



WOMEN INVOLVEMENT IN LIVESTOCK PRODUCTION ACTIVITIES IN KANO STATE, NIGERIA

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ABSTRACT

The study evaluated the involvement of women in livestock production in Kano State, Nigeria. Multi-stage sampling procedure was used to select 90 respondents from three local government areas namely; Kumbotso, Bunkure and Kura. Data were collected with the aid of structured questionnaire and analyzed using descriptive statistics. The result revealed that about 36.25% of the respondents fell within the age bracket of (26-35), while 33.75% of the respondents were within the age bracket of (36-45) years. In addition, 48% of the respondents were married, 30% of the respondents had informal (Quaranic education) followed by 25% who had secondary education. Further more, above half (58.54%) of the respondents were motivated to engage in livestock production based on their desire for additional income, 39.0% ventured into livestock production as a source of employment, whereas 2.44% saw this enterprise as a means to provide animal protein for their families. About 37% of the respondents were involved in small ruminant production (sheep and goats) while the majority (79%) of the respondents were involved in cleaning, water supply, milking and young animal care. The constraints to women involvement in livestock production were high cost of feed (with a weighted mean score of 3.0 and ranked 1st) and veterinary services (with a weighted mean score of 2.9 and ranked 2nd). This study therefore recommends that farmers should locally source for feed ingredients from their immediate environments to meet their production demands. Also, farmers should join cooperatives such that they can pull resources together to meet their production cost.

Keywords: Women involvement, livestock production, Kano State

INTRODUCTION

Livestock production is the second largest contributor to the global agricultural economy and serves as a tool for improving nutrition, food security and rural livelihoods. Furthermore, it is an important means for achieving the 2030 Agenda for Sustainable Development. To reduce hunger and poverty, animal rearing on farms can be particularly effective. Livestock production is of great economic and socio-economic importance to developing countries. Its contribution to economic development has reduced the vulnerabilities of the rural women, thus enhancing gender equality and empowerment. (Amanat *et al.*, 2015). Livestock production is usually managed semi-intensively and extensively as a full-time job for both men and women (Zahoor *et al.*, 2013). Globally, women represent two-thirds of low-income livestock keepers, and they constitute an average of 43 percent of the agricultural labour force in developing countries. Rural women are particularly involved in small-scale livestock production thus, they greatly contribute to the development of the small-ruminant livestock sector. The socio-economic characteristics of women livestock farmers vary depending on the region, cultural norms, and the type of livestock farming they engage in. However, women livestock farmers typically face greater economic, social and institutional barriers. In rural and peri-urban areas of different countries, livestock production is a source of livelihood to meet the family's nutritional requirements (Naz and Khan, 2018). In many communities, ownership of livestock by women is limited to small sized animals eg. sheep, goats, poultry, etc. to ensure financial security. Furthermore, it has increased the family consumption of livestock products which has improved the health and nutrition of their families (Aylee and Peacock, 2003). Hoddinott *et al.* (2014) reported higher milk consumption and a reduction in stunted growth amongst children due to cattle ownership by the women thus, improving their empowerment status.

Women's active role in livestock activities has increased their participation in decision-making hence empowerment (Mahadi *et al.*, 2014). Similarly, Patel *et al.* (2016) reported that



functions performed by different household members in livestock production must be understood and valued. According to Farnworth and Kathleen (2015), women frequently play distinct roles in livestock production. Like other household chores in rural areas, livestock rearing is regarded as a responsibility of women. They contribute in providing farm labour such as milking, fodder cutting, feeding, shed cleaning, watering, and milk processing activities. They are also considered responsible for manure collection and preparation of dung cake (Andaleeb *et al.*, 2017). Women work for the management of both small and large ruminants (Hashmi *et al.*, 2007). Women participation in livestock activities is not only employment, but they earn their worth through contribution in income from the sale of livestock products and get nutritious food for their family. The sale of small ruminants by women in rural areas has contributed greatly to their family income (Kyotos *et al.*, 2022). Their contribution to the collection of manure reduces the farm budget through the provision of organic fertilizer for soil fertility and enhancement of crop yield (Batoool *et al.*, 2014). However, in Northern Nigeria, traditional gender norms have shaped the distribution of tasks, resources, and decision-making in the livestock sector. This has led to gender-based disparities, limiting women's access to opportunities and hindering the potential for agricultural development. Understanding these gender dynamics is crucial for devising effective strategies that promote gender equality and enhance livestock productivity. This study therefore was designed to examine the level of women's involvement in livestock production as well as identify their constraints to production. Specifically, the objectives of the study were to:

- i. describe the socio-economic characteristics of women livestock farmers in Kano state.
- ii. determine the motivation for involvement in livestock production.
- iii. evaluate the level of involvement in livestock production amongst women farmers.
- iv. identify the constraints to livestock production by women livestock farmers in the state.

METHODOLOGY

The Study Area

The study was carried out in Kano State which is in the North-Western part of Nigeria. The State lies between latitude 12° 37' North, 9° 33' South and longitude 9° 29' East and 7° 43' West with a population size of 15,462,200. It is bounded by Katsina State to the north-west, and Bauchi and Kaduna State to the south. Kano State consists of two agro-ecological zones namely, Northern Guinea Savannah and the Sudan Savannah. The southern part of the state is in the Northern Guinea Savannah, which has an annual rainfall of 600-1,200mm. The central and northern parts are in the Sudan Savannah, with annual rainfall of 300-600mm (Kano State Government, 2012). Agriculture is the major employer of labour in the state with many citizens involved in farming, animal husbandry and fishery.

Kano State's agrarian economy heavily relies on livestock farming as a significant source of income and employment for rural communities.

Sampling Procedure and Sample size

Multi-stage sampling procedure was used to select respondents from three Local governments (Kumbotso, Bunkure and Kura). The first stage, involved purposive selection of the local government areas with high concentration of women farmers. In the second stage, purposive sampling was used to select two wards from each local government followed by a random selection of 15 women farmers who were actively involved in livestock production from each ward, making a total of 90 respondents for the study.

Method of Data Collection

The questionnaire was designed to obtain information on: socio-economic characteristics of the respondents, their ownership of livestock, level of involvement in livestock production and constraints to livestock production.

Method of Data Analysis

Descriptive statistics; frequencies, percentages and means were used to analyse the primary data collected.



RESULTS AND DISCUSSION

Socio-Economic Characteristics of Women Livestock Farmers

Table 1 shows the socio-economic characteristics of the respondents. About 36.25% of the respondents fell within the age bracket of (26-35), while 33.75% of the respondents were within the age bracket of (36-45) years, only 10% of the women livestock farmers fell within the age bracket of (46-55) years. The results obtained from the study showed that majority of the women involved in livestock production were middle aged. These findings were in agreement with Amin *et al.* (2010) and Zahoor *et al.* (2013) who also stated that many of the women farmers were middle aged as such they had the strength to carry out livestock activities. The Table also shows the marital status of the respondents, 48% of the women were married, 21% were widowed while 19% were single. This result concurs with reports of Zahoor *et al.* (2013) who reported that availability of family labour could contribute to livestock production implying that there are more hands to do the job of rearing animals.

The result also revealed that, 42.5% of the respondents had a household-size of 1-5 persons while 26.25% had a house hold size of 6-10 persons. Further more, 16.25% of the respondents had a household size of 16-25 persons. According to Suresh *et al.* (2008), more family members could manage larger flocks.

The educational status of the respondents as described in Table 1 showed that, 30% of the respondents had informal (Quranic education) followed by 25% which had secondary education and 16% which had tertiary education. These findings are similar to those obtained by Neha & Dave (2021), who reported that illiterate women spend more time on livestock and farming activities than the literate ones. Also, he observed that there is a negative correlation between the level of education and time spent on farming activities. In addition, Suresh *et al.* (2008), reported that the literacy of women farmers is the most important factor that determines the level of adoption of some livestock technologies such as artificial insemination and crossbreeding. Furthermore, Onubuogu *et al.* (2014), noted that higher education was likely to enhance information access to improved technology uptake and greater productivity as well as enhance the farmer's ability to comprehend and adopt innovations. On the contrary, Khan *et al.* (2013), stated that more educated women would prefer sophisticated jobs that can provide more income as well as display their expertise and skills.



Table 1: Socio-Economic Characteristics of Women Livestock Farmers

Parameters	Frequency	Percentage	Mean
Age			
18-25	16	20.00	36.57
26-35	29	36.25	
36-45	27	33.75	
46-55	8	10.00	
Marital Status			
Divorced	10	12	
Married	38	48	
Single	15	19	
Widowed	17	21	
Household Size			
1-5	34	42.5	8.63
6-10	21	26.25	
11-15	12	15.0	
16-25	13	16.25	
Educational Level			
Quranic Education	24	30	
Adult Education	12	15	
Primary Education	11	14	
Secondary Education	20	25	
Tertiary Education	13	16	
Total	80	100	

Source: Field survey, 2024

Motivation for involvement in livestock production

The results of the motivation for involvement in livestock production are revealed in figure 1. From the figure, 58.54% of the women were motivated to engage in livestock production based on their desire for additional income, however, 39.0% ventured into livestock production as a source of employment, whereas 2.44% of the respondents said the reason for venturing into livestock production was to provide animal protein for their families. These results are in agreement with Andaleeb *et al.* (2017) implying that the women livestock farmers were all interested in improving the livelihood and nutrition of their families.

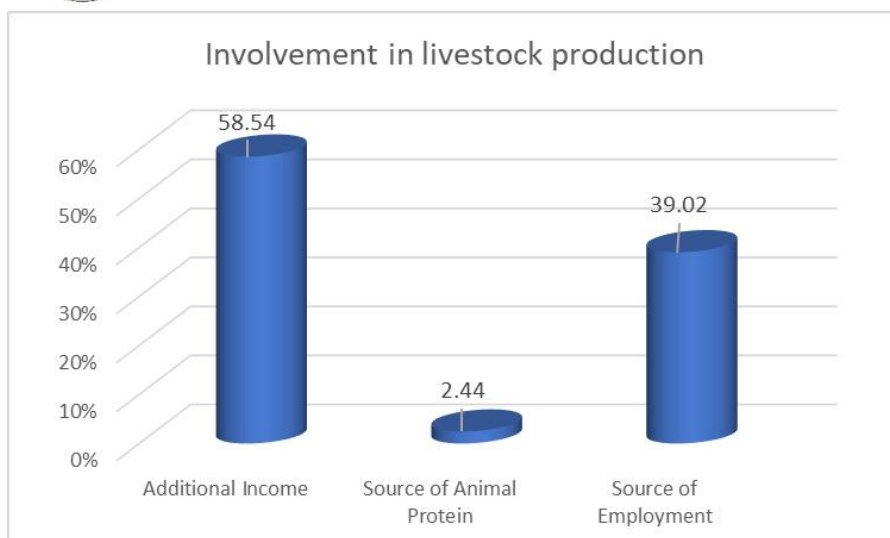


Figure 1: Motivation for involvement in livestock production

Type of Livestock Kept

Figure 2 shows the type of livestock kept by women farmers in the study location. From the pie-chart, about 38% of the women reared goats alone, while 37% raised both sheep and goats. Furthermore, 16% reared cattle alone, whereas only 2% kept camel. The preference for rearing small ruminants by the respondents may be due to their ability to provide meat, milk, hides and skin as well as withstand harsh climatic conditions. Also, multiple births (twins and triplets), the little amount of capital required to raise them and the quick returns upon investment may have influenced such decisions (Neha & Dave 2021).

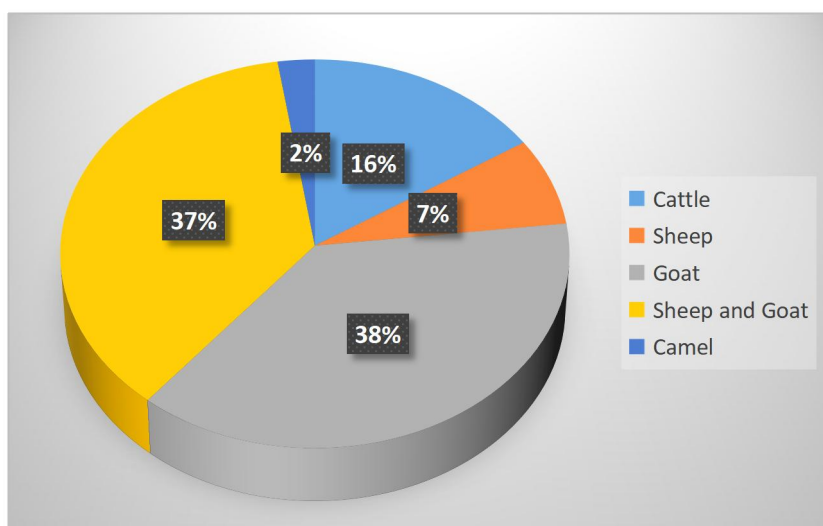


Figure 2: Type of Livestock Kept

Management System Practiced

The management system practiced by the women livestock farmers is described in Figure 3. From the figure, most (80%) of the women practiced semi-intensive system of management, while 16% adopted the extensive system of management. However, 4% of the women practiced the intensive system of management. This result is in agreement with Andaleeb *et al.* (2017) thus, it can be implied that the choice of management system practiced is based on availability of shelter to protect livestock from harsh environmental conditions, diseases and theft.

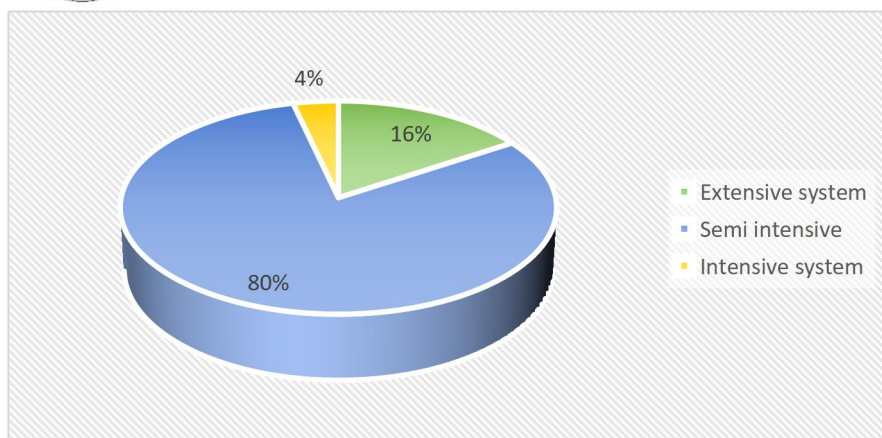


Figure 3: Management System Practiced

Herd Size of Livestock

Figure 4 reveals the herd size owned by women livestock farmers in the study location. From the results, 39.02% of the respondents had a herd size of 1-5, while 34.15 % had a herd size of 6-10, while 19.51% had a herd size of 11-15%. However, 1.22% of the women had a herd size of 21-25. This result depicts that women farmers with large herd size are very few and concurs with Biradar *et al.* (2013). This may be due to their inability to access loans or financial support for livestock production.

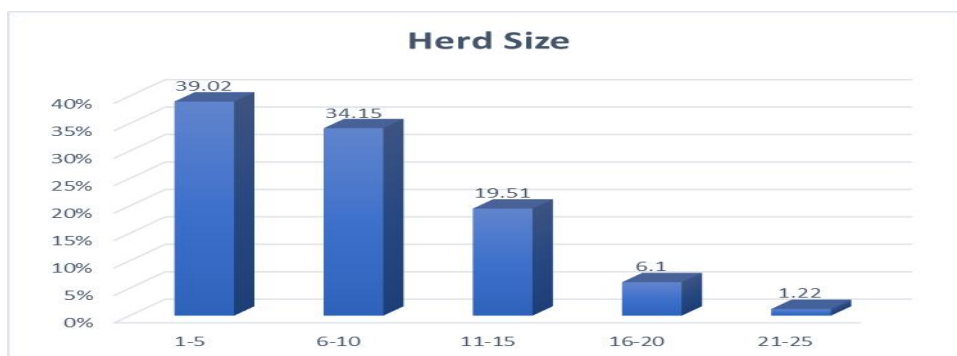


Figure 4: Herd Size of Livestock

Level of Involvement in Livestock Production

Figure 5 shows the level of participation of the respondents in livestock production activities. From the bar-chart, majority (74%) of the women were involved in feeding their livestock daily while 8% fed their livestock weekly. Similarly, 79% of the women were involved in water supply and shed cleaning daily, whereas 3% performed these activities weekly. In addition, 80% of the respondents were daily involved in young animal care, while 2% weekly took care of their young animals. The chart also revealed that 63% of the respondents were daily involved in milking their livestock, while 16% milked their livestock weekly. Furthermore, 52% of the respondents were daily involved in value addition, whereas 27% were involved in value addition on a weekly basis. These findings align with those of Saghir *et al.* (2005) and Zahoor *et al.* (2013), who reported that women take part in several livestock management tasks, such as cleaning animal pens, preparing animal feed, milking cows and baking dung cakes. They also stated that most of the responsibilities for livestock care rest on rural women's shoulders. These responsibilities include watering, milking, cleaning sheds, feeding, treating sick animals and producing cheese.

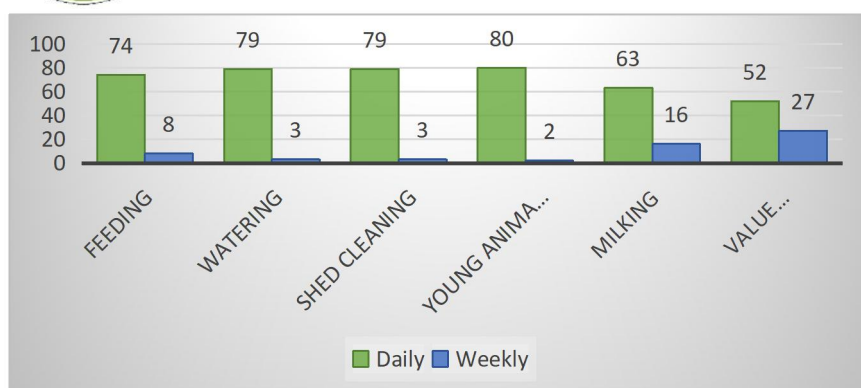


Figure 5: Level of Involvement

Respondents' Constraints to Livestock Production

The constraints to livestock production are revealed in Table 2. From the Table, the major constraint to livestock production was the high cost of feed, ranking 1st. Followed by expensive veterinary services which ranked 2nd, then the need for capacity building which ranked 3rd. Furthermore, poor financial support ranked 4th, whereas, expensive foundation stock ranked 5th. Lastly, inadequate extension services and poor market ranked 6th and 7th position respectively. These findings align with results of Naz *et al.* (2018) who also reported that costly feed, veterinary services as well as poor technical training of female farmers hindered women's involvement in livestock management.

Table 2: Constraints to Livestock Production

Constraints	Very serious	Serious	Not serious	WS	WMS	Rank ed
High cost of feed	246	-	-	246	3.00	1 st
Need for capacity building	225	10	2	237	2.89	3 rd
Expensive High cost of veterinary services and medications	225	12	1	238	2.90	2 nd
Poor financial assistance	219	16	1	236	2.88	4 th
Inadequate extension services	174	28	10	212	2.59	6 th
Expensive foundation stock	192	14	11	217	2.65	5 th
Poor market	12	171	21	204	2.49	7 th

Source: Field survey, 2024

CONCLUSION AND RECOMMENDATIONS

Based on the findings of this study, it can be concluded that women livestock farmers play a significant role in livestock production. Age, marital status, household size, level of education, livestock type and management system are significant factors influencing women involvement in livestock production in the study area. Emanating from the findings of the study, the following recommendations are suggested:

- Private-Public sectors should assist in subsidizing animal feeds and veterinary services and ensure women have access to different animal breeds through policy and intervention to enhance more livestock production.
- The capacity of women farmers should be improved upon by providing more trainings in livestock production.
- Adequate and efficient extension services should be given to the women farmers.



iv. Women participation in cooperative societies should be encouraged in order to leverage the opportunity of access to farm resources.

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