

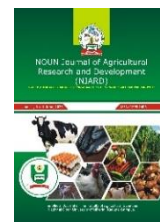


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Original Article

Foetal wastage in Cattle and Sheep at Pankshin Slaughter Slab, Plateau State, Nigeria (January–July 2024)

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ABSTRACT

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Foetal wastage due to the slaughter of pregnant livestock is unethical and results in economic loss. This study assessed the incidence of foetal wastage among cattle and sheep slaughtered at the Pankshin slaughter slab, Plateau State, from January to July 2024. A total of 155 cattle and 1,139 sheep were slaughtered. From these number, 77(49.7%) and 777(68.2%) were males and 78(50.3%) and 362 (31.8%) were females. Of the 78 and 362 females slaughtered, 13(8.4%) and 141(12.4%) were pregnant respectively. The investigation also shows that most cattle were slaughtered in the month of April with 27(17.4%) while majority of sheep were slaughtered in January with 226(19.8%). The rate of foetal wastage recorded in this study could be due to lack of ante-mortem inspection and poor veterinary checks. Slaughtering of animals for meat purposes should also be checked to avoid foetal wastage, which is unethical and is contrary to the international Standard Rules of slaughter. It is recommended that pregnancy examination should be carried out by experts such as veterinarians before slaughtering. Therefore complete enforcement of animal legislation should be put in place to avoid foetal wastage in livestock.

Introduction

Ruminants are important asset in contributing to economic growth in developing countries. They are reared for many reasons but majorly for optimum supply of protein. They have a crucial role as a primary source of protein and serve as a significant contributor to the overall supply of animal protein (Addass et al., 2011). A steady growth in demand of meat is however accompanied by attractive meat price which has led to unhealthy practice of slaughtering of breeding and pregnant in most of Nigerian abattoir and slaughter slabs Mohammed et al, (2008).

Rearing and killing of cattle have been a longstanding practice observed throughout various regions worldwide for thousands of years. According to Chidi et al. (2006). According to the Food and Agriculture Organization (FAO, 2014), Nigeria possesses a significant number of ruminant livestock resources, including cattle, sheep, and goats, estimated at 19.2 million, 38.5 million, and 57.4 million, respectively. Extensive study has been conducted globally on the significant issue of foetal wastage within slaughterhouses. Based on the systematic collection of data and surveys, the frequency of foetal wastage in abattoirs has been ascertained, revealing that it is a



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common phenomenon. There have been reports of foetal wastage in livestock in abattoirs globally with its attendant substantial economic losses (Maurer *et al.*, 2016). Higher prevalence reports have been observed in African countries ranging from 1.3% to 45% (Nonga, 2015). Foetal wastage has predisposed some African countries to protein malnutrition and is a possible constraint to future livestock populations in the continent (Nwakpu & Osakwe 2007; Ademola 2010; Cadmus & Adesokan 2010). Poor financial condition of the farmers who are usually rural livestock farmers as well as the ignorance of the pregnant state of the animals have been advanced as reasons for culling and slaughtering of pregnant livestock (Sanusi *et al.* 2006; Muhammad *et al.* 2009). To enhance the availability of nutritious animal protein, it is imperative to address the practice of slaughtering pregnant food animals in numerous developing countries (Maurer *et al.*, 2016). Foetal wastage has been primarily associated with substantial economic losses (More *et al.*, 2017).

Foetal wastage occurring in abattoirs can be attributed to various factors, such as indiscriminate slaughter of pregnant livestock (Fayemi and Muchenje, 2013), inadequate ante-mortem pregnancy screening methods (Urga *et al.*, 2021), advanced age and suboptimal body condition (Benaissa *et al.*, 2016), disease and stress (Adebowale *et al.*, 2020), leading to the production of low quality meat (Iliyasu *et al.*, 2015). These factors contribute to a decline in the livestock population and low rates of herd replacement (Zubair *et al.*, 2022). Given these circumstances, this study was aim to determine the incidence of foetal wastage in cattle and sheep at Pankshin slaughter slab from January to July 2024

Materials and methods

Study area: The study was conducted at Pankshin slaughter slab from January to July 2024 in Pankshin Local Government Area (LGA) Plateau State, Nigeria. Pankshin experience a tropical savanna climate characterized distinct dry an wet seasons. The town sits at an elevation of approximately 1200 meter (3900feet) above sea level which a significant impact on its weather patterns. It lies between latitude 9⁰19' 31. 48'' N and 9⁰26' 6.72''E.

Study period: This study was carried out for a period of seven (7) months from January to July 2024. The slaughtered slab was visited daily between the hours of 6am to 10am to assess the foetal wastage

Sample collection

During the period of visitation, the following parameters were observes: Total number of cattle and sheep slaughtered, Total number of males slaughtered and total number of females slaughtered. The reproductive tracts of females were collected and observed immediately after slaughter to assess for foetal wastage and were separated from the dry females (non pregnant). This was done successfully by the help of the veterinary personal and staff working in the slaughter slab

Data analysis: The data obtained were analyzed using descriptive statistics and the results were presented in tables.

Results

Table 1 shows total number of cattle and sheep slaughtered in Pankshin slaughter slab from January to July 2024. A total of 155 and 1,139 of cattle and sheep were slaughtered respectively. From the total number slaughtered, 77(49.7%) were Bulls, 78(50.3%) were Cow and 777(68.2%) were Rams, 362(31.8%) were Ewe. Of the 78 and 362 slaughtered, 13(8.4%) and 141(12.4%) were pregnant Cow and Ewe respectively

Table 1: Number of cattle and sheep slaughtered from January to July 2024

Month	Cattle				Sheep			
	Total no of cattle slaughte red	Total no of Male slaughtered	Total no of Females slaughte red	Total no of pregna nt slaughte red	Total no of sheep slaughtered	Total no of male slaughtered	Total no of females slaughtered	Total no of pregnant slaughtered
Jan.	19	9	10	4	226	191	35	19
Feb	21	12	9	2	105	59	46	12
March	25	13	12	3	141	83	58	34
April	27	10	17	1	156	94	62	41
May	23	12	11	2	201	148	53	11
June	21	10	11	1	192	130	62	15
July	19	11	8	0	118	72	46	9
Total	155	77	78	13	1139	777	362	141

Percentage of foetal wastage was shown in Table 2 where 50.3% and 31.8% of Cow and Ewe were slaughtered with a total of 8.4% and 12.4% of pregnant

Cow and Ewe were recorded. Bull had 49.7% while Ram had 68.2%. More of the wastages was recorded from the pregnant Ewe than Cow.



Table2: Percentage of foetal waste in cattle and sheep in Pankshin slaughter slab from January to July 2024

Month	Cattle				Sheep			
	% of Females slaughtered	% of Male slaughtered	% of pregnant slaughtered	% of Non pregnant slaughtered	% of females slaughtered	% of male slaughtered	% of pregnant slaughtered	% of Non pregnant slaughtered
Jan.	52.6	47.4	21.1	25.9	13.3	84.5	5.4	7.1
Feb	42.9	57.1	9.5	22.8	43.8	56.2	11.4	32.4
March	48.0	52.0	12.0	33.3	42.5	58.9	24.1	17.0
April	63.0	37.0	3.7	25.9	47.9	60.3	26.3	13.5
May	47.8	52.2	8.7	22.9	25.9	73.6	5.5	20.9
June	52.4	47.6	4.8	28.6	32.8	67.7	7.8	24.5
July	42.1	57.9	0.0	24.5	40.7	61.0	7.6	31.9
Total	50.3	49.7	8.4	41.9	31.8	68.2	12.4	19.4

Table 3 shows the proportion and distribution of cattle and sheep slaughtered at the Pankshin slaughter slab from January to July 2024. A total of 1294 were

slaughtered and of the 1294, 855(66.1%) were females and 439(33.9%) were males. A total 154 (11.9%) were pregnant females slaughtered

Table 3: Proportion and distribution of Cattle and Sheep slaughtered from January to July 2024

Ruminants	Total number slaughtered	Total number of females Slaughtered	Total number of males slaughtered	Total number of pregnant slaughtered	% of Females slaughtered	% of pregnant slaughtered	% of males slaughtered
Cattle	155	78	77	13	50.3	8.7	49.7
Sheep	1139	777	362	141	31.8	12.4	68.2
Total	1294	855	439	154	66.1	11.9	33.9

Discussion

The total number of 155 and 1139 cattle and sheep slaughtered respectively was recorded at Pankshin slaughter slab from January to July 2024. The number of cattle slaughtered was lower to the report of Oduguwa *et al.* (2013) who reported 15112 at Lafenwa abattoir, Odoh *et al.* (2008) who also reported 195 from July to October at Gboko abattoir, 1122 in Gombe between April to June (Muhammed 2008). However the number slaughtered was still less than a monthly average of 724 in Cameroon (Ndi *et al.*, 1993). The difference could be due to the population of consumers in the city where those abattoirs are located most especially this study which was conducted in a slaughter slab where less number of slaughter will certainly be recorded.

High number of cattle were slaughtered in the months of April 27(17.4%) while in the case of sheep were in January 226(19.8%) this number could be associated with demand for meat during Christmas, Salah and other traditional festivity and need for money to return students back to school and other reasons.

The percentage of pregnant cow and ewe slaughtered in this study was 13 (8.4%) and 141(12.4%) respectively. The 8.4% recorded in cattle was higher than 7.88% reported by Feyami *et al.* (2008) and 7.73% by Ndi *et al.* (1993). It was also lower than 10.7% reported by Oduguwa *et al.* (2013), 17.1% reported by Ibrahim *et al.* (2020) and 9.15% by Nwakpu *et al.* (2007). This high figure recorded in this study could be due to lack of enforcement of legislative against slaughtering of pregnant animals, inconsistency in ante mortem inspection before slaughtering and ignorance on the part of farmers, butchers, and policy makers on proper management of

pregnant animals. This may have contributed to the foetal loss and the slaughter of pregnant animals. In regards to percentage of foetal wastage in sheep, 12.4% recorded in this study was lower than 13.2% reported by Ibrahim *et al.* (2020)

The proportion and distribution of cattle and sheep slaughtered for this study shows a total of 1294 cattle and sheep were slaughtered. Of 1294 slaughtered, 855(66.1%) were females and 439(33.9%) were males. A total of 154 (11.9%) were slaughtered with pregnant and 701(54.2%) were non pregnant. During the period of the study 11.9% of foetal wastage was recorded at Pankshin slaughter slab This study has clearly shown that foetal wastage is a problem in Nigeria as has been reported above. This menace has been attributed to either Diseases prevalence, hash financial embarrassment, lack of enforcement of legislatives, poverty and lack of proper enlightenment of farmers on the effects of slaughtering of pregnant animals. Sheep had the highest percentage 12.4% of foetal wastage than cattle with 8.4% in the slaughter slab within the period of the study. This shows that people residing within the study area consumes more of mutton than cow meat due to cost.

Conclusion

This study highlights a high incidence of foetal wastage due to the slaughter of pregnant animals at the Pankshin slaughter slab. It is unethical when pregnant animals are been slaughtered for meat purposes. Such practices will lead to high economic losses, considering the cost of a grown animal presently in the international market. Strict enforcement of animal welfare regulations, routine veterinary checks, and sensitization of farmers and butchers are urgently needed.



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