

Fetal Wastage in Goats Slaughtered at Trans-Amadi Abattoir Port-harcourt, Nigeria

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Abstract: This study evaluated the level of fetal wastage in goats slaughtered at trans-amadi abattoir Port-Harcourt and its economic implications. Out of a total of 7,500 doe slaughtered, 712 (9.5%) were pregnant. The study revealed an incidence rate ranging from 5.85-14% (average 9.29 %) over the five months period. A total of 1654 fetuses were wasted during the study period. Financial losses accrued from the fetuses wasted was within the range of ₦ 6,616,000- ₦ 19,848,000 (\$39,855-\$119,566). The study advocates that the practice of fetal wastage due to the slaughter of pregnant does' should be discouraged so that the demand for goat meat should be met. For this to be achieved there must be legislation against slaughtering of pregnant animals and this should be enforced strictly. At ante-mortem inspection all pregnant animals should not be allowed into the slaughter hall. The livestock farmers and the butchers should be educated on the economic losses that are accrued due to fetal wastages.

Key words: Fetal Wastage • Goat • Abattoir • Slaughter • Nigeria

INTRODUCTION

Goats play a very important role in providing food and financial security for rural populations, especially in developing countries. The small size goat has distinct economic and managerial advantages. For instance, they can be conveniently cared for by women and children. Goats need little housing space, consume low amounts of feed and can supply both meat and milk in quantities that are suitable and enough for immediate family consumption [1]. Goats are the main small ruminants in the Nigerian livestock industry and provide protein, essential minerals and vitamins. Nigeria falls among countries with very low per caput production and consumption of animal protein [2]. The mean protein intake (meat, milk, eggs and fish) per caput per day in Nigeria has been estimated at 14.85g, with meat alone representing 6.8g. The meat protein intake in Nigeria is much lower than the North American and European averages of 38.3 and 27.3g per caput per day respectively but slightly higher than African average of 4.5g [3].

The growth rate of ruminant production is too slow to cope with the per capita requirements in Nigeria [4], the human population of Nigeria grows with an estimated 3.5% per year and the livestock resources grow between 0.8% and 2.9% per year. This phenomenon has attracted huge profits in the meat business, but with the result of undesirable slaughtering of breeding stock and pregnant animals [5, 6]. This practice leads to waste of fetuses and reduction in reproductive active dams and has a negative effect on livestock growth capacity [7]. Reports on slaughtering of pregnant animals resulting in fetal wastages in small ruminants have been recorded previously [8-10]. This practice has reduced the supply of protein to the consuming public. This practice if not checked will no doubt have a far-reaching implication on income of the livestock producers. Sanusi *et al.* [11], reported that it may impede the current policies of the nation on food security.

There is a scarcity of data on economic losses due to wastage of small ruminant fetuses from most slaughter houses in Nigeria and this affects planning and decision

making on food security. There is no published report on fetal wastage from trans-amadi abattoir in Port-Harcourt which is the largest abattoir in the state and processes the highest number of goats to mutton in the state.

The aim of this study is to determine fetal losses encountered during post mortem meat inspection at trans-amadi abattoir and the economic implication of this losses.

MATERIALS AND METHODS

Study Area and Animals: The trans-amadi abattoir is located at Oginigba in Obio-Akpor LGA of Rivers state. It is situated at 4° 48' 53"N Latitude and 7°2 14"E. It is the largest abattoir in the state and receives ruminants from various parts of Nigeria, mainly northern Nigeria and from other countries bordering Nigeria including Chad, Niger, Mali and Cameroon [12, 13]. The abattoir provides goat meat to a cosmopolitan population of the city of Port-Harcourt, the choice of this abattoir as a point for data collection is therefore considered representative for monitoring animal diseases trends. Slaughtered goats were inspected by trained veterinary technical officers and supervised by a veterinarian and the pregnancy statuses of the goats were often not determined.

Data Collection: The data were collected everyday between 06:00hr and 11:00hrs GMT, for a period of five months (Oct 2012-Feb 2013). Data on the number of male and female goats slaughtered, pregnant does slaughtered and number of fetuses found was collected on a daily basis. The results were analyzed to determine the prevalence of pregnancy in the slaughtered does and the ratio of does to billy goats slaughtered.

RESULT AND DISCUSSION

A total of 13,900 goats were slaughtered at the abattoir during the study period, 6400 were males (billy goats) and 7500 were females (does). During the study period the rate of pregnant does slaughtered

ranged between 5.85 and 14% (average of 9.29%). The rate of does slaughtered ranged between 48.15 and 64.29% with (average of 53.92%) with a total of 1654 fetuses condemned from pregnant females in the abattoir. Table\ 1 shows the slaughter figures, number of fetuses condemned and the percentages. The result of this study shows that pregnant does are slaughtered frequently at trans-amadi abattoir. This study revealed an incidence rate of 5.85-14% (average of 9.29%) over the five months period. The average rate of 9.29% noted in slaughtered pregnant does is lower than other observed rates ranging from 10.1% to 57.9% reported by Mohammad *et al.* [8], Bokko [10], Sanusi *et al.* [11], Wosu and Dibua [14], Idahor *et al.* [15] and Alade *et al.* [16]. The reason for the rates observed is that pregnancy diagnoses are not routinely carried out during ante-mortem inspection in the abattoir. This is a common practice in most abattoirs in Nigeria which consequently leads to slaughtering of pregnant animals and high prenatal losses. If the fetal wastages are to be quantified in monetary terms, the amount of money wasted cannot be over-emphasized. Financial loss over the five month period due to the wastage of 1654 fetuses when the cost of an adult goat is between ₦ 4000- ₦12,000 (\$24-\$75) the estimated loss over the five month period is therefore valued at ₦6,616,000-₦19,848,000 (\$39,855-\$119,566). Similarly the edible parts of kids wasted presents a threat to food security with a decrease in protein supply to human. Poverty is said to be the reason why livestock rearers sell off pregnant does because they keep small ruminants as a source of income. Small ruminant fetal wastages are of great economic and food security concerns to agriculture and the Nigerian livestock industry that provides bulk of protein, essential minerals and vitamins needed by man.

CONCLUSION

The practice of fetal wastage due to the slaughter of pregnant goats should be discouraged so that the demand for goat meat should be met. For this to be

Table 1: Incidence of fetal wastage in goats slaughtered at Trans-amadi slaughter between Oct 2012- Feb 2013

Period	Total goats slaughtered	Total billy goats slaughtered	Total does slaughtered	% of does slaughtered	No of fetus condemned	% of does Pregnant	% of fetus condemned to no of goats
Oct 2012	2700	1300	1400	51.85	168	5.85	12.00
Nov 2012	2800	1300	1500	53.57	250	7.33	16.66
Dec 2012	2900	1400	1500	51.72	450	14.00	30.00
Jan 2013	2700	1400	1300	48.15	220	7.31	16.92
Feb 2013	2800	1000	1800	64.29	566	11.94	31.44
Total	13900	6400	7500	53.92	1654	9.29	21.40

achieved there must be legislation against slaughter of pregnant animals and this should be enforced. At ante-mortem inspection all pregnant animals should not be allowed into the slaughter hall. The livestock farmers and the butchers should be educated on the economic losses that are accrued due to fetal wastages.

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