IDENTIFICATION OF THE CHALLENGES AND PROFITABILITY OF GOAT PRODUCTION IN EBONYI STATE, NIGERIA

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Abstract

The study focused on the identification of the challenges and profitability of goat production in Ebonyi State, Nigeria. The major research objectives are to identify the challenges confronting goat farmers and to determine the profitability or otherwise of goat production in the study area. Due to the relative large population, poposive sampling technique was used to select 390 goat farmers rearing a minimum of 5 goats in each local government area in Ebonyi State. Structured questionnaire was used to solicit information from the farmers. Descriptive statistics was used to analyze the data collected. The result of the study revealed that goat production was a viable business with a good net farm income. The farmers, however, indicated that they are confronted by the following challenges: diseases and pests outbreak, lack of processed feed, poor veterinary services, high cost of transportation, labourious nature of goat farming among many other challenges. Hypothesis 1 and 2 tested was not accepted, indicating that the challenges encountered by the farmers and the management systems adopted affect the profitability of goat farming. It is therefore recommended that the unemployed youths and adults can engaged in goat production as a profitable business. The government and relevant research institutes should, as a matter of urgency, implement farmers' views and perceptions into research and government policies for the development and growth of goat production. Government should provide loan facilities as an incentives to farmers to increase production.

Keywords: Goat Production, Challenges and Profitability

Introduction
Background to the study

Goats are small ruminant animals found all over the region of West Africa and even beyond the African continent. It is one of the oldest domesticated species of animals which occurred in Iran at 10,000 years ago. They are hardy in nature and evenly distributed throughout the Southern and Eastern regions of Nigeria because of their adaptation to the climatic conditions of the regions (Albert an Okidhim, 2012). Nwambe (2009) opined that up to 75% of rural population in Nigeria keep small ruminants to an average herd size of 2-5 animals per household, goats being more in number than other small ruminants. Goats have relatively short breeding cycles, high reproductive efficiency and rapid development (FAO, 1991). Goats are multi-purpose animals that produce manageable amount of meat, milk, skin and fibre for family consumption and sales (Steel, 1996). Nwambe (2009) also noted that goats serve as flexible financial reserve for rural population and play other socio-cultural roles in the customs and tradition of many Nigerian societies. Goats do not compete to an extent with humans for food and usually do not demand large imputs of time and labour. They can also be raised with very mall supplements and minimal shelter, and are easy-care animals. Goat meat is very popular throughout the country and has a great demand in the local restaurants, hotels and the head sells like hot cake in eateries.

Despite the importance of goats in the livestock economy of Nigeria and as a huge source of animal protein in the diets of the teaming population of the country, its breeding and production in Ebonyi State is still basically centred on indigenous West African Dwarf Goat breeds of South East Nigeria (WADG). However, non-indigenous goats like the Sokoto red goat, Bornu brown, Kano red, etc from the Northern parts of Nigeria are sold, slaughtered and eaten in different parts of the country and are difficult to rear under household management as the West African Dwarf Goats.

In Nigeria, as well as most other developing countries, daily animal protein intake is below the food and Agricultural Organization (FAO) standard of 25% per day. In Nigeria, this amounts to only 10g per day (FAO, 1985). Goat rearing in Nigeria makes a significant contribution to the livelihood of the

impoverished families (Ozoje and Mgbere, 2002). The full potential of goat in alleviating poverty and providing the ever increasing demand for animal protein is still largely untapped due to some challenges. The above situation, therefore necessitated the need to embark on the study to find out who are the people involved in goat production? What management practices are adopted. How profitable is goat farming? And what are the challenges of goat production in the study area? What could be possible solution to the problems identified?

Statement of the Problem

A visit to any of the major and local markets gives a good indication of the level of goat production in the study area. The very few number of goats brought to the market for sell puts a lot of pressure on the demand and invariably results to hike in their prices. The situation even becomes worst during festive periods such as Christmas, Easter etc. The constant increase in the cost of beef and other sources of animal protein also demands that more efforts need to be made in order to expand the scope of goat farming in order to increase the output of farmers per year. This can only be achieved by identifying the cause of the low production and also proffer solutions to them.

Moreover, the hardy nature of goats, their docility and their high fecundity rate are some of the attractive features of goat which can go a long way in providing the fastest and cheaper source of animal protein in the state. A family of 10 that cannot afford the cost of one cow, can afford to slaughter one goat and the meat will be enough for the family unlike the chicken in festive seasons.

Purpose of the Study
The general purpose of this research is to identify the challenges and profitability of goat production in Ebonyi State.

Specifically, the study is designed to:
1. determine the demographic data of the goat farmers.
2. identify the management systems adopted by the goat farmers
3. determine farmers benefits from goat rearing
4. ascertain the challenges encountered in goat production
5. identify possible solutions to the identified challenges

6. determine the cost benefit ratio of goat production

Justification of the Study
This study will be beneficial to farmers, researchers, students, governments, NGOs, extension agents and any other individual or group that who may have interest in starting goat farming as business and source of employment.

Scope of the Study
The study covered the 13 Local Government Areas of Ebonyi State. The State is located on latitude 8°E and longitude 7°N of Southern Nigeria. The state is made up of 13 Local Government Areas, which are: Abakaliki, Ebonyi, Izzi, Ezza South, Ezza North, Ikwo, Ohaukwu, Afikpo North, Afikpo South, Ohaozara, Ivo, Onicha and Ishielu.

Research Questions
The following six research questions shall guide the study:
1. What are the demographic data of goat farmers in Ebonyi State?
2. What are the management systems adopted by goat farmers in Ebonyi State?
3. What ways do farmers benefit from goat farming in Ebonyi State?
4. What are the challenges faced by goat farmers in Ebonyi State?
5. What are the possible solutions to the challenges faced by goat farmers in Ebonyi State?
6. What is the annual cost benefit ratio of goat production

Hypothesis
Two null hypothesis guided the study and tested at 0.05 level of significance
They are:
Hypothesis 1
HO_1: There is no significant difference between the contributions of the management systems adopted by goat farmers on the profitability of the enterprise.

Hypothesis 2
HO_2: The challenges faced by farmers is not a significant source of difference in the profitability of goat production.

Methodology
The chapter dealt with: Design of the study, Area of the study, Population of the study, Sample and sampling techniques, Instrument of data collection, Validation of the instrument, Method of data collection, Reliability of the instrument and Method of data analysis.

Research Design
Descriptive survey research design was used for this study. Hence it seeks to find out and describe the nature of the phenomenon.

Area of the Study
The area of the study is the 13 Local Government Areas that make up Ebonyi State which are: Abakaliki, Ebonyi, Ezza South, Ezza North, Ishielu, Ohaukwu, Ikwo, Izzi, Afikpo North, Afikpo South, Ohaozara, Ivo and Onicha

Population of the Study
There are 975 goat farmers in the 13 L.G.As of Ebonyi State which is comprised of 101 from Ebonyi, 108 from Izzi, 90 from Abakaliki, 79 from Ohaukwu, 63 from Ishielu, 84 from Ezza North, 93 from Ezza South, 65 from Ohaozara, 53 from Afikpo North, 48 from Afikpo South, 61 from Ivo, 60 from Onitcha and 70 from Ikwo.
Source: Livestock Unit, State Ministry Agriculture, 2018.

Sample and Sampling Techniques
Owing to the relative large population, poposive sampling technique was used to select 390 goat farmers rearing a minimum of 5 goats in each local government area in the following order: Abakaliki 33, Ebonyi 37, Izzi 46, Ezza North 31, Ishielu 27, Ohaukwu 30, Ikwo 32, Afikpo North 23, Afikpo South 19, Ohaozara 31, Ivo 23, Onitcha 24 and Ezza South 34.

Instruments for Data Collection
The instrument for data collection is structured questionnaire designed by the researcher and titled: Identification of the Challenges and Profitability of Goat Production in Ebonyi State (ICPGPES). The questionnaire is of two sections. Section A will focus on the instruction on the questionnaire while section B will be on the questions 1-6 with their items.

Validation of the Instruments
The instrument for data collection was validated by three experts, two from the Department of animal science while one is from the science Education Department, all from Ebonyi State university.

Reliability of the Instruments
The reliability of the instruments was tested using cronbach alpha method, after a pilot test has been carried out with the goat farmers in Enugu State.

Method of Data Analysis
Data collected were analyzed using descriptive statistics such as frequency counts, means and percentages. A 3 points likert scale with option agreed with nominal value of 3, undecided with nominal value of 2 and disagreed with nominal value of 1 were used to analyze questions 2, 3,4 and 5. A mean value of 2.0 was also used to determine the decision rule. Any item greater than 2.0 is considered agreed while any item below 2.0 is considered disagreed. Question 6 is analyzed using the enterprise budgeting method in determining the profitability in naira (N) of goat production in the state as follows:

$$GM = TR-TVC, \text{ and}$$
$$NFI = GM - TFC \text{ OR } NFI = TR - TC$$
Where:

GM	-	Gross Margin
TR	-	Total Revenue
TVC	-	Total variable cost
NFI	-	Net Farm Income
TFC	-	Total Fixed Cost
TC	-	Total Cost (TVC + TFC)
CBR	-	Cost Benefit Ratio (TR/TC)

When, CBR>1, there is profit, otherwise, there is loss. Annual deprecation values of goat production assets were determined by means of the straight line method of calculating depreciation and given thus:

$$D = \frac{C-S}{L}$$

Where:
D = Annual depreciation expense (N)
C = Cost of fixed Assets (N)
S = scrap/salvage value (N)
L = useful life span (years) (see table 6)
The hypothesis will be tested at 0.05 level of significance using t-test analysis.

Results

Research Question 1:

What are the demographic data of goat farmers in Ebonyi State?

Table 1: demographic data of goat farmers in Ebonyi State

Variables		
Age	**Frequency**	**Percentage**
20-29	30	7.70
30-39	46	11.79
40-49	72	18.45
50-59	101	25.90
60-69	89	22.82
70-79	37	9.49
80 and above	15	3.85
Total	**390**	**100**
Sex		
Male	218	55.90
Female	172	44.10
Total	**390**	**100**
Marital Status		
Single	39	10.00
Married	198	50.77
Widow/widower	106	27.18
Divorced/separated	47	12.05
Total	**390**	**100**
Educational level		
No formal education	63	16.15
First school leaving certificate	69	17.69
SSCE/GCE	78	20.00
OND	51	13.09
HND	25	6.41
NCE	49	12.56
University Degree	17	4.36
Others	38	9.74
Total	**390**	**100**
Farming experience (years)		
1-5	59	15.13
6-10	62	
11-15	87	22.31
16-20	71	18.20
21-28	68	17.44
29 and above	43	11.03
Total	390	100
Membership of cooperative society		
Yes	87	22.31
No	303	77.69
Total	**390**	**100**
Number of goats reared		
5-10	112	28.72
11-15	75	19.23
16-20	91	23.33
21-25	43	11.03
26-30	41	10.51
30 and above	28	7.18
Total	**390**	**100**
Household size (No)		
1-4	109	27.95
5-8	215	55.13
9-12	66	16.92
Total	**390**	**100**

In Table 1, the highest percentage (25.90%) of goat farmers are between the ages of 50-59years. The male farmers were also more in number (218) than the female farmers (172). The mean age of the farmers was 53years. However, a greater number of married people (198) were involved in goat keeping followed by widows/widowers (106). Those less involved in goat rearing (39) were the single persons. On the educational level of goat farmers, those with SSCE/GCE had the highest percentage (20%) while the least involved were the farmers with university degree (4.6%). The highest number (87) of the respondents have been in the business of goat farming for 11-15years and the mean score on years of experience of all the farmers stood at 15years. Furthermore, the highest percentage (77.69%) of the farmers were not members of any cooperative society. The source of finance for the goat farmers was majorly (40%) by personal savings. The result in Table 1 further shows that only 28 farmers reared 30 goats and above while the highest number of farmers (112) kept between 5-10goats. Equally, the result also indicates that the household size of 5-8 persons were more (215) involved in goat rearing followed by 109 household size of 1-4 persons.

What are the management systems adopted by goat farmers in Ebonyi State

Table 2: Management system adopted by goat farmers

S/N	Management system	Mean ($\overline{X}$)	SD	Remarks
1.	Intensive system	1.69	1.20	D
2.	Semi-intensive system	1.98	0.81	D
3.	Free range system	3.22	1.28	A
4.	Tithering	3.14	1.48	A
	Grand mean	**2.51**	1.19	A

Source: field survey data, 2022. A = Agreed; D = Disagreed

Cut of point = 2.0. (M$\geq$ 2.0 means agreed; M<2.0 means disagreed)

The result in Table 2 shows that the respondent agreed on free range and tithering as the major systems of goat management in the study area.

Research question 3:
What ways (purpose) do farmers benefit from goat farming in Ebonyi State
Tabl e 3: Purpose of goat farming

S/N	Purpose	Mean ($\overline{X}$)	Standard deviation (SD)	Remarks
1.	Income generation	2.80	1.20	A
2.	Employment	2.75	0.41	A
3.	Source of meat	2.05	0.84	A
4.	For prestige	0.52	0.80	D
5.	Cultural /traditional values	0.13	0.26	D
6.	Raw material for industries	0.10	1.01	D
7.	Hobby	1.59	1.15	D
8.	Insurance against crop failure	2.26	0.49	A
	Grand mean	1.74	0.88	

Cut-off point = 2.0 (M $\geq$2.0 means agreed; M<2.0 means disagreed)

The mean score of respondents on purpose of keeping goat indicates that majority of the farmers with mean score of 2.80 reared goats mainly for income generation. This was closely followed by the farmers who kept goats as a source of employment with mean score of 2.75. The mean score of 2.26 indicates that a good number of the respondents also rear goats as an insurance against crop failure, while those who keep goat as source of meat scored 2.05.

Research question 4:

What are the challenges faced by goat farmers Rural and Urban Areas in Ebonyi State

Table 4: Mean score on perceived challenges faced by goat farmers Rural and Urban Areas

Challenges	Rural Area			Urban Area		
	Mean ($\overline{X}$)	SD	RMKS	Mean ($\overline{X}$)	SD	RMKS
Diseases and pests	2.98	1.21	A	2.41	1.20	A
Seasonality of feed	2.41	1.19	A	2.56	1.12	A
Labourious nature of goat farming	2.62	0.90	A	2.65	0.81	A
Inadequate labour	1.85	0.60	D	2.71	0.62	A
Lack of processed feed	2.86	0.89	A	2.01	0.87	A
High cost of production	1.13	1.11	D	3.01	1.13	A
Goat theft	2.07	1.26	A	2.10	1.24	A
Poor housing	1.92	0.75	D	2.51	0.66	A
Insufficient fund	2.57	0.43	A	2.60	0.71	A
Poor veterinary services	2.96	0.80	A	2.81	0.82	A
High mortality rate	2.48	0.42	A	2.62	0.79	A
Poor record keeping	1.24	0.75	D	2.11	0.63	A
Unavailability of improved breed	1.13	1.11	D	1.31	1.14	D
High cost of transportation	2.80	0.65	A	2.82	0.71	A
Unavailability of drugs	2.61	0.92	A	2.71	0.77	A
Destruction of farm crops by stray goats	1.73	1.14	D	1.80	0.69	D
Litigation arising from stray goats	1.52	0.80	D	1.61	1.22	D
Poor growth rate	1.28	0.68	D	1.35	0.73	D
Poor marketing	2.10	0.59	A	2.15	0.61	A
Seasonality of demand	2.17	0.60	A	2.25	0.64	A
Scarcity of water in dry season	1.26	0.91	D	2.71	0.62	A
Grand mean	2.08	1.43	A	2.29	1.58	A

Cut-off point = 2.0 (M $\geq$ 2.0 means agreed; M <2.0 means disagreed)

The major challenges faced by goat farmers in the study area and their mean scores in the rural areas are: effects of diseases and pests (2.98), poor veterinary services (2.96), lack of processed feed (2.86), high cost of transportation, (2.80), laborious nature of goat farming (2.62), unavailability of drugs (2.61), insufficient fund (2.57), high mortality rate (2.48), seasonality of feed (2.41), seasonality of demand (2.17), poor marketing (2.10) and goat theft (2.07). However, the farmers in the urban area agreed that all items were major challenges faced except items 13,16,17 and 18.

Research questions 5:

What are the possible solutions to the challenges faced by goat farmers in Ebonyi State.

Table 5: Mean score on possible solutions to the challenges faced by goat farmers

S/N	Challenges	Mean ($\overline{X}$)	SD	RMKS
1	Good management practices will help to control the outbreak of diseases and pests	2.89	0.36	A
2	Intensive system of goat rearing will prevent goats from destroying people's farm crops	2.62	0.29	A
3	Availability of processed feed at affordable price will control the scarcity of goat feed	2.08	0.48	A
4	Sinking of more boreholes in the local government areas by the government will control water scarcity	0.14	0.80	D
5	Provision of loan and credit facilities by the government will be a great incentive for the goat farmers to increase production	2.20	0.96	A
6	Recruiting and posting of more veterinary personnels to the local government areas will help in controlling diseases outbreak	2.11	1.81	A
7	More extension agents, if posted to the local government areas by the government, will expose the farmers to modern methods of goat keeping	1.60	1.20	D
8	The provision of more accessible roads by the government will reduce the cost of transportation	1.57	1.26	D
9	Good record keeping will help the farmers in calculating their profit and loss and the expansion of their farms	1.25	0.75	D
10	Provision of improved breeds by the government for the farmers will boost goat production in the state.	1.11	0.63	D
	Grand mean	1.76	0.79	

Cut-off point = 2.0 (M ≥ 2.0 means agreed; M <2.0 means disagreed)

In Table 5, the mean scores of the farmers responses on the possible solutions to the challenges is presented. A total of 5 out of 10 responses were major solution to the challenges with the highest mean scores presented as follows: good management practices (2.89), intensive system of goat rearing will prevent goats from destroying people's crops (2.62), provision of loan and credit facilities to farmers by the government (2.20), recruiting and posting of veterinary personnels to the study area (2.11) and availability of processed goat feed at affordable price (2.08).

Research Question 6:

What is the cost benefit ratio of goat production

Table 6: Cost benefit ratio of goat production

Factor		
Total revenue		**695,610**
Sale of 5 adult she goats at N45,685		228,410
Sale of nine (9) adult he goats at N42,950		386,550
Sale of 6 kid goats at N12,500		75,000
Sale of compost manure at N5,650		5,650
Total revenue (TR)		**695,610**
Variable cost (VC):		
Cost of purchasing 5 young she goats at N15,950		79,750
Cost of feed		32,980
Cost of labour		60,000
Cost of drugs/veterinary services		35,250
Goat house maintenance		10,460
Total variable cost (TVC)		**218,440**
Fixed cost (FC):		
Depreciation on goat house		58,890
Depreciation on bus/truck		32,240
Annual interest on loan		58,000
Total Fixed Cost (TFC)		**149,130**
Total Cost (TC=TVC + TFC)		367,570
Gross Margin (GM = TR-TVC)		477,170
Net farm Income (NFI = GM – TFC)		328,040
Cost benefit ratio (TR/TC)		1.90

Source: field survey data, 2022.

The cost benefit ratio is as presented in Table 6. Enterprise profitability is calculated as the excess of total revenue over total cost. The calculation was done using enterprise budgeting and return on investment methods. The data indicates that the cost of purchasing young she goats constituted (N79,750) seventy nine thousand, seven hundred and fifty naira followed by cost of labour which stood at sixty thousand naira (N60,000). The total revenue was N695,610.00; total cost, N367,570.00. The net farm income was three hundred and twenty eight thousand, and fourty naira (N328,040.=) while the cost benefit ratio (return on investment) was N1.90.

HYPOTHESIS I

HO_1: There is no significant difference between the contributions of the management system adopted by goat farmers on the profitability of the enterprise

Table 7: t-test analysis mean rating on free range and tithering management systems of respondents on profitability of goat farming

Management System	N=390	Means ($\bar{x}$)	3D	DF	t-cal	t-tab	Decision
Free range	200	3.22	1.28				
Tithering	190	3. 14	1.48	388	4.21	1.96	Not accepted
Grand mean	390	3.18	1.38				

Field surrey data, 2022.

Result in table 7 shows that all the t-cal (4.21) were greater than t-tab value of 1.96 at 0.05 level of significance and 388 degree of freedom on respective items. This indicated that management systems adopted by farmers have different significant inputs on the profitability of goat farming. The null hypothesis (HO_1) was therefore rejected.

HYPOTHESIS 2

HO_2: The challenges faced by farmers is not a significant source of difference in the profitability of goat production.

Table 8: t-test analysis on the mean rating of challenges faced by farmers to profitability of goat production.

Variable	N	Means ($\bar{x}$)	SD	DF	t-cal	t-tab	Decision
Rural farmers	200	2.61	1.43				Not accepted
Urban farmers	190	2.32	1.58	388	1.98	1.96	
Grand mean	390	2.47	1.51				

Source field surrey data, 2022

Result in Table 8 shows that t-calculated (1.98) is greater than t-tab (1.96) at 0.06 level of significance and 388 degree of freedom. The null hypothesis was not accepted indicating that challenges encountered by farmers significantly affect the profitability of goat farming.

Discussion

The demographic data of the goat farmers

The demographic data of goat farmers in the area studied shows that the highest percentage of the farmers were between the age of 50-59years which is inline with the report of Albert and Okidhim (2012); Ugwumba and Okeke (2012). The mean age of 53years could mean that the farmers may have retired from public service or about to retire, hence they engaged in goat farming as another means of self-employment and income generation. The result further shows that more married people were involved in goat rearing, most of whom were males, with majority of them having SSCE/GCE as the highest educational attainment. The mean score (15years) of the farming experience of the respondents is a good indication that education and experience are veritable tools for acquiring new ideas and skills that bear positively on productivity, income and better living (Ike and Ugwumba, 2011). The high unemployment rate in the country may have compelled the idle youths and others with basic education to go into goat rearing as a means of employment and income generation. Majority of the farmers with household size of 5-8 is an indication that large households have more cheap family labour at their disposal for goat rearing. This finding is in consonance with the report of Ajala et al (2003). The result further indicated that the farmers funded the goat farming business from personal savings, and were not members of any cooperative societies.

Management system adopted by goat farmers

The highest number of the respondents adopted tithering and free range systems of goat rearing which indicates that most of the farmers have not adopted the modern intensive method of rearing in the study area. This could be attributed to the heavy capital demand of the intensive system and the level of education of most of the farmers. Majority of the farmers were males with much energy that enabled them to practice the tithering system which involves a lot of labour. There is need to create awareness on the importance of adopting modernized intensive and semi-intensive goat farming systems in the area as it will boost the level of production and increase the income of the farmers.

Purpose of rearing goats

Majority of the farmers reared goats as a source of income generation and self-employment which implies that the goat rearing families depended majorly on the business as a means of livelihood and a way of improving their standard of living. The income generated from the goat rearing can go into their educational needs, healthcare, housing and for the general socio-economic wellbeing of the family. This report is inline with the findings of Ezeibe (2012) who opined that the income generated in goat production will consequently improve the standard of living in families as it can go into children's educational needs, offsetting medical bills, meeting clothing needs, improving the quality of family food and savings for future needs. From the results, a good number of the respondents reared goats as insurance against crop failure, which implies that most rural families that are self-employed make maximum use of their time by engaging in both crop and livestock farming.

Challenges confronting goat farmers in the study area

The respondents, both in the rural and urban areas, indicated to have many challenges confronting them. The major ones includes: the effects of diseases and pests, poor veterinary services, lack of processed feed, high cost of transportation, labourious nature of goat farming, unavailability of drugs; insufficient fund, high mortality rate, seasonality of feed, poor marketing and goat theft. All these impacted negatively on the success and profitability of goat farming in the study area. On the area of goat theft, Albert and Okidhim (2012) noted that restriction of goat because of theft and custom, affects their growth. In his own work, Ezeibe (2012) opined that goat productivity is constrained by poor management and understanding of many values of goats and of strategies for improved natural resources management in target environments. He further averred that lack of understanding of economic and social values of goat by developers and scientists, undoubtedly restrict goat production. The seasonality of feed has equally impacted negatively on goat production especially during dry seasons. During such periods, farmers engage extra hands in search of fresh grass and browse materials which invariably adds to the total cost of production. This is corroborated by Aina et al (2003) that the systems of small ruminants production in Nigeria are usually characterized by limitation posed by year round non-availability of feed resources due to prolonged dry season.

Lack of drugs and poor veterinary service has lead to high mortality rate incurred by farmers in the study

area. The high cost of transportation reported by the farmers could be attributed to the constant increase in the pump price of petroleum products in Nigeria which further cuts down on the income of the farmers.

Solution to the challenges faced by goat farmers
The farmers agreed that the following were solutions to the challenges confronting them: good management practices, intensive system of goat rearing, provision of loan and credit facilities for the farmers by the government, recruiting and posting of veterinary personnels to the area and availability of processed goat feed in the market at affordable prices, among others. In the area of management, tithering, and free range systems still practiced by the farmers is not only archaic but equally limits the scope of production and profitability. This finding is supported by the result of Ezeibe (2012) who noted that poor management practices is one of the major problems against improved goat production. This has to change so as to make goat rearing business a sustainable venture. On the area of feed, feed millers should come to the rescue of the farmers by providing processed feed for the small ruminants at affordable price. Increasing demand and subsequent high cost of conventional animal feed ingredients in the tropic has created the need for sustainable alternatives, particularly natural feed resources indigenous to the region (Fajemisin et al, 2009). This search for alternative feed resources has over the past few decades rekindled research interests in the use of tropical browse and medicinal plants as sources of nutrients for ruminants as well as non-ruminants (Okeli et al 2002).

Cost benefit ratio of goat production
The cost benefit ratio shows that goat production in the study area is a viable business with net farm income of N328,040 and cost benefit ratio of 1.90. The finding corroborates the report of Ezeibe (2012) that about 50% of goat farmers studied has an income of between N101,000 – N150,000 per annum from goat production. In his own report, Albert and Okidhim (2012) noted that for every N1.00 invested in goat business, a profit ratio of N3.44 was yielded which implies that goat production is profitable.

Conclusion and Recommendations
Based on the results, it has been established that goat production is a viable venture with a good return on investment. This therefore implies that the teaming jobless youths and retired but not tired civil servants in the labour market, can engage in goat farming as a veritable source of employment and income; which will invariably alleviate the level of poverty occasioned by the dwindling economy of the country. However, for this to be achieved, a lot of sensitization and improvement are required on the areas of challenges confronting farmers in the area. More extension agents should be posted to all the L.G.As of the state to educate the farmers on the need to embrace more modern intensive method of goat farming instead of tithering and the semi-intensive methods practiced by the farmers at present. This, if done, will reduce the cost of labour and increase the level of production and profitability. The government and relevant research institutes should as a matter of urgency, implement farmers views and perceptions into research and government policies for the development and growth of goat production. Government should equally do better by providing loan and credit facilities as an incentive to farmers so as to increase production.

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