

ECONOMIC IMPACT OF PROCESSING PREGNANT ANIMALS UNDER ZARIA CONDITION

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ABSTRACT

The study was designed to determine the economic impact of processing in-animals in Zango Abattoir of Sabon-Gari Local Government Area of Kaduna State. Observations were made by visiting abattoir daily from January to April 2010. The study revealed that the rate of fetal wastage among the slaughtered animals in Zango abattoir was 39.29% for small ruminant and about 5% for large ruminant, which is quite high. The study observed some reasons for slaughtering of in-animals as due to the fact that butchers are ignorant about fetal wastage and that there is no law against it.

INTRODUCTION

The livestock sector in Nigeria has been characterized by a low supply of meat and other animal product, which has led to a wide spread rise in prices in most product. Several factors such as inadequate nutrition, prevalence of disease, failure to harmonize crop and animal farming in agricultural practice and inadequate knowledge of sound herd management have been suggested to be responsible for low supply of meat and other animal product (Fetuga, 1997). This has led to the low level of animal protein intake by Nigerians. Lufadeju *et al.* (1997) reported that 90% protein source consumed by Nigerians are from vegetable sources which shows that animal protein is below the minimum recommended level for daily maintenance of health. Meat from ruminant animals contributes substantially to the total protein intake. Ruminant production constitutes a full term occupation for some farmers who derive their income mainly from its sales. It is economically important to identify whether an animal is pregnant or not, an early diagnosis of pregnancy is required soon after mating for early identification of pregnant animals to certify animals for sales so as to reduce wastage in breeding programmes and subsequently increase in the population of livestock. According to Oyekunle *et al.* (1992) who said if fetal wastage is allowed to continue it will have implication of reducing the population of animals and therefore the herd size in Nigeria. This will in turn reduce the access of an average Nigeria to proteins of animals sources (such as beef and milk) even though his normal daily protein requirement is not presently being met.

MATERIALS AND METHODS

Study Area

The study was conducted at Zango Abattoir of Sabon-Gari Local Government area of Kaduna state. It is situated between longitude 11° 3'N and latitude 7° 42'E.

Method of data collection

The research method adopted for the study was survey using observations. This was achieved based on daily visits to Zango abattoir, within the period of January to April 2010. Foetuses were recovered from uteri of both the large and the small ruminants during the course of the study. Interviews were held with butchers, middlemen, veterinary staff and livestock owners. This was done to find out the opinion of those involved in the processing of the animals. The data collected were presented as percentages.

RESULTS AND DISCUSSION

Table 1 shows the distribution of animals slaughtered in the Zango abattoir of Sabon-gari Local Government Area Kaduna State (January-April). There were about 5215 animals slaughtered throughout the period of study out of which about 3058 (58.64 %) were male and about 2157 (41.36%) were Females within. Table 2, Shows the species distribution of slaughtered in-animals in Zango abattoir of Sabon-gari Area of Kaduna state. A total of 371 goats, 134 Sheep, 1652 cows were slaughtered in the abattoir from January to April. Of all the animals slaughtered, 110 (29.65%), 55(41.05%) and 144(8.72%) were pregnant Goats, Sheep and Cows respectively. From the table, more Sheep (41.05%) were slaughtered in the abattoir followed by Goats and Cows. This is contrary to report Ayoade (1995) who recorded higher preference for beef as source

of animal protein. In addition the large ruminant may provide large carcass for meat per slaughter. The high foetal loss recorded agrees with report by Matthew finding (1992). Table 3, Shows the incidence of occurrence in slaughtered animals at the Zango abattoir. From the table it reveals that more fetuses were discovered in small ruminants not only as single but as twins, triplets and quadruplets. This is an indication that the act of animal slaughtering can result in loss of two, three, or four fetuses at a time. Those wasted fetuses ordinarily were supposed to be left till parturition so as to serve as a form of replacement for the older once. Tables 4 and 5 shows the value of money due to slaughter of pregnant female animals (small an large ruminant)

Impact of Processing In-animals

From tables 4 and 5, the total estimated value of the foetal loss in goat was #16,650. For sheep, it was # 8,250, for the large ruminants, it was #108,000.00. On the whole, #132,900.00 worth of foetuses were wasted per-quarter in the Zango abattoir. Cows had 8.72 % of total loss, goats (doe) had 29.65 % of the total foetal and sheep had 41.05 % foetal loss.

This implies that per annum #398,700 worth of fetuses are wasted in the Zango abattoir. When viewed at a national level, it could be imagined that the loss per-annum could reach a colossal amount. This finding confirms that the habit of slaughtering in-animals should be seen as a great wastage that needs urgent attention. Therefore no prize should be considered too much to check these losses in Zango abattoir of Sabon-gari Local Government Area of Kaduna State.

Reasons for Slaughtering In-animals

From interview carried out to find out the reason for processing in-animal in the abattoir the following were views were recorded:

- i. Livestock owners dispose off their animals due to economic (financial) reasons.
- ii. No law against slaughtering of in-animals.
- iii. Some livestock owners (farmers) find it difficult to notice/observe pregnancy especially at the early stage.
- iv. Livestock owners, middlemen, butchers and slaughtering staff do not know the economic and social implication of slaughtering in-animals.

Conclusion

The percentage fetal loss in the commonly slaughtered ruminant animals in zango abattoir is high. 29.69% for goat (doe), 41.05 % for Sheep (ewe) and 8.72 % for large ruminants (cow). The main factor responsible for slaughtering in-animals in the abattoir is economic (or financial) reasons because most livestock owners, middlemen, butchers and the slaughtering staff place more emphasis on the money they realized from sale.

Recommendation

Antimortem examination of the animal by the veterinary staff before slaughtering should be made compulsory in Zango abattoir. Government should enact laws to discourage the processing of in-animal and back up the law with adequate enforcement to curtail the habit of slaughtering in-animals. Livestock owners, middlemen, butchers and the slaughtering staff should be enlightened effectively on the economic and social implications of slaughtering in-animal through the joint effort of education and extension officers.

Livestock owners, middlemen, butchers and the slaughtering staff should be educated on the modern techniques of pregnancy diagnosis to check wastage caused through the processing of in-animals.

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Table 1: Distribution of slaughtered in the Zango abattoir of Sabon-gari local Government Area Kaduna State.

Number of animals slaughter	Total (Jan-Apr)	%
Females	2157	41.36
Males	3058	58.64
Total	5215	100

Table 2: Distribution of in-animals slaughtered in Zango abattoir (January to April 2010)

Species of animals	Total Females (Jan-Apr)	In-animal	% Foetal loss
Goats	371	110	29.65
Sheep	134	55	41.05
Cow	1652	144	8.72

Table 3: Incidence of foetal of slaughtered animals at Zango abattoir

Species of animals	Single	Twins	Triplets	Quadruplets
Goat	51	60		
Sheep	32	20	2	2
Cow	144			

Table 4: Monetary values of loss due to slaughter of in-animal (small ruminant) January-April

Value	Sheep			Goat		
	Frequency	Percentages	Total Value(#)	Frequency	Percentages	Total Value (#)
0-150	32	58.18		51	45.90	
151-300	20	36.36		60		
301-450	2	3.64				
>451	1	1.82				
Total	55	100	8250	111	99.95	16650

Table 5: Monetary value of loss due to slaughter of in-animal (cow) January-April 2010

Value	Frequency	Percentage	Total value (#)
0-750	144	8.72	
751-1000	1 508	91.28	
Total	1 652	100	108 000