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Incidence of Foetal Wastage and its Economic Implications in Cattle Slaughtered at Abak Slaughter House Abak, Akwa-Ibom State

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Abstract: This study evaluated the incidence of foetal wastage in cattle slaughtered at Abak slaughter house, Akwa- Ibom State and its economic implications. Out of a total of 4695 cattle slaughtered during the four years period (2005- 2008) of this study, 1620 (34.50%) were females and 3075 (65.50%) were males. The study revealed an incidence rate ranging from 16.09 – 30.49% (average 22.40%) over the period of study. A total of 349 foetuses were wasted during the study period. Financial losses accrued from the foetuses wasted were within the range of 20, 940, 000 – 29, 665,000 ($126,144 - $178,704).The study advocates that the practice of foetal wastage due to the slaughter of pregnant cows should be discouraged so that the demand for beef is 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 foetal wastages.

Key words: Foetal Wastage · Cattle · Slaughter · Economic Loss · Abak · Nigeria

INTRODUCTION

Cattle are one of the main sources of animal protein to the human populace. Animal protein always plays a major role in ensuring good body defence mechanism that its consumption in humans is absolutely necessary [1]. It has been well established that animal proteins are superior to vegetable protein for man as a result of the better balance of amino acids in animal protein [2]. Gefu *et al*. [3] reported that the primary production objectives for livestock in Nigeria are meat and milk while the skin may be taken as an important by- product and a major export earner. They are also reared for the production of hair, hides and skin, income and provision of job opportunity for the nomadic and semi- nomadic pastoralists. According to Mukasa *et al*. [4], herd productivity can be affected by a range of disease problems and reproductive wastages. Livestock are very important assets in Africa and contributes to the nutritional status and the economic growth of their owners. They are reared for several reasons but mostly for animal protein supply. The steady growth in demand for meat accompanied by increase in the price has led to the practice of slaughtering breeding and pregnant animals in most Nigerian abattoirs [5, 6]. Most livestock farmers also sell off their animals without confirming the fertility stage before selling them off due to poverty, illiteracy and disease condition of the animals [7]. Animals commonly slaughtered for meat in Nigeria are cattle, goat, sheep, pig, camel, donkeys, horses and other edible game/forest animals [8]. The foetuses are usually discovered during post mortem meat inspection at the abattoirs. Foetal wastage has been reported in other abattoirs in Nigeria. A rate of 2.6% slaughter of pregnant animals was reported in Enugu [9]. At Doma abattoir Nasarawa state a 0.32% slaughter of pregnant cow was reported [10]. There was however no published report on foetal wastage in Abak slaughter house in Akwa-Ibom state Nigeria.

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The aim of this report is therefore is to bring to light the rate of foetal wastage in Abak slaughter house, Akwa-Ibom State, Nigeria over a four -year period and the economic losses accrued during the period.

MATERIALS AND METHODS

Description of Study Area: The metropolitan slaughter house is located in Abak Local Government area of Akwa-Ibom State. Abak is located on the following coordinates 4°59°N 7°47°E and 4.983°N 7.783°E. The major economic activities of the people are palm produce. The slaughter house is owned by the Akwa-Ibom State Government and managed by the State Ministry of Agriculture and Natural resources. This abattoir receives cattle from various parts of Nigeria, mainly Northern Nigeria and other neighbouring countries like Niger, Chad, Burkina Faso, Mali and Cameroon [11, 12]. Slaughtered cattle were inspected by a trained veterinary technical officer and supervised by a Veterinarian. Pregnancy status of the cows was usually not determined before slaughter.

Data Collection: A retrospective study was carried out using abattoir records for cases of foetal losses in cattle, over a period of four years from 1st January 2005 to 31st December, 2008. The data was collected from the livestock department of Akwa-Ibom state Ministry of Agriculture and Natural Resources. Data was analysed based on the records available from the Abak slaughter in Akwa-Ibom State, Nigeria.

RESULTS AND DISCUSSION

A total of 4695 cattle were slaughtered at Abak slaughter house over the survey period. Of the 4695 cattle slaughtered 1620 were cows and 3075 were bulls. The slaughter of pregnant cattle over the study period ranged between 16.09 – 30.49% (average of 22.40%) with a total of 349 foetuses condemned from pregnant cows in the abattoir.

Table 1 shows a yearly trend of foetal wastages at Abak, Slaughter house, 2006 had the highest peak of wastage and there was a decrease in 2007 with another increase in 2008. The reason for the peak in foetal wastage in 2006 and subsequent fall in 2007 could not be ascertained but cattle are sold to make money and also to meet other domestic demands of the farmers in Northern Nigeria. It also shows the slaughter figures, number of foetuses condemned and the percentages. The result of this study shows that pregnant cows are usually slaughtered at the Abak slaughter house with incidence rate ranging from 16.09 – 30.49% (average of 22.40%) over the 4 years study period. The result of this study is lower than results obtained by Wosu [9] who reported an incidence of 26% slaughtering of pregnant cows in Enugu. Muhammed *et al*. [13] reported 46.9% loss of pregnant cows in Gombe.

Table 2 shows the monthly increase of foetal wastage at the slaughter house, there was an increase in October followed by the month of May and June. The lowest was in the month of March. On a monthly average across the

Table 1: Incidence of foetal wastage at Abak Slaughter house

Year	Total cattle slaughtered	Total bull slaughtered	Total cow slaughtered	% of cow slaughtered	No of foetus condemned	% of foetus condemned to number of cows
2005	851	605	246	28.91	75	30.49
2006	1447	869	578	39.94	93	16.09
2007	1255	866	389	31.00	89	22.88
2008	1142	735	407	35.63	92	20.15
Total	4695	3075	1620	Average 33.87	349	Average 22.40

Table 2: Monthly incidence of foetal wastage in cattle slaughtered at Abak Slaughter house between 2005-2008

Months	2005	2006	2007	2008	Total	Mean
January	0	11	9	9	29	7.3
February	0	9	7	8	24	6.0
March	0	8	5	8	21	5.3
April	0	9	7	10	26	6.5
May	7	9	9	10	35	8.8
June	10	7	8	10	35	8.8
July	5	5	5	8	23	5.7
August	8	7	8	7	30	7.5
September	8	9	9	8	34	8.5
October	15	7	6	8	36	9.0
November	13	5	8	6	32	8.0
December	9	7	8	0	24	6.0
Total	75	93	89	92	349	

4 year period under study, majority of the foetal wastage occurred in the months of October (9), November (8), September (8.5), May and June (8.8).

The foetuses are usually sold to hunters who use them to feed their hunting dogs and to fishermen who use them for their fishing hook. This practice should be discouraged as it can spread diseases like brucellosis to both dogs and man.

The yearly financial losses over the four years study period due to wastage of 349 foetuses can be estimated as follows; the estimated cost of an adult cattle is between 60,000 - 85,000 ($361- $512) is 20, 940, 000 – 29, 665, 000 ($126,145 – $178,704).

The high volume of foetal wastage encountered poses a significant threat to both livestock production and the economy of the country. This value is higher than that reported by Ngbede *et al*. [14]. This variation is likely due to the difference in locality and the price of cattle in the different part of the country. Cattle are more expensive in the southern part of the country than in the northern part.

CONCLUSION

This study has shown that foetal wastage in Abak slaughter house occurs throughout the year resulting in losses to the livestock production industry and the financial economics of the country in general.

The practice of slaughtering pregnant animals should be discouraged so as to meet the demand of beef for the growing populace.

Legislation on the slaughter of pregnant animals by butchers should be enforced.

There must be personnel's at various control posts in the country to check for pregnant animals that are been transported from different parts of the country for sale and enforce the laws that prevent pregnant animals from been transported for sale. Strict legislations should be enforced at ante-mortem examination in abattoirs and slaughter houses so as to discourage the slaughter of pregnant animals.

The butchers and farmers should be educated on the financial losses accrued due to slaughtering of pregnant animals and should be discouraged from selling off and slaughtering pregnant animals.

REFERENCES

1. Gillespie, J.R., 2003. Merder Livestock and Poultry Production – Seventh Edition, pp: 753-754.
2. Devendra, C., 2001. The nutrition of dairy goat, 1st National Seminar on Goat Production. Venezuela, 12-14 Nov. 2001 pp: 11.
3. Gefu, J.O., I.F. Adu, C.B.I. Alawa and S.O. Magaji, 2004. Characteristics of small holder sheep and goats management practice In South East of Nigeria, Observation from Anambra State, Nigeria. Journal of Animal Production, 21: 127-134.
4. Mukasa, E., A. Said, A. Nylahlou Kassi, J. Sherington and E.R. Mutiga, 2006. "Birth weight as a risk factor for prenatal mortality and the effect of pregnant ewe supplementation and gestation weight gain in Ethiopia menz sheep" Preventive Veterinary Medicine, 19: 45-56.
5. Craig, P.S., 1982. The management of a small holder cattle fattening credit Scheme in Nigeria. Proceedings of National Beef conference, July 1982, Kaduna, Nigeria, pp: 350-398.
6. Taiwo, B.B.A., F.A. Aluko and O.A. Olufowobi, 2006. Reproductive wastage in some urban abattoirs in Ogun State. Proceedings of the 31st Annual National Conference of the Society for Animal Production, Kano, pp: 140-143.
7. Toulmin, C., 1986. Pertes de betailet reconstitution du cheptel après la secheresse en Afriquuesubsaharlenne. Document de travail LPU. No. 9 Addis Ababa, Ethiopia, International Livestock Centre for Africa.
8. Alabi, S.A., 2003. Anti- mortem and post- mortem inspection of food animals 'paper presentation at a workshop on meat inspection held at the college of Agriculture and Animal Science, Mando road Kaduna 25th Apri,l 1999, pp: 5-10.
9. Wosu, L.O., 1988. Calf wastage through slaughtering of pregnant cows in Enugu Abattoir (Nigeria). J. Anim. Hus. and Vet. Med., 41(1): 97-98.
10. Idahor, K.O., J.N Omeje and A. Akwe, 2009. Embryonic losses from slaughtering of pregnant ruminant animals at Doma abattoir. Proceedings of the 14th Annual Conference of Animal Science Association of Nigeria, Sept 14-17, LAUTECH Ogbomosho, Nigeria, pp: 240-242.
11. Cadmus, S.I.B., I.F. Ijagbone, H.E. Oputa, H.E. Adesokan and J.K Stack, 2006. Serological survey of brucellosis in livestock animals and workers in Ibadan, Nigeria. Afri. J. Biomed. Res., 9: 163-168.

12. Ibironke, A.A., C.M.E. McCrindle, T.A. Adejuwon and S.I.B. Cadmus, 2010. Losses associated with mortality of cattle and camels during transport to Oko-Oba abattoir, Lagos State, Nigeria. Eur. J. Trans. Myol. Basic Applied Myol., 1: 13-16.
13. Muhammed, B.F., A.M. Haruna and J.M. Bichi, 2008. Fetal wastage in Northern Nigeria. The case of Gombe Abattoir. Proceedings of the 13th Annual Conference of the Animal Science Association of Nigeria. September 15 – 19, 2008. Ahmadu Bello University, Zaria, pp: 124-127.
14. Ngbede, E.O., S.A. Hena, O.O. Oguntoye, R. Tarhyel and C Bulus, 2012. Bovine foetal wastage and its economic implication: a six-year (2003 – 2008) retrospective study in an abattoir in northwestern, Scientific Journal of Veterinary Advances, 1(2): 42-46.