greater proportion of female-headed households than male-headed ones. In contrast, 63% of male-headed households and 49% of female-headed households owned exotic cattle; higher-yielding, genetically improved cattle, respectively. This is because of the cheap management and handling of local cattle. Nowadays, it is repeatedly advised that local breeds are more suited to changing climatic conditions.

The majority of the work they do on the farm, raising chickens, and managing livestock is categorized as housework, and macroeconomic planning ignores the amount of labor they put into maintaining the home. According to research (EADD, 2008), women perform the majority of the tasks associated with cutting fodder, milking cows, and other related tasks. The collection of manure and upkeep of animal sheds are responsibilities that are limited to rural women. Men and women have experienced significant discrimination when it comes to participating in farm activities and making decisions (Rahman *et al.*, 2007). Compared

to men, women are typically less involved in farm decision-making. Women have made significant contributions to livestock production, but their role has frequently been overlooked or undervalued (IFAD, 2007). Nonetheless, women are empowered by contributing to livestock rearing and development. This objective of this review is to outline the participation scenario and how it contributes to the development of livestock.

Concept, meaning, and significance of women's empowerment

One of the main goals of the current development initiatives has been the empowerment of women. Women are essential to a nation's development and economic progress. There is a dual rationale for promoting gender equality. First and foremost, social justice and human rights are at stake when it comes to equal rights, opportunities, and responsibilities for men and women. Furthermore, increased gender parity is a prerequisite for long-term, people-centered development. Measures aimed at giving individuals and communities more autonomy and self-determination so they can responsibly and independently represent their own interests by acting with authority are referred to as empowerment (Mandal, 2013). The ability of women to exercise their rights to manage risk and enhance their financial status and well-being, as well as to control and benefit from resources, assets, income, and their own time, is referred to as women's economic empowerment (Meinzen *et al.*, 2011). The importance of women's empowerment is essential and integral part of development. Women's empowerment is no longer just needed—it is now essential. A number of organizations, including NGOs,

women's groups, and government agencies, have been actively promoting women's empowerment over the past few decades. The goal of women's empowerment is crucial and extremely important because of the incalculable significance of women's empowerment and its necessity for overall development. “Ranked third among the eight-millennium development goals (MDGs) and it plays a vital role to speed progress toward other” (UNDP, 2008). Equal rights for men and women in all aspects of public life are also provided by the Bangladeshi constitution.

Women's participation and livestock development

Farm families that raise ruminants (cattle, buffalo, goats, and sheep) also tend to raise poultry and ducks, which are the main sources of protein. Although women directly participate in animal rearing, their involvement is influenced by socioeconomic factors. The main reasons women engaged in livestock farming were to earn more money and gain more social recognition. This led to a positive change in their lives and increased autonomy over their finances and decisions. Bangladeshi women are integral to the livestock-raising industry, where their active economic participation helps them overcome socioeconomic barriers and discrimination to achieve complete empowerment. According to recent studies, women manage livestock and poultry through managerial roles. There is a strong correlation between income, food security, and empowerment and involvement in animal farming. Women's participation in the livestock sector is noteworthy and remarkable like as crop sector. Women who work with livestock can improve food security, lower

poverty, improve the health and nutrition of their families, create new job opportunities, and increase the effectiveness of extension services. Generally, women in rural areas are not only busy with their household chores but also remain busy with their cattle management. The animals that are still around the homestead are also typically handled and controlled by women. For example, women tend to small ruminants and other small livestock close to their homesteads in the majority of traditional agro-pastoral societies in Bangladesh. They also handle water. Cleaning of shades of livestock, feeding and watering, collecting grass and preparing mergers, milking dairy animals, bringing the sick animal to a veterinary surgeon, and marketing these are very common and almost dairy jobs of a rural woman. Women's involvement in all facets of livestock management in various pastoral systems across the globe is documented by Flintan (2008). In addition to giving births and gathering feed, women are essential to the care, processing, and sale of livestock. In addition to enhancing their capacity for making decisions, processors and consumers of livestock products play a critical role in advancing women's economic advancement and social empowerment, which in turn offers rural women a means of escaping the cycle of poverty.

Role of women in dairy farming

Bangladesh has a high livestock population density. Around 20% of rural workers are employed full-time by the livestock industry, which also generates 13% of foreign exchange earnings (Al-Amin *et al.*, 2018). Many women, particularly Bangladesh's rural impoverished, rely on their dairy industry for their living. Farm women play an important role in the dairy

sector. Most of the rural women are imposed to do domestic work with dairy farming. In rural places, dairying is primarily a women's occupation. They participate heavily in the tasks of gathering and chopping fodder, feeding animals, caring for calves, cleaning sheds, transporting ill animals to medical facilities, and milking animals. Not only do women work on farms, but they also make decisions there. Among the ways that women are involved in livestock breeding include by bringing animals for natural services, artificial insemination, pregnancy diagnostics, parturition supplies, and veterinary care in the event of dystopia. Women's involvement in the processing and marketing of dairy products, including the buying and selling of animals, the purchase of feed and fodder, the preparation and processing of animal products, the selling of milk and milk products, and the buying and selling of animals. Women's involvement in financial activities, such as taking out loans to buy animals, buy feed, market milk, sell milk in the home, sell milk through cooperative societies, and make decisions regarding the economic aspects of dairy products, including choosing animals for dairying, taking out loans, buying and selling of animals, caring for the animals, and managing the dairy industry. In a study conducted by Islam *et al.*, (2019) stated that women had poor (64%), moderate (24%), and good (12%) engagement in microcredit programs before but during the study women had moderate (54%) and good (30%) which indicate better economic empowerment. In the case of the "independence in spending money" indicator 84 % of women had independence in spending money for their family whereas before engaging in dairy farming activities only 8 % (Table 1).

Table 1. Distribution of indicators of women's empowerment

Women empowerment		Category	Before study		During Study	
Dimensions	Indicators		Frequency	%	Frequency	%
Economic empowerment	Involvement in microcredit	Poor	32	64	8	16
		Moderate	12	24	27	54
		High	6	12	15	30
	Autonomy in financial decision	Yes	9	18	38	76
		No	41	82	12	24
		Independence in spending money	Yes	4	8	42
		No	46	92	8	16

Source: Islam *et al.*, 2019.

Women's involvement in raising livestock and various studies have shown that they are heavily involved in a variety of tasks, including cutting straw, tending to newborns, weaning, and managing them, milking animals, keeping farm records up to date, maintaining animal sheds, cleaning utensils, watering cattle, tending to new calves, maintaining cows, collecting cow dung, caring for animals, and bathing and washing them.

Role of women in beef cattle fattening

Bangladesh has excellent prospects for beef cattle operations (Begum *et al.*, 2007). Not just during Eid-ul-Azha but throughout the entire year, the business is quite promising. But there are still obstacles standing in the way of the participation of the really poor and women in general. People who are economically disadvantaged and live in rural areas are better suited for beef fattening. They are usually maintained on tree leaves, shrubs, Napier grass, inexpensive concentrate, and straw that has been treated

with urea-molasses in rural areas. In Bangladesh, the involvement of women in cattle fattening business is not well recognized and documented yet. But the time is coming to change the views. A number of case studies revealed that they are coming forward and doing that business successfully. The majority of livestock production is done by women. In addition to the significant roles and contributions played by women, gender disparities are also prevalent in Indian villages. In fine, it is imperative to address gender inequality in the livestock industry. To better satisfy women's strategic needs and negotiate with confidence, initiatives must be made. The selling of fattened cattle was mostly the responsibility of male households, according to Tadesse *et al.* (2017), but women actively participated in the feeding and watering, cleaning of manure, and shelter provision. For the most part, husbands bargained with their wives to decide to sell. Through Quota Sampling, 50 peasant women engaged in adegen beef cattle husbandry were included as respondents in a subsequent study by Azizah

et al., (2023) conducted in Karangtekok, Baluran National Park, Situbondo, East Java, Indonesia. They demonstrated that spouses, whether they work on a farm or not, are productive members of homes. Productive wives are essential members of society. A productivity level of 112,515 Indonesian Rupiah (IDR) per man-day and a labor outflow of up to 78,128 man-days/year translate to a 29.06% productivity rate.

Role of women in poultry farming

Poultry meat and egg are considered as potential dietary animal protein for meeting human needs. Poultry farming in the past was not considered an important occupation. The village women have been keeping the chickens mainly for their domestic consumption only. In Bangladesh, the poultry industry employs about 6 million people and has received an estimated total investment of BDT 3500 million, according to the Bangladesh Poultry Industries Central Committee (BPICC) (Saleque and Ansarey, 2020). It is projected that this sector will generate jobs for roughly 10 million individuals by 2021, the majority of them will be unemployed young men and women (Saleque and Ansarey, 2020). Poultry and poultry products, like eggs and meat, are vital foods for enhancing health and nutrition, especially for young people, expectant mothers, and frail adults (Olaniyi *et al.*, 2008). Producing poultry meat and eggs is easier and takes less time than producing beef (Rahman and Yakubu, 2006). It is true that the number of female poultry business proprietors is reportedly increasing (Okitoi *et al.*, 2007). It was discovered that between six and twenty backyard chickens were kept by nearly eighty percent of rural Muslim and impoverished people. 75 percent of

households have between six and twelve birds. Women handled all aspect of the business, including marketing, management, and feeding, for over 70% of the households. In over 95% of the cases, women handled all aspects of bird handling and feeding. Women sold eggs and birds from their homes, either through middlemen or directly to consumers.

In the overall decision-making process in livestock and poultry rearing 42% of women respondents followed by 39 % of men and 19 % of both participated in this regard. (Mahadi *et al.*, 2014).

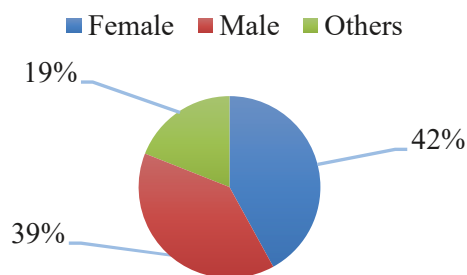


Fig. 1: Participation in decision-making process.

The findings indicate that, similar to other developing nations, women in Bangladesh possess the highest percentage of ownership (90.58%, $p=0.0001$) and are in charge of caring for family poultry (93.94%, $p=0.0001$). The findings indicate that women in Bangladesh are in charge of making decisions about the sale of eggs and birds (Ahmed *et al.*, 2021.) Millions of people still enjoy village poultry. Native chickens, sometimes referred to as deshi (native) chickens, are gathered from rural areas and are considered as highly sought-after commodities. Rural women raise native chickens on a big scale, which is essential for meeting their protein needs and providing a source of money from selling eggs and live birds, among other benefits,

even though it is not a publicly publicized commercial enterprise. According to earlier reports, the poultry business is considered to be one of the major job creators in Bangladesh. It also enhances food security, increases the availability of high-quality protein, advances economic growth, and reduces poverty in the nation. In developing nations, indigenous chickens continue to be a significant contributor to the quantitative production of chicken meat and eggs by scavenging on rural garbage and cereal byproducts (Rao, 1990). In Bangladesh, meat from nondescript native-colored chickens is highly sought-after by all levels of people due to its unique flavor, aroma, and texture. Although their flock size (below 20) and performance (up to 1.50 kg meat and 35–40 eggs annually) are limited, native chicken and duck raised on free range produce 75.06% eggs and 86.05% meat (Das *et al.*, 2008).

For many impoverished rural families around the world, raising and producing poultry is their primary source of income and a means of reducing their poverty. Poultry farming raises the production of vital protein items (meat and eggs) that raise nutritional standards while also creating jobs and monetary flow. Women played a significant role in decision-making related to raising chickens as well as activities like managing and treating them and marketing particular poultry products. Women were heavily involved in the raising of chickens; they helped with feeding, caring for the birds, cleaning the shed, collecting eggs, and selling them. Women are keen to raise chickens for a number of reasons, including the fact that they are inexpensive, easy for them to manage, and in high demand on the market. Poultry farming in rural areas can also help lower poverty rates for women and

children. Poultry farming gives women more money, which raises their social standing and gives them more influence over home decisions.

Role of women in rearing small ruminants

Sheep and goats are important to small-holder farmers, particularly landless women, economically. It appears that tiny ruminants are especially important for landless people, especially women, as the total income share of small ruminants tends to be inversely proportional to the extent of land-holding. Women are frequently denied the right to own land in some cultural contexts, when they work as secondary wage earners. Many people view livestock as sources of income, producers of milk and meat, and repositories of wealth (Coppock *et al.*, 2006; Sani *et al.*, 2000). The rural economy depends heavily on the livestock animals. This industry is home to thousands of domestic and foreign companies (Alam, 2021). In Bangladesh, over half of the women (46%) who raised small ruminants made between BDT 12000 and BDT 18000 annually. A little over half of the respondents who work as full-time housewives also raise animals, and 47 percent of these women make between BDT 2209 and BDT 6629 per month (Sumy *et al.*, 2021) (Table 2).

In addition, there are many economic benefits for which sheep and goats are kept, such as investment and savings, stability, security and insurance and social roles. It seems that goats and sheep can withstand droughts better than cattle, and because of their short reproductive cycles, they can bounce back quickly from a devastating disease infestation or a sudden resumption

Table 2. Women's income from raising small ruminant

Income (BDT/year)	Frequency	Percentage
10000-12000	18	36
13000-18000	23	46
19000-25000	8	16
Above 26000	1	2

Source: Sumy *et al.*, 2021.

of breeding during a drought. In Bangladesh for instance, rural women are involved in the raising or rearing of small ruminants – sheep and goats especially around homes by feeding them kitchen wastes or at most times leaving them to graze on surrounding herbs and shrubs. Because of the high poverty level in Bangladesh, small ruminants have assisted women in rural areas in meeting financial obligations with the overall goal of ensuring sustainability and enhancing the benefits inherent in the practice of small ruminants. This is due to the fact that small ruminants offer the simplest and most convenient financing option for fulfilling urgent social and financial responsibilities. (Jibowo, 2000) emphasized that women in rural regions maintain small ruminants like sheep and goats in addition to helping their husbands gather and transport farm products. These animals are preserved as backup cash sources for individual and household expenses in an emergency. Small ruminants have actually been referred to be the "village bank" in some places. According to the aforementioned, women are superior resource managers in the home than males are, and tiny ruminants are crucial to the financial security of rural women (Maxwell, 1990).

Role of women as a livestock service provider

Women who perform livestock services (LSPs) are more skilled and experienced than men, and they make more money doing so. Consequently, individuals can improve their standard of living from the cattle service industry by applying their own skills and experience. A livelihood is considered sustainable if it can withstand negative trends and unexpected shocks, recover from them, and maintain and improve its assets both now and in the future (FAO, 2009). The identical conclusions have been published by Monalesa (2014), Rahman (2017), and Rahman and Shing (2018). According to Kaur *et al.* (2017), the majority of women (68.75%) had a medium knowledge level of the various recommended practices for dairy farming; just 17.5% had a high knowledge level. 13.75% had a low knowledge level. When it comes to handling and serving, women are the most careful.

Evidence-based women empowerment

Case study-1

Renu begum is a housewife and she is 40 years old. She has been living in the Horikhali village of the Bogura district. She lives with her husband and three children in a two-bedroom tin-shade house. She is

Table 3. Livelihood scenario of Renu Begum

Name	Renu Begum
Age	40
Address	Bogura
Land	30 decimals
Number of dairies	05
Number of poultry	50
Income from dairy	150,000 BDT/Year
Income from poultry	20,200 BDT/Year

Source: Field survey, 2022.

illiterate and did not attend school, and college. Her husband works as a farmer. From her early marital life begum participate in livestock and poultry production along with crop farming with 30 decimals of land.

But over the years, she has managed to build houses, provide education for her children, she bought land for cultivation. Now other women come to her, to learn livestock farming techniques. They seek advice from her on how to become successful in livestock farming. After the family consumed, the surplus share she started supplying the milk-to-Milk Vita (a milk processing unit). She started getting money every week and that inspired her to extend the farm (Table 3).

I am commonly known as Sakib's mother (the name of my eldest son) people refer to my success, they say

“If we could work hard like Sakib's mother, we would also be successful. Another name of empowerment is solvency, sufficiency, and power to make life easy and comfortable.”

Case study -2

Suraya Begum is a housewife of 50 years old, has been living in the village Baluahat of the Bogura district for the last 35 years. She lives with her husband, Abdurjobbar, who is 55 years old and they have five children. They live in a three-bedroom tin shade house, which has mud floors and an outdoor kitchen. Suraya and her husband married for 35 years and she feels lucky to have a husband who supports and encourages her to engage in different activities. Like most other women in her village, she is illiterate and did not attend school and college. Her husband works as a farmer. 20 years ago, she started to rear livestock and poultry production along with rice and vegetable cultivation with her husband. Though Suraya did not attend school, her greatest personal desire is that, with her encouragement, her children will complete higher education. Among her five children, the elder daughter has completed a degree course and the other two are studying in college and school, respectively. She received livestock production and management training from FAO. From this training, she learned how to prepare the sheds, how to take care of the cows, how to harvest and chopping of fodder, how to feed

Table 4. Livelihood scenario of Suraya Begum

Name	Renu Begum
Age	50
Address	Bogura
Land	40 decimals
Number of dairies	04
Number of poultry	60
Income from dairy	130,000 BDT/Year
Income from poultry	20,500 BDT/Year
Income from crop and vegetable production	100,000 BDT/Year

Source: Field survey, 2022.

animals, how to rearing of calves and cleaning of sheds, how to take sick animals to hospitals for treatment and milking of animals. She learned how to produce quality milk for the locals (Table 4).

Nowadays, men respect their wives' opinions and wives also respect their husband's views. Both learned to give value to each other's contribution. She had received a loan of sixty thousand local NGO to buy two cows. Primarily, it was tough to repay the installments at intervals. Now she has paid the entire installment and her two cows four. Two of them give about four liters of milk per day of which one liter is consumed by her family and the rest of the milk is sold in the local market. Money earned from this is used for buying daily essentials and kept for savings. Suraya reported that grass and fodder are not always available which is essential to high milk production. Her husband helped her handle livestock and cattle. She also said that she jointly takes decisions with her husband while they sell their cows and poultry. Only crop production was not always profitable and that is why they decided to rare cattle and poultry. Suraya mentioned that her

husband's contribution is higher but her contribution is not low to her family. She also agreed that the individual who earns the most income should have a low to her family. But she also believes that women have equal rights.

Challenges faced by women in livestock rearing

Though women are very much enthusiastic to produce livestock for self-employment, food security, household nutrition, income generation and poverty reduction, they face huge challenges and obstacles on their way. Despite these multifaceted bottlenecks, their participation is noteworthy. The following barriers need to resolve for the greater benefit of our women in society.

Family ties and male-dominated society

When it comes to farm activities and decision-making, there has been a noticeable gender disparity. Compared to men, women are typically less involved in farming decision-making. Women are primarily responsible for the care and management of livestock, but men control how money is spent. When it comes to using

their decision-making abilities and gaining access to natural resources, extension services, marketing opportunities, and financial services, women are limited access than men. Women are frequently unable to realize their full potential due to these limitations. Inequalities in gender can also negatively affect women's capacity to make a firm living and adversely affect the total amount of money that households make from rearing livestock. Women contribute to the raising of livestock, but they have less access to technologies and resources than males do. In the poor world, there exist differences in gender when it comes to accessing information, training, and extension services.

Lack of education

Most of the village women are illiterate. It is necessary to set up educational awareness campaigns in order to alter the unfavorable social perceptions of women. The forefathers' attitude requires to be changed regarding the potential of girls and their rightful place in society. Men and women are frequently in charge of different animal species and have distinct responsibilities when it comes to animal care. Additionally, the goals behind owning animals tend to differ between men and women, as do the roles and responsibilities that come with managing animals, as well as the ways in which they are able to access and utilize new knowledge and advanced technologies. For these reasons, proper education and training on updated livestock technology are essential for women.

Access to finance

A lot of finance cells might be available to give female entrepreneurs quick access to funding. Women entrepreneurs should be able to access financing from these special

cells with easy repayment options and low interest rates. Even these finance cells should be managed by women officers and clerks. The municipal level should make an effort to supply funding. Women typically have less control over loans, collateral, and household decision-making authority. For this reason, it is essential to guarantee that women have access to extension services, information, credit, and technology.

Low risk-bearing capacity and limited mobility

Women have a low risk-bearing capacity which is why they are not interested to take a risk. There's evidence to suggest that women play an important role in managing animal health and illness prevention and treatment, but officials and even males in communities might not realize this. Supplements and treatments for animals are purchased and used by women. So, in order to have a bigger effect, distributors and suppliers advertise to women.

Lack of self-confidence and training facilities

One of the most crucial components that can raise rural women's standards of life, increase their knowledge, and improve their abilities is training. The growth of women's entrepreneurship is greatly dependent on training and development programmers. To ensure that women receive all the benefits, special training programs should be set up. The provision of technical input services, such as animal insemination, balanced cattle feed, improved fodder varieties, and emergency veterinary health care, has improved the quality of life in the communities in addition to aiding in the growth and maintenance of milk output.

Discourage from society

Throughout their careers, female entrepreneurs encounter a variety of "stumbling blocks," such as training facilities, marketing expertise, and finance cells. Women now have more economic and decision-making authority in the community and in the home when they own livestock.

Limited market knowledge

Generally, women have less experience regarding market information than men. In informal market, women usually sell their livestock or products in cash due to less access to formal market. This scenario has yet to be changed by providing proper market information and permission to go to formal market. Women can thus be quite influential in the marketing and management of livestock. Though it creates an extra workload but make them independent.

Conclusion and Recommendations

Women's participation in livestock production has made significant contributions to the growth and development of livestock. Women usually handled income-earning opportunities in the livestock production sector but men have taken the control of these areas. Income is not the only factor that determines women's socioeconomic position but also it greatly influences their status and living conditions. If men recognize the contribution of women and give the actual worth to them, the equitable and sustainable developmental changes in livestock industry will be achievable. If women increase their participation in livestock activities, there will be many developments in the livestock sector. The following recommendations are suggested based on the studies reviewed:

- Enhancing the livestock production, empower women to participate by taking the necessary steps to boost their self-confidence and meet their strategic needs in a decent way.
- Improving the livestock sector, the role of women, and their empowerment at local and central are parallel and indispensable and should receive special attention.
- Easing the provision of credit facilities to women livestock owners and linking the production with a marketing hub that will ensure better returns from livestock.
- Provisioning successive training on livestock management and practices to women would be essential for the improvement of livestock productivity.

References

- Ahmed, S., Begum, M., Khatun, A., Gofur, M. R., Azad, M. T. A., Kabir, A. and Haque, T. S. 2021. Family Poultry (FP) as a Tool for Improving Gender Equity and Women's Empowerment in Developing Countries: Evidence from Bangladesh. *European J. Agri. Food Sci.*, 3(2): 37-44.
- Alam, M. N. 2021. Livestock's contribution to GDP: Authentic Data Necessary for Development. *The Independent*. <https://m.theindependentbd.com/post/262658>
- Al-Amin, M. A. N., Arman, S. M., Afrose, M., Rahman, M. M., Bhattacharjee, J. and Bhuiyan, M. M. U. 2018. Pregnancy rate and associated factors in dairy cows of Bangladesh. *Bang. Vet.*, 35(1,2): 25-31.
- Andaleeb, N., Khan, M. and Shah, S. A.

2017. Factors affecting women participation in livestock farming in District Mardan, Khyber Pakhtunkhwa, Pakistan. *Sarhad J. Agric.*, 33(2): 288-292.
- Arshad, S., Muhammad, S. and Ashraf, I. 2013. Women's participation in livestock farming activities. *J. Anim. Plant Sci.*, 23(1): 304-308.
- Azizah, S., Latifah, S. I., Djunaidi, I. F., Wati, A. M., Rachmawati, A. and Hamidah, S. 2023. Peasant Women Contribution in Adegen Beef Cattle Farming Partnership. *Anim. Vet. Sci.*, 11(5): 725-731
- Bayeh, E. 2016. The role of empowering women and achieving gender equality in the sustainable development of Ethiopia. *Pacific Science Review B: Humanities and Social Sciences*, 2(1): 37-42.
- BBS 2021. Statistical Yearbook for Bangladesh, Bangladesh Bureau of Statistics, Statistics and Informatics Division, Ministry of Planning, Government of the People's Republic of Bangladesh, Dhaka.
- Begum MAA, Hossain MM, Khan M, Rahman MM and Rahman SME 2007. Cattle fattening practices of selected farmers in Panchagarh district. *Bang. J. Anim. Sci.*, 36(1-2): 62-72.
- Coppock, D. L., Desta, S., Tezerra, S. and Gebru, G. 2006. An Innovation System in the Rangelands: Using Collective Action to Diversify Livelihoods among Settled Pastoral Women in Ethiopia. In *Innovation Africa Symposium, Held in Kampala, Uganda*.
- Das, S. C., Chowdhury, S. D., Khatun, M. A., Nishibori, M., Isobe, N. and Yoshimura, Y. 2008. Poultry production profile and expected future projection in Bangladesh. *J. World's Poult. Sci.*, 64(1): 99-118.
- DLS 2022. Department of Livestock Services, Livestock Economy at a Glance, Ministry of Fisheries and Livestock, Government of the People's Republic of Bangladesh, Dhaka.
- EADD 2008. Gender, dairy production and marketing, East Africa Dairy Development Project. Baseline Report No. 6 Flintan. EADD/ILRI, Nairobi, Kenya.
- FAO 2009. Medios de Vida Sostenibles. In: Gente. In: Social Development Dimensions. Departamento de Ordenación de Recursos Naturales Medio Ambiente. Food and Agriculture Organization.
- Flintan, F. 2008. Women's empowerment in pastoral societies. A report developed jointly by the World Initiative for Sustainable Pastoralism, Global Environment Facility, United Nations Development Programme, and International Union for Conservation of Nature.
- Islam, M. R., Kabir, S. M. L. and Islam, M. S. 2019. Women's empowerment through small-scale dairy farming in Bangladesh: a study on some selected areas of Mymensingh district. *Asian Australas. J. Food Saf. Secur.*, 3 (2): 85-95.
- IFAD 2007. Women livestock managers in the third world: a focus on technology.

- Jaim, W. M. H. and Hossain, M. 2011. Women's Participation in Agriculture in Bangladesh: Trends, Determinants and Impact on Livelihoods¹. Paper presented in the pre-conference event on "Dynamics of Rural Livelihoods and Poverty in South Asia", 7th Asian Society of Agricultural Economists (ASAE) International Conference Hanoi, Vietnam, October 13-15.
- Jibowo, A. A. 2000. Essentials of Rural Sociology, 2nd impression, GbemiSodipo Press Ltd. Abeokuta, Nigeria. : 23-25.
- Kaur, S., Verma, H. K., Singh, J., Dash, S. K. and Kansal, S. K. 2017. Knowledge level of women dairy farmers about various farming practices in the border area of Punjab. *J. Anim. Res.*, 7(6):1051-1059.
- Mahadi, M. S. A., Khanum, R. and Akhi, K. 2014. Participation in Livestock and Poultry Rearing: A Study on Haor Women in Bangladesh. *J. Chem. Bio. Phy. Sci. Sec.*, 4(4): 3850-3860.
- Mandal, K. C. 2013. Concept and Types of Women Empowerments: In International Forum of Teaching and Studies. American Scholars Press, Inc. 9(2):18.
- Maxwell, S. 1990. Food Security in Developing Countries: Issues and Options for the 1990s, *IDS Bulletin* 21 (3): 2-13.
- Meinzen-Dick, R. S., Johnson, N. L., Quisumbing, A. R., Njuki, J., Behrman, J., Rubin, D., Peterman, A. and Waithanji, E. M. 2011. Gender, assets, and agricultural development programs: A conceptual framework. CAPRI Working Paper No. 99.
- International Food Policy Research Institute, Washington, DC, New York.
- Monalesa, N. 2014. Farmers' Knowledge and Attitude towards Summer Tomato Cultivation. M. S. (AEIS) Thesis, Department of Agricultural Extension and Information System, Sher-e-Bangla Agricultural University, Dhaka.
- Okitoi, L. O., Ondwasy, H. O. and Obali, M. P. 2007. Gender issues in poultry production in the rural household of Western Kenya. *Livest. Res. Rural Dev.*, 19(2), p.17.
- Olaniyi, O. A., Adesiyun, I. O. and Ayoade, R. A. 2008. Constraints to the utilization of poultry production technologies among farmers in Oyo State, Nigeria. *J. Hum. Ecol.*, 24(4):305-309.
- Rahman, and Yakubu, A., 2006. Analysis of poultry egg production, distribution, and consumption in parts of Nasarawa State, Nigeria. *Int. J. Nat. and Appl. Sci.*, 1(1):1-4.
- Rahman, M. 2017. Knowledge and Attitude of the Farmers towards Tobacco Cultivation in Selected Areas of Rangpur District. M. S. Thesis, Department of Agricultural Extension and Information System, Sher-e-Bangla Agricultural University, Dhaka.
- Rahman, S. A. and Alamu, J. F. 2003. Estimating the level of Women's Interest in Agriculture: An Application of Logit Regression Model. *Niger. J. Sci. Res.*, 4(1):45-49.
- Rahman, S. A., Ibrahim, H. and Ibrahim, H. 2007. Socioeconomic Study of Gender

- Role in farm production in Nasarawa State of Nigeria. *Asia. Paci. J. Rural Dev.*, 17(1):57-58.
- Rahman, S. and Shing, R. R. 2018. Knowledge and Attitude of the Farmers towards Maize Cultivation in Selected Areas of Gaibandha District. M. S. Thesis, Department of Agricultural Extension and Information System, Sher- e-Bangla Agricultural University, Dhaka
- Rao, C. V. 1990. Native fowl genetic resources in India- A study perspective. *Poult. Guide*, 27 (6): 34-39.
- Saleque, M. A. and Ansarey, F. H. 2020. Poultry industry: Challenges and solutions. *Daily Sun*; 29 August 2020.
- Sumy, M. C., Islam, M. M. and Huda, F. A. 2021. Women's Participation in Small Ruminant Rearing and Household Decision-Making Process at Banshkhali Upazila in Chattogram District. *J. Bangl. Agri. Uni.*, 19(1): 128-133.
- Sani, R. M., Tahir, I. and Kushwaha, S. 2000. Economics of Poultry Production in Bauchi State: A Case Study of Bauchi Local Government Area. *Niger. J. Anim. Prod.*, 27(1): 109-113.
- Taddesse, D., Goshu, G., Urge, M. and Goraga, Z. 2017. The Role of Women in the Traditional Cattle Fattening and Marketing Activities in West Hararghe Zone, Oromia, Ethiopia. *J. Cul. Soc. Dev.*, 35: 2422-8400.
- UNDP 2008. Empowered and Equal: Gender Equality Strategy 2008-2011. United Nations Development Program, New York.