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SMALL RUMINANT SALES AND ITS IMPLICATION ON GOAT PRODUCTION: A CASE OF A KRAAL MARKET IN IBADAN, NIGERIA

[1]O.G Akewusola, [2]B.R Olajide, [1]I.O Busari, [1]Y.A Osho and [1]O.J Babayemi

[1]Department of Animal science, University of Ibadan, Ibadan .Nigeria

[2]Department of Agric Extention and Rural Sociology, University of Ibadan Ibadan Nigeria

ABSTRACT

A total of 54 livestock traders (LT) at Akinyele kraal market in southwestern Nigeria were sampled using universe sampling technique. The LT were interviewed to examine their socio-economic characteristics and the rate of sales of small ruminant in the market. The number of animal, breed, sex and sales of pregnant female of sheep and goat transported in four weeks was evaluated.

Small ruminants were transported by road (100%) using vehicles such as trucks and open roof trailers with different capacities. Transportation of sheep and goat to the market was done thrice in a week with a total delivery of 37,762 goats and 1,304 sheep all through the study period. Hundred percent of the livestock traders were males and majority (77.80%) were between 35-60 years. Goat was predominant in the market (95.68%), Red Sokoto goat was the common breed and larger percentages (64.66%) were bucks. Majority of the traders (68.50%) confirm that they sold pregnant goats and sheep.

The result of the study therefore showed that there is need for effective implementation of policies on adequate ante –mortem inspection at all levels of animal exchange in the marketing channels of goats to sustain the importance of goat in Nigeria livestock economy.

Keywords: Pregnant does, Livestock market, Small ruminant traders, Livestock economy.

INTRODUCTION

Ruminant transaction in Nigeria is a lucrative livestock business that has contributed significantly to the nation's economic growth especially small ruminant. Most developing countries where ruminant business strives have witnessed many setbacks as a result of the

ISSN: 2455-6939

Volume:03, Issue:02 "March-April 2017"

prevailing political, environmental, socio and economic factors (Olabode,2007). Sheep and goat are important and preferred source of meat in southern Nigeria (Francis,1990). Most sheep and goat consumed in the south especially in urban areas are imported from the northern part of Nigeria. The main destinations of animals from the north are Ibadan and Lagos. Smaller numbers of animal pass through Markurdi to the principal markets of southeast, Onitsha, Enugu, Umuahia and Port Harcourt (Obi,1984). For northern animals coming to the southwest, the main dropping-off point is Akinyele kraal market. The small ruminant especially goats found in market are in different categories. There are young ones i.e. yearling, weaners, culled old ones, male, female, pregnant and breeding stock (Ajala et al., 2008). However, anti-mortem inspection of animal's prior sale is not effective in Nigerian ruminant kraal markets (Garba and Hassan, 2002). This has led to slaughter of genetically wholesome does and ewes that are meant to be breeders. Increased animal production provides an opportunity to boost protein intake, reduce poverty and unemployment and achieve food security. Small ruminants especially goat in Nigeria livestock industry can provide bulk of protein, essential minerals and vitamins for both rural and urban populace. Protecting their breeding stock and guarantee of birth of fetuses becomes necessary in order to derive full benefits prom its production There are many constrains facing small ruminant production in Nigeria which range among nutrition and health (Olorunisomo,2012), poor management practices (Ajala, 2003), pest and disease (Adesheinwa, 2000), illiteracy of farmers (Okunlola et al 2010), seasonality of forages (Aregheore,2001) and others. While these problems are being identified and tackled there are some problems militating against small ruminant production. One of these yet to be focused problem is unregulated sales of ruminants in kraal markets across the country. The practice if not checkmate will have a far-reaching implication on genetic strains, reproductively active animals and pregnant ewes and does. This study was to investigate the rate of sales of small ruminants at Akinyele kraal market in Ibadan, Nigeria with an attempt to:

- Determine the socio-economic characteristics of respondents
- Measure the distribution pattern of small ruminant sold by the respondents
- Determine the population, breed and sex of predominant specie brought to the market in four weeks

MATERIALS AND METHODS

Study area

The research work was conducted among ruminant traders in Akinyele kraal market a major ruminant market in the south western Nigeria. The market is located in Akinyele local government of Oyo-state about 19 kilometers north of Ibadan, Nigeria. Geographically it is

ISSN: 2455-6939

Volume:03, Issue:02 "March-April 2017"

situated between latitude 3^0.927301′ and 3^0.91127′ north and longitude 7^0.637089′ and 7^0.562479′ east.

Data collection and data analysis

A two-stage sampling procedure was used for selection of respondents for this study. In the first stage, stall location of small ruminants' sellers was purposively selected. In the second stage, using a simple universe sampling procedure method, 54 small ruminant sellers were sampled and interviewed. Primary data were obtained using a well-structured questionnaire administered as interview schedule to obtain information on respondents' socioeconomic characteristics, breed, sales of pregnant female, consultation of veterinary doctors. And distribution pattern of small ruminants. Also, researchers took data for population, sex and species brought to the market in four weeks. This was done three days per week. Descriptive statistics such as frequency distribution, percentages and mean were used to present the data collected.

RESULTS AND DISCUSSION

Most of the traders were within the age range of 35-60 years (77.8%) and were males (100%), while 20.4% were between 18-34 years. Less than 2% were above 60 years (Table1). This implied that ruminant trading was dominated by middle age men. This could be attributed to physical strength involved in handling animals and the business being lucrative.

Table 1: Socio-economic characteristics of small ruminant sellers (respondents)

Variables	Frequency	Percentage (%)
Sex:		
Male	54	100
Female	0	0
Religion:		
Islam	35	64.8
Christianity	12	22.2
Traditional	7	13.0
Age (years):		
18-34	11	20.4
35-60	42	77.8
Above 60	1	1.9
Number of years in business:		
5-10	7	13

ISSN: 2455-6939

Volume:03, Issue:02 "March-April 2017"

10-15	4	7.4
Above 15	43	79.6
Education Qualification:		
Non-Formal Education	23	42.6
Primary	16	29.6
Secondary	15	27.8
Ethnic Group:		
Yoruba	39	72.2
Hausa	11	20.4
Other	4	7.4
Social organization (Goat seller's association):		
Yes	43	79.6
No	11	20.4

(Source: Field survey, 2015.)

In the market, 64.8% of the respondents were Muslims, 22.2% were Christians and 13% were traditional worshippers. The educational level of the respondents showed that 57.4% had formal education while 42.6% had no formal education. About thirty (29.6) percent of those who were formally educated had primary school leaving certificate while 27.8% had secondary school leaving certificate. The high percentage of those with formal education can be attributed to the current high unemployment in the formal sector in Nigeria which has led to engagement of citizen in the informal sector especially those enterprises that could afford them daily earnings like sales of small ruminants. It can be inferred therefore that the business is lucrative and has no religion limitations.

The result further showed that 79.6% of the respondents belong to a social organization and had spent more than 15 years in the business while 20.4% were presently not associated with any social organization. This was in agreement with the findings of Filani, (2005) who reported that many associations are involved in the ruminant transactions however, many of these associations have no formal constitution but they rely on norms which they have developed after long years of existence and enforce with relative ease

Figure 1 indicates that 45.0% of the traders sold both sheep and goats while 15.0% sold only cattle. Four percent sold sheep, goat and cattle but 28.0% sold goats only while 8.0% sold only sheep. The result implied that most of the ruminant traders sold sheep and goats and also that goat was the commonest ruminant sold by the traders. This could be attributed to meat consumption pattern of the populace in the study region and in Nigeria as a whole. According to

ISSN: 2455-6939

Volume:03, Issue:02 "March-April 2017"

Oni, (2002) goats contribute 24% of Nigerian meat supply. In further corroboration, Cassey (1992) assert that specie preference in ruminant sale and consumption is dictated by cultural and traditional backgrounds and the socio-economic status of the community. The low percentage of traders that sold sheep alone (8%) could be attributed to the seasonal demand for sheep especially during Muslim religious festival while goats are used for all ceremonies throughout the year such as births, deaths, marriages and festivals resulting in the demand for goat being consistently high.

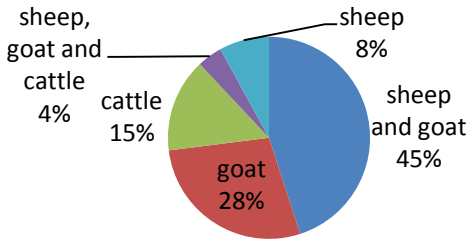

Fig.1 Frequency distribution of types of ruminant sold by traders

Types of breed of goat sold

Goat was the predominant specie sold in the market and most of the respondents (51%) sold Red Sokoto breed as shown in figure 2. This could be because the breed is the predominant goat found in Nigeria and are reared mainly in the Northern part of the country (RIMS,1992) where most goats and sheep consumed in the south originate. In the study area, Red Sokoto goats were more than half of the goat population found in the market.

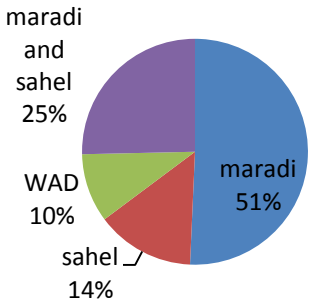

Fig 2: Frequency distribution of types of breed of predominant specie (goat) of ruminant sold

ISSN: 2455-6939

Volume:03, Issue:02 "March-April 2017"

Field observation reveals that breed has significant effect on small ruminants' sales in the study area. Sellers claimed that butchers and middlemen that are their major buyers demanded more for Red Sokoto goats. According to them carcass from this breed commands higher demand by consumers. The carcass quality and medicinal characteristics of goat meat has been reported to affect its preference by consumers (Okeudo and Moss, 2004).

Pregnancy status of the animal sold

All the respondents claimed that they did not consider pregnancy status as a factor when acquiring animal for sale (figure 3), indicating that whether an animal is pregnant or not it will be bought for sale. Although majority of the traders confirms that they know a pregnant animal at sight and through livestock handler method, they sold these animals because they command better price and they need the income to fulfill domestic obligations. This confirms the assertion that productive animals are sold for urgent financial needs (Ajala et al., 2008).

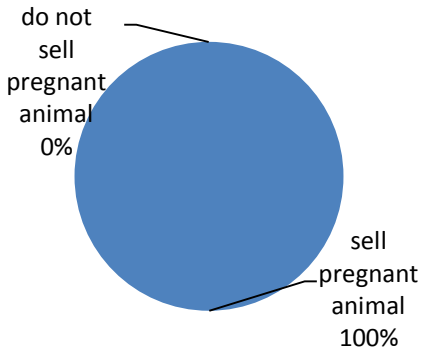

Fig 3: Frequency distribution of traders that sold pregnant ruminants

Veterinary consultation

Ninety- three percent of the traders responded that they did not consult veterinary doctors for either pregnancy or health status of their stock animals. The reason could be because of their experience in the business and handling of animals or corroborative activities with other traders in the market on how to identify and interpret various symptoms and behavior of their stock animals. Veterinary consultation was available in the study area but according to 60.0% of the respondents, it has led to increase in their cost price. Twenty-two percent stated that consulting veterinary doctors was responsible for reduction in their stock as the doctors condemn some seeming healthy goats claiming they are not fit for consumption and so should not be sold (figure.4). Sixteen percent of the respondent claimed they do not believe the veterinary decisions

ISSN: 2455-6939

Volume:03, Issue:02 "March-April 2017"

on their animals as their opinion always contradicted theirs. However, the increase in cost price could be attributed to additional costs incurred in treating sick animals conventionally as well as veterinary charges.

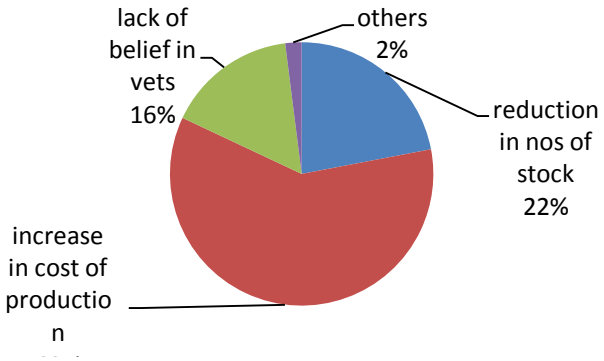

Fig 4: Reasons for lack of veterinary consultation

Average age of animal sold

The study revealed that 65.0% of the respondent sold sheep and goat within the age bracket of 1.5-2years, while 35.0% sold goats of ages 1-1.5years (figure.5). Small ruminant between the ages 1-1.5 years had the largest population in the study area. This could be as a result of what the traders were able to get from farmers or other sources for sale. Small ruminant farmers disposes off their animals mostly at ages 1-1.5years (Ajala et al.,2008).

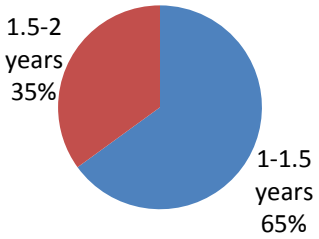

Fig 5: Frequency distribution of age of animal sold by traders

Market channels used to acquire the animal sold

Forty-one percent of the respondent acquired their stock animals from the wholesaler (Yan kasuwa Hausa language for middlemen) and farmers, 33.0% acquired theirs directly from farmers while 26.0% acquired their stock animals from middlemen alone (figure.6). Ajala et al

ISSN: 2455-6939

Volume:03, Issue:02 "March-April 2017"

(2008) reported that 95% of ruminant farmers of northern Guinea savannah of Nigeria sell their animals to middlemen who offered better prices.

Market channels used to sell animals

Larger percentage of the respondents (59.0%) in the study area sold their animals especially goats to butchers, 30.0%, sold to both middlemen and butchers while 11.0% sold to middlemen alone. It can be inferred from this result that most of the goats found in the market ended up been slaughtered for consumption as butchers are their major buyers. The findings corroborates the claim of Ahemen (2010) that most of the animals slaughtered in abattoirs especially goats are brought by butchers and were mostly purchased from markets and small holders farmers.

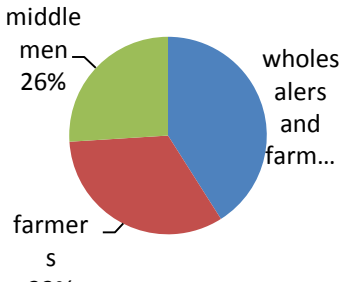

Fig 6: Frequency distribution of market channels used in acquiring stock

Sales of pregnant animals

Sixty-nine percent of the livestock traders sold pregnant goats (figure.7) while 31.0% claimed they did not. However, among those that sold pregnant animals 37.0% claimed that it was what they were able to get from their sources, 7.0% stated that they sell pregnant animals for breeding purpose to customers that want to start a breeding herd (figure.8). Twenty-eight percent stated that their customers (mainly butchers) prefer pregnant does or ewes while about 22.0% claimed they sell ignorantly. Rise in poverty level has been reported to be responsible for slaughter of pregnant ewes and does (Alhaji 2013) and this might have a multiplier effect on their sale in the market as major buyers of sheep and goats (especially goats) from markets are butchers.

ISSN: 2455-6939

Volume:03, Issue:02 "March-April 2017"

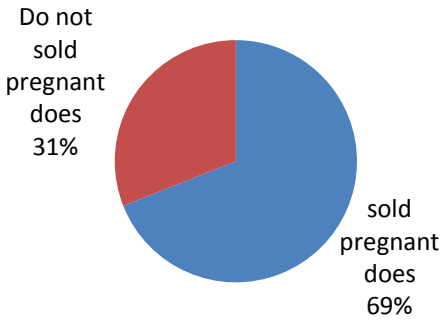

Fig.7: Frequency distribution of traders that sold pregnant does

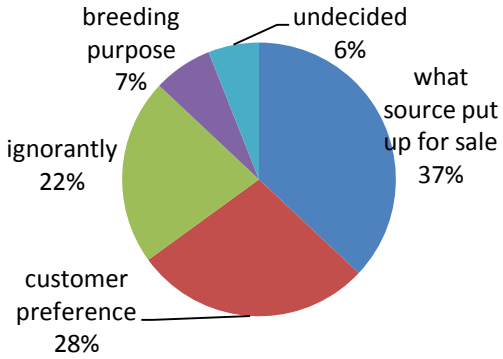

Fig.8: Reasons for selling pregnant does by traders

Number of small brought to Akinyele market in four weeks ruminants

Table 2 and 3 shows the number of goats and sheep brought to Akinyele market over a period of four weeks respectively. Mean weekly buck delivery into the market was about six thousand and fifty-five totaling 65.0% of total weekly delivery. Doe mean weekly delivery was nine-thousand four hundred and forty (about 35.0% of total delivery). For sheep, mean weekly delivery of ram and ewe respectively is 217 and 209. The result showed that large volume of small ruminant (particularly goats) trade was transacted on a regular basis in the study area. Goats have been reported to be liquid assets compared to cattle and sheep because of their low value or price in the market and their meat is well-cherished by most people across various ethnic groups in Nigeria (Ahemen, 2010). However, indiscriminate sales of pregnant does were not regulated in the market and this might transcend to slaughtering of pregnant does as butchers were major buyers of goat in the market. The trend if not checkmated, will have a deleterious effect on the production and sustenance of small ruminant sub- sector of livestock in Nigeria.

ISSN: 2455-6939

Volume:03, Issue:02 "March-April 2017"

Table 2: Distribution of number of goats brought to Akinyele market in four weeks

Variable	Weeks				Average weekly
	1	2	3	4	
Buck	5330	6339	6331	6221	6055.25
Doe	2261	2981	4097	4202	3385.25
Total	7591	9320	10428	10423	9440.50
Percentage Weekly buck delivery	70.21	68.02	60.71	59.69	64.66
Percentage weekly doe delivery	29.79	31.98	39.29	40.31	35.34

(Source: Field survey, 2015.**)**

Table 3: Distribution of number of sheep brought to Akinyele market in four weeks

Variable	Weeks				Average weekly
	1	2	3	4	
Ram	220	214	226	208	217
Ewe	210	206	210	210	209
Total	430	420	436	418	426
% weekly ram delivery	51.16	50.95	51.84	49.76	50.94
% weekly ewe delivery	48.84	49.05	48.16	50.24	49.06

(Source: Field survey, 2015.**)**

CONCLUSION

Considering the data presented in this study, the following conclusion can be inferred:

- Most people involved in goat and other ruminants sales in the study area were males and of average age
- Goat, Red Sokoto breed and buck were the predominant specie, breed and sex of ruminant found in the market .
- Butchers and middlemen were the major buyers of goats from market.

ISSN: 2455-6939

Volume:03, Issue:02 "March-April 2017"

- Sales of pregnant does and ewes were high in the market and this will have a negative effect on breed and productivity of goats if not given immediate attention.

RECOMMENDATIONS

Based on the findings from the study it can be recommended that:

Pregnant goat sales should be discourage by government through policies making and enlighten programs in kraal markets

Farmers should be given appropriate incentives (such as vaccines, drugs, loans and mortgages) by government to discourage sales of pregnant goats.

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