

SUB-THEME: Animal Production and Value Addition

FOETAL WASTAGE IN KANO CENTRAL ABATTOIR AND ITS IMPACT ON THE NATIONAL ECONOMY

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ABSTRACT

The study examined the incidence of bovine foetal wastage and its economic impacts in Kano central abattoir. Daily visits were made to the slaughter slab and recorded the total cattle slaughtered, number of bulls and cows slaughtered and number of condemned fetuses for 30 days. The results revealed that 11,930 cattle's were slaughtered during the study period with average daily slaughter of 385. About 64.28% of slaughtered bovine were cows out of which 7.5% were pregnant. Averagely, 8 pregnant cows were slaughtered daily at the ratio of 1:33 fetus to cow slaughtered. These wastages may lead huge depletion of future reproductive stock which is disastrous to the future of livestock industry in meeting beef and milk demand of the teeming population. The estimated financial losses accrued in the Kano central abattoir was ₦3,944,000.00 monthly translating to annual loss of ₦47,280,000.00. The finding urges for urgent action to be put in place to checkmate the marketing and slaughter of pregnant cattle in the State.

Key words: Abattoir, Bovine, Foetus, Wastage,

INTRODUCTION

Nigeria's population was estimated to 211.4 million in 2021 and projected to be 401.3 million by 2050 (population reference bureau: PRB, 2021). The country's population grow swiftly and transform extensively, the urban dwellers will rise from 94 million to 280 million while GDP/capital will triple. These changes will raise the demand of animal products and further downslide the precarious supply and consumption of animal protein. Projections suggest that beef and milk consumption will grow by 117% and 577% respectively (FAO, 2019). Beef constitutes the most consumed meat in the country, according to Okorie-Kanu *et al.* (2018), more than 50% meat consumption in the country is from cattle. Similarly, the country depends highly on cattle for its milk production (Ahmad, 2017) and is producing less than 40% of its demand and meeting its deficit by importation. Despite these changes that coincides with low growth rate of livestock in the country, animal production is obstructed by many obstacles among which is the slaughter of pregnant animals which is unethical practice and negatively affects growth and development of national herd, possess a threat in meeting the animal dietary protein requirement of the country and leads to the consumption of more plant protein which is of poor quality (Abraham, 2014). In addition, it is associated with high economic impact that limit the livestock contribution to the country's gross domestic product. For instance, in the Sahelian region of the country, Bokko (2011) reported the loss of ₦63.42 billion annually due to slaughter of gravid bovine and subsequent foetal wastages, ₦11,502,960.00 at Maiduguri (Iliyasu *et al.*, 2015), ₦174,980,000.00 at Jos (Dunka *et al.*, (2015) while Ahaji *et al.* (2017) reported 52,234 foetal destructions amounting to ₦1,731,557,200.00 at Niger State. From the southern part of the country, Awoyomi *et al.* (2013) estimated loss of ₦2,766,432,528.0 at Lafenwa Municipal abattoir while Uduak and Samuel (2014) estimated ₦29,665,000.00 at Akwa-Ibom. Kano central abattoir is one of the biggest abattoir in Nigeria were large number of ruminants are slaughtered for meat, thus require to investigate the magnitude of bovine foetal destruction in the State. Thus, the aim of the study was to investigate the incidence of bovine foetal wastage in Kano central abattoir and its economic impact on national economy.

MATERIALS AND METHODS

Description of the study area

The study was conducted at Kano central abattoir. Kano is situated between latitude 11° 30'N and longitude 8° 30'E at an altitude of 488 meters above sea level. The climate is characterized by a well-defined wet season (May to September) and dry season (October to April). The mean annual rainfall varies from 600 to 1000 mm (Kano Agricultural and Rural Development Authority; KNARDA, 2001).

Data collection and analysis

The slaughter slab of the abattoir was visited daily between 6:00 to 7:00 am for 30 days (December, 2019). Total number of cattle slaughtered and the ratio of cows to bulls slaughtered were recorded. After slaughter, the uterus of the cows were examined and recovered fetuses were recorded. The data was managed in excel spreadsheet and analyzed using simple frequency and percentile. The economic losses was estimated at slaughter using the equation; $(ELB (\text{₦}) = N0 * P0)$ as described by Babatunde *et al.* (2011) cited in Bakari, 2016).

Where: ELB = Economic loss at birth,

N0 = Number of foetus at slaughter

P0 = Average price of calf at birth

RESULTS AND DISCUSSION

Daily record of bovine slaughtered, frequency of bulls, cows and condemned fetuses in Kano central abattoir were presented in Table 1. The result revealed that 11,930 cattle were slaughtered during the study period. Out of the total slaughtered, 7,722 were cows and 4,262 bulls. The finding discovered that 232 (3.0%) of the cows slaughtered were pregnant and their fetuses wasted. Foetal wastage recorded agreed with the reports of Sanusi *et al.* (2020). The average daily slaughter was 386 cattle (249 cows and 137 bulls) and 7.5 were pregnant, this revealed that out of every 33 cows slaughtered, 1 was pregnant (1:33). This might be linked to inadequate veterinarian, poor antemortem inspection and poor legislations enforcement prohibition the slaughter of gravid animals. The higher ratio of cows slaughtered compared to bulls is in line with the reports of Adeyemi *et al.* (2016), Raimi *et al.* (2017) and Usman *et al.* (2021) which depicts a great danger to the future of livestock industry as reproductive females were not spared for meat. Nevertheless, the Slaughter of gravid animals is against the law (Khan and Khan, 1989) unless sick, accidentally injured, old or non-breeding. The average calf price during the study period was ₦17,000. Thus, the estimated economic loss were ₦127,500.00 daily, ₦3,944,000.00 monthly and ₦47,280,000.00. The finding agreed with several findings such as report of Ahaji *et al.* (2017). These losses might be due to inadequate antemortem inspection of animal before slaughter in the country's abattoirs. If this is to be extrapolated to central abattoirs in the 36 States and FCT Abuja, 103,008 fetuses were loss (0.5% of the national heard) annually amounting to ₦1,751,136,000 which is detrimental to the future of bovine and its contribution to national GDP. This practice, if not tackled will further downslide the animal protein consumption especially meat and milk which is already far below the WHO recommendations (8 liters/year against 210 liters/year) (WHO, 2021).

TABLE 1: DAILY BOVINE SLAUGHTER AND FEOTAL DESTRUCTION IN KANO CENTRAL ABATTOIR

Day	TCS	NCS	NBS	NFR
1	350	200	150	7
2	360	240	120	8
3	410	270	140	7
4	400	240	160	10
5	450	300	150	10
6	420	280	140	5
7	360	240	120	7
8	410	250	160	4
9	370	230	140	8
10	350	200	150	5
11	430	290	140	6
12	390	260	130	10
13	360	240	126	7
14	318	212	166	13
15	360	240	120	10

16	332	221	111	7
17	360	240	120	9
18	390	260	130	12
19	360	240	120	9
20	396	260	130	3
21	360	240	120	10
22	354	236	118	2
23	357	238	119	6
24	338	222	116	3
25	616	360	250	10
26	496	296	200	4
27	358	239	119	9
28	356	238	118	10
29	360	240	120	7
30	390	260	130	8
31	369	240	129	6
Total	11,930	7,722	4,262	232
Daily average	385	249	137	7.5

TCS= total cattle slaughter, NCS = no of cow slaughtered, NBS = number of bull slaughtered, NFR = number of foetus recovered

CONCLUSION

The slaughter of gravid bovine is persistence in the State, This practice will further worsen the current precarious animal protein consumption available for the populace which is necessary for proper growth and mental development. Public enlightenment should be put in-place to educate the rearers, butchers and general public on the impact of slaughter of pregnant animals and foetal wastages as well as risk of transmitting zoonotic diseases through foetal handling.

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