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Survey of Foetal Wastages: A Case Study of Makurdi Abattoir in Benue State from 1997 to 2002

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Abstract: This study was conducted to evaluate the causes and effects of foetal wastage in the Nigeria livestock industry, following indiscriminate slaughter of pregnant cows in Makurdi Abattoir, Benue State. A total of 45,742 were slaughtered in the abattoir, with a total of 1,508 (3.9%) fetuses recovered from 1997 to 2002. There was no significant difference ($P > 0.05$) between fetuses and years.

Key words: Foetal wastage, protein, malnutrition

Introduction

The need for adequate human nutrition cannot be overemphasized; yet, acute protein malnutrition is endemic in most developing countries (FAO/WHO, 1983). In Nigeria, this situation has largely been due to inadequate development of the livestock sub sector of the economy. However, it is noteworthy that other factors including adequate meat inspection practices have also been contributory. An undesirable effect of this lapse in veterinary public health duties is the indiscriminate slaughter of pregnant animals (Garba *et al.*, 1992).

Today, there exist a wide disparity between the food Agricultural Organization quantity of animal protein intake (3sg/person/day) and this is subject to several factors that account for inadequate supply of meat in Nigeria, bringing less consumption of meat compared to plant sources of protein which are relatively cheaper. The animal product in the diet of an average Nigerian has been diminishing year after year due to marginal improvement in animal population and productivity (Oyenuga, 1987).

The common slaughtered animals for meat in Nigeria are Cattle, goat, sheep, pig and poultry others include camel, buffaloes, donkey, horses, rabbit and others game and forest animals that are edible (Alabi, 1993). A decrease in annual growth rate of livestock population in Nigeria (CBN, 1983) annual report of 1997 showed that there was a decline in the percentage contribution of the livestock sector to the gross domestic product (GDP) between 1991 and 1995. However, marginal increase was recorded in the absolute worth of the sub sector between 1993 and 1995. If the situation is compared with the rapid growth in human population of 21% per annum and the diminishing disposable income, an average growth rate of 1.6% per annum in the livestock production index holds a grim prospect for animal protein supply and this situation is tragic.

The economic recession that has been witnessed in

Nigeria since the 1980s has brought in its wake a deterioration in the quality and quantity of animal protein in the diet of Nigerians. This has also dictated new trends in ameliorating the situation. This has entailed the slaughtering of not only prime breeding males but also pregnant animals resulting in foetal wastages, as reported by different workers with respect to camels (Ataja and Uko, 1994) small ruminants (Ogwuegbu, *et al.*, 1987) and cattle (Oyekunle *et al.*, 1992). Ataja and Uko (1994) found that 24.06% of female camels slaughtered for meat in Sokoto abattoir in 1992 were pregnant. Oyekunle *et al.*, 1992 reported that between 14% and 20% of cows slaughtered in Abeokuta and Ijebu-Igbo abattoirs from 1984 to 1989 were pregnant.

The slaughter of pregnant domestic animals *vies-avis* cattle, goat and sheep will no doubt worsen the already precarious supply of animal protein to the populace (Abdullahi, 1985). It is most uneconomical to continue the practice of slaughtering pregnant animals, a situation that greatly threatens the Nigeria livestock industry. One possible actor contributing to the high rate of slaughter of pregnant cows is the season of the year. In analyzing the effect of draught on the effect of draught on livestock in sub Saharan Africa, Toulmm (1984) observed that at the extreme dry periods, herders increased their sales of aged cows and less productive females in order to meet house hold cash needs. As the dry season progressed and the stress on cattle increased, herders were compelled to liquidate pregnant females before they die naturally. Most livestock farmers sell off their animals without considering the fertility of the stock before selling off due to illiteracy and poverty and or diseases condition of the animal. It therefore becomes necessary to study the pattern of foetal wastages with Benue State as a case study.

Benue State is said to be the food basket of the Nation. The links between the North and Southern States of Nigeria and as such form a good case study.

Materials and Methods

The study was carried out in Makurdi Metropolis. The primary data used for the study were obtained from the livestock division, Benue State Ministry of Agriculture, Makurdi. The data which covered a period of six years (January, 1997 to December, 2002) were collected and analyzed from Makurdi.

The completed meat inspection forms at the Makurdi abattoir. The number of cattle slaughtered annually was calculated and the sex incidence was obtained with the number of fetuses recovered at the time of slaughter though not classified according to the trimester of pregnancy.

A total of 20 farmers (Fulani herds men) and 20 butchers were orally interviewed on the reasons for premature slaughter of pregnant females.

Results were analyzed using a chi-square test. Analysis of variance (ANOVA) was also employed to test the significance difference between the numbers of fetuses with the number of years.

Graphs were plotted using micro soft excel window XP.

Results and Discussion

Figure 1 revealed yearly trend of fetal wastages at Makurdi, abattoir, 1998 had the highest peak of wastage and there was also significant rise within the years determined by different seasons of the year.

While Fig. 2 shows the monthly increase of fetal wastage at the abattoir, there was a rise in the months of May to July with the highest peak in June. There was also a significant rise in September.

The rise in fetal wastages from 1997 having the highest peak may have been as a result of the economic hardship that prevailed around that period. Perhaps farmers need money to send children to school and meet some other domestic needs.

The season of the years under review also shows that the rains are just about to begin in the months of May-June.

These periods are characterized by drought, hunger which expose animals to poor nutrition, diseases and as such to forestall losses due to natural death or diseases farmers prefer to sell their animals. Also the problem of anthelhemintes occurs at unset of rains and the ends of rains and cost of treating the animals may also be another reason why farmers sold their animals.

The reports of Beckm *et al.* (1974) showed that 70% of the cattle slaughtered during the extreme dry periods were females, compared to 30% during the normal periods of the year. Germen (1975) also observed a similar phenomenon, that most of the cattle sold for slaughter during the dry season were females. The rise in wastage in September of most of the years May be as result of emergence of festivals and ceremonies, this period farmers need money for marriages, Christmas and Moslem Festivals.

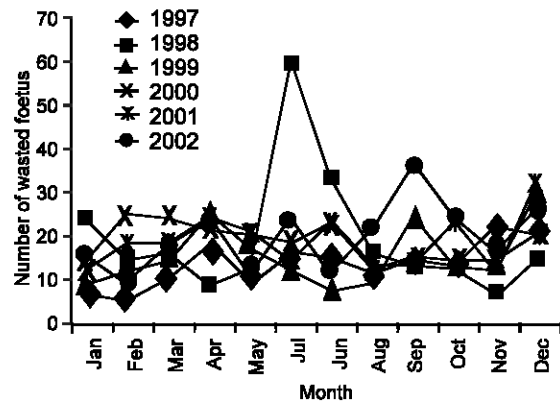


Fig.1: Monthly incidence of fetal wastage at Makurdi abattoir

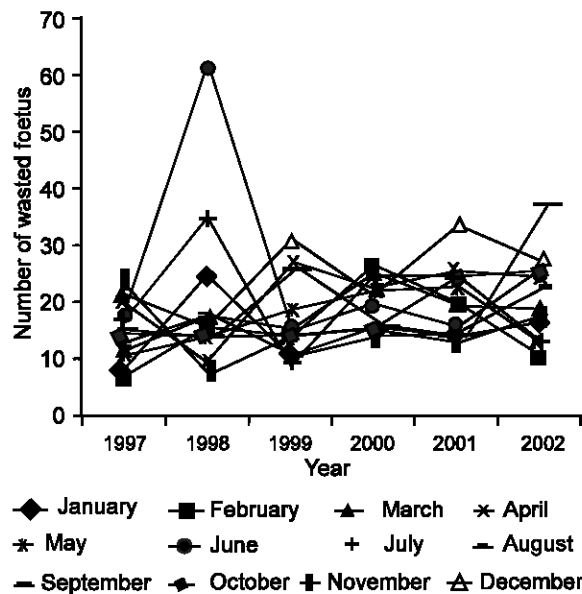


Fig. 2: Yearly incidence of fetal wastage at Makurdi abattoir

Looking at the relatively high rate of calf wastage in Makurdi abattoir, two important questions come to mind. First, what are the effects of this on the supply of beef in a Country where meat production lags behind Consumption? And secondly what are the economic implications of this for both total and per caput meat production and consumer and the policy implications for adequate planning of the livestock sector in Nigeria? The net effect of the continuous calf wastage would mean a reduction in both the consumer and the producer welfare, through meat shortages and reduced farmer increase. Nigeria (through Makurdi abattoir, Benue State alone) loses about 3.9 percent of its future productive herd as a result of the indiscriminate slaughtering of pregnant cows. An important factor contributing to the increased slaughter of pregnant cows

in Nigeria is the poor enforcement of existing livestock legislation. Three important policy objectives are emphasized in Nigerians livestock sector to increase domestic animal protein production so as to attain national self sufficiency in meat production; to increase farmer's income in order to raise their standard of living and to cut down on meat imports thereby conserving scarce foreign exchange. Although government regulations discourage the slaughter of pregnant cows, the structure of the formal cattle marketing and slaughter system in Nigeria has flaws limiting their application. As a result of the lax enforcement of existing regulations, trade cattle markets for abattoirs without routine veterinary checks.

Attempts to reduce meat deficits in Nigeria must focus on ways of reducing calf wastage during slaughter. Government intervention in cattle marketing remains essential, particularly in the enforcement of policies relating to the sale of pregnant cows for slaughter. Policy efforts must concentrate on instituting routine veterinary checks at cattle control posts and abattoirs. In addition, producers of cows in order to avoid disposing of them during calving season. If meat supplies are to be maintained or increased to meet future domestic demand, the incidence of slaughtering pregnant cows must be reduced or halted completely.

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