

SOCIO ECONOMIC CHARACTERISTICS OF CATTLE REARING IN OGBOMOSO NORTH LOCAL GOVERNMENT AREA OF OYO STATE

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Abstract

Animal agriculture is an indispensable prerequisite towards the sustainability of human development. This study was carried out using structured questionnaire in order to highlight the economic importance of cattle rearing among pastoralists. It was found that, the primary occupation of pastoralists was livestock farming and they have no educational background. The herd composition was mainly cattle. The number of cows is more than the bulls suggesting a dairy and a breeding herd among the farmers. The interest of Bunaji breed in the study area despite susceptible to trypanosome infection is an indicator of less relevance of trypanosomiasis as a limiting factor to cattle production in the area and having the highest population of averaging 38.86% of the total herd compared with keteku, N'dama and Sokoto Gudali with 31.23%, 16.40% and 13.50% respectively. Grass and browse were the major feed for the animals during wet season and addition of crop residues during dry season. The main feeding pattern adopted by pastoralist was grazing and cut and carry. The prevalent adult disease was foot and mouth while diarrhea was highly rampant among young calves. Results generally indicated the breed was preferred in the study area because of her superior milk production, large body size, fast growing rate, ease of management and ability to consume variety of forage.

Key words: Cattle, Bunaji, Local Government, Pastoralist, Trypanosomiasis

Introduction

Animal agriculture is an indispensable prerequisite towards the sustainability of human development because of their provision of meat and milk (which are the highest source of animal protein), raw materials (such as hides and skin, wool, leather) and employment generation (Oluwafemi *et al.*, 2001). Livestock production contributes about 12.7% of total gross domestic product (GDP) of Nigeria (CBN, 1999). The cattle industry provides a means of livelihood for a significant proportion of the livestock rearing (pastoral) households and participants in the cattle value chain in the sub-humid and semi-arid ecological zones of Nigeria (FAO, 2006). Although, there are many sources of animal protein in Nigeria, recent studies have shown that cattle and cattle products are the predominant and the most commonly consumed animal protein sources. Thus, cattle are a highly valued livestock in Nigeria (Tibi and Aphunu, 2010) where they are kept for beef, hide, and milk or for traction (Tukur and Maigandi, 1999).

Livestock production is faced with a number of constraints, among which on the long run results in the low productivity and reduced profitability (Anon, 2004). Prominent among these constraints are diseases. Animal diseases contribute a major obstacle to economic development as well as posing health risk on the human population.

Problems associated with reduced livestock productivity and profitability include; inadequate consumption of protein of animal origin, poverty, unemployment, low contribution to the nation's gross domestic product (GDP) among others (Anon, 2004). Cattle production is most impossible in hot and wetter parts of Africa due to disease such as trypanosomiasis (Agyemang, 2004) and the pressure of parasites (ticks, worms etc).

Materials and Methods

Sampling location

This study was carried out in Ogbomosho North Local Government Area of Oyo State. The area is located on the Latitude 8° 1'E and longitude 4°15'N. The annual rainfall is about 1500mm, and within the Derived Savannah zone of Nigeria. The major occupation is farming and trading.

Sample collection

A total of 23 households (21 Fulani and 2 Yoruba farmers) were selected using stratified random sampling procedure. In the survey, the variable of interest were the breeds of cattle kept, types of feeding system, adopted feed source, herd composition, pattern of production, common disease and treatment method.

Data collection and analysis

A well-structured and pre-tested questionnaire on variables of interest was prepared in English Language, and an agricultural extension officer

and a translator who are proficiency (speaking and understanding) in Fulani and Yoruba languages were engaged in the course of the interview which takes place in each farmer's farmstead. The data collected were analyzed using the descriptive model of SPSS statistical software package. (2012)

Results and Discussion

Figure 1 revealed that Bunaji (also known as White Fulani) was the predominant breed kept having the highest frequency of 38.86% while the lowest frequency (13.50%) was recorded for Sokoto Gudali. The high rate of Bunaji breed being reared in the sample area might be due to their relatively superior milk production, large body size, high growth rate, ease of management, high marketability and ability to consume variety of forage and low incidence of trypanosome infection. Jabbar *et al.* (1995) and Ndambi *et al.* (2008) reported that the interest of the Bunaji breed in the zone despite susceptible to trypanosome infection is an index of less relevance of trypanosomiasis as a limiting factor to cattle production in the area and are reared mainly for meat and for their resistance to common disease.

Table 1 showed foot and mouth disease was the prevalent disease, to a lower extent of dermatophilosis and minute cases of foot rot disease because the animals are on range. It was observed during the study that the animals gathered at the spot where they defecated, this might be responsible for high occurrence of diseases. Diarrhea was more common in young animals because they possessed less immunity to

combat the resurgence of the disease. Disease diagnosis was done by the Fulani herdsman, they were thought by their fathers and private veterinary doctors. Method of disease treatment adopted by the farmers was by using herbs and conventional drugs. Obianwu (1984) reported that the use of herbal remedies in modern health care systems is being achieved in China, India and the SOVIET union. However, very little is being done to exploit traditional medicine as it applies to veterinary practices, even though the integration of traditional remedies may be much easier in the veterinary than in the human medical field (Nwude and Ibrahim, 1980)

Table 2 showed all the farmers during the wet season graze their animals on grass only without any supplementary feeds. Also in addition to grazing on grass during dry season, animals were fed with browse and crop residues to supplement the shortage of grasses. Bwire and Wiktorsson (1996) reported that selection of forages to feed in a particular season together with concentrate supplements is therefore importance for good performance. The grazing systems employed by the pastoralist during dry season are grazing on range and cut and carry. In early life, calves cannot utilize high fibre feeds efficiently (Otterby and Linn 1981) but feeding good concentrate early in life enhances the nutrient supply to the calf and is necessary for early weaning (Berhane 1998). This will ensure high intakes and sufficient consumption of nutrients by the animals. It will also reduce the workload of cutting and carrying forages to the stalls which will eventually remain uneaten by the animals creating a manure disposal problem.

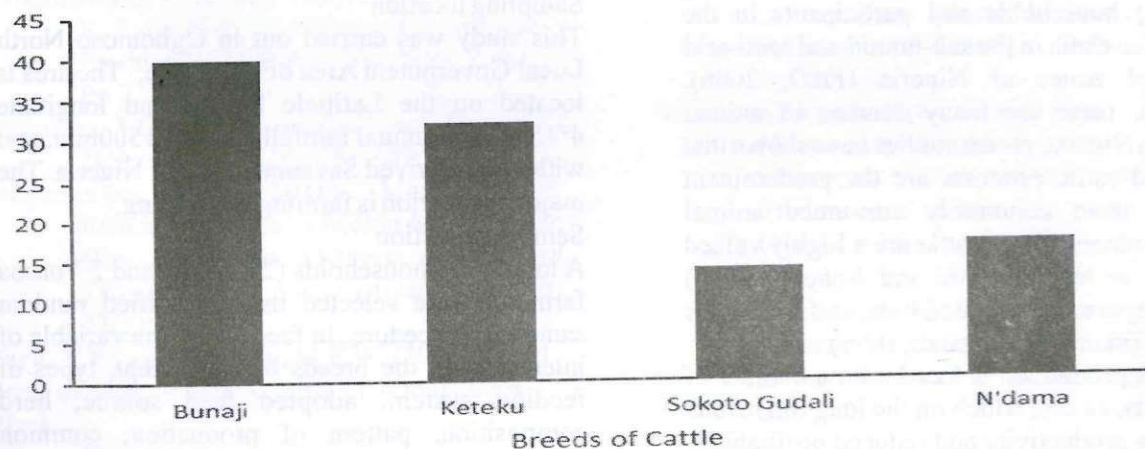


Figure 1 showing statistic of each breed of cattle in the area.

Table 1: Showing the diseases of cattle in the study area.

Parameters	Number of Respondents	Frequency (%)
Adult Cattle Disease		
(I) Foot and Mouth disease	34	65.38
(II) Diarrhea	-	-
(III) Dermatopholosis	12	23.10
(IV) Foot rot	6	11.54
Young Cattle Disease		
(I) Foot and Mouth disease	10	19.23
(II) Diarrhea	20	38.46
(III) Dermatopholosis	7	13.46
(IV) Worm Infestation	15	28.85
Total	52	100

Source: Field survey, 2015

Table 2: Showing types of feeds and feeding systems of cattle by patoralist in wet and dry season.

Parameters	Wet season		Dry season	
	Number of	Frequency	Number of	Frequency
	Respondents	(%)	Respondents	(%)
Type of Feeds				
Grass only	52	100	-	-
Grass and Browse	-	-	12	23.10
Grass, Browse and Crop residue	-	-	40	76.72
Feed sysytem / Mode				
Grazing only	10	19.23	-	-
Grazing, cut and carry	42	80.77	52	100
Total	52	100	52	100

Source: Field survey, 2015

Conclusion

It could be concluded that the farmers in this study area could have prefer Bunaji breed because of her relatively superior milk production, large body size, fast growing rate and ability to consume variety of forage which resulted in high profitability.

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