

Slaughter of Donkey *Equus Asinus*, "The Ass" for Meat: A Survey of Sources of Meat in Equatorial Tropics of Southeastern Nigeria

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Abstract

Records on supply (1990 - 1994) and slaughter (1984 - 1994) were analysed to study the scale, monthly and annual trend of the supply and slaughter of donkey, the ass, Equus asinus, for meat at the Ezillo in Ishielu Local Government Area, near Abakaliki, in Ebonyi State of Nigeria. There were two peaks of supply/slaughter in the year. The first occurred 1 April while the second was by November/December. In each month of the year, an average of 700 donkeys were supplied from various parts of northern Nigeria. The total supply in 1990 was 6612. This increased sharply to 11,817 by 1994. More than 50% of the supplies were slaughtered at Ezillo monthly. The rest were resold to traders from various other states of the Federation. Also fresh and dried donkey meat were purchased and transported to other towns and markets in the southern States of the country. Post mortem examination of the meat revealed that tuberculosis was the most prominent disease found in 31.69% of the slaughtered animals. This has very serious public health implications.

Description of Problem

In any nation or country and even among communities within a given nation, certain crops or animal species form their major supply of food and/or meat. The people of southeastern Nigeria has always depended on cattle, goat and sheep, the porcine, poultry, fish and various forms of wildlife for their animal protein supply. The horse was used for the funeral rites of the dead and for other ceremonies. Horses so used were, however, slaughtered and the meat eaten. In the past it was not common to see horsemeat being sold openly the way beef, goat meat, mutton or pork were displayed as articles of trade.

These days horsemeat is displayed side by side with beef, goat meat and other types of meat, in many rural and urban markets of the southeastern States of Nigerian. Then at the end of the Biafran/Nigerian war, came the donkey meat to join other sources of meat supply to the people of the war affected areas who had to consume any available form of meat to ameliorate the effects of the war.

Records on the transportation of various species of livestock, including the ass, from the north to the south of Nigeria for slaughter for meat exist (1). Also the slaughter of the donkey for meat supply, both in the north and south of Nigeria, has been reported (2,3,4). However, no records exist on the scale, monthly and annual trends in the supply and slaughter of the donkey for meat in southeast of Nigeria.

This study was, therefore, conducted to find out the monthly and yearly trends in supply and slaughter of donkeys, for meat supply in the equatorial humid tropics of southeastern Nigeria.

Materials and Methods

Data used in this study were obtained from the records kept by the Veterinary Unit at the Ezillo Local Government Area (LGA), Ebonyi State, on monthly supply and slaughter of donkey for meat at the Afor market, Ezillo. Data on donkey supply were available for the period from 1990 to 1994 while data on slaughter covered the period between 1985 and 1994.

Four days make one Igbo week. They follow chronologically thus: Orié, Afor, Nkwo and Eke. Of these four days donkeys were supplied, re-traded or slaughtered for meat, alternately, in two of them viz: Afor and Eke. From September 1993 to June 1994, visits were made to Afor Ezillo to make physical counts of the supplies and slaughter. This helped to confirm the reliability of the data kept by the Veterinary Unit.

The monthly and annual supplies and slaughter were calculated. The values obtained were used to plot graphs. Also percentage monthly and annual changes were estimated. Furthermore, the proportional contributions of the slaughtered and re-traded animals were calculated. These are expressed in Tables 1 and 2. However, the 1984 values were not included in the calculations because there were no records for the months of January and February of that year.

Results and Discussion

Figure 1 shows the monthly trends of supply and slaughter in absolute terms. The results show that both trends are bimodal, with the first and lower peaks (743 supplied and 451 slaughtered) occurring in April while the second and greater ones (1,008 supplied and 530 slaughtered) occurred by December of the year (Table 2).

Figure 2 shows the annual trend of supply and slaughter for the years 1990 to 1994 and 1984 to 1994 respectively. The available records on supply show a gradual increase from 1990 to 1992 followed by a sharp rise thereafter through 1992 to 1994. In each year an estimate of 700 donkeys were supplied to the market. The annual slaughter trend seems to have three peaks. The lowest value of 3,180 was obtained in the first year 1984. Then there was a rise through 1985, culminating in the first peak of 5,830 slaughters by 1986 (Table 1). The second and lowest peak (4431 slaughters) occurred in 1988, followed by a decline in 1989. There was a gradual rise till 1992 and a sharp thereafter, attaining the third and highest peak in 1994.

Table 1 shows the absolute values as well as percentage changes in supply and slaughter using 1990 and 1985 as the base years respectively. The supply percentage showed a very sharp increase

from a mere 2% in 1991 to 178.72% in 1994. The percentage slaughter seemed to rise and fall but at the end it was a marked increase to its highest value of 4.89% by 1994. The percentage re-traded rose sluggishly for the first two years but showed a sharp increase in 1993 and that represented its peak year.

Table 2 shows both the absolute and relative values for the supply and slaughter as well as the proportion of the supply that got re-traded at the Ezillo market per month. The relative values for supply had two troughs, the first one (4.06%) occurring in April and the second and lower one (1.26%) occurring in October. The highest increase was in the month of December.

The slaughter value a proportion of mean of supply was highest by June - July (67.27% and 65.89% respectively). The number re-traded as a proportion of mean supply was understandably lowest in those months (32.73% and 34.11% respectively). The values in table 2 strongly suggest that relatively fewer animals were slaughtered while relatively greater numbers were re-traded by the months of November and December (52.66%, 52.58% and 47.345 and 47.42%) respectively.

Figure 3 shows the percentage male and female slaughtered for the decade under study. Except for the years 1985, 1988, 1990 and 1992 when the sex ratio of the slaughtered donkeys approached 1:1, more females than males seemed to have been slaughtered. The greatest difference occurred in 1986 when as much as 77.19% females and only 22.81% males were slaughtered. The overall mean per cent was 43.78 male : 56.22 female which calculated to 1:1.29 male : female ratio. This could be regarded as an overall ratio of 1:1.

Post mortem examinations of the carcasses revealed that as many as 1,6663, representing 33.69% of all the donkeys slaughtered were suffering from tuberculosis at the time of slaughter. Also 1,3758 representing 26.16% suffered from liver fluke, 981 representing 18.79% suffered alopecia, 6973 representing 13.26% were suffering from pneumonia. Such organs as the liver, lungs and the kidneys of those individuals who suffered tuberculosis were said to have been condemned. Also the liver and lungs of those that suffered from pneumonia were equally condemned. However, it

Table 1. Total Annual Supply and Slaughter and Percentage Change.

Year	Supply	Percent Change (%)	Slaughter	Percent Change (%)	Proportion Slaughtered
1985	-	-	5491	0.00	-
1986	-	-	5839	6.34	-
1987	-	-	3655	33.44	-
1988	-	-	4431	19.30	-
1989	-	-	3484	36.55	-
1990	6612	0.00	3608	34.29	54.57
1991	6793	2.74	3810	30.61	56.09
1992	7174	8.50	4258	22.45	59.35
1993	9322	40.99	6868	25.08	73.68
1994	11817	178.72	7956	44.89	67.33

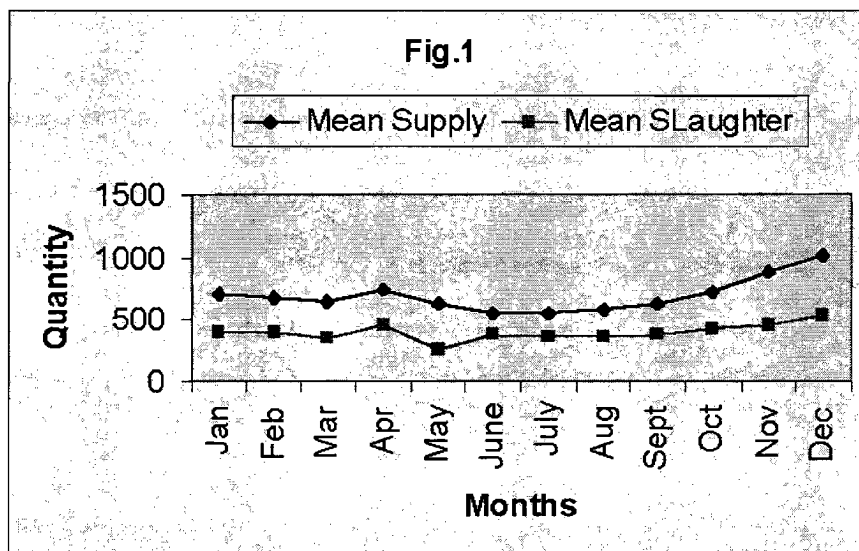
Fig.1. Monthly Trend of Supply and Slaughter of Donkeys

Table 2. Mean Monthly Supply, Slaughter, Their Percentage Change and Proportion Slaughtered and Sold Out to Other States.

Month	Total Supply	Percent Change (%)	Total Slaughter	Percent Change (%)	Slaughtered as Proportion of Supply (%)	Proportion Sold out (%)
Jan.	714	0.00	398	0.00	55.74	44.26
Feb.	68	4.06	394	1.01	57.52	42.48
Mar.	641	10.22	346	13.07	53.98	46.02
Apr.	743	4.06	451	13.32	60.70	39.30
May	636	10.92	345	11.06	55.66	44.34
June	556	22.13	374	6.03	67.27	32.73
July	557	21.99	367	7.79	65.89	34.11
Aug.	583	18.35	366	8.04	62.78	37.22
Sept.	627	12.18	373	6.28	59.49	40.51
Oct.	723	1.26	429	7.79	59.34	40.66
Nov.	883	23.67	465	16.83	52.66	57.34
Dec.	1,008	41.18	530	33.17	52.58	47.42

Fig.2. Annual Trend of Supply and Slaughter

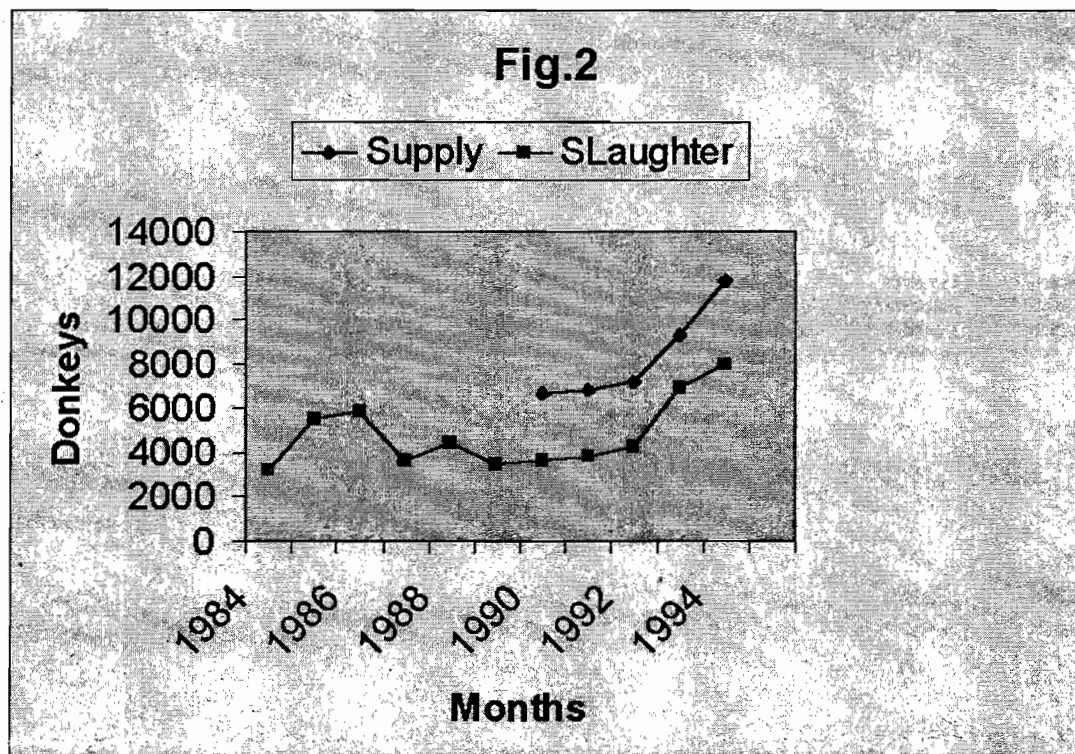
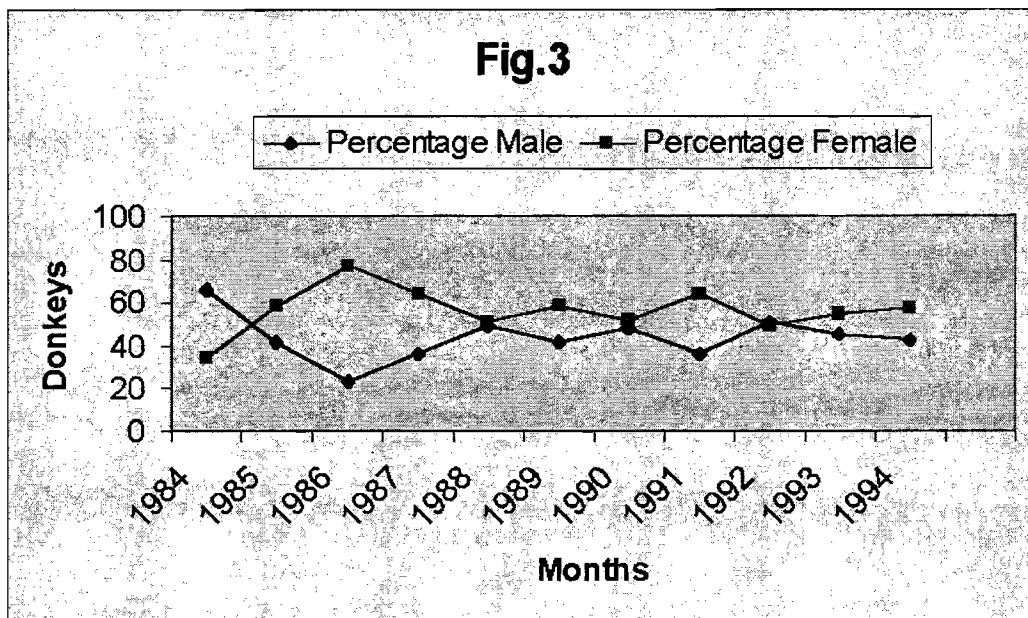


Fig.3. Percentage Male and Female Slaughter



was not possible to ascertain whether the same individual animals were suffering from more than one of the diseases at the time of slaughter.

A major observation in this donkey business was that the animals and their meat processing were exclusively a women's affair. It was on record that the men involved in the slaughter and meat processing in this Afor market at Ezillo were dealing on cattle, goat and sheep, porcine and canine slaughter but never in donkey business. None of the dealers interviewed was forthcoming with any reasons. Some who responded at all only said that it was a matter of interest.

Reports exist that such beasts of burden as the camel, donkey and horse are slaughtered for meat in various parts of Nigeria. The camel is slaughtered for meat at Maiduguri (5), Sokoto (6), Ibadan, Jos (1; 7). The slaughter of donkeys and horses for meat at Gaigabi in Sokoto State and at Jannaret in Plateau State has also been reported (2). Furthermore, the slaughter of donkeys and horses for meat at Eha Amufu in Enugu State has been reported (3; 8). It has been observed (9) that donkey contribution to the total meat consumed in Enugu State from 1988 to 1995 ranged from 2.68% to 11.05% with an average of 5.94% per

annum.

In this part of Nigeria the consumption of horsemeat, but not that of the donkey, has been on for a very long time. Reports exist that there was a long established trade in livestock by the nineteenth century, which came from Igalla, in the present Kogi State, to Nsukka, in exchange for slaves and woven cloth (10).

The trade and slaughter of donkeys for meat in this part of Nigeria started in 1972 (3; 8). This occurrence must not be unconnected with some major events that happened about 1972. First was the Sahelian drought that ravaged the entire Sahelian West Africa from 1969 to 1973. Virtually the entire livestock industry of the West African sub region collapsed as animals and their owners died in their millions. Second event was the Biafran/Nigerian war that lasted from 1967 to 1970.

These two events must have combined to create a situation that compelled the inhabitants of these areas and beyond to start consuming not only horsemeat but also donkey meat. The civil war left much of the population of the so called Igbo heart land terribly impoverished to the extent that all sorts of animals, not hitherto used as meat,

got popularized as meat sources. Such undomesticated species as the *Agama agama* lizard, the *Zonoceros spp.* of grasshopper and even the frog, were consumed as meat during the war. The domestic dog *Cannis familiaris* was the last domesticated species to survive in Biafra as the cattle, goats, sheep, pigs and poultry never survived the first two of the three years (1967 to 1970) of the macabre show. When the other animals got finished, the dogs were hunted, slaughtered and eaten.

It is very probable that with the decimation of the livestock industry of the sub region and the Biafran/Nigerian war, the cost of meat from the familiar sources became unaffordable to the people. The event of donkey trade for meat supply at the Ezillo market by 1972 may be explained by the above reasons.

The annual increase in the supply of donkey to the market from 1990 is not easy to explain. However, it may not be unrelated to higher demands owing to increasing human population. Traders were coming from far and wide, e.g. Igumale and Utonkon in Benue State, Otuocha in Anambra State, Agbor in Delta State and other States in Nigeria to purchase not only donkeys on hoof but also fresh and dried donkey meat.

The monthly variations in supply and slaughter may be due to various reasons. The decline from February to September may be explained by the fact that this period is the rainy season when most of the people in this part of Nigeria are engaged in farming activity. Donkey business, to most of women apparently, is a secondary occupation that is suspended at the height of farming activities. Rains start here by late March-early April. Land preparation starts well ahead of the rains. So it is known that Abakaliki in Ebonyi State is a leading area in yam and rice production in Nigeria. Women are very highly involved in the exercises of rice production.

The rise in both supply and slaughter in the month of April and also from October to December may be explained by the fact that two major Christian festivals - Easter and Christmas - occur at those periods of the year respectively. By Christmas time in particular, there is a great demand not only for meat but also for other items

of food. These days, in Igbo towns and villages, Christmas periods are no longer just for merry making alone. People now in addition to merry making, also use the period for launching development projects, settling old quarrels, long standing intra and interfamily disputes as well as taking other far reaching family and village decisions, all geared towards human development. For these reasons, family members are expected to come home not only from all over the federation but also from other African countries as well as from overseas. These may, in part, explain the very apparent swell in both supply and slaughter by the months of November and December.

All indications are that more and more of these animals are being transported down, only for their meat as the southern environment may not be suitable for ass breeding and no efforts are being made to breed them here. The question is, therefore, what is the rate or degree with which we are depleting the population of this very important species of burden? The ass is of very economic, agricultural and even political importance in Nigeria (5). The rich may own horses or motorized means of transportation but the poor, who are in far greater majority, depend heavily on the ass for movement and transportation. Also times come when the rich become helpless with their motorized vehicles and other forms of sophisticated modes of movement. A good example of such periods is the time of electioneering campaign. It is only the beasts of burden, and especially the ass, that can access most of the extremely rugged terrains of the various areas of northern Nigeria where the contestants have their constituencies. At time like that the real worth of the Donkey is appreciated.

Better breeding, nutrition and husbandry programmes have been recommended (5) for this species. In Egypt the population of the indigenous camel had declined by as much as 37.7% between 1967 and 1974 (11). This was said to have coincided with increase in slaughter figures of 20% between 1973 and 1974. In Tunisia also, it has been observed (6) that the dromedary population declined by 43.3% between 1981 and 1986. In Nigeria we neither know the populations of our indigenous beast of burden nor do we know the

rate at which they are being depleted.

Though tuberculosis was the most prevalent disease, it did not occur in all the months of the year. It is noteworthy that no organ condemnation was recorded in the months of January, February, July, August and December. The highest incidence was just before the rains (in March) through the first peak of the rains (in June). Then there were lower incidences from September (which marks the second and last peak or our monsoon rains) to November, which in turn marks the end of the rainy season in this part of the country.

The liver fluke infestation also was not recorded in all the months of the year. It occurred from September to March and with no occurrence from April to August.

Pneumonia occurrence was from May to September, though there was no occurrence in December. All other months of the year seemed completely free.

The reasons for the monthly pattern, distribution and frequency of occurrence of these diseases are not easy to explain. However, it has been suggested (13) that hunger, dehydration, long trekking and high ambient temperatures that characterize the long dry seasons in the north of Nigeria could provoke the manifestation of these diseases probably from their latent stages. These adverse conditions are known to lower the resistance of animals. The cases of cattle and small ruminants seem even worse as they do not only lose conditions but also die in good numbers. Under such conditions the diseases appear as if they are seasonal which they are not.

The donkey is acclimatized to the arid and semi arid environments. However, as they are transported to the south, which is warm and highly humid, it is possible that they easily contract pneumonia especially as the transportation systems are never conducted with any humane touch.

Both the bed sore and alopecia occurred throughout the year. Bed sore showed even distribution throughout the year. For the alopecia

there was a rise in frequency from 713 (animals affected) in September to 1511 in December followed by a decline from 1004 in February to its lowest (mere 560 occurrences) in August.

There is nothing surprising that the skin problems appear all the year round. The alopecia is somewhat a chronic disease. The bed sore is as a result of the rough loading and offloading as well as the merciless walloping meted to the poor animals en route to their final place of slaughter. Anything, ranging from heavy sticks to horse whip, and at times even cables, is used in this inhuman beating. Sometimes an animal can fall and get trampled upon by those sharing a wagon or coach with it. This can go on for hundreds of kilometers un-noticed and, therefore, un-remedied. The bed sore, and especially when inflicted on an individual already suffering from alopecia, makes the animal present a very gory sight.

In the north of Nigeria where the animal is used, while the rich ride horses, the poor including the leper, ride the donkey. Some people then have the belief that the sores and patches of other skin diseases are areas of the donkey skin that harbour the leprosy causing organisms. The banning of the slaughter of donkey in Ebonyi State by the last Military Administration was probably not totally unconnected with this belief.

Although previous studies (4) declared the donkey meat traded in healthy for human consumption, it has become very necessary to take another look at the safety of this meat vis-avis the high incidence of, in particular, tuberculosis among the slaughter animals. A blanket ban of the slaughtered of the animal will definitely worsen the matter as the business will go underground and become very dangerous.

The health aspect has become very important in view of the fact that donkey meat is, probably and unwittingly, widely consumed as beef in various parts of Nigeria. This business has a very far reaching health implication.

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