

**Rural women participation in small ruminant enterprise in the middle belt
region of Nigeria**

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Abstract

Small ruminant enterprise is a major source of income for women in the rural areas especially in the middle belt region of Nigeria. However, there seems to be a dearth of research on this hence this study aims to identify the factors and parameters that influence women involvement in sheep and goat enterprise. A quantitative approach with a descriptive survey research design was employed. The simple random sampling technique was used to select respondents from the three clusters. A five-scale likert scale questionnaire was used to elicit information from 480 respondents with a total number of 3159 goats and 1145 sheep. Personal observation and oral interviews were used to acquire relevant information needed to complement the questionnaire. Descriptive statistics was used to analyse and present the findings. The study revealed that majority of the animals kept were for economic purposes, mainly for sustenance and savings. It is therefore important to strengthen the capacity and productivity of women engaged in small ruminant enterprise to improve productivity and consequently their standard of living. This study would enable policymakers and planners to strengthen the capacity and productivity of women engaged in small ruminant enterprise and improves their standard of living.

Keywords: Small ruminant enterprise; rural women; sustenance and savings; capacity building; policymakers

1. Introduction

Beyond food production and protein supply, small ruminant enterprise contribute to the sustainable livelihoods of women in Nigeria socially, culturally, and economically, and provides various functions and services (Lawal and Ogunseitan, 2017; Oluwatayo and Oluwatayo, 2018). Of particular importance, small ruminant enterprise has continued to offer substantial opportunities towards the Sustainable Development Goals (SDGs) through support of small and large production systems in agricultural development (Njuki and Sanginga, 2013; Keeling, 2019). Besides, extrinsic functions such as ceremonial and religious roles, ruminant production plays a significant role in the Nigerian economy from the perspective of rural employment and provision of income for families and raw materials for industries (Oluwatayo and Oluwatayo, 2018).

Women play a vital role in the socio-economic development of a Nation (Koroma, 2014) by participation in various agricultural production processes such as rearing, processing, and marketing (Mohammed and Abdulquadri, 2012) as spelt in SDG 5 – Gender equality; and SDG 1 –No poverty. The farm labour of women is dominantly within the family settings, it is therefore necessary to give statistical analysis to sex role in agricultural production and to adequately recognize and quantify the labour contributed by women to agricultural productivity (Doss, 2018).

In livestock production, women have long been recognized to play a prominent role. However, many cultures view their activities in livestock production as an extension of domestic work, and therefore, assumption of ‘no economic opportunity cost’ to these activities are often encouraged. Small livestock such as goats, sheep and poultry are usually predominantly the concern of women and are much frequently owned by them compared to cattle (Raney, 2011). Studies have

described small livestock as an asset that is easily accessible to women ownership and with a great potential to reduce gender gap asset inequalities within households (Kristjanson *et al.*, 2010). In many sub-Sahara African countries like Nigeria and Latin America, women often own sheep and/or goats (Joserland and Ariza-Nino, 1982), while the men are involved largely in the rearing of cattle. Women are also involved in other activities such as processing and marketing of milk and caring for domestic animals.

Although evidence is scant due to rare collection of sex-disaggregated data in agricultural studies (Njuki and Sanginga, 2013). Studies have highlighted the importance of small ruminants particularly goats as an important financial security for women on domestic issues such as payment of children's school fees, health care, misfortunes and general family expenses (Glass *et al.*, 2014; Oluwatayo and Oluwatayo, 2018). The Nigerian government has made several efforts such as women empowerment through FADAMA 1 and 2 programmes towards attaining self-sufficiency in animal production and other mini enterprises yet, the scale is low. There is lack of appreciable data on the contribution of women in livestock production especially goats and sheep within the household. Kristjanson *et al.*, (2010) reviewed the importance of livestock for women, the roles of rural women in livestock keeping and the opportunities through livestock-related interventions which have received little research attention in recent years. Unarguably, such negligence requires necessary attention particularly in the rural areas since more than two-thirds of 600 million poor livestock keepers are rural women (Thornton *et al.*, 2003). .Despite their significance, women participation and contributions in small ruminant enterprise, and in extension - livestock production has been underestimated and unappreciated. Hence, this study identifies the factors and parameters that influence women involvement in sheep and goat enterprise.

2. Materials and methods

2.1 Study area

The study areas were Kogi, Kwara, and Niger States in North Central geopolitical zone of Nigeria. The zone is unique because of its diversity and multiplicity in dimensions representing the whole 36 states and FCT in Nigeria. However, these three states have the common identity and huge presence of the indigenous Yoruba ethnic group that can permit extrapolation. Kogi State is among the centrally located states in the country with 21 local government areas. Whilst Kwara State shared a historical international border with the Republic of Benin along the north-western part of the state and made up of 16 local government areas. Lastly, Niger state is contained of 25 local government areas with the largest landscape in Nigeria (Figure 1).



Figure 1. Map of the study areas (Kogi, Kwara, and Niger States)

2.2 Sample Size and technique

The study employed the quantitative approach using descriptive survey research design. A cluster random sampling method was used as sampling technique. In order to ensure that every local government area respondents' have equal chance of being selected, every odd numbers were randomly selected from the local governments as clusters. That is, 11 local government areas of Kogi state, 8 in Kwara state, and 13 in Niger state. This accounted for the sample size of 480 respondents with a total number of 3159 goats and 1145 sheep.

2.3 Method of data collection

Data was collected through the administration of a 5-point Likert scale questionnaire, personal observation and oral interview during the four weeks of data collection. Most questionnaires were administered personally by the trained research assistants assigned to each local government and sometimes with the assistance of an interpreter due to language restrictions. The first part of the questionnaire comprised of the bio-data (local government of origin, age, marital status, religion, ethnicity, level of education and occupation). Whilst section B and C comprises small ruminant reared and number. It also included feeding strategies and management, breeding practices, marketing, and reasons for keeping small ruminants. In addition, the questionnaire included questions about the health and challenges faced by the women.

2.4 Ethics approval

Ethical approval for this study was obtained from the Ethical review Committee of Landmark University: Centre for Research, Innovation and Discoverie (LUCRID). Email: dlucrid@lmu.edu.ng.

2.5 Limitations

One of the limitations of this study was inability to approach the women directly in Niger state. This was primarily due to the social norm in the state which does not permit meeting women directly. Compounds always carry the restriction sign “*ba siga*” which means ‘no entry’, which applies to the male gender, except with explicit permission of their husbands.

2.5 Analytical Technique

A descriptive statistic was used to analyse the data collected.

3. Results

3.1 Biodata of the small ruminant owners

3.1.1 Marital status

The results of the marital status of the respondents showed that majority of the small ruminant owners were married (320, 66.67%). The single, divorced, and widowed recorded 3.3% (16), 8.54% (41), and 21.46% (103) respectively. This is presented in Figure 2.



Figure 2: Distribution of respondents by marital status

3.1.2 Age distribution of small ruminant owners

Age distribution of the respondents indicated that most of the small ruminant owners fall within the age range of 31-40 (32%) and 41-50 (32.71%) as presented in Figure 3.

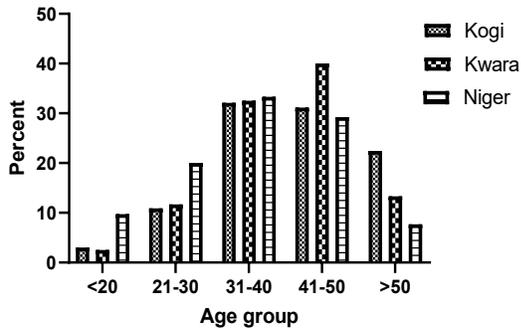


Figure 3: Age group distribution of the respondents

The age range of 21-30, 50 and above, and below 20 years recorded the lowest percentages with 14.79%, 14.17%, and 5.63% respectively.

3.1.3 Religion of the small ruminant owners

Figure 4 showed that majority of the women that kept small ruminants were Muslims (81.88%). Christians (17.92%) and believers in traditional religion (0.20%) formed the minority.

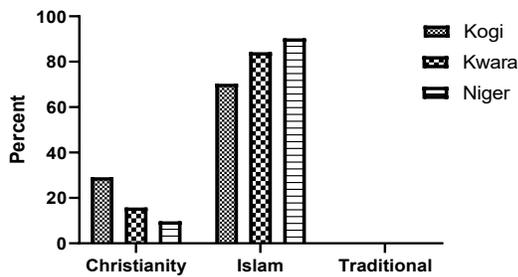


Figure 4: Religion of the respondents

3.1.4 Ethnicity and level of education of the small ruminant owners

The animals were kept by tribes identified in the region in the order of Yoruba tribe (33.75%), followed by the Igala tribe (20.2%), and Hausa (20.08%). Those from Nupe recorded 10.21%, Fulani 2.92%, Bakobaru 2.5%, Gwari 2.08%, and Ebira 1.25% (Figure 5).

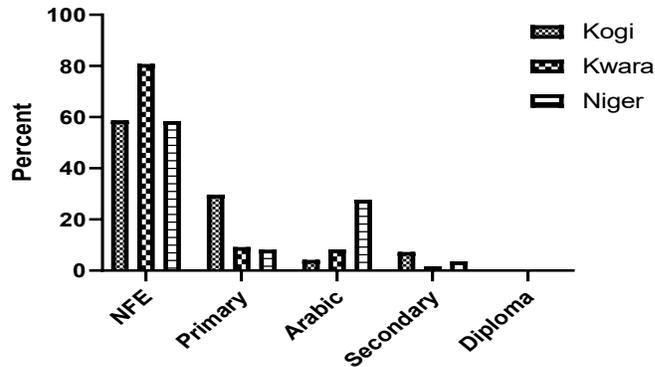


Figure 5: Level of education of the respondents

Majority of the small ruminant owners in the region had no formal education- NFE (64.17%) while respondents with primary and Arabic education were 15.83% and 15.62% respectively.

3.1.5 Occupation of the small ruminant owners

Figure 6 revealed that majority of the women in the region were farmers (49.79%), some are traders and those with other occupation made up 48.13% and 2.08% respectively.

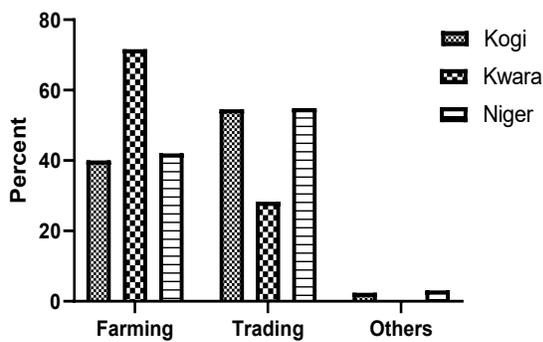


Figure 6: Occupational distribution of the respondents

3.2 Ownership pattern of small ruminants

Out of 480 respondents, 300 (62.5%) owned goats only, 42 (8.75%) owned sheep only while 138 (28.75%) owned both goats and sheep (Figure 7).

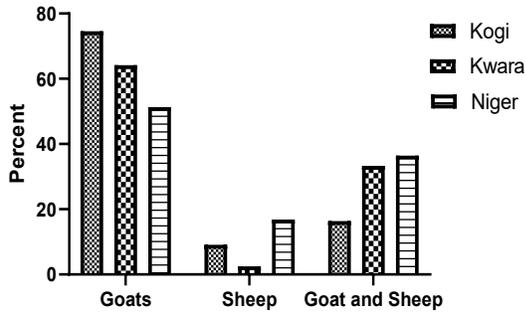


Figure 7: Small ruminants' ownership pattern of the respondents

Generally, majority of the respondents (64.58%) were sole owners of small ruminants compared to ownership with husband (15.42%), relatives (13.75%), neighbors (3.3%), and family friends (2.95%).

3.3 Distribution of small ruminants among women owners within the study area

Distribution of ownership of small ruminants among women within the study area is presented in Figure 8.

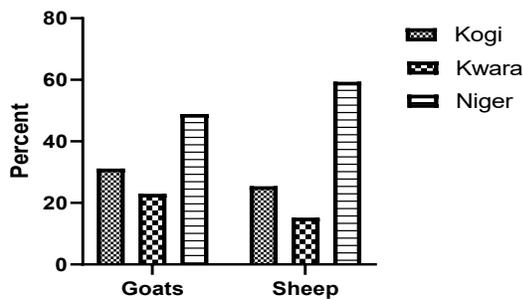


Figure 8: Distribution of small ruminants within the study area

A total of 3159 goats and 1145 sheep were recorded. This indicated an average of 7.2 goats and 6.4 sheep per small ruminant owner. The herd of sheep and goats was made of 249 (21.75%) rams, 534 (46.64%) ewe, 743 (23.52%) bucks, 1361 (43.08) does, 571 (18.08%) grower goats, 209 (18.25%) grower sheep, 484 (15.32%) weaner goats, and 151 (13.19%) weaner sheep. The

small ruminant owners exhibited a pattern of acquisition as 263 (54.79%) owners, 95 (19.79%) borrowed, 69 (14.38%) by inheritance and 53 (11.04%) owners raised.

3.4 Source of acquisition

The result for the source of the animals indicated that 300 (63.5%) bought the animals from the market, 89 (18.54%) acquired them from their relatives, 64 (13.33%) acquired them through inheritance, while 13 (2.71%) raised them from old stock.

3.5 Reasons for keeping small ruminants

The owners scored a list of predetermined reasons for keeping small ruminants as very important (score 2), important (score1), or unimportant (score 0). Reasons related to savings and income was ranked most important. Majority of the small ruminant owners kept the animals for the purpose of meat only. Reasons for keeping small ruminants among the women in the study are presented in Table 1 and 2.

Table 1: Reasons for keeping small ruminants by women within the study area (Goats)

| Reasons | Kogi | Kwara | Niger | Average |
|--------------------------------|-------------|--------------|--------------|----------------|
| Savings | 1.91 | 2.0 | 1.69 | 1.87 |
| Income | 1.86 | 1.99 | 1.79 | 1.88 |
| Prestige | 0.05 | 0.03 | 0.20 | 0.09 |
| Manure | 0.01 | 0.03 | 0.16 | 0.07 |
| Exchange for other animals | 0.10 | 0.04 | 0.11 | 0.08 |
| For family consumption | 0.98 | 0.95 | 0.83 | 0.92 |
| Insurance against crop failure | 0.62 | 0.24 | 0.82 | 0.56 |

Table 2: Reasons for keeping small ruminants by women within the study area (Sheep)

| Reasons | Kogi | Kwara | Niger | Average |
|--------------------------------|-------------|--------------|--------------|----------------|
| Savings | 2.0 | 2.0 | 1.77 | 1.92 |
| Income | 2.0 | 2.0 | 1.88 | 1.96 |
| Prestige | 0.15 | 0.06 | 0.26 | 0.16 |
| Manure | 0.02 | 0.01 | 0.17 | 0.06 |
| Exchange for other animals | 0.12 | - | 0.04 | 0.05 |
| For family consumption | 0.92 | 0.45 | 0.87 | 0.75 |
| Insurance against crop failure | 0.39 | 0.02 | 0.90 | 0.44 |

3.6 Management system, Housing, and Health Care

All of the small ruminant owners practiced extensive system of production. 165 of the respondents were from Kogi state, 120 from Kwara state, and 195 from Niger state. Feeding system differed for dry and rainy seasons. Roaming (R) was the most practiced system for other seasons in all the study area. During the dry season, 393 (81.88%) owners released their animals to search for feed by themselves. 24 (5%) owners practiced herding (H), 31 (6.46%) owners practiced teetering (T), while 32 (6.67%) practiced zero grazing (G). However, during the rainy season, majority of the small ruminant owners (274, 57.08%) practiced free roaming (R) but comparatively less than those obtained during the dry season. 43 (8.96%) practiced herding, 60 (12.5%) practiced tethering, while 103 (21.46%) practiced zero grazing. This is presented in Figure 9.

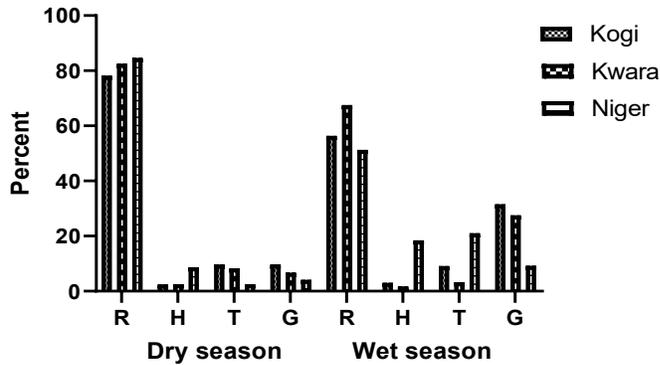


Figure 9: Management practices adopted during the dry and rainy season

3.6.1 Supplementary feeding

Majority of the respondents practiced supplementary feeding for the animals. 97.5% of the respondents gave supplementary feeds in the form of crop waste and 3.33% gave supplementary feeds in concentrate form. The categories of goats reared with supplementary feeds were breeder male, BM (4.58%), breeder female, BF (8.13%), fattening male, FM (21.25%), and suckling female, SF (66.04%). For sheep, the categories were breeder male, BM (4.58%), breeder female, BF (18.84%), fattening male, FM (17.87%) or suckling female, SF (58.94%) as shown in Figure 10.

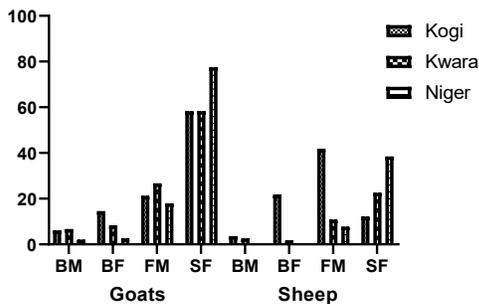


Figure 10: Categories of animals with supplementary feeding

3.6.2 Sources of feed

The sources of feed were from free feed mills 305 (63.54%), by local mixing 90 (18.75%) or mixing the feed by owners 85 (17.71%).

3.6.3 Form of Housing

At night, small ruminants were either housed under well-constructed shed with wood and corrugated iron sheet (goat: 16.13%, sheep: 16%), shed made of earth thatched (goat: 59.45%, sheep: 57.14%), tied without shelter (goat: 6.45%, sheep: 5.71%). They were also kept in an enclosure (goat: 10.83%, sheep: 7.43%) or tied under shelter (goat: 7.14%, sheep: 7.43%). While in the house, majority of the small ruminant owners kept the male and female together (goat: 92.87%, sheep: 98.48%).

3.6.4 Disease management

Majority (98.88%) of the small ruminant owners recorded that they vaccinated their animals against Pest de Petits Ruminant (PPR) and Pasteurellosis, which was in line with their willingness to pay. Majority also indicated that the service charge was avoidable and the veterinary officers in the area very friendly. Health practices such as animal deworming were rarely performed as only 24.38% small ruminant owners reported to deworm their stock.

3.7 Marketing

Majority of the women take decision on how to sell the animals (65.12%), when to sell (64.90%), and where to sell the animals (65.96%) as presented in Figure 11.

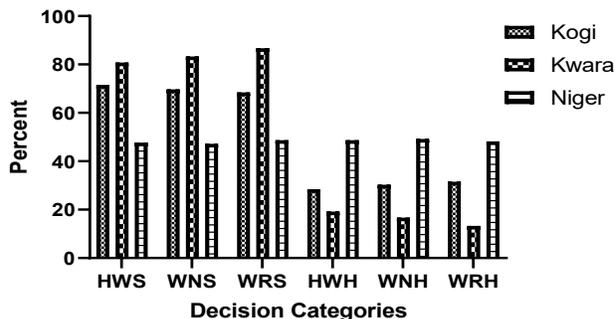


Figure 11: Decision pattern of how to sell, when to sell, and where to sell animals among small ruminant owners. *HWS-How to sell (Self), WNS-When to sell (Self), WRS-Where to sell (Self), HWH-How to sell (Husband), WNH-When to sell (Husband), WHR-Where to sell (Husband)*

The animals were mostly sold during the festive period (58.30%). Mostly, the animals were bought by individuals in the market (57.96%), while selling to individuals in the locality recorded 40.98%.

3.8 Challenges faced by the small ruminant owners

The major challenge faced by the small ruminant owners was unavailability of green pastures during dry season. However, the animal that posed more challenge was goat due to cases such as skin diseases, theft, and accident with moving vehicles.

3.9 Characteristics of breeding stock

Opinion of the small ruminant owners about traits for a good breeding ram, ewe, buck, and doe was included in the questionnaire. The traits were ranked from 5 (maximum) and 0 (minimum).

Table 3 and 4 presents the frequencies of the combined answers.

Table 3: Characteristics of breeding stock (Sheep)

| Traits | Ram | % | Ewe | % |
|--|------------|----------|------------|----------|
| Reproduction (Fertility and multiple births) | 24.33 | 23.47 | 4.25 | 23.16 |
| Health (Good looking animal) | 4.29 | 23.25 | 4.34 | 23.65 |
| Growth (Fast growth rate) | 4.21 | 22.82 | 4.30 | 23.48 |
| Milk production | - | - | 1.23 | 6.70 |
| Breed | 3.76 | 20.38 | 4.23 | 23.05 |
| Horns | 1.86 | 10.08 | - | - |

Table 4: Characteristics of breeding stock (Goat)

| Traits | Buck | % | Doe | % |
|--|-------------|----------|------------|----------|
| Reproduction (Fertility and multiple births) | 4.25 | 22.49 | 4.32 | 22.97 |
| Health (Good looking animal) | 4.29 | 22.70 | 4.28 | 22.75 |
| Growth (Fast growth rate) | 4.20 | 22.22 | 4.24 | 22.54 |
| Milk production | - | - | 1.68 | 8.93 |
| Breed | 3.84 | 20.31 | 4.14 | 22.01 |
| Horns | 2.32 | 12.28 | 0.15 | 0.80 |

4. Discussion

4.1 Bio data of the small ruminant owners

Our results indicated that majority of the respondents are married women. Marriage is responsibility and might be too much for the father only hence the need for supplementary income from the women through ruminant enterprises. Thus, it becomes imperative to perceive ruminant enterprise as a means of supporting household income and alleviate some domestic expenses by a woman. This concurred with Raney's (2011) conclusion that made married women to be dominant in household small ruminant animal enterprises. It also showed that these groups of women keep these animals as a source of economic empowerment and financial security for better living. The mean age of most small ruminant owners (31-50 years) correspond with the productive age and especially 31-40 years which is the age of active procreation (Ugwuja *et al.*, 2008). The children are relatively young and that family responsibilities increase

in terms of children schools fees, feeding, clothing and so on. Engaging in ruminant enterprise is a means of alleviating poverty and stress. Hence, in most cases especially for women not exposed to formal education, her dependence on goat and sheep enterprises is highest at this stage of life (as reflected in our result).

More than 80% of the respondents that kept small ruminants were Muslims while more than one third were the Yoruba's. People in these areas are more traditional and have more commitment to Islam that have little respect to girl-child education as well as western education in general, hence the majority lacked formal western education. Thus, the option is for the women to get involved in ruminant enterprise aside supporting the man in his farm work. Furthermore, Muslims use goats and sheep for most ceremonies such as naming ceremony, the Ramadan feast, and the likes. Therefore, to a Muslim woman, ruminant enterprise is more a market-driven exercise and a lucrative business.

Moreover, the lack of formal education by majority of the small ruminant owners in this area probably deters innovation in animal husbandry in this region. The small ruminant owners are either farmers or traders while the ruminant enterprise is perceived as an extension of their farm work or trade. Thus, the keeping of animals is a practice that is generally accepted as a means of insurance whether as a farmer or trader.

Social practices could limit what occupation or activity women are exposed to. In some communities, gender stereotyping has been an issue of some urgency and calling for attention. Although this may not be an issue in actual small ruminant animal rearing, other extensions of such as marketing could influence women decision to engage in small ruminant enterprise. According to Olomola, (2013), female smallholders were restricted from marketing agricultural

commodities in some northern parts of Nigeria. In our study, the social practice of restriction of the women does not affect the women participation in small ruminant enterprise in Niger State.

Further, the record of Yoruba tribe as the highest percentage among the tribes in this region might not be unconnected with the fact that majority of the people in this area are Yorubas; especially in Kogi and Kwara States. With respect to the number of owners in Niger State, majority keep goats and sheep but in Kogi and Kwara States, the goat is more dominant. This is a reflection of the variation in preference in the small ruminants with ecological zone (Budisatria *et al.*, 2010). Moreover, the Yoruba tradition, irrespective of religion does not encourage women to be totally dependent on the husband and be without any enterprise thus, the higher population of Yoruba women involvement in ruminant enterprise in contrast to other tribes in the region. The observation in Niger State might not be unconnected with religion as there are more Muslims in the State.

Individual flocks belonging to small ruminant owners were found to be quite small (on average 7.2 goats and 6.4 sheep) as against Egahi (2012) report in the Guinea Savanna region of Nigeria that 8.1 of goats and 4.0 of sheep was recorded. In most cultures, livestock enterprise has been dominated by men who own large number of livestock, especially cattle. As obtained in this study, the contribution of women in small ruminant enterprise in terms of flock size is quite small. This agrees with the report of Oluka *et al.*, (2005) that women are denigrated to ownership of small stock despite being the custodians of food security and family livelihoods.

Only about half of the sheep and less than one third of the goat owners reportedly have their own breeding male. Thus, the ownership of breeder male is not general. The male animals are always sold out for slaughter. A low proportion of older male and the majority of male animals in the flock being young in age corroborate the opinion of Osaer *et al.*, (2000). Of great concern is the

origin of breeding rams and bucks in which all originated from respective flock. On a general scale, this implies that inbreeding is widespread within the village due to the relationship and breeding line of animals within a flock.

4.2 Management and feeding

With respect to grazing, management systems in this study showed that small ruminants are reared mostly in extensive or low input systems as reported by Ahmadu (2000). This involves the production of a few goats to meet domestic family needs and cash income. The study also indicated that free roaming is the common practice both during the dry and rainy seasons though, the practice is more common in the dry season than in the rainy season to prevent crop damages from animals as opined by Agossou *et al.*, (2017). Observed supplementary feeding in this study is in line with the report of Akubuo *et al.*, (2020) where small ruminant owners practiced supplementary feeding for their animal at any time.

4.3 Housing

Nearly all the small ruminant owners in this study considered the provision of shelter as important although the type of housing varied among the owners. Shed made of earth-thatched grass seemed to be more popular (59.45%) in the area covered which conformed with Ahmad's report (1980). In the study of Matthewman (1980) however, no special housing for small ruminants were provided and animals returned to the households in the evening to spend the night in the compound. Goats usually remain near the compound but sheep wonder further, thus destroying crops especially during the wet (cropping) season. In another study by Okali and Sumberg, (1985), sheep were banned in many communities and households due to their potentially destructive grazing habits. In the same study, women reasoned that the grazing habit of sheep often limits their willingness to keep them. This study further revealed that majority of

the respondents rarely kept female and male separate while in the house. Consequently, this will allow indiscriminate mating among the animals resulting to inbreeding.

4.4 Reasons for keeping small ruminants

Generally, reasons for keeping goats and sheep are very similar and highest scoring was given for savings and income. Prestige, manure, family consumption and insurance against crop failure are less important. According to Okali (1979) sheep and goats produced under village systems are sold rather than consumed as obtained in this study. Timing of sales is determined by cash needs and festivities such as Ramadan, Christmas and family events such as naming ceremonies wedding and funerals. Emergency selling and slaughtering of diseased stock is also practiced. In addition, in South West Nigeria small ruminants are not kept for prestige they are kept mainly for sale and thus sold whenever cash needs arise. One can consider them as a means of saving rather than a source of regular income. Small ruminants are also kept for slaughter during traditional and religious ceremonies and festivals.

4.5 Health

The small ruminant owners engaged in health care in terms of vaccination majorly but this vaccination is done after the animals have been affected by diseases. However, farmers should be encouraged to adopt preventive measures. Adoption might be difficult with help to the purchase of drugs (Osaer *et al.*, 2000).

4.6 Challenges faced by the small ruminant owners

Shortage of feeds during the dry season was reported by majority of respondents. This is as a result of poor knowledge of how to preserve the feeds for the animals. Disease or mortality was often noted as a constraint on small ruminant production but this does not prevent farmers from

keeping some animals. Another major constraint hindering the farmers from keeping small ruminants are theft and accident with moving vehicles.

4.7 Source of acquisition

The survey also revealed that majority of the respondents bought the animals from the market (62.5%) while the rest either borrowed the animals from relatives or acquired through inheritance. The result agrees with the findings of Osigbodi *et al.*, (2020) for goats where majority (40.2%) of goat farmers obtained their stock through purchase. However, this was not in agreement with Okali (1979). According to Okali (1979), 54% of the survey carried out in South West Nigeria borrowed animals or had animals, which came from borrowed stock. The borrower has the advantages that he/she reduces the risk of long capital invested through death of an animal and that the offspring are shared equally between the borrower and the lender. There are however disadvantages in borrowing animals because the lender takes certain decisions as to what should happen to the animal especially when it is sick; whether to slaughter or sell. Due to this, the majority of the borrowers reported that they would prefer to buy breeding stock if they had cash. The owners gain from lending his/her animal because he saves his own time.

4.8 Characteristics of breeding stock

The breeder goats are usually selected by the women by applying their own parameters of good breeding stock that is for goat and sheep. Thus, the owners rate the traits for reproduction (fertility, multiple births) as very important. The second and third ranked reproduction traits of importance selected by the small ruminant owners related to health (good looking animal) and growth (fast growth rate) respectively. This could be connected to the reasons for keeping small ruminants by the women; savings and income (corresponding to animal size). Jaitner *et al.*, (2001) reported that traits with health and reproduction are assumed to have low heritabilities.

Therefore, for a reliable estimation of the breeding value, different breeding scheme than growth traits with respect to number of offspring.

5.0 Conclusion

This study has analysed the factors and perimeter of women participation in ruminant enterprise. It revealed that the women keep very small number of goats and sheep mostly on a part time basis. In most cases, the women are sole owners of the animals and are kept for the purpose of savings and income.

As observed the illiterate nature of the concerned farmers, government should encourage sensitization of the rural women through extension and rural agricultural development programmes. Government should also give improve breeds to the women and create opportunity for the sales opportunity for them. This will encourage their commitment, alleviate poverty, increase standard of living and increase GDP of the economy. Government should also render support by making more extension agents available and accessible to these women. This can be

done by employing more hands and making available the necessary incentives to complement the efforts of the available personnel.

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