INTRODUCTION

Livestock production is an important component of the agricultural sector in Cameroon. The country has a land mass of 46.944 km², of which 6.3% is under crop production, 36.5% under livestock, 42.1% under forest and 14.8% under water. Thirty percent (30%) of the rural population derive their livelihood from livestock husbandry which contributes 16% of the agricultural sector. This marginal contribution to the agricultural GDP could partially be attributed to the prevailing cattle production system; the dominant livestock species in terms of number and distribution which are mostly grazed extensively in the Northwest, Adamawa, North and Far North regions.

Lack of adequate nutrition all-year-round is one of the major causes of the low productivity of these animals. Effects of dry season, drought, expansion of agricultural activities and urbanisation have constantly exerted constraints on dependence on natural pasture as a sole nutrient source for ruminant nutrition.

The trending government agenda, MINPLADAT 2009, drawing lessons from its first poverty reduction strategy, is a vision which projects an image of the country by 2035 to be a democratic emerging country united in its diversity. An important issue of this emerging plan is decentralization and the outcome of land tenure; considering that current cattle husbandry practices are generally extensive on communally-owned lands. Within this vision, and for the beef cattle industry to emerge alongside other sectors by the projected time, information on the current cattle practices and their challenges at important cattle production areas are needed to serve as clues for the design and effective implementation of local development strategies in future cattle development plans.

OBJECTIVE OF STUDY - The aim of the study was to audit the prevailing cattle farming systems and profile the challenges on their sustainability in Misaje area.

MATERIAL AND METHODS

A) STUDY AREA - Misaje grazing area is located in the Bamenda highlands of the Northwest Region of Cameroon. It lies between latitude 6°59' S and longitude 10°55' E. The mean altitude is 1000m a.s.l. with extremes of 300m and 1800m. The average annual rainfall varies from about 1500 to 1700 mm. The area is characterized by two main seasons; rainy from mid-March to mid-October and dry-March, and temperature is mild. It is drained by numerous streams and rivers constituting natural watering points for both domestic animals and wild life. It is a complex mosaic of montane woodlands, tree and shrub savannah, grass savannah (predominantly Hyparrhenia rufa), farms and fallow fields derived from tropical montane forests. The soils are acidic, low in major nutrients and have high phosphorus requirements.

B) PRIMARY DRIVER FOR KEEPING CATTLE

Primary driver for keeping cattle

- Bank on hoof (store of wealth)
- For Milk
- Cultural identity (meeting marriage, religious festival needs)
- Food cash for emergencies

Source of cattle

- Inheritance
- Sales of small Ruminants
- Cash from other sources

RESULTS & DISCUSSION

In a survey of 164 farmers, who managed 213 herds with 17000 cattle, 88% are landless and predominantly of the minority Mbororo cultural decent, while 12% are indigenous farmers including a 36,000ha ranch, breeding 6200 Goudali cattle, owned by a parastatal; SODEPAM. Except for SODEPAM ranch, transhumance is the main pastoral system. Acute shortage of pasture during the dry season, avoidance of cattle theft and of farmer-grazer conflicts were identified as the main reasons of transhumance by all respondents. Three main zebu breeds were identified in transhumant herds. One hundred and forty one herds were of homogeneous breeds (Goudali 27.2%, Aku 22.1%, Djafun 16.9%) while 72 herds were of mixed breeds. Minimum, mean and maximum herd size were 23, 79 and 270 respectively, while most of the herds (55%) fell within 40-80 class size. Breed prevalence in farms and herds.

Analysis of primary drivers for cattle keeping shows that 79% of production is motivated by the need for a source of cash in times of emergencies, 11% for merely cultural value – meeting marriage, births, and religious ceremonies needs, 2% for milk, while 8% was driven by the need for a means of storing wealth. The supply of beef to the family of the herd owners was not indicated as a primary reason for cattle keeping. This is probably so because the main source of meat for the household is small ruminants and traditional poultry reared in all the homesteads visited. The source of cash for breeding varied from cash obtained from sales of small ruminants (12%), through purchases from cash from other sources (30%) to inheritance from ancestors (58%).

Generally, selection of breeding stock is done arbitrarily because of the absence of precise animal performance records. However, testicular size, apparent state of health, size of hump, color of hair coat where considered in the selection of bulls retained in breeding herds. The SODEPAM ranch was noted as the main source of breeding heifers and bulls for the Goudali breed in the area. Apart from micro-mineral licks, feed supplementation with farm residues is not practiced. The only pasture maintenance action was off-season bush fires. However, a combination of natural pasture rotation and brush fires was noted in SODEPAM ranch. Cultivation of cereals; notably maize, was intended for domestic use only.

Streptococcosis, cowdriosis, blackquarter, epidemic fever, foot and mouth disease, and trypanosomiasis were noted to be the most prevailing cause of morbidity and mortality. Other causes of herd losses include poisonous plant intoxication (mostly by ingestion of Spondias bigloris preseis), snake bites, fractures and electrocution by lightning during stormy weather. Invasion of pastures by undesirable plant species in overstocked areas; especially bracken fern (Phleum aquilium) and Chromolena adorata in wet season pastures, infestation of pasture lands by lice-tse fly, bush fires, and other natural disasters were motivating factors influencing current grazing pattern in the locality.

Conclusively, the ranching system where heifers and young bulls are the main products put in the market, except for sales of cattle in the transhumant farming system is usually in the form of distress sales of culltled animals to butchers.