

Management of Sheep at Sales Points in Abeokuta Metropolis, Nigeria.

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ABSTRACT

This project was designed to study the management of sheep at sales points in Abeokuta metropolis of Ogun State, Nigeria. It aimed at determining marketing distribution channels of sheep, feeding practices, health management, transportation/supply, and determination of prices as related to sheep grading at sales points.

Structured interview guides were used to collect relevant data from four different sheep sales point in Abeokuta viz. Lafenwa, Olomore, Itoko, and Kuto. Relevant information/data were coded on a broad sheet and contingency tables were designed and subjected to chi square analysis to establish the significant associations between concentrate feeding, clinical signs, drugs used, and housing with sales points. However, no significant relationship were established ($P > 0.05$) between sales points and means of transportation, source of stock, feed type, and water supply. While there were significant relationships between stock sales point and concentrate feeding ($P = 0.029$), clinical signs ($P = 0.027$), drugs used ($P < 0.001$), and housing ($P < 0.001$), respectively. These imply that production features like concentrate feeding, clinical signs, drugs, and housing are the major significant production features in the sales points.

(Keywords: management, sales point, sheep, goat, livestock)

INTRODUCTION

Animal welfare is the avoidance of abuse and exploitation of animals by human through maintaining appropriate standards of accommodation, feeding and general care, prevention and treatment of diseases, and the

assurance of freedom from harassment and unnecessary discomfort and pain (Broom, 1996).

The welfare of all farmed animals is protected by the "Animal Welfare Act 2006" which makes it an offence to cause unnecessary suffering to any animal. The act also contains duty of care to animal. Anyone responsible for an animal must take responsible steps to make sure the animal's welfare needs are met (Department for Environment, Food and Rural Affairs, DEFRA).

In 1967, the UK government set up an Animal Welfare Advisory Committee which became the Farm Animal Committee in 1979. The committee's first guidelines recommended that animals require freedom to stand up, lie down, turn around, groom themselves, and stretch their limb. The guidelines have been elaborated to become known as five freedoms:

- Freedom from thirst and hunger by ready access to water and diet to maintain full health vigor.
- Freedom from discomfort by providing appropriate environment including shelter and comfortable resting area.
- Freedom from pain, injury and diseases by prevention or rapid diagnosis and treatment.
- Freedom to express normal behavior by providing sufficient space, proper facilities and company of good animal's own kind.
- Freedom from fear, distress by ensuring condition and treatment which avoid mental suffering. (Farm Animal Welfare Council, 1979).

The quality of human nutrition is significantly influenced by the nature of raw materials (protein sources) eaten by animals; the link between affluence in societies by Avery (1998).

It has been calculated that approximately 70% of the total animal protein eaten by humans is provided by ruminant animals (Minson, 1997) and that 35% of all protein consumed is derived from animals. The debate continues about the nutritional adequacy of plant based diet versus meat (Sanders, 1999). In addition to meat as a vital source of dietary protein for human, milk and egg are also standard against which the adequacy of protein sources can be measured terms of provision of essential amino acids for body protein synthesis (Rosegrant et al., 1999) emphasize the significant variation there is in the proportion of meat consumed in national diets across the world-against linked to population growth, income and degree of urbanization.

Feeding remains a problem in Nigeria animal agriculture; the Fulani's in the north practice nomadism, driving sheep and goats in the midst of cattle's from place to place in search for fresh grasses and water. They hardly feed any other supplement to these animals.

Peculiar diseases of sheep are; 'Pestes de petit ruminant, Diarrhea, Foot rot, Helminthiasis, Anthrax, Black leg, Mastitis, etc. Housing at sales points are in form of stalls which are made of iron roofs and cemented floor which can be divided into pens.

This study is important to examine the welfare of small ruminants at sales points, since animal protein is the best recommended protein. As this is constituted as mass production of livestock, especially sheep and goats (others include; cattle, poultry, pigs and rabbits), the task of meeting the nutritional requirements through animal sources entail a number of important processes such as husbandry (involving housing, feeding, disease management and marketing involving efficient distribution channel from producer to final consumer).

These processes have attendant problems which are the factors that impede high productivity of the National herd and consequently poor protein nutrition. Therefore the objective of the study was to evaluate the management of sheep at sales points in Abeokuta Metropolis through the determination of the marketing distribution

channel, determination of feeding practices, determination of health management practices, determination of transportation/supply of Sheep to Abeokuta and to study how prices are determined as related to methods of grading Sheep.

MATERIALS AND METHODS

Description of Study Area

The study area comprised sales points in Abeokuta North and Abeokuta South local government areas: *Olomore, Lafenwa, Kuto, Oja agbo*.

The Abeokuta North local government shares common boundaries with Odeda local government in the North, Ewekoro Local Government in the South, and Yewa North local government in the East and West, respectively.

It has a projected population of 229,249. More than 75% of the people live in the urban area. The people are predominantly farmers more of whom engaged in cultivation of arable crops which some engaged in livestock and fishing. Abeokuta South Local Government Area covered an area of 1,640,926 km² of Ogun State, which lies in the rainforest belt of Nigeria. The local government on its Northern frontier, Obafemi Owode local government on the Eastern, while Abeokuta North Local government engages in farming activities such as crop production and livestock rearing.



Figure 1: Geographical Description of Abeokuta North and South Local Government Areas.

Method of Data Collection

A structured interview guide was used to obtain information from 60 respondents in the sales points of sheep.

The structured interview guide was divided into four sections to elicit information on:

- Socio-economic characteristics of respondents
- Feed related issues
- Health related issues
- Economic related issues

Statistical Analysis of Data

Information from the structured interview was coded on broadsheet; contingency table was designed to establish the relationship between livestock production features and sales points using Chi-square (X^2) test statistics of Genstat statistical package (Genstat Release 7.2 DE, copyright 2007, Lawes Agricultural Trust, Rothamsted Experimental Station). Bars were used to graphically express significant relationships as established by the statistics.

Hypotheses

- Ho: there are no significant relationships between various livestock production features and sales points.
- Ha: there are significant relationships between various livestock production features and sales points

RESULTS AND DISCUSSION

Table 1 shows the Chi-square analysis and relationship between stock sales point and various production features. Means of transportation, source of stock, feed types and water supply, had no significant association ($P > 0.05$) with stock sales points. However, there was significant association of stock sales point with feeding concentrate ($P = 0.029$), clinical signs ($P = 0.027$), drug used ($P < 0.001$) and housing ($P < 0.001$).

Table 1: Chi-Square Analysis of Relationships between Stock Sale Points and Various Production Features.

Livestock Production Features	Chi-square values
Means of transportation	0.00 ($P = 1.00$)
Source of stock	0.00 ($P = 1.00$)
Feed type	7.98 ($P = 0.536$)
Feeding concentrate?	9.03 ($P = 0.029$)*
Clinical signs	18.79 ($P = 0.027$)*
Drug used	39.28 ($P < 0.001$)*
Water supply	8.42 ($P = 0.209$)
Housing	29.12 ($P < 0.001$)*
Price determination	2.11 ($P = 0.550$)

Note: Values in parentheses are corresponding Probability levels

Figure 2 above showed that Lafenwa market served concentrate most out of the four sales points having 100%, In Itoko market, 93% served concentrate while 7% do not serve concentrate. In Kuto market 80% served concentrate while 20% do not serve concentrate and Olomore market 62% served concentrate while 38% do not serve concentrate. Ruminant animals do not require too much of concentrate in their diet but could be given in balanced proportion with roughages to enhance the activities of the rumen bacteria. When percentage of concentrate is high in the diet it leads to nutritional disorder such as diarrhoea

Figure 3 showed the relationship between stock sales point and incidence of clinical signs, Itoko market has 42% diarrhoea, 6% skin infection, 12% loss of appetite and 39% cold stress. In Kuto market we have 43% for diarrhoea, 20% skin infection, 17% loss of appetite with 20% cold stress. Lafenwa market has the highest percentage for diarrhoea with 60% among the four sales points which may be as a result of higher percentage of concentrate been fed, 28% skin infection and 12% cold stress. Olomore market has 42% diarrhoea, 33% skin infection which is the highest percentage for skin infection as a clinical sign, 11% loss of appetite and 14% cold stress. Itoko market has the lowest percentage of 6%. Loss of appetite is 17% in Kuto market while Lafenwa market does not have any sign of loss of appetite. Cold stress is more in Itoko market with 39%, and lowest in Kuto with 20%.

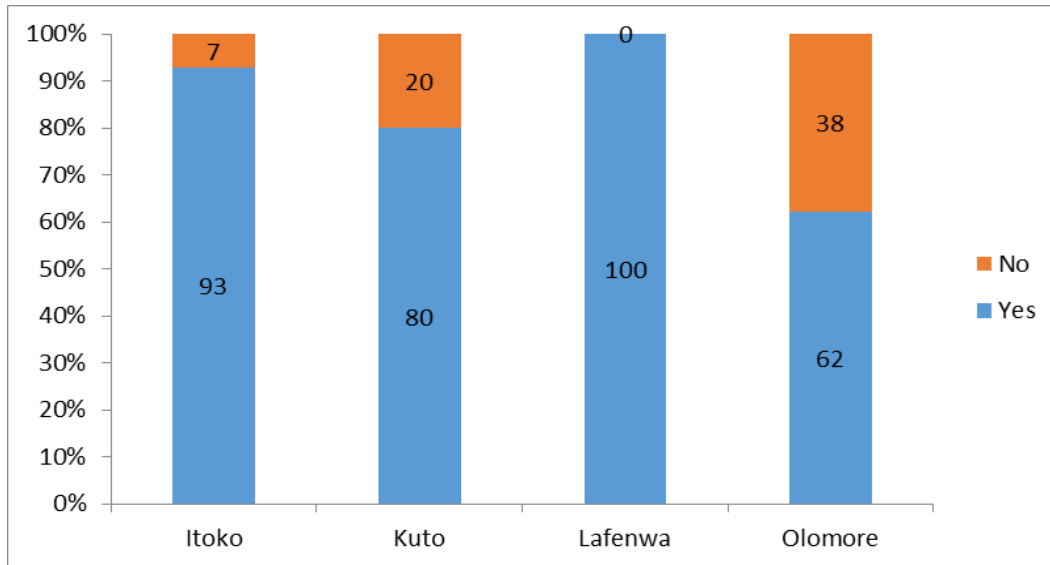


Figure 2: Relationship between Stock Sales Points and Feeding of Concentrate.

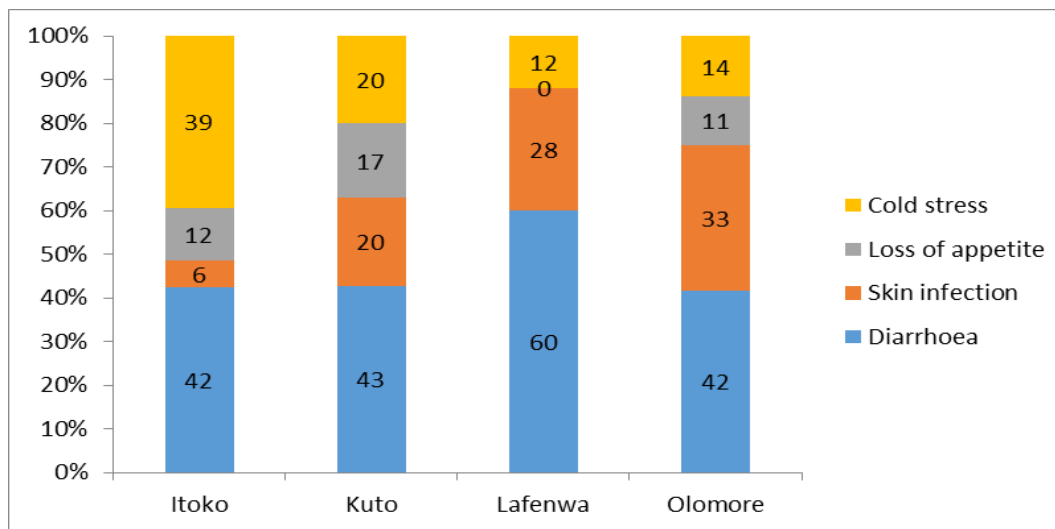


Figure 3: Relationship between Stock Sales Points and Incidence of Clinical Signs.

Figure 4 showed the relationship between stock sales point and drugs used. Itoko and Kuto market claim not to use any drug. Lafenwa market uses Flagyl 23%, Tetracycline 18%, Thalazole 16% Ampiclox 10% and 33% Analgesics. Olomore market has Flagyl with 59%, Tetracycline with 21% and Thalazole with 20%. Lafenwa uses all drugs for their sheep; this might be due to nutritional factor.

Figure 5 showed the relationship between stock sales point and housing system. Lafenwa market uses stall and pen, 44% uses stall, 37% uses pen and 19% uses stall and pen. Itoko, Lafenwa and Kuto markets uses stall for housing the sheep.

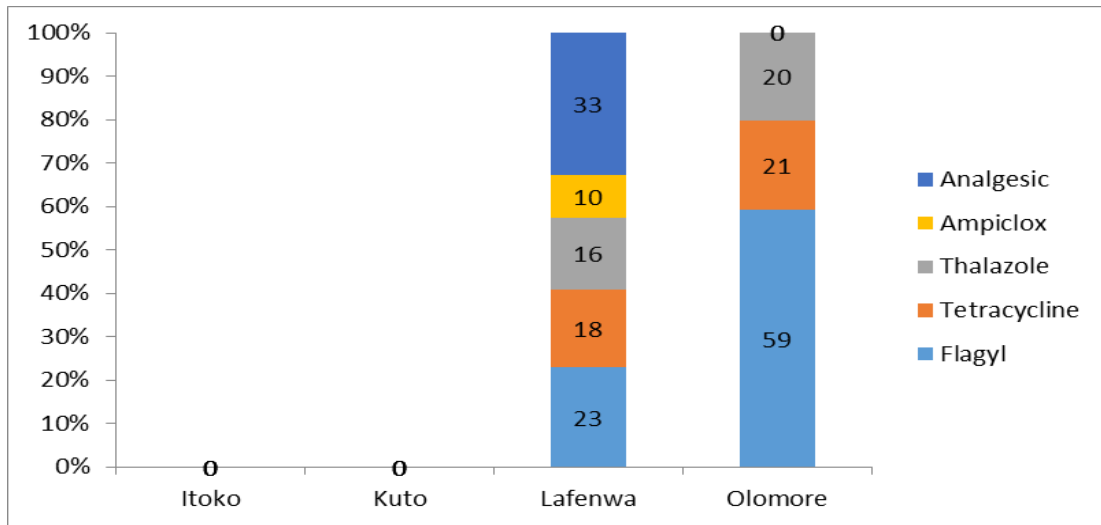


Figure 4: Relationship between Stock Sales Points and Drugs Used.

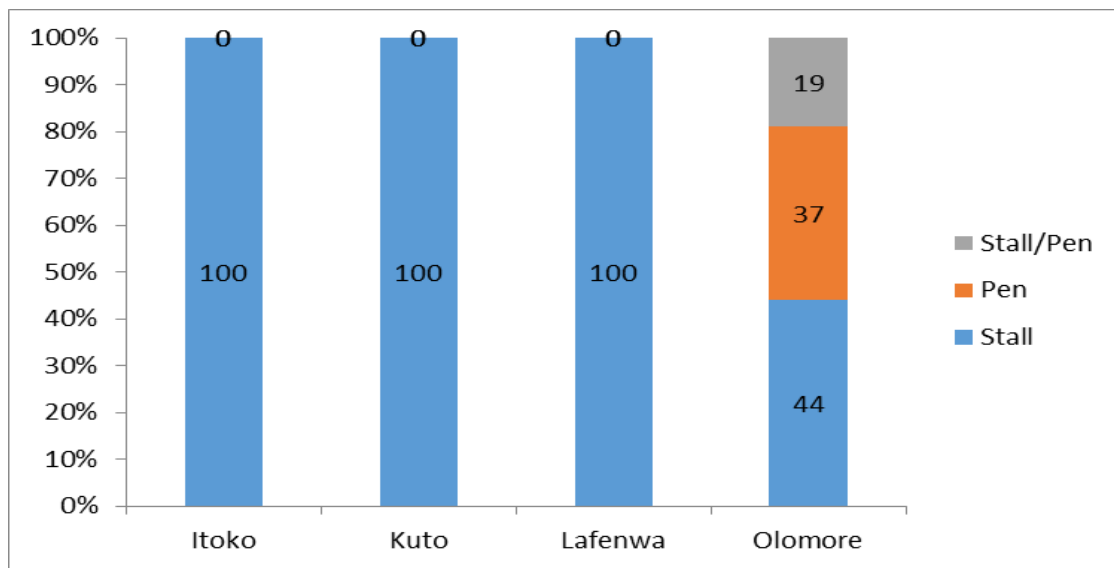


Figure 5: Relationship between Stock Sales Points and Housing System,

CONCLUSION

The study revealed that there was no significant relationship between stock sales point and production features like source of transportation, source of stock, feed type and water supply. Whereas, production features like concentrate feeding, clinical signs, drug used and housing have significant relationships with stock sales point having.

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SUGGESTED CITATION

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