

Communication courte

Calf wastage through slaughtering of pregnant cows in Enugu abattoir, Nigeria

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WOSU (L. O.), Perte de veaux résultant de l'abattage de vaches aux abattoirs d'Enugu, Nigeria. *Revue Elev. Méd. vét. Pays trop.*, 1988, 41 (1) : 97-98.

Une étude sur les effectifs des vaches gestantes abattues a été effectuée aux abattoirs d'Enugu sur une période de six ans, afin d'attirer l'attention sur ce gaspillage, surtout dans les pays où la viande manque. Les résultats montrent que sur 57 891 (21,72 p. 100) femelles abattues, 5 654 (9,77 p. 100) étaient gestantes ; 2 394 (42,34 p. 100), 2 167 (38,33 p. 100), 1 093 (19,33 p. 100) étaient pleines respectivement de 1 à 3 mois, 4 à 6 mois et 7 à 9 mois. Le nombre total de foetus âgés de plus de 3 mois était de 3 260 soit 57,65 p. 100. Les facteurs favorisant cette situation ont été analysés. Pour empêcher de telles pertes, il est suggéré de pratiquer, avant l'abattage, un examen des vaches par palpation rectale. Cette pratique devrait être généralisée dans les divers abattoirs du pays. Seules les vaches ayant dépassé l'âge maximal de fertilité, 9 ans, pourraient être abattues. *Mots clés* : Veau - Vache - Mortalité des veaux - Abattage - Perte économique - Nigeria.

Cattle provides 50 p. 100 of Nigerian total meat supply (4). The Sahelian drought of the early seventies and the recent terrible rinderpest (1980-85) in Nigeria were major disasters to beef industry in the country (4) ; 6.7 million cattle, almost half the national herd, were affected by the rinderpest, caused over half million mortalities and reduced reproductive performance of the cattle (2). Nomadic cattle rearers in Nigeria have the habit of retaining cattle in excess of their economic age with over 75 p. 100 of the cows not able to calve at all or calving at interval more than three years (1). It is against this background that calf wastage, well known to abattoir personnel in Nigeria should be viewed with greater concern. Such wastage has also been reported from Yaounde abattoir, Cameroon (5).

The purpose of this study was to evaluate the numbers of calves lost through slaughtering pregnant cows in Enugu abattoir over a period of six years, thereby helping to focus concern on this wastage in all countries facing increasing shortage of meat supply.

Records of cattle slaughter at Enugu abattoir from January 1980 to December 1985 were studied. Meat inspection was carried in this abattoir by trained veterinary assistant meat inspectors supervised by veterinarians of the Veterinary division of the Ministry of Agriculture. Pregnancy status of the cows was determined only by visual assessment and palpation of the exposed uterus after slaughter. Pregnancies were confirmed by dissecting the uteri. Ages of the foetuses after slaughter were determined in comparison with known aged foetuses. Data were obtained on monthly basis on the total number of male and female cattle, pregnant cows slaughtered and the age of the

foetuses found. The results were analysed to determine the prevalence of pregnancy in the slaughtered cows, the prevalence of avoidable calf wastage and the ratio of cows to bulls slaughtered.

The analysis is presented in table I. Over the six-year period 266,525 cattle were slaughtered of which 57,891 (21.72 p. 100) were females ; 5,654 (9.77 p. 100) of the females were pregnant of which 2,394 (42.34 p. 100) were 1-3 months of age, 2,167 (38.33 p. 100) were 4-6 months of age and 1,093 (19.33 p. 100) were 7-9 months of age. The total number of foetuses in second and third trimesters of pregnancy was 3,260 (57.65 p. 100 of total foetuses). Yearly figures are also shown in the table.

The results obtained in this study are very similar to results from Yaounde abattoir in Cameroon (5). In Yaounde study, 45.05, 34.37 and 20.58 p. 100 of foetuses were in 1-3 month, 4-6 month and 7-9 month of age respectively ; 16.61 p. 100 of the cows were pregnant. In Zaria, Nigeria (3) 50.9 p. 100 of cows slaughtered were pregnant. Twenty-six, 67, and 7 p. 100 of the foetuses were 1-3 month, 4-6 month and 7-9 month old respectively. Beef production in Nigeria is almost entirely from range cattle of the nomadic Fulani pastoralists in the North who are accustomed to extensive system of management in search of feed and water. This extensive system of management was given as reason for the high percentage of slaughter of pregnant cows in Cameroon. In Nigeria, in addition to this reason, shortage of beef due to many constraints in production especially bad disease epidemics and drought, good prices for beef cattle in Southern Nigeria induced cattle owners to be less discriminate than usual in selling cows to dealers. Cattle dealers send this cattle straight to cattle markets and abattoirs in the South. There, animals are sold for slaughter without pregnancy examination. In Nigeria cattle is sent away from the abattoir for public health reasons. No cow is sent away from abattoir because it is pregnant. The high demand for beef and the practices in such abattoirs account for high percentage of cows and pregnant cows slaughtered in Nigerian abattoirs. Yet pregnancy diagnosis is taught in the veterinary schools. That over half of the pregnant cows slaughtered (57.66 p. 100) were in their second or third trimester of pregnancy is very serious because these pregnancies could easily have been detected by rectal palpation prior to sell for slaughter.

In a country like Nigeria where shortfall in meat supply has been predicted to rise from 91.94 x 10³ metric tonnes in 1980 to 807.85 x 10³ metric tonnes in 1990 (4), such serious problem of calf wastage in the abattoir should be viewed with lot of concern. Only very few studies have been done of calf wastage in Nigeria abattoirs. The indications from this and the Zaria study are that the national wastage is extremely alarming.

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TABLE I Prevalence of pregnancy in slaughtered cattle and analysis of foetuses encountered in Enugu abattoir, Nigeria.

	Years						
	1960	1981	1982	1983	1984	1985	5 Years Total
T.S.	19,228	58,645	34,591	50,499	44,559	59,003	266,525
T. Fem	5,757	11,851	7,196	11,331	9,351	12,405	57,891
T. Foe	883	1,184	836	918	628	1,205	5,654
$\frac{T. Fem}{T.S}$ (per cent)	29.94	20.21	20.80	22.44	20.99	21.02	21.72
$\frac{T. Foe}{T. Fem}$ (per cent)	15.34	9.99	11.62	8.10	6.72	9.71	9.77
1-3 m Foe T. Foe (per cent)	333 37.71	320 27.03	461 55.14	356 38.78	359 57.17	565 46.89	2 394 42.34
4-6 m Foe T. Foe (per cent)	282 31.94	348 23.34	324 38.76	458 49.89	323 51.43	432 35.85	2 167 38.33
7-9 m Foe T. Foe (per cent)	269 30.46	216 18.24	261 31.22	143 15.58	96 15.29	109 9.05	1 094 19.35
A.S. (7a + 8a) T. Foe (per cent)	551 62.40	564 47.64	585 69.94	601 65.47	419 66.72	541 44.90	3 260 57.66

T.S. = Total number of cattle slaughtered.

T. Fem = Total number of cows slaughtered.

T. Foe = Total number of foetuses encountered.

Foe = Foetus AS = Total number of avoidable slaughter of pregnant cows.

m = month.

To prevent such avoidable losses, it is suggested that it should become mandatory to carry out pregnancy testing by rectal palpation before sell of cow for slaughter. Conversely only cows that have passed their maximum age of fertility of nine years should be slaughtered.

Acknowledgements

I wish to express my deep gratitude to the Director of Veterinary Services, Enugu, for permission to have access to the records for these studies and to the staff of the Meat Inspection section of the Veterinary Division of the Ministry of Agriculture, Enugu, for their coöperation in carrying out the study. I also thank the secretarial staff of the Department of Veterinary Medicine for their services.

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Evaluation was done of the numbers of calves lost through slaughtering of pregnant cows in Enugu abattoir over a period of six years, to focus concern on this wastage especially in countries with increasing shortage of meat supply. The results showed that of 266,525 cattle slaughtered, 57,891 (21.72 p. 100) were females; 5,654 (9.77 p. 100) of the females were pregnant; 2,394 (42.34 p. 100), 2,167 (38.33 p. 100) and 1,094 (19.35 p. 100) of the foetuses were 1-3

month, 4-6 month and 7-9 month old respectively. The total number of foetuses in second and third trimesters of pregnancy was 3,260 (57.66 p. 100) of total foetuses. Factors encouraging this situation were discussed. To prevent such losses, it was suggested that pregnancy examination of cows by rectal palpation should become mandatory before sell of cows for slaughter in the country. Conversely only cows that have passed their maximum age of fertility of nine years should be slaughtered. *Key words*: Calf - Cow - Calves mortality - Economical loss - Nigeria.

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