

## SMALL RUMINANT PRODUCTION IN AKWA IBOM STATE

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### Summary

400 farmers with a total population of 2,781 small ruminants (2,658 goats and 123 sheep) were interviewed to assess the different management systems used and the productive performance of small ruminants in these various systems. The dominant system adopted was intensive (60%) followed by semi-intensive (33%). Results showed that small ruminants in the intensive system performed better than those in the other systems. Moreso, there were more goats (2658) than sheep (123) and multiple birth was predominant – having a frequency of 128 for once in a year, so for twice in a year and 190 thrice in two years kidding/lambing interval. Increased production will be obtained with better management, nutrition and breeding.

### Introduction

The increase in population in the developing countries has resulted in increased demand for food, thus there is pressure on land and livestock to produce beyond their potentials. There is therefore a shift of good rangelands into marginal crop production, increased stocking rates on marginal rangelands and reduced production options to the pastoral livestock producer. There appears to be increased interest in small ruminants as land holdings become smaller on a family unit basis (Glimp and Wiegand, 1991). Small ruminants (goat and sheep) are important domestic animals representing a valuable resource in tropical livestock production system. Although widely distributed in the tropics, they remain neglected being looked upon as poor converters of feed, slow growers and animals destined to roam the country side subsisting on house hold wastes and bush grazing (Devendra and Mcleroy, 1982). It became necessary therefore to assess the management systems and the productive performance of small ruminants (goats and sheep) in these systems in Akwa Ibom State, with a view to improving their productive performance.

### Materials and methods

Respondents were randomly selected to represent farmers in Akwa Ibom State using Uyo and Nsit Ibom Local Government Areas as the study areas. A total of 500 questionnaires were issued for the purpose of gathering information from farmers. 250 questionnaires were issued to respondents in each of the Local Government areas. Farmers who could not read and write were interviewed and their responses used in completing the questionnaires, while the literate ones had theirs, completed them on their own and returned them. At the end, a total of 400 questionnaires were collected for analysis. Parameters considered were management systems, Frequency of goats and sheep in households, numbers of twins and single births and kidding/lambing interval.

### Results and discussion

Table 1 presents management systems used by farmers in Akwa Ibom State. It shows that more farmers preferred intensive management to the other systems – tethering, semi-intensive and extensive.

Table 1: Management system used by farmers in Akwa Ibom State

Management systems	Frequency	Percentage (%)
Tethering	15	3.75
Intensive	240	60
Semi-intensive	132	33
Extensive	13	3.25
Total	400	100

Out of the 400 farmers interviewed, 15 used the tethering system, 240 used the intensive system, 132 the semi-intensive system and 13 the extensive system. The high preference by farmers for the intensive system may be



connected with the advantages that are associated with the system being that it helps in overcoming theft, prevents damage to cultivated crops as well as the animals from feeding on poisonous leaves, enhances effective conversion of crop residue, use of cheap family labour at low opportunity cost and the fact that less land is required for its production.

Table 2: The frequency of goats and sheep in Akwa Ibom State

Animal	Frequency	Percentage (%)	Mean Number/Household
Goats	2658	95.58	6.60
Sheep	123	4.42	0.31
Total	2781	100	

Table 2 shows the frequency of goats and sheep in Akwa Ibom State. It reveals that more goats than sheep were kept by farmers in a ratio of 22 to 1 respectively. This is markedly different from the 3:1 ratio (FAO, 1980) and 4:1 ratio (Velez-Nauer et al, 1982). Goats had a frequency of 2,658 corresponding to 95.50%, while sheep had 123 corresponding to 4.42%. This variation is due to the fact that mutton is not in high demand in the state rather high premium is placed on goat meat. Goats had a higher frequency of twin births than sheep as is presented in Table 3.

Table 3: The number of twin and single births in sheep and goats in Akwa Ibom State

TYPE OF BIRTH	GOATS		SHEEP	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Single	80	33.88	40	32.52
Twin	175	63.17	63	51.22
Tripple	15	5.42	20	22.76
Total	277	100	123	100

Due to its ability of multiple births, which results in a better producing potential, goats have high fertility, which contributes to a higher reproductive efficiency. Kidding/lambing interval of small ruminants is presented in Table 4. It shows that three kiddings from a doe in two years is predominant in Akwa Ibom State. This is in line with Payne (1990), who had it that although two kiddings from a doe in a year is possible, in practice this is seldom achieved. More commonly, three kiddings are obtained in two years and appears to be the pattern for most indigenous goats in the tropics. Small ruminants have a great potential in Akwa Ibom State. However to increase their productivity, it is pertinent to combine proper management systems, nutrition and breeding with good productive herds of these animals.

Table 4: Kidding/lambing interval of small ruminants

INTERVAL	GOATS		SHEEP	
	Frequency	Percentage(%)	Frequency	Percentage (%)
Once/year	82	29.60	46	37.39
Twice/year	55	19.85	27	21.95
Thrice/years	140	50.54	50	40.65
Total	277	100	123	100



### References

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