

Problems of Intensive Sheep Production in Nwangele L.G.A of Imo State

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Abstract

A study was carried out to investigate the problems of intensive system of sheep production in selected towns in Nwangele Local Government Area of Imo State. Five towns with sixty sheep farmers from each of the towns were used. Structured questionnaire was to gather relevant information on intensive system of sheep production and associated problems, solutions to the identified problems and production possibilities. Results showed that infection by diseases and parasites, fighting and making noise in the confinement, coupled with not having enough feeds were the important problems of intensive sheep production. The study therefore recommends that each of the sheep farmers should have an organized health programmes involving the employment of veterinary officers and government personnel support and observation of roles regarding health management.

Keywords: *Problems, Intensive system, Sheep production, Diseases & parasites, Inadequate feed, Health programmes, Veterinary officers, Government personnels*

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Background to the Study

Sheep (*Ovis arises*) are quadrupedal, ruminant mammals typically kept as livestock. Like all ruminants, sheep remembers of the order Artiodactyla, the eventoeed ungulates. They belong to genus ovidae which is the domestic species. Sheep are mostly likely descended from the wild mouflon of Europe and Asia. One of the earliest animals to be domesticated for agricultural purposes, sheep's wool is the most widely used animal fibre, and usually harvested by shearing. Ebing a key animal in the history of farming, sheep have a deeply entrenched place in human culture, and frid representation in much modern language and symbology. As livestock, sheep are most often associated with pastoral arcadian imagery. Sheep figure in many mythologies: such as the Golden fleece and major religions, especially the Abrahamic traditions. In both ancient and modern religions virtual, sheep are used as sacrificial animals (Linnaeus 2018). Its production is not new in Nwangele Local Government Area of Imo State nor in Nigeria as a whole where nearly every household keeps a few sheep (Sumberg and Cassaday 2002) reported that up to 60 percent of rural village population in Nigeria keep sheep to an average size of 4-12 animals in each household. Sheep distribution is very uneven throughout the world, and depends chiefly on geographical, economic and historic factors. There are comparatively few sheep in the tropical and sub-tropical regions. Large numbers are found in the temperate plain countries in the mountain areas, and in land that fringes continental deserts, e.g. the fringes of the Sahara and Kalahari desert in Africa.

In West Africa, sheep are often seen roaming about the town or village precincts in small flocks. Although sheep are perhaps less significant in developed countries on a world scale, they form a substantial proportion of the domesticated grazing animals (John and Halliday, 2008). Sheep is particularly important animals of subsistence agriculture on account of its perfect ability to adapt and be maintained in harsh environment (Deverdia 2010). The food and agriculture organization (FAO) put the sheep population in the world in 1973 at one million mostly found in tropical or sub-tropical region more than one third of them are in Africa.

In the tropics, although a few breeds with a marked propensity for production have been evolved and are primarily maintained for that purpose, the majority owe their existence to the fact that they can thrive as producers in conditions in which it is difficult for other species of domestic livestock to live. Their unsurpassed ability to forage, their ability to withstand the extremes of tropical climate led to their widespread distribution throughout the eastern Nigeria. Sheep are good sources of meat, milk, wool and skin. Sheep meat is realized in all the diet (Deverdia 2019). Leather from sheep hides is used to make shoes, gloves and jackets (Oluyemi Akinsanmi 2017).

Materials and Methods

Study Location

This study was carried out at Nwangele Local Government Area of Imo State. Nwangele Local Government Area is made up of 5 towns and it has a population of over 20,000 people. Nwangelel Local Government Area is situated about 30 kilometers away from Owerri the state capital and three kilometers away from the nearest tarred road running Northwards from Orlu Local Government Area.

Research Design

This is survey research. A survey research design is one which people or items are studied by collecting and analyzing data from only a few considered being the representative of the entire group (Nworgu 2021).

Population Size

The population of this study comprised a small farmer in five towns in Nwangele Local Government area of Imo state. These towns in Nwangele Local government Area of Imo State are: Abbe, Isu, Umuozu, Amaigbo and Abajah.

Sample

Sixty sheep farmers were used for the study, out of the local government, five towns such as Abbe, Isu, Umuozu, Amaigbo and Abajah were selected. Twelve sheep farmers were randomly sampled in each of the five towns given a total of sixty respondents as shown in Table 1.

Table 1.

S/N	Sample Distribution	
	Towns	Number of Selected Sheep farmers
1.	Abbe	12
2.	Isu	12
3.	Umuozu	12
4.	Amaigbo	12
5.	Abajah	12
6.	Total	60

Data Collection Method

The research instrument employed in data collection was mainly questionnaire but personal observation was used to obtain some needed information from the respondent.

Administration of Instrument

The researcher visited the treated respondents and administered the questionnaire personally to them. Literate ones were made to fill their response while the questionnaire were read out to illiterate respondents and their response were filled into the questionnaire by the researcher a total of sixty copies of questionnaires were administered.

Data Analysis

Data collected through the use of descriptive statistics percentage.

Table: Frequency count and statistics percentage

Where: \bar{X} = the mean

$$= \frac{\sum X}{N}$$

= Summation

- X = Total number of respondents to the numerical rating scale
- N = Total number of respondents to an option
- \bar{X} = Mean

Percentage

The mean value for an item is divided by the frequency number of the respondent to an item and expressed in percentage.

$$\frac{F}{N} = \frac{100}{1}$$

- Where F = Frequency of respondent to each item
- N = Number of respondents to an item

Decision Rule

The acceptance level for a favourable level of an item was 100 percent, therefore an item accepted to be a problem to the intensively system of sheep production farm, of the percentage of the respondent was 50 percent and above, where as any percentage less than 50 percent was rejected as a problem.

Results and Discussions

Sex of the sheep farmers is presented in Table 2

Table 2: Sex of Livestock Farmers

Sex	Frequency	Percentage
Male	25	41.7
Female	35	58.3
Total	60	100

Source: Field survey

Analysis of result (table 2) showed that male and female sheep farmers recorded 41.7% and 58.3% respectively. This indicates that most of the sheep farmers were female.

Marital Status of Sheep Farmers

Table 3 shows the marital status of the sheep farmers

Table 3: Marital Status of Sheep Farmers

Marital status	Frequency	Percentage
Single	22	36.6
Married	35	53.3
Widowed	12	3.3
Divorced	1	1.6
Total	60	100

Source: Field survey

Analysis shows that of result (table 3) indicate that 58.3%, 36.6%, 3.3% and 1.6% of the sheep farmers were single, widowed and divorced respectively. This also shows that most of sheep farmers are married.

Age of sheep farmers

Table 4: Presents the age Distribution of the Sheep Farmers in the Area

Age	Frequency	Percentage
Less than 25	6	10
25-35	20	33.3
36-45	33	55
45-55	1	1.6
Above 55	-	-
Total	60	100

Source: Field survey

Result of the analysis of data (table 4) showed that ages below 25, 25-35, 36-45, 45-55 and above 55 recorded 10%, 33%, 55% and 1.6% respectively. This data reveals that most of the sheep farmers are between 36 and 45 ages.

Educational Qualification

Table 5: Presents the Educational Qualification of Sheep Farmers.

Educational Qualification	Frequency	Percentage
Non-Formal Education	5	8.3
Primary Education	7	11.6
Secondary Education	18	30
Adult Education	18	30
Post-Secondary Education	12	20
Total	60	100

Source Field Survey

Result of the analysis shows that 71.6% of sheep farmers attended average education, 20% higher education whereas, 8.3% did not attend any formal education.

Breed of sheep

Table 6: Showing breeds of sheep kept

Type of sheep breed is presented in table 6

Breeds of sheep kept	Frequency	Percentage
Ouda Uda or Geizeira	11	18.3
Yankassa or Hausa Sheep	24	40
West African dwarf sheep	25	41
Total	60	100

Source Field Survey

Result of analysis (table 6) shows that most of the West Africa dwarf sheep are raised in high percentage 41.7 percent in the area while other are 11 and 24 with percentages of 18.3 and 40 respectively.

Sex of Sheep

Table 7

Sex	Frequency	Percentage
Male	20	33.3
Female	40	66.7
Total	60	100

Source field survey

Analysis of the result (table 7) shows that male recorded 33.3%, female 66.7% respectively. This implies that majority of the sheep are Female (Ewe).

Duration of raising sheep

Table 8: Present the duration of raising Sheep

Distribution	Frequency	Percentage
6 years	1	1.6
7 years	9	15
8 years	15	25
9 years	1	1.6
10 years	34	56.6
Above 10 years	-	-
Total	60	100

Source Field survey

Result indicates that majority of the sheep farmers were seen the range of 9-10 years (showing 56.6%) of duration.

System of husbandry

How do you keep the sheep?

Table 9: Presents the system of Husbandry used in keeping Sheep.

System in sheep keeping	Frequency	Percentage
Kept in open where they move freely	25	41.7
Kept in open fettered	8	13.3
Fettered under shades of trees	8	13.3
Kept in a fenced padlock	19	31.7
Total	60	100

Source: Field survey

Result of analysis (table 9) shows that majority of the farmers kept their sheep in open where they move freely with the highest percentage 41.7% whereas few other sheep farmers keep in open and fettered under shades of trees, and in a fenced padlock recorded 13.3%. 13.3% and 31.7% respectively.

Table 10: Showing reason for keeping sheep

Reason for keeping sheep	Frequency	Percentage
Supply regular family meat need	13	21.7
Supply family meat need during festival occasion	3	5
Raise money for the family	38	63.3
Making sacrifice	-	-
Source of prestige	3	5
Source manure	3	5
Total	60	100

Analysis of result in (table 10) shows that the major reasons why people keep are to raise money for the family and to supply regular family meat need recorded 63.3% and 21.7% respectively. The minor reasons are supply family meat need during festival, source of prestige and manure recorded 5%, 5%, 3%, 3% and 3% respectively.

Table 11: Presents the types of forage

Forage	Frequency	Percentage
Grass only	12	20
Legume only	13	21.7
Grass and item	20	33.3
Maize item	15	25
Total	60	100

Leaves	Frequency	Percentage
Isikala	7	11.7
Mango tree	13	21.7
Guava tree	15	25
Peer tree leaves	10	16.7
Palm tree leaves	15	25
Total	60	100

Kitchen waste	Frequency	Percentage
Cassava peel	12	20
Yam peel	13	21.7
Cassava sivate	20	33.3
Guava sivate	15	25
Total	60	100

Concentrate	Frequency	Percentage
Maize only	7	11.7
Guinea corn only	20	33.3
Soya bean only	15	25
Maize chaff only	18	30
Bambara nut	-	-
Total	60	100

Mixed Concentrate	Frequency	Percentage
Maize only	16	11.7
Maize only	8	13.3
Soya bean only	1	1.6
Bambara nut	1	1.6
Guinea nut	2	3.3
Soya bean and maize chaff	2	3.3
Guinea and Bambara nut	5	3.3
Bambara nut and soya bean	5	8.3
Total	60	100

Problems associated with keeping sheep in confinement

Table 12: Present the problem associated with Sheep in Confinement

Problems	Frequency	Percentage
Skin disease e.g., scram	6	
Problem of the scope used for fettering	3	
Pest	4	
Thieves	1	
Adequate feeding trough	15	
Noise always in confinement	5	
Confinement is laborious	4	
Confinement is capital		
Pensive in most feeding	18	
Problem of castration	2	
Problem of management	3	
Total	60	100

Result of analysis (table 12). This indicated that the most problem is capital problem which is 30% and all problems listed in the table also affect sheep production in confinement.

Solutions to the identified problems

Table 13: Presents the Solutions to the Identified Problems

Solution	Frequency	Percentage
Enough pen/house	4	6.7
Observation	3	5
Present of labour	3	5
Present of forage	4	6.7
Present of feed (Concentrates and the presence of regular personal forage)	12	20
There should be feed to avoid crying	10	16.7
Present of labour among family	1	1.6
There should be no absent of capital	16	26.7
Hygiene and use of veterinary officer	2	3.3
There should be no absent of forages	2	3.3
There should be no absent of balance ration	2	3.3
There should be no infected sheep	2	3.3
Total	60	100

Result analysis of data in (table 13) shows that solutions aid is 26.7 respectively.

Conclusion

Poor management and husbandry, poor interaction between the researcher, farmer extension workers and policy makers, most of the research results are not suitable for adoption by sheep producer because the experiment was designed and developed under the controlled environments of the experimental stations and because problems researched do not reflect those facing small sheep herders.

Recommendation

Based on the study, the following recommendations were drawn:

1. Considering the lucrative and veterinary preventive measures, the farmers should take the prime responsibility for providing durative and desirable preventive veterinary care.
2. Credit facilities should be made available to farmers through government development and co-operative banks and such credit should be on long term basis and at low interest rate with minimal collateral requirement to encourage farmers that have the willingness to keep sheep.
3. Primary health care and botanical assistance should be built at village level or on group based on regular technical support and training should be provided at field and national levels where producer group be given to traditional structures.
4. Government should relate and strengthen the area which is of major public interest research, extension, vaccination campaigns, against known diseases.

References

- Adams. U. (2002). The behavior of sheep: biological principles and implications for production. *CABI, Walling Ford*. 237
- Akinoyosaye, V. O. (2017). *Senior tropical agriculture for West Africa*, London: Macmillan Publishing Company Ltd. Pp147-183
- Deverdia, E. (2019). *Animal breeding in sheep production*.
- FAO. (2004). *Food and Agricultural organization feeding system 2004*
- FOA. (2018). POOR Animal Health FAO. 2017. *State of world's animal genetic resources for food and agriculture*. 512
- John, R. & Halliday. P. (2016). *The complete book of raising livestock and poultry. A self-setting guide Lagos, Nigeria University Education Publishing Ltd, 73-96*.
- Linnaeus, T. (2018). *Sheep and goat production in the tropics*.
- Livestock, B. A. O. (2017). *Ministry of agriculture Nigeria*.

- Nworgu, B. (2021). Analyzing data from only a few considered representatives of the entire group.
- Oluyemi, A. (2017). *Certificate agricultural science*. 140-141
- "Sheep (Ovis arises). *Breeds of livestock*, Oklahoma state University Dept. of Animal Science. Retrieved 2007-11-02.
- Shulaw, D. & William, P. (2016). Sheep care guide, *American sheep industry Association*. Retrieved 2008-09-08.
- Terrill, C. E. & Hazel, L. N. (2016). Heritability of neck folds and face covering in range Rambouillet lambs as evaluated by scoring, *J. Anim. Sci.* 5:170-179.
- Tropical (2014). Animal health production.
- Van-Soest, P. J. (2014). *Nutritional ecology of ruminant 2nd ed*, Cornell. Univ. Press. 476
- Upton, W. (2015). *Return from small ruminant production in Western Nigeria Agricultural system* 65-66.
- Wikipedia (2015). *Production theory basics, free Encyclopedia*, Inton, <http://en-wikipediaorgan/wiki/productiontheorybasics>.