

## Full Length Research Paper

# Social Factors Influencing Small Ruminant Livestock Production in Offa Local Government Area of Kwara State

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**ABSTRACT:** Livestock production is an instrument for socio-economic change to improved income and quality of life. The study was carried out to investigate the social factors influencing small ruminant livestock production in Offa local government area of Kwara State, Nigeria. Random sampling technique was used to sample 120 small ruminant livestock farmers in the study area while 101 questionnaires were retrieved. The data collected were subjected to statistical analysis using the frequency table, simple percentage, and chi-square. 76.2% and 23.8% respectively represent the percentage of male and female respondents. The ages of the respondents were 50-59 years (4.0%), 40-49 years (25.7%), 30-39 years (39.6%) and 20-29 years (30.7%). 11.9% of the respondents were into goat production only, 44.6% were into sheep production only while 43.6% were into both sheep and goat production. Farming system (54.5%), farm size (59.4%), and preference for sheep and goat meat (70.3%) were the social factors that had minor influence while gender (71.3%), ethnic

affiliation (88.1%), age (84.2%), land ownership (57.4%), farm size (59.4%) and flock management (56.4%) had no influence on small ruminant livestock production in the study area. Majority of the respondents sees unavailability of funds, theft, accessibility to market; no credit facilities' and transportation problem are not constraints facing small ruminant livestock animals in the study area. There was no significant difference among sex (0.385), marital status (0.177), age (0.112), education (0.144), tribe (0.920), and religion (0.069) when compared to the management systems used by small ruminant livestock farmers at 5% level of significance. Feeds, modern equipment, medication, and vaccination should be available and accessible for small ruminant livestock farmers to improve the productivity of the animals.

**Keywords:** Social factors, small ruminant, livestock production

## INTRODUCTION

One of the first steps in designing sustainable community-based breeding in developing countries in the tropics is to understand the social and economic factors that influence small ruminant (i.e., goats and sheep) livestock production (Kosgey, 2004). With primary focus on animal husbandry/veterinary services,

acknowledged socio-cultural factors as an appendage of major concern in seeking solution to problems facing livestock production is necessary (Olawoye, 1990). The importance of small ruminants in the tropics in general is well recognized. Small ruminants are reared mainly for four functions namely: Meat, milk, skin and wool,

according to order of importance.

The importance of small ruminants (i.e. sheep and goats) to the socio-economic well being of people in developing countries in the tropics in terms of nutrition, income and intangible benefits (e.g savings, insurance against emergencies, cultural and ceremonial purposes) cannot be overemphasized (Kosgey, 2004). Sheep and goats are important livestock species in developing countries because of their ability to convert forages crops and household residues into meat, fibre, skin and ndlk. The economic importance of each of the products varies between regions, especially in the developing countries. In terms of total output, sheep and goat products are the most important in developing countries where 45% of all mutton, 54% of all sheep milk, 93% of all chevon, and 73% of all goat milk are produced (FAO, 1990). Sheep and goat meat enjoys wide acceptability amongst different several cultural groups because there is no taboo against them hence, a small flock can quickly expand until it forms major part of the family capital asset (Peacock, 1998).

In recent times, sheep and goats production is becoming popular even among urban dwellers.

Urban livestock production which is an aspect of urban agriculture has the benefit of providing food; according to (Smith, 1996), it has become one of the major food producing activities. Raising goats and sheep can be a valuable part of a sustainable farm. Integrating livestock into a farm system can increase its economic and environmental health and diversity, thereby making important contributions to the farm's sustainability. Goats and sheep often fit well into the biological and economic niches on a farm that otherwise goes untapped.

Small ruminants are kept for both tangible (i.e., cash income from animal, milk and meat sales and for home consumption) and intangible benefits (e.g. savings, insurance against emergencies, cultural and ceremonial purposes) (Kosgey *et al.*, 2006). Furthermore, the socio-economic factors, including farmers' reasons (both tangible and intangible) to keep animals, the particular traits they consider important and their farm management practices were quantified. However, a number of other social factors are still unclear. Therefore, it is necessary to study some of the social factors influencing small ruminant livestock production in Offa local government area of Kwara state.

## METHODOLOGY

### Study area

The study was carried out in Offa Local Government area of Kwara State. Offa is the administrative headquarters of Offa local government council area. It lies approximately on latitude 8°9 N and longitude 4°43E. The government area consists of nine wards and also comprises of

several communities. The local government has a total land area of approximately 650 km<sup>2</sup> with a population of 88,975 according to Nigeria population census in 2006(NPC, 2006). The major occupation of the inhabitants is farming but some of them engage in trading.

### Population of the study area

The population of the study consists of small ruminant livestock farmers in Offa local government area of Kwara state.

### Sampling technique and sampling size

A reconnaissance survey was carried out by visiting the areas selected in order to know the sample unit. Random sampling technique was used for the study. Offa local government area consists of 9 ward and five wards were randomly selected from the wards in the study area. The wards were; Ward 1(Balogun),Ward 2 (Ojomu),Ward 4 (Offa), Ward 5 (Ijagbo),Ward 7 (Ajase). 120 questionnaires were administered to the small ruminant livestock farmers in the selected wards based on their population i.e. A total of 120 questionnaires were administered as follows; ward 1(35), Ward 2 (25), Ward 4(25), Ward 5(20) and Ward 7 (15).

### Data collection and data analysis

Data from this study were collected using primary source through the use of well structured questionnaire and personal interview method. Descriptive technique was used to illustrate the socio-economic characteristics of the respondents; these include frequency distribution and percentage. Analytical tools was used to investigate relationship between two variables and compare significant association between them, chi-square and PPMC (Pearson product moment of correlation) were used to analyze the hypothesis.

## RESULTS AND DISCUSSION

Table 1a shows that 76.2% of the respondents were male while 13.8% of respondents were female. The result shows that small ruminant production in the study area is majorly dominated by male and this was confirmed by Babu *et al.* (2010) which say that more men are engaged in agriculture than women and this may be as a result of the strenuous activity involved in ruminant livestock keeping. Also, females are still expected to cook and perform house chore duties while males are expected to do jobs that require lots of energy such as certain farm operations involved in herd management (Moyo, 2010).

**Table 1a:** Socio-economic characteristics of respondents in the study area.

Variable	Frequency	Percentage
<b>Sex</b>		
Male	77	76.2
Female	24	23.8
Total	101	100
<b>Marital status</b>		
Married	74	73.3
Single	27	26.7
Total	101	100
<b>Age</b>		
20-29	31	30.7
30-39	40	39.6
40-49	26	25.7
50-59	4	4
<b>Household size</b>		
1-5	73	72.3
6-10	28	27.7
Total	101	100

**Table 1b:** Socio-economic characteristics of respondents in the study area.

Variable	Frequency	Percentage
<b>Educational Status</b>		
No formal education	6	5.9
Primary education	17	16.8
Secondary education	53	52.5
Tertiary education	25	24.8
Total	101	100
<b>Tribe</b>		
Yoruba	73	72.3
Igbo	2	2
Hausa	22	21.8
Others	4	4
Total	101	100
<b>Religion</b>		
Christianity	39	38.8
Islam	62	61.4
Total	101	100

The marital status among the respondent revealed that majority of the respondents (73.3%) were married while (26.7%) were single. This result shows that the respondent in the study area will have an advantage in the productivity of small ruminant livestock of the respondent because the respondents would have access to free labour and thus making more hands available for productivity of small ruminant livestock production. Furthermore, most of the respondent (39.6%) falls between the ages of 30-39 while only a few (4%) were in the age range of 50-59. This shows that the productive years of the respondent falls between the ages of 30-39. The significance of this information is that the respondent

age range will enable them to cope with the vigor of livestock farm, this result contradicts the findings of Gantam and Madhur (2000) that older people of old age are more into farming than younger people in Africa.

Table 1b revealed that majority of the respondents (52.5%) had secondary education while 5.9% had no formal education. This means that majority of the respondents have the ability to read and write and this would enable them to easily adopt new innovation and expose them to information which could lead to more efficient farming activities. Education is relevant if farmers are to access and apply livestock technology appropriately (Marinda *et al.*, 2006). Furthermore, most of

**Table 2:** Management practice used by small ruminant livestock farmers in the study area.

Variable	Frequency	Percentage
<b>Type of livestock raised</b>		
Goat only	12	11.9
Sheep only	45	44.6
Goat and sheep	43	43.6
Total	101	100
<b>Management system practiced</b>		
Intensive	45	44.6
Semi-intensive	51	0.5
Extensive	5	5
Total	101	100
<b>Awareness about management system</b>		
Extension agent	18	17.8
Friend	66	65.3
Specify	17	16.8
Total	101	100
<b>Scale of production</b>		
Large scale	37	36.6
Medium scale	30	39.7
Small scale	34	33.7
Total	101	100

**Table 3:** Social factors that influence small ruminant livestock production.

Social factors	No Influence	Minor Influence	Major Influence
Gender	72(71.3%)	29(28.7%)	0(0%)
Ethnic affiliation	89(88.1%)	12(11.9%)	0(0%)
Age	85(84.2%)	10(9.9%)	6(5.9%)
Farming system	42(41.6%)	55(54.5%)	4(4.0%)
Land ownership	58(57.4%)	23(22.8%)	20(19.8%)
Farm size	36(35.6%)	60(59.4%)	5(5.0%)
Flock management	57(56.4%)	36(35.6%)	8(7.9%)
Preference for sheep and goat meat	12(11.9%)	71(70.3%)	18(17.8%)

the respondents (72.3%) were Yoruba, 21.8% Hausa, while a few (2%) were Igbo.

The result further showed that 61.4% of the respondents are Muslims while 38.8% were Christians. Also, 72.3% of the respondent has a household size of 1-5 while 27.7% has a household size of 6-10. Household members are likely to provide family labour for farm activities. Successful herd management for maximum profit requires family labour from certain members of household (Majekodunmi, 2011; Daud *et al.*, 2018).

Table 2 further revealed that 44.6% rear sheep only, 11.6% rear goat only while 43.6% rear goat and sheep. Majority (50.5%) of the respondents kept their animals under semi-intensive system of management. This is contrary to the findings of Adesehinwa and Okunlola (2000) who reported extensive system as the most common system of production in Nigeria. 65.3% of the respondent became aware of the management practice through their friends, 17.8% of the respondents

became aware of the management practice which they practiced through extension agents while 16.8% of the respondents became aware of the management practice which they practiced through other means, this can be because ends can easily influence what type of management system a livestock farmer practices more than extension agents because the result further revealed that. The result above revealed that 36.6% of the respondents were engaged in livestock production on a large scale basis while 29.7% and 33.7% were involved on medium and scale production respectively.

Table 3 revealed that most of the respondents believed that gender (71.3%), ethnic affiliation (88.1%) land ownership (57.4%) and flock management (56.4%) have no influence on small ruminant livestock production. The result further shows that most of the respondents believed that preference for goat and sheep meat (70.3%), farm size (59.4%) and farming system (54.5%) have minor influence on small ruminant livestock

**Table 4:** Constraints faced by small ruminant livestock farmers.

<b>Constraint</b>	<b>Not A Constraint</b>	<b>Minor Constraint</b>	<b>Major Constraint</b>
Unavailability of funds	39(38.6%)	35(34.7%)	27(26.7%)
Unavailability of feed	38(37.6%)	58(57.4%)	5(5.0%)
Pest and diseases	28(27.7%)	69(68.3%)	4(4.0%)
Theft	61(60.4%)	29(28.7%)	11(10.9%)
Accessibility to market	51(50.5%)	49(48.5%)	1(1.0%)
Cost of labour	75(74.3%)	20(19.8%)	6(5.9%)
Unavailability of modern Equipment	33(32.7%)	56(55.4%)	12(11.9%)
No credit facilities	71(70.3%)	3(3.0%)	27(26.7%)
Unavailability of vaccination and medication	20(19.8%)	79(78.2%)	2(2.0%)
Weather and climatic factor-	36(35.6%)	55(54.5%)	10(9.9%)
Seasonal demand for Produce	25(24.8%)	74(73.3%)	2(2.0%)
Transportation problem	75(74.3%)	22(21.8%)	4(4.0%)

**Table 5:** Chi-Square showing the relationship between socio-economic characteristics and management system.

<b>Variables</b>	<b>X<sup>2</sup></b>	<b>P-Value</b>	<b>Decision</b>
Sex Vs. management	0.765	0.385	NS
Marital status Vs. management	1.820	0.177	NS
Age Vs. management	5.995	0.112	NS
Education Vs. management	5.416	0.144	NS
Tribe Vs. Management	0.495	0.920	NS
Religion Vs. management	3.307	0.069	NS

production. None of the respondent believed that ethnic affiliation and gender have major influence on small ruminant livestock production and just a few of the respondents believed that age (5.9%) and flock management (7.9%) has major influence on small livestock production. This implies that majority of the factors does not necessarily have major influence on small livestock production.

According to (Table 4), majority of the respondent sees unavailability of funds (38.6%), theft (60.4%), accessibility to market (50.5%), no credit facilities (70.3%) and transportation problem (74.3%) as not a constraint facing small ruminant livestock animals. The result agrees with the work of Babu *et al.* (2010) that states that cost of labor, theft and unavailability of funds are major constraints affecting small ruminant livestock animals.

The result also revealed that majority of the respondents believe that pest and disease (68.3%), unavailability of modern equipments (55.4%), unavailability of vaccination and medication (78.2%), weather and climatic factors (54.5%) and seasonal demand for produce (73.3%) are minor constraint affecting small ruminant livestock animals. These findings agree with the report of Shittu *et al.* (2008) who identified these factors as constraints to sheep production in Nigeria as well as in the tropics (Kosgey *et al.*, 2008).

Table 5 shows, sex, marital status, age, education,

tribe and religion has no significant relationship with the management system at 5% level of significance, this implies that sex, marital status, age, education, tribe and religion are not influenced by the management system practiced by the respondents.

### Conclusion

Based on the results gotten from the respondents, 76.2% of the respondents were male and 39.6% of the respondent falls within the age range of 30-39 years. The result also shows that the social characteristics of the respondent do not influence the type of management practice that is carried out by the farmers. Also the result shows that, majority of the respondents sees unavailability of feed, pest and diseases, theft, accessibility to market, cost of labour, unavailability of modern equipment, no credit facilities, unavailability of vaccination and medication, weather and climatic factor, seasonal demand for produce and transportation problem as minor constraint. Most of the respondents believed that ethnic affiliation and gender has no major influence on small ruminant livestock production while a few of the respondents believed that age, farming system, land ownership, farm size and flock management, has major influence on small livestock production.

## Recommendation

From the result gotten, the following recommendation can be made; Government should create enabling environment for the small ruminant livestock farmers so as to increase their productivity likewise government should try to create awareness on the need for more women to go into small ruminant livestock production so as to improve their socio-economic well-being.

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