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SLAUGHTERED CATTLE AND REASONS FOR SLAUGHTERING COWS IN EMBER MONTHS AT LAFENWA ABATTOIR IN ABEOKUTA, NIGERIA

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ABSTRACT: *High incidence of slaughtering of gravid cows has damnable effects on productivity of animal protein to the ever-increasing population in Nigeria. This study was conducted to evaluate the foetal losses from the slaughtering of pregnant cows at Lafenwa abattoir –Abeokuta, Ogun state. Information on demographical pattern of the butchers, herd size and composition of slaughtered animals as well as the reasons for slaughtering were assessed through the use of a structured questionnaire. Most of the butchers fell within the active age (31-40 years), married (83.3%) and having formal education at various levels. It was found that a total of 15112 cattle were slaughtered of which 76.7% were cows. The percentage of foetal wastage was 10.7%, while one foetus was lost for every nine cattle and seven cows slaughtered. Pregnant cows were mostly slaughtered for ceremonies and festivals while sometimes, it was due to poverty or disease condition of the animal. Control of foetal wastage in abattoirs will go a long way in increasing the population of livestock in Nigeria. Knowledge of the magnitude of bovine foetal wastage in abattoirs is necessary to forestall further occurrences.*

KEYWORDS: Cattle, Slaughtered, Foetuses, gravid, Nigeria

INTRODUCTION

Livestock are important assets in Africa, contributing to improved nutritional status and the economic growth of their owners. In many African countries livestock also play many roles, ranging from draught power to provision of manure, milk and meat (Melttzer, 2005). As at 2004 the cattle population figure was 14,659,092 (Adesehinwa *et al.*, 2012) while at 2008, it was 16,000,000 (FMA 2008). In Nigeria, poor management which includes inadequate and unbalanced feeding, high disease prevalence and associated high neonatal mortality, poor economy, climate, inadequate breeding and husbandry system constitute major obstacles to promotion of large scale holdings of livestock (Okeudo, 2004).

Proper economic management of animal demands that those sold for slaughter should be males and females that are reproductively inactive. Information on the reproductive status, breed and weight of animals sent for slaughter should be continually evaluated to avoid wastage through the slaughtering of reproductively active females (Maxwell *et al*., 2006). Most abattoirs in Nigeria are not modern abattoirs where proper ante-mortem examination can aid the elimination or point –out unfit animals. Where such inspection is not religiously carried out, the outcome is high incidence of slaughtered pregnant animals (Nwakpu *et al*., 2007). Hence, animal protein intake in Nigeria still falls short of the 69g per caput per day recommended by FAO (2006).

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It is most uneconomical to continue the practice of slaughtering pregnant animals, a situation that greatly threatens the Nigeria livestock industry (Oduguwa *et al*., 2013). One possible factor contributing to the high rate of slaughter of pregnant cows is the season of the year. Often, rainy period coincides with active breeding season for most livestock species due to availability of pasture and consequently high pregnancy rates. Although globally, the practice of slaughtering different breeds of livestock has been sustained, the pregnancy status of the animal being slaughtered for meat still remains a hideous issue in many countries (Aberle *et al*., 2001; Warriss, 2008). The scenario of animal slaughter in abattoirs has shown that not only the conventional non-breeding livestock are slaughtered for meat but also the productive pregnant and lactating ones are not left out (Gregory and Grandin, 2007; Whitlock and Maxwell, 2008; Adama *et al*., 2011). These animals are either killed for daily meats or occasionally for rituals, religious festivals, ceremonies, drug formulations, disease control or to meet immediate financial needs (Gregory and Grandin, 2007; Cadmus and Adesokan, 2010). The pattern of disease infection varies with seasons and most often severe disease outbreaks were recorded during the rainy seasons too (Muhammad *et al*., 2008).
Control of foetal wastage in abattoirs will go a long way in increasing the population of livestock in Nigeria. Knowledge of the magnitude of bovine foetal wastage in abattoirs is therefore inevitable. This will provide the basis for justifying the human and material resources required for pregnancy diagnosis.

It is against this background that this study was conducted to investigate the breed and sex, reasons for slaughtering cows and the importance of foetuses to the butcher. The study evaluated the magnitude and significance of foetal wastage caused by slaughtering pregnant cows.

MATERIALS AND METHODS

Study area

The study was carried out at Lafenwa abattoir in Abeokuta, Ogun state, Nigeria between September and December. The state is located in the south - western part of the country. The state has an area of 16,726sqkm expanse of land with a population of 2,333,726 (1991 census). Its natural resources include rain forest, savannah grassland, rivers, mineral deposits as well agricultural products such as cassava, maize, kolanut, oil palm etc.
Abeokuta occupies a geographical area of 1255sq.km, and is located on longitude and latitude 3.0^0N – 7.5^0N. The land mass is surrounded by rock, low lying forested areas with an average rainfall of 1,445mm, which is bimodal in nature with peak in June and September. Lafenwa abattoir in Abeokuta was purposefully chosen because about 80% of the cattle slaughtered in the town came from there.

Data Collection

Data were collected with the use of a structured questionnaire and personal interviews. Forty-seven respondents (butchers) were randomly sampled and interviewed in the study area. The questionnaire was designed to supply demographic and other information such as total number of bulls and cows slaughtered per day, pregnant cows slaughtered and disposal of foetus recovered. Questions were asked from veterinary personnel and other workers to know how often they visited the abattoir, examination of the pregnant cows before slaughtering and so on.

Data Analysis

The data were analysed using descriptive statistics which comprised of percentages and frequency. The quantitative analysis was carried out using the analysis of variance (ANOVA) on the number

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of cattle, bulls and cows slaughtered per month. Duncan's New multiple Range Test was used to compare the means.

RESULTS

Presented in Table 1 are the age distribution and sex of respondents in the study area. The age range of the respondents was from 11 to 60. This is an indication that both young and old were into butchering business in the area. It also implies that they were introduced to the business at an early stage, probably due to the rigors of handling and restraining animals at slaughtering points. Majority were concentrated around 21-40 years which could be said to be the most active stage of life. All the respondents were males. It may be connected to the nature of this work; rigorous, requires a lot of vigour and strength which may be too demanding on the female folks.

Table 1: The distribution of age (years) and sex of butchers at Lafenwa abattoir, Ogun state

Age (years)	Frequency	Percentage
11 – 20	1	2.1
21 – 30	14	29.8
31 – 40	16	34.1
41 – 50	12	25.5
51 – 60	4	8.5
Total	**47**	**100.0**
Sex		
Male	47	100
Female	0	0

Figure 1is the marital status of the respondents in the study area. Most (83.3%) of the respondents were married, 14.6% were single and 2.1% widowed. Both single and married folks were found in this business and it may imply that the business is lucrative and worthwhile. However, the business was predominantly populated by married men which may be traced to the fact that they have a lot of financial commitments and responsibilities.

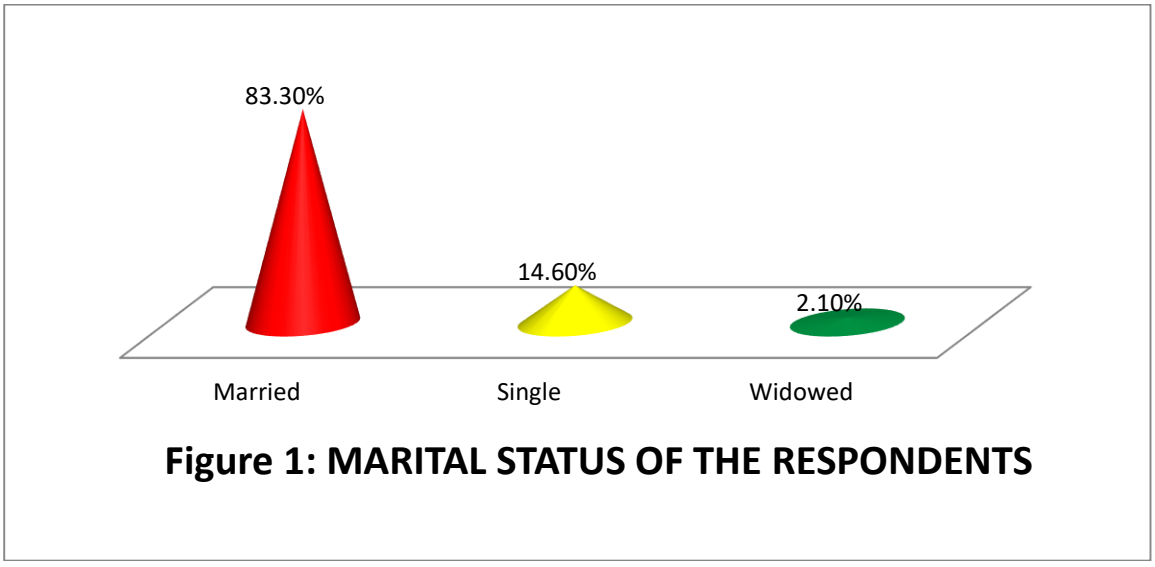

Figure 1: MARITAL STATUS OF THE RESPONDENTS

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Presented in Table 2 is the educational status of butchers in Lafenwa abattoir. Majority had primary school certificate (55.3%). However, it is worthy to note that many also possessed secondary school certificate (40.5%) and minority (2.1%) had no formal education.

Table 2: Educational background of butchers at Lafenwa Abattoir, Abeokuta, Ogun state

Educational status	Frequency	Percentage
No formal education	1	2.1
Primary	26	55.3
Secondary	19	40.5
Post-secondary	1	2.1
Total	47	100.0

Table 2 shows the daily average number of cattle slaughtered in each month. Daily average cattle slaughtered ranged from 135.62 in December to 154.72 in November. There were no significant differences in the number of cattle slaughtered September to November ($p<0.05$). The number of bulls slaughtered ranged from 30.93 to 37.92 (October and November respectively) while pregnant cows was from 14.42 to 17.60 (September and November respectively). However, there were no significant differences. The numbers of pregnant cows slaughtered within the period ranged from 148.38 to 154.72, the highest number were in the month of November. Statistically, there was no difference ($p<0.05$) between the number of bulls and the average number of pregnant cows slaughtered in each month.

TABLE 3: Average monthly distribution of slaughtered cattle in Lafenwa Abattoir

Month	**ANCAS**	**ANBS**	**ANCOS**	**ANPCOS**
Sept	148.38[a]	33.00 [a]	115.38[a]	14.42 [a]
Oct	144.89[ab]	30.93 [a]	113.96[a]	15.63 [a]
Nov	154.72 [a]	37.92 [a]	116.80[a]	17.60 [a]
Dec	135.62[b]	33.85 [a]	99.77[b]	14.62 [a]
Daily Mean	145.91	33.93	111.48	15.57
SEM	2.09	0.97	1.87	0.44

[ab] Means on the same column having different superscripts are significantly different ($p<0.05$)
Key:
ANCAS: Daily average number of cattle slaughtered in each month
ANBS: Daily average number of bulls slaughtered in each month
ANCOS: Daily average number of cows slaughtered in each month
ANPCOS: Daily average number of pregnant cow slaughtered each month

Table 3 shows the breeds of cattle slaughtered in the study area. It ranges from crosses (4.3%) to white Fulani (53.2%). It is an indication that white Fulani and Sokoto gudali are predominant in the area compared to other breeds.

Table 4: Breeds of cattle slaughtered

Breed	**Frequency**	**Percentage**
White Fulani	25	53.2
Sokoto gudali (Bokolo)	17	36.1
Crosses	2	4.3
Other breeds	3	6.4
Total	47	100

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Figure 2 shows the reasons for slaughtering pregnant cows and it ranged from diseases and poverty to ceremonies. Most respondents slaughtered pregnant cows because of festivals and ceremonies (89.1%), while only few slaughtered gravid cows because of disease (4.3%) and poverty (6.5%). As stated earlier, this may not accurately reflect the feeling/opinion of the cattle rearers. Some people may indirectly encourage slaughtering of pregnant cows for financial gains. This is because over 50% of the foetuses recovered were sold to those who manage fisheries or keep dogs.

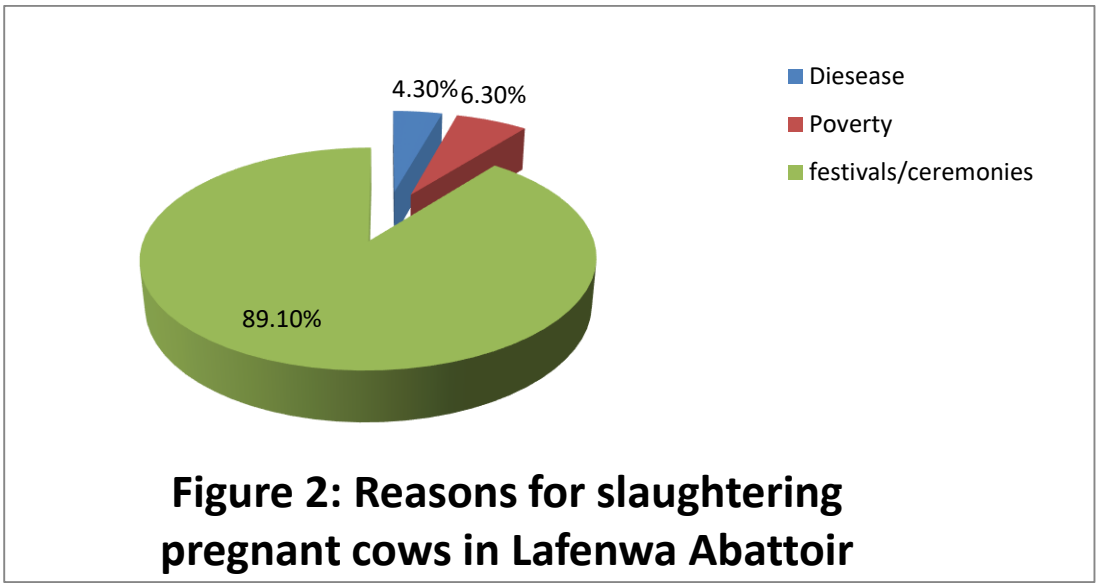

Figure 2: Reasons for slaughtering pregnant cows in Lafenwa Abattoir

Table 5 shows how the foetuses recovered from the slaughtered gravid cows were disposed off. Most of the foetuses are sold to interested buyers while the minority were either eaten or buried. This is an indication that the foetus has some economic value, irrespective of their size and stage of development.

Table 5: Management of the foetuses recovered at Lafenwa abattoir

Management practice	Frequency	Percentage
Thrown away	13	26.0
Sold	26	52.0
Eaten	2	4.0
Buried	1	2.0
Others	5	16.0
Total	47	100

DISCUSSION

Most of the respondents were within the age range of 21-40 years, married men with one level of formal education or the other. This age range is an indication that cattle slaughtering required vigour which may be unobtainable both in older or younger generation. They were all men and mostly married. The butchers were all men in the study area probably because cattle slaughtering is highly demanding and may be unbearable for the female folks. They were mostly married which indicated that the enterprise was a profitable one that can cater for financial obligations in the family. Familade *et al*. (2011) reported that most small ruminant producers in Iwo Local Government area were married and hinged it on the fact that the animals served as source of income and food security for the family.

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High foetal wastage in this study may be due to the emergence of dry season. As the dry season progressed and the stress on the cattle increased, herders were compelled to liquidate pregnant females before they died naturally. The above observation was underscored by Nwakpu *et al*. (2007) in Ebonyi State who also noted that slaughtering of pregnant animals was significantly ($p< 0.05$) higher during dry seasons and festival periods reflecting the high level or female animals slaughtered during this period.

Number of foetus recovered within the ember months showed that the least number as well as the percentage of foetuses lost was in December. This may be due to the fact that the least number of cattle and cows was slaughtered in December. Similarly, the average number of cattle and cows slaughtered in December was significantly ($p<0.05$) lower than those slaughtered in the other months slaughtered. The low number may in turn be due to the fact that people opted for poultry products rather than beef during the festive season.

Most of the foetuses recovered in this study were recovered in the second and third trimesters (75.2%), a finding which is consistent with reports by earlier researchers. Fayemi *et al*. (2008) found that 74%, 64.1%, and 75.7% of the foetuses recovered respectively were in the second/third trimesters. Similarly, Muhammad *et al*. (2008) who worked at Kaduna abattoir recovered 64.3% of the foetuses in the third trimester. This observation is surprising given the fact that pregnancy in the second and third trimesters are relatively easy to diagnose than those of the first trimester. Moreover, veterinary officers are attached to Lafenwa abattoir, excluding the role of ignorance as the reason for slaughtering gravid cows.

Generally, the reasons for slaughtering pregnant cows ranged from diseases and poverty to ceremonies. Most respondents slaughtered pregnant cows because of festivals and ceremonies (89.1%), while only few slaughtered the animals because of disease (4.3%) and poverty (6.5%). As stated earlier, this may not accurately reflect the feeling/opinion of the cattle rearers/owners. Some people may indirectly encourage slaughtering of pregnant cows. This is because over 50% of the foetuses recovered were sold by the butchers to those who managed fisheries or kept dogs.

White Fulani and Sokoto Gudali (Bokolo) accounted for 53.2% and 36.2% of the cattle slaughtered respectively at Lafenwa abattoir. This observation is similar to that of Opara *et al*. (2006) who found that White Fulani and Sokoto Gudali accounted for 76% of the animals slaughtered at Owerri abattoir. However, Muhamma *et al*. (2008) who carried out a study at Kaduna found that more cattle of Bunaji breeds were slaughtered than the other breeds. Predominance of a particular breed in a location is traceable to adaptation, utility and availability of feed resources.

The results from this study showed that on the average 3,778 cattle were slaughtered per month. This implied that 45336 cattle were slaughtered per annum. If one foetus is wasted for every nine cattle slaughtered, 5037 foetuses would be wasted in a year. Assuming zero prenatal mortality, and a week old calf is sold for N5, 000.00, this translates to a monetary loss of N25 million per annum. If the cattle were sold at maturity, the estimated monetary loss will be N181million per annum at Lafenwa abattoir alone, assuming a 20% pre and post weaning mortality and N5,000.00 as cost of rearing a calf till maturity. Another adverse consequence of high foetal wastage is the loss of daily milk and therefore income which the cattle owner may derive from the sales of fresh milk from nursing cows to the general public.

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Apart from the monetary loss, slaughtering of pregnant cows can reduce the population of cows, and therefore the herd size in Ogun State in particular, and Nigeria as a whole. This will in turn reduce the access of an average Nigerian to protein of animal source, despite the fact that his present daily protein consumption is less than his normal daily protein requirement.

CONCLUSION AND RECOMMENDATION

The results of this study showed that more cows than bulls were slaughtered at Lafenwa abattoir, and the breeds of cattle commonly slaughtered were the White Fulani and Sokoto Gudali. One foetus was lost for every nine cattle and seven cows slaughtered respectively. Furthermore the percentage of foetal wastage was 10.7%, and the reasons for slaughtering pregnant cows ranged from diseases and poverty to ceremonies. Policy efforts must geared towards instituting routine veterinary checks at the abattoir lairage and slaughter's slab exempt unfit animals. In addition, producers should be informed about the seasonal breeding patterns of these animals in order to avoid disposing them close to calving as well as the implications of slaughtering pregnant cows. The government should enforce the law that prohibits slaughtering of pregnant animals. If meat supplies are to be maintained or increased to meet future domestic demand, the incidence of slaughtering pregnant animals must be reduced or halted completely.

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