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Camel fetal wastage in Sokoto

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ABSTRACT

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The study was conducted to evaluate the incidence of foetal wastage following indiscriminate slaughter of pregnant camel in the Sokoto state over a period of seven months. A total of 3172 camels were slaughtered, out of which, 1534 were females; with a total of 682 (44.46%) fetuses recovered during the study period. 441 fetuses belongs to the first trimester, 173 fetuses belongs to the second trimester, and 68 fetuses belongs to the third trimester. 408 of the fetuses were male, 274 fetuses were female and 36 fetuses were at undifferentiated stage. The implication of these losses was discussed and way of preventing the dilemma was suggested. There was significant difference ($P > 0.05$) between the number of fetuses recovered and the period of the study (month).

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1. Introduction

An integral part of making wholesome meat available for adequate human nutrition cannot be overemphasized; yet, acute protein malnutrition is endemic in most developing countries (FAO/WHO,1983). In Nigeria, this situation has largely been due to inadequate development of the livestock sub sector of the economy. However, it is noteworthy that other factors including adequate meat inspection practices have also been contributory, and undesirable effect of this lapse in veterinary public health duties is the indiscriminate slaughter of pregnant animals (Garba *et al.*, 1992).

Today, there exist a wide disparity between the food Agricultural Organization and quantity of animal protein intake (3g/person/day) and this is subject to several factors that account for inadequate supply of meat in Nigeria, resulting in less consumption of Animals compared to plant sources of protein which are relatively cheaper. The animal product in the diet of an average Nigerian has been diminishing year after year due to marginal improvement in animal population and productivity (Oyenuga, 1987).

The common slaughtered animals for meat in Nigeria are Cattle, camel, goat, sheep, and poultry; others include pig, buffaloes, donkey, horses, rabbit and others games and forest animals that are edible (Maltin *et al.*, 1998), with only Cattle, camel, goat, sheep, and poultry being dominantly slaughtered in sokoto state. A decrease in annual growth rate of livestock population in Nigeria (CBN, 1983) annual report of 2009 showed that there was a decline in the percentage contribution of the livestock sector to the gross domestic product (GDP) between 2000 and 2005. However, marginal increase was recorded in the absolute worth of the sub sector between 2006 and 2007. If the situation is compared with the rapid growth in human population of 21% per annum and the diminishing disposable income, an average growth rate of 1.6% per annum in the livestock production index holds a grim prospect for animal protein supply and this situation is tragic.

The economic recession that has been witnessed in Nigeria since the 1990s has brought in its wake a deterioration in the quality and quantity of animal protein in the diet of Nigerians (Uko *et al.*, 1998). This has also dictated new trends in ameliorating the situation. This has entailed the slaughtering of not only prime breeding males but also pregnant animals resulting in foetal wastages, as reported by different workers with respect to camels (Uko *et al.*, 1998) small ruminants (Ogwuegbu, *et al.*, 1987) and large ruminants (Oyekunle *et al.*, 1992). Uko *et al.*, (1998) found that 24.06% of female camels slaughtered for meat in Sokoto abattoir in 1992 were pregnant. Oyekunle *et al.*, 1992, reported that between 14% and 20% of camels slaughtered in kano and katsina abattoirs from 1994 to 1999 were pregnant.

The slaughter of pregnant domestic animals vies-avis camel, cattle, goat and sheep will no doubt worsen the already precarious supply of animal protein to the populace (Abdullahi, 1985). It is most uneconomical to continue the practice of slaughtering pregnant animals, a situation that greatly threatens the Nigeria livestock industry. One possible factor contributing to the high rate of slaughter of pregnant cows is the season of the year.

In analyzing the effect of draught on livestock in sub Saharan Africa, Toulmm (1984) observed that at the extreme dry periods, herders increased their sales of aged cows and less productive females in order to meet house hold cash needs. As the dry season progressed and the stress on cattle and camel increased, herders were compelled to liquidate pregnant females before they die naturally. Most livestock farmers sell off their animals without considering the fertility of the stock before selling off due to illiteracy and poverty and or diseases condition of the animal. It therefore becomes necessary of study the pattern of fetal wastages with Sokoto State as a case study. Sokoto State is said to be the seat of the caliphate, the second largest livestock producer situated at the Northwestern States of Nigeria and as such form a good case study.

2. Materials and methods

Sokoto abattoir is the main abattoir serving the needs of providing wholesome meat to the sokoto populace and beyond and it is located at sokoto south local government, sokoto metropolis. It is one of the best organized abattoirs in Nigeria. Hence, the abattoir is an example of the public sector. It receives hundreds of animals daily.

More than 100 cows and an average of 10 camels (between 5 and 15) are slaughtered at the abattoir on a daily basis, making the abattoir one of the busiest in the state. Animals slaughtered at the abattoir arrive by road from different parts of state. Other sources of animals slaughtered at the abattoir are countries mainly within the West African sub-region including Niger, Chad, Cameroon, Mali, Burkina Faso, Togo and many other countries. More animals are slaughtered at the abattoirs during festive periods than other periods of the year.

The data for this study were based on abattoir records kept by both the Veterinary Department of the state as well as the private managers of the abattoir. The survey was a retrospective study spanning over a period of Seven(7) months (November, 2010 to May, 2011). The abattoir was also visited on a daily basis between 7:00am-10:00am to gain first hand experience on the scope of the problems and to witness all the activities that take place from the arrival of the animals to slaughter.

3. Results and discussion

From the study, revealed monthly trend of fetal wastages at Sokoto metropolitan abattoir, April had the highest peak of wastage and there was also significant rise within the month. determined by different seasons of the year. While Table. 2 shows the monthly increase of fetal wastage in relation to sex of the fetus at the abattoir, there was a rise in the months of May to July with the highest peak in June. There was also a significant rise from march to april in the year.

The rise in fetal wastages from march, having the highest peak may have been as a result of the economic hardship that prevailed around that period. Perhaps farmers need money to send children to school and meet some other domestic needs. The season of the years under review also shows that the rains are just about to begin in the months of May. These periods are characterized by drought, hunger which expose animals to poor nutrition, diseases and as such to forestall losses due to natural death or diseases farmers prefer to sell their animals. Also the problem of anthelmintes occurs at unset of rains and the ends of rains and cost of treating the animals may also be another reason why farmers sold their animals. The reports of Andersen (1975) showed that 70% of the Camel slaughtered during the extreme dry periods were females, compared to 30% during the normal periods of the year. Johnston *et. al.*, (1981) also observed a similar phenomenon, that most of the cattle sold for slaughter during the dry season were females. The rise in wastage in April and May,1997 may be as loses about 3.9 percent of its future result of emergence of festivals and ceremonies, this period farmers need money for marriages and Moslem Festivals.

Table 1

Shows relationship of pregnant camels slaughtered and duration (period) of the study.

| Month | Total camel slaughter (TCS) | Total femals slaughter(TFS) | Pregnant female slaughter(PFS) | 1 st trimester fetuses | 2 nd trimester fetuses | 3 rd trimester fetuses |
|----------|-----------------------------|-----------------------------|--------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| November | 450 | 150 | 68 | 32 | 25 | 11 |
| December | 434 | 124 | 57 | 36 | 18 | 03 |
| January | 410 | 120 | 50 | 38 | 09 | 03 |
| Febuary | 390 | 108 | 42 | 24 | 12 | 06 |
| March | 558 | 372 | 167 | 101 | 50 | 16 |
| April | 420 | 390 | 178 | 131 | 28 | 19 |
| May | 510 | 270 | 120 | 79 | 31 | 10 |
| TOTAL | 3172 | 1534 | 682 | 441 | 173 | 68 |

Table 2

shows the number of fetuses in relation to ages (trimester) over the period of the study.

| Month | Pregnant female slaughter | Male fetus (%) | Female fetuses(%) | Unsex fetuses(%) |
|----------|---------------------------|----------------|-------------------|------------------|
| November | 68 | 40(58.8) | 23(33.8) | 5(7.4) |
| December | 57 | 35(61.4) | 19(33.3) | 3(5.3) |
| January | 50 | 30(60.0) | 12(24.0) | 8(16.0) |
| Febuary | 42 | 25(59.5) | 17(40.5) | 0(0.0) |
| March | 167 | 101(60.5) | 59(35.3) | 7(4.2) |
| April | 178 | 104(58.2) | 68(38.2) | 6(3.4) |
| May | 120 | 73(60.8) | 47(39.2) | 7(5.8) |
| TOTAL | 682 | 408 | 274 | 36 |



Plate. 1. Photograph showing camel fetus at 1st trimester with transparent abdominal wall and rudimentary ear canal opening X 75

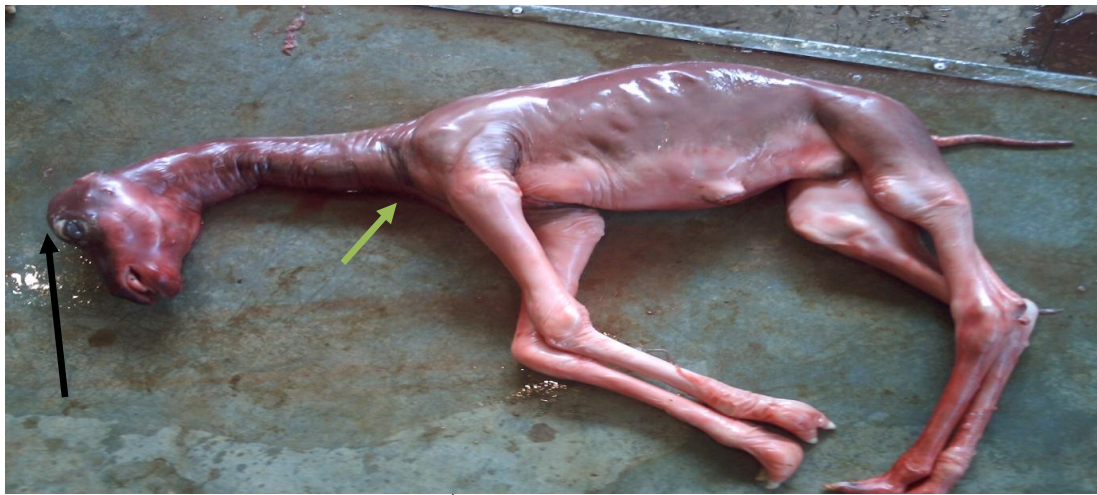


Plate. 2. Photograph showing camel fetus at 2nd trimester with thick prominent skin (green arrow) and hair on the upper eyelid (black arrow) and head region. X 75



Plate. 3. Photograph showing camel fetus at 3rd trimester with short densely distributed hair (whitish) all over the body with very small areas of alopecia (black arrow). X 75

4. Conclusion

Slaughtering of pregnant animals for meat purpose is unethical and is contrary to the rules of slaughter under which only unproductive, infertile, sterile, old or accidentally injured animal are allowed to be slaughtered (Maltin *et al.*, 1998). It also frustrates the scientific endeavors of geneticist, biologist, nutritionalist and livestock breeders working for the propagation of animal species (Abdulkadir *et al.* 2008).

This practice also reduces the quality and quantity of animal protein for human consumption and declines the population of camel in the world. The practice of slaughter of pregnant camels should therefore be discouraged as it is even cruel to the animals and contrary to the principles of veterinary ethics and animal welfare.

The following recommendations are however made to rescue the situation

- Legislation on the prohibition of slaughter of pregnant animals should be passed into law and enforced by the law enforcement agent.
- There is need for more meat inspection staff at the abattoir to meet the rate of slaughter and carry out more comprehensive meat inspection
- Ante-mortem inspection should be comprehensively carried out on animals before they are passed as fit animals for slaughter. This will help to detect pregnant animal and reduce the current level of fetal wastage.
- Public awareness on the implication of slaughtering pregnant animals or handling animal fetuses should be carried out to rescue the situation.

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