Foetal Wastage in Camels Slaughtered (Camelus dromedaris) at Maiduguri Abattoir, Borno State, Nigeria

U.B. Abubakar, F.U. Mohammed, S.A. Shehu and R.A. Mustapha

1Department of Veterinary Surgery and Medicine, Faculty of Veterinary Medicine, Ahmadu Bello University, Zaria, Nigeria
2Animal Reproduction Unit, Jigawa Research Institute, Dabase
3Department of Veterinary Anatomy, Faculty of Veterinary Medicine, Usmanu Danfodiyo University, Sokoto

Abstract: The records of slaughtered camels at the Maiduguri abattoir was evaluated over a 10 year period between 2000 and 2009 with the aim of determining foetal wastage due to the slaughter of pregnant camels. Out of the 124,898 camels slaughtered during the study period, 69,603 (55.7%) were females. A total of 2,382 foetuses were recovered which represented a foetal recovery rate of 3.42%. The foetal wastage in deferent seasons of the year, shows that 947 (39.8%) were recovered during rainy season and 1,435 (60.2%) during dry season. Estimated economic loss due to the slaughter of pregnant camels in Maiduguri abattoir stands at N25,725,600.00 during the period of 10 years. It was concluded that legislative lows against the slaughter of pregnant animals should be enforced. Adequate veterinary ante-mortem inspection, literacy campaign amongst camel’s rearers and butchers should be intensified as an effort to improve camel population in Nigeria.

Key words: Foetal wastage, camels, abattoir, Maiduguri, enforced, Nigeria

INTRODUCTION

In Nigeria and indeed Africa, camels are increasingly gaining economic importance, especially in the northern part of Nigeria due to their increasing value as a source of meat, milk, hides and as draught animals (Abdullahi, 2006).

The camels have been known to be capable of withstanding harsh conditions characteristic of the Sahel region because of their peculiar morphologic and physiologic features (Bello et al., 2008). Camels as a drought animals play a pivotal role in the economy of developing countries especially in Sahel part of Northern Nigeria (Raza, 2000). In spite of this importance, camels have rarely received the attention they merits (Umaru, 2002).

The devastation of cattle population by drought and rinderpest in the Sahelian Zone of the country in 1980s has shifted attention to camels which are known to be less affected by these conditions. Consequently, Nigeria continue to import camels from neighbouring countries such as Niger republic, Chad republic, Sudan, Ethiopia and Somalia in order to supplement the declining source of animal protein. The slaughter of pregnant animal is a major cause of economic loss that could place camels on the list of endangered species. Since it is known that the slaughter of camels for meat is on the increase there is danger in the continue depletion of the camel population through the slaughter of pregnant camels for meat. Indeed, the slaughter of pregnant animals is a well recognized source of wastage in Nigeria, especially by the abattoir personnel, animal scientist and veterinarians (Ojo et al., 1977; Garba et al., 1992; Ataja et al., 1997; Bello et al., 2008).

The destruction of foetuses due to the slaughter of pregnant animal is forbidden by low in nearly all countries of the world (Economic Commission for Africa, 1988). Despite the existence of the law, Bello et al. (2008) reported 23.9% in five month period of the year at the Sokoto municipal abattoir, Nigeria. The fact remain that in as much as the demand and consumption of camel meat is on the increase, pregnant camels continue to be slaughtered and little or no effort is made towards improving camel population in the country, then the total population figure for the camel will drastically decline. In view of the important role camels play in supplementing the source of animal proteins in the diet of Nigerians, there is need to arrest the slaughter of pregnant camels in the abattoirs and slaughter houses. This study is a 10 year retrospective study of foetal wastage in order to assess the economic losses due to slaughter of pregnant camels at Maiduguri abattoir, Nigeria.

Corresponding Author: U.B. Abubakar, Department of Veterinary Surgery and Medicine, Faculty of Veterinary Medicine, Ahmadu Bello University, Zaria, Nigeria
MATERIALS AND METHODS

This study was conducted at Maiduguri abattoir, Maiduguri is located in Borno state Nigeria. The state is located between latitude 9°30’ and 12°30’N and longitude 8°45’ and 11°45’E and share boundaries with the republic of Niger to the North, Chad Republic to the North-east and Cameroon to the East (Daura, 2001).

Data collection and analysis: Camels foetuses recovered during routine meat inspection between 2000 and 2009 were obtained from Maiduguri abattoir and data were compiled and analysed using proportional (percentage) presentation. Economic foetal loss was estimated as described by Ribadu (1988).

RESULTS AND DISCUSSION

The annual distribution of camel foetal wastage from 2000-2009 is shown in Table 1. Out of 124,898 camels slaughtered, 69,603 (55.7%) were females. The highest annual camels slaughter was recorded in 2009 (16,915) while the lowest recorded camels slaughter figure was in 2002 (7,293). Of the 69,603 (55.7%) females camels slaughtered during the period, 2,382 (3.42%) had foetuses in various trimester (Table 1).

Table 2 shows that 43,171 (34.6%) were slaughtered during rainy season while 81,727 (41%) were slaughtered during dry season of the year. The total female slaughtered during rainy season was 23,519 (33.8%) while during dry season was 46,084 (66.2%). Within the study period a total of 947 (39.8%) foetal wastage was recorded during rainy season and 1,435 (60.2%) during dry season. Financial loss over a 10 year period due to the slaughter of 238 pregnant camels at the Maiduguri abattoir in a single year was estimated at ₦25,725,600.

The study indicate that foetal wastage may be occurring on a massive scale in the abattoirs and slaughter houses where camels are being slaughtered on a daily basis (especially in Sahel part of Northern Nigeria). The number of females slaughtered within the study period was 69,603 with percentage foetal wastage of 34.2%. This is slightly higher than 23.9% that was reported by Bello et al. (2008) at Sokoto municipal abattoir.

However, the result of this study varies greatly from the observations of Ojo et al. (1977) who reported 50.9% foetal wastage in camels. This variation may be due to the fact that few or no camels were considered for meat in the past. But the current increase in the contribution of camel meat to daily animal protein requirement will consequently lead to slaughter of more female camels thereby causing increase in camel’s foetal wastage (Agba et al., 1997).

The high demand of male camels for traction, races, festival ceremonies and transportation of goods for a long distance in the desert make the male camels expensive which make butchers to prefer females in order to maximize profits.

Williamson and Payne (1978) stated that male camels are undoubtedly best workers. One of the possible factors contributing to the high rate of foetal wastage is the season or period of the year. More camels were slaughtered during the peak of the dry season (November-March). Bello et al. (2008) reported that during extreme dry period, camel’s herders increase the sale of aged and less productive females in order to meet household cash needs.

The progressive annual foetal wastage rate evident in the study may be attributed to on the part of the camel rearers (who in most cases can not diagnose pregnancy in the early stages) on one hand, the prolonged absence of pregnancy diagnosis as a major component of ante-mortem examination of animal prior to slaughter at most abattoirs and slaughter houses nation-wide. There is an urgent need to reactivate this major veterinary professional activity at the Nigerian abattoirs and slaughter houses.

Table 1: Foetal wastage in slaughtered camels at Maiduguri abattoir (2000-2009)

<table>
<thead>
<tr>
<th>Years</th>
<th>Total Camels Slaughtered (TCS)</th>
<th>Total females slaughtered</th>
<th>Foetuses recovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>9670</td>
<td>5137</td>
<td>171</td>
</tr>
<tr>
<td>2001</td>
<td>7458</td>
<td>4029</td>
<td>135</td>
</tr>
<tr>
<td>2002</td>
<td>7293</td>
<td>3963</td>
<td>129</td>
</tr>
<tr>
<td>2003</td>
<td>9976</td>
<td>5388</td>
<td>185</td>
</tr>
<tr>
<td>2004</td>
<td>12422</td>
<td>7011</td>
<td>225</td>
</tr>
<tr>
<td>2005</td>
<td>13619</td>
<td>7517</td>
<td>251</td>
</tr>
<tr>
<td>2006</td>
<td>15281</td>
<td>8499</td>
<td>292</td>
</tr>
<tr>
<td>2007</td>
<td>15887</td>
<td>8911</td>
<td>303</td>
</tr>
<tr>
<td>2008</td>
<td>14327</td>
<td>9475</td>
<td>352</td>
</tr>
<tr>
<td>2009</td>
<td>16915</td>
<td>9715</td>
<td>357</td>
</tr>
<tr>
<td>Total</td>
<td>124,898</td>
<td>69,603</td>
<td>2,382</td>
</tr>
</tbody>
</table>

Table 2: Comparison between camels slaughtered and foetuses recovered during different season of the year (2000-2009)

<table>
<thead>
<tr>
<th>Camels</th>
<th>Rainy season April-October</th>
<th>Dry season November-March</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Camels Slaughtered (TCS, %)</td>
<td>43,171 (34.6%)</td>
<td>81,727 (65.4%)</td>
<td>124,898</td>
</tr>
<tr>
<td>Total Females Slaughtered (TFS, %)</td>
<td>23,519 (33.8%)</td>
<td>46,084 (66.2%)</td>
<td>69,603</td>
</tr>
<tr>
<td>Total Foetuses Recovered (TFC, %)</td>
<td>947 (39.8%)</td>
<td>1,435 (60.2%)</td>
<td>2,382</td>
</tr>
</tbody>
</table>
The economic implication of foetal wastage is indeed enormous. From the result obtained in this study, the economic loss over a 10 years period from the slaughter of 238 pregnant camels at Maiduguri abattoir in a single year may be as high as twenty million and 8800 N (₦ 25,725,600).

Bello et al. (2008) reported an annual loss of ₦ 24,960,000.00 from Sokoto abattoir (North western Nigeria). Similar projections of about ₦ 6,000,000.00 were made by Ribadu (1988) from the slaughter of 4500 pregnant camels at Kano abattoir.

More so, Economic Commission for Africa (1988) reported that the slaughter of pregnant cows in Nigeria averages 17,000 per year resulting in an estimated financial loss of at least 14 million US dollars ($4,000,000,000.00) in over 10 years.

CONCLUSION

The daily financial loss resulting from the slaughter of pregnant camels nation-wide is enormous and this seems to continue in as much as the demand and consumption of camels meat is on the increase. Law against the slaughter of pregnant animals should be enforced and the Government also need to re-introduce the pregnant-animal recovery project which was suspended in 1980. Adequate ante-mortem inspection, literacy campaign amongst camels rears and butchers on proper method of pregnancy diagnosis through rectal palpation should be intensified.

Veterinarians should adopt such modern equipment as ultrasoundography for faster and more accurate in pregnancy diagnosis. The large-scale production of alternative source of animal protein such as fish and poultry will go a long way in decreasing the existing pressure on cattle/camels as the main source of meat as effort to improve camel population in this country.

ACKNOWLEDGEMENT

The researchers thank the Borno State Veterinary Services and Maiduguri abattoir management staff for providing the data.

REFERENCES


