CHARACTERISTICS OF BACKYARD LIVESTOCK FARMING IN ETSAKO CENTRAL LOCAL GOVERNMENT, EDO STATE.

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ABSTRACT
The study was carried out to describe the characteristics of backyard livestock farming in Etsako Central Local Government Area of Edo State. A multi stage sampling technique was used to select three out of six districts in the Local Government Area with a well structure questionnaire administered to 210 randomly selected respondents while only 162 were retrieved. Data collected were analyzed using descriptive statistics and inferential statistical tools. The results revealed that majority (61.7%) of the respondents were female with all (100%) of them not older than 50 years in age. Most (58%) of the them has minimum of secondary education and are involved in only poultry rearing (38.9%) while about 27.2% rears both poultry and small ruminants. The result revealed that majority (58.7%) of the respondents practice extensive system of rearing with no fewer than 92% of respondents engaged in backyard livestock rearing for income purpose. Inadequate capital (75.3%), activities of predators (51.2%) high cost of feeding animals (41.4%) remains the most reported severe constraints to livestock rearing. It is recommended that stake holders should make financial supports in terms of grants and single digit loan available to the respondents while factors that contribute to high cost of livestock feed be looked into as these will increase the profitability of backyard livestock farming in the study area.

Key words: Backyard livestock, Socio-economic characteristics, Livestock farming

INTRODUCTION
Livestock plays various and important roles in rural livelihoods, providing both direct and indirect benefits to people. According Saleh et al, (2015) to them, the lack of economic resources and small land properties, among other factors make it difficult to develop large scale production systems in rural areas worldwide. Backyard farmers are people that rear their animals in the backyard of their homes. Typically, a flock of 10 to 50 sheep or 10 to 100 birds are raised. They are mostly low-wage workers living in peri-urban or rural areas. Backyard livestock production is an important activity for rural communities around the world, representing a constant source of food, income, and savings as well as providing social status within the community (Saleh *et al.,* 2015). In most developing nations, Farm households benefit greatly from backyard production systems in terms of sustainability and improved living conditions as they increase their animal protein intake and generate extra income for the family.

The broad objective of this study was to describe the characteristics of backyard livestock farming in the study area and specifically analyze the socio-economic characteristics of the respondents in the study area, ascertain the level of involvements of respondents, examining the benefits derived by respondents and identifying the constraints militating against backyard livestock farming in the study area.

METHODOLOGY
The study was carried out in Etsako central Local Government Area of Edo State. Etsako central Local Government Area is one of the eighteen local government areas in Edo state. The local government share boundaries with Etsako East, Etsako West, Esan south east and river Niger with farming as predominant livelihood. The local government has 6 districts out of which 3 were selected namely, Ekperi, Fuga- Avianwu, and Okpekpe. Yamane's Formula was used to calculate the sample size. Yamane's Formula is normally used to calculate smaller household population size . (Israel 2013). A 95% confidence level and P = 5%, 7% and 10% are also assumed for different population size by the equation below.

$$n=N/(1+N(e)^2)$$

Where
n is the sample size,
N is the population size and
e is the level of precision.

The estimated total population of Etsako central local Government Area is123,400 (NPC, 2006). According to the formula, the sample size derived was 210 households with the respondent not younger than twenty-one years old. A total of 162 well-structured questionnaires were administered to 3 districts out of the 6 districts, this was due to the concentration of respondents practicing backyard farming in the study area. Forty-seven (47), Seventy-five (75) and forty (40) questionnaires were administered to Ekperi, Fugar and Okpekpe districts respectively. Data collected were analyzed using descriptive statistics and inferential statistical tools.

RESULTS AND DISCUSSION

Socio-economic Characteristics of Respondents

Table 1: Socio-economic Characteristics of Respondents

	Frequency (n=162)	Percentage
Gender		
Male	62	38.3
Female	100	61.7
Age range (Years)		
21-30	31	19.1
31-40	70	43.2
41-50	61	37.7
51 and above	0	0
Educational Status		
No formal education	17	10.5
Completed primary school	51	31.5
Completed Secondary school	46	28.4
ND/HND/Degree	46	28.4
Post graduate	02	01.2
Marital Status		
Single	32	19.8
Married	115	71.0
Divorced	0	0
Separated	15	9.2
House Hold Size		
2-4	47	29.0
5-7	92	56.8
8-10	23	14.2
Primary Occupation		
Artesian	16	09.9
Civil servant	75	46.3
Crop farming	22	13.6
Livestock farming	31	19.1
Trading	16	09.9
Fish farming	2	01.2

Source: Field Survey, 2022

The result in table 1 shows that most (61.7%) of the respondents were female with all (100%) of them not older than 50 years in age. This is in agreement with the findings of Adeyemo, (2016) and Win *et al.,* (2018) who reported that women are more in backyard livestock farming than men however the findings defers from submission of Maikasuwa and Jabo (2011) and Saleh *et al.,* (2015) that most of respondents in similar study in the Northern part of the Nation were male. Meanwhile the age range reported in the study was similar to that of Saleh *et al.,* (2015) but differs from Win et al (2018) who reported most participants between forty and sixty years of age. This suggests that location may contribute to the age status of participants in backyard farming. No less than 58% of the respondents has minimum of secondary education with implication that they are all well-read. This is in agreement with past studies (Oyelami *et al.,* 2022, Maikasuwa and Jabo 2011, Saleh *et al.,* 2015, and Mugisa *et al.,* 2017). The table also revealed that majority (46.3%) of them are civil servants, married (71%) with household size (56.8%) of 5-7 members.

Involvement in backyard livestock farming by respondents

Table 2: Distribution according to involvement in backyard livestock farming by respondents

	Frequency (n=162)	Percentage
Type of livestock kept		
Poultry Only	63	38.9
Poultry & Small Ruminants	44	27.2
Small ruminant only	20	12.3
Small ruminants & Cattle	2	1.2
Cattle only	17	10.5
Other livestock	16	9.9
Years of Experience		
1-5 years	56	34.6
6-10 years	38	23.4
11-15 years	31	19.1
16-29 years	22	13.6
Above 20 years	15	09.3

Source: Field Survey, 2022

Table 2 shows that most (38.9%) of the respondents are into only poultry rearing while about 27.2%, 12.3%, 10.5% and 9.9% rear poultry & small ruminants, ruminants only, cattle only and other livestock respectively. This agrees with earlier reports (Oyelami *et al*., 2022, Olafadehan and Adewumi 2010; Adeyemo, 2016). The result further revealed that most (34.6%) of the respondents has maximum of five years of backyard livestock farming experience while only 9.3% have been in the practice for over twenty years.

Management System Used

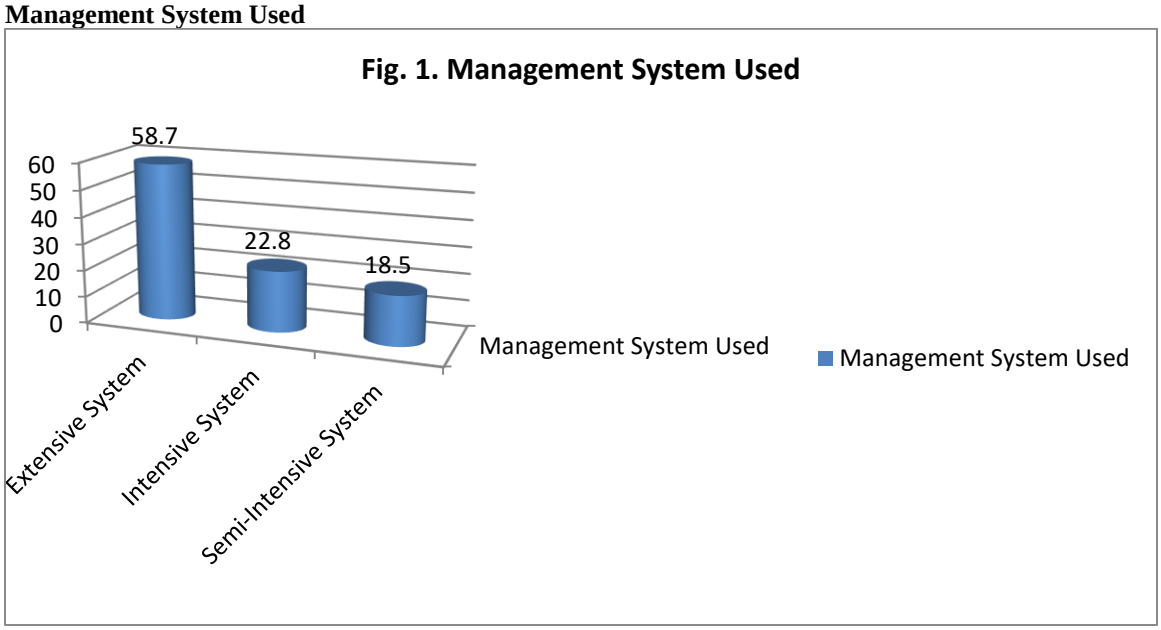

Figure 1 shows the distribution of the management systems adopted by the respondents in the study area. The result revealed that majority (58.7%) of the respondents are practicing extensive system of rearing leaving the livestock to be roaming about with little or no shelter provider. Next to this is the semi-intensive system (22.8%) of rearing in which the animals are left to move about in the day time while a minimal shelter is provided at night. This result is slightly differs from the findings of Ahmed and Egwu (2014), who reported that majority of their respondents in backyard ruminant farming practiced semi-intensive system.

Benefits of involvement in backyard livestock farming in the study area

Table 3: Distribution according to benefits derived from backyard livestock farming by respondents

Benefits	No Freq. (%)	Undecided Freq. (%)	Yes Freq. (%)
Provision of animal protein for the family	67(41.4)	64(39.5)	31(19.1)
Provision of additional animal protein for the family	0(0)	162(100.0)	0(0)
Source of additional income for the family	0(0)	20(12.3)	142(87.7)
Provision of farm yard manure for sale	78(48.1)	69(42.6)	15(9.3)
Provision of farm yard manure for family use	16(9.9)	146(90.1)	0(0)
Serves as pet	66(40.7)	96(59.3)	0(0)
Serves as prestige for the family	0(0.6)	161(99.4)	0(0)

Source: Field Survey, 2022

The single most important benefit of the backyard livestock farming is additional source of income for the family (87%) while provision of animal protein was enjoyed by 19.1% of respondents. Some respondents (9.3%) are exploring sales of livestock manure to interested farmers. It is interesting to note that no respondents saw ownership of backyard livestock as a source of prestige.

Constraints in backyard livestock farming in the study area

Table 4: Distribution according to constraints in backyard livestock farming in the study area

Constraining Factors	Severe Freq. (%)	Mild Freq. (%)	Nil Freq. (%)
High cost of feeding	67(41.4)	64(39.5)	31(19.1)
Inadequate water	59(36.4)	80(49.4)	23(14.2)
Market location	53(32.7)	15(9.3)	94(58.0)
Change in climate	37(22.8)	16(9.9)	109(67.3)
High cost of disease management	22(13.6)	94(58.0)	46(28.4)
Bad road	15(9.3)	15(9.3)	132(81.5)
Inadequate power supply	83(51.2)	31(19.1)	48(29.6)
Inadequate access to credit facility	122(75.3)	39(24.1)	1(0.6)
High cost of labour	44(27.2)	80(49.4)	38(23.5)
Inadequate access to Extension agents	70(43.2)	63(38.9)	29(17.9)
Activities of middle-men	7(4.3)	31(19.1)	124(76.5)
Activities of predators	83(51.2)	78(48.1)	1(0.6)
Loss of livestock to road accident	30(18.5)	68(42.0)	64(39.5)

Source: Field Survey, 2022

Table 4 revealed that inadequate capital (75.3%), activities of predators (51.2%) as well as high cost of feeding animals (41.4%) remain the most severe constraint to livestock rearing after. This agrees with previous findings (Oyelami *et al.,* 2022, Saleh *et al.,* 2015) in related studies. This findings reveals that prices of livestock feed in the study area should be considered to encourage the participants in the industry. The observation on high activity of predators could be as a result of practicing extensive system management that allows the livestock roaming about on free range.

Crosstab results

Table 6: Summary of the Chi-Square test of association between system of management and age, gender and level of education.

	Chi-Square	df	p-value	
Management system vs Age	76.799	4	0.000	S**
Management system vs level of education	39.955	8	0.000	S
Management system vs Gender	29.963	2	0.000	S

Table 6 shows the association between management practices adopted by the respondents and their ages, gender and level of education. The result shows that there exists significant relationship between all the variables cross tabulated with the management system. Although further investigation revealed a weak relationship between management and gender as well as management and level of education with implication that there is a gender and level of education of the respondents influenced their choice of management system however the result reveled a stronger association between age and management system of choice with implication that age affected the type of management practices to a greater extent in the study area.

CONCLUSION AND RECOMMENDATIONS

Backyard livestock farming as revealed by this study is one of the most important sources of livelihood among the female folks in the study area as many of the sampled individuals in the study area used it as their primary sources of income. It was determined that many young individuals in the study area are involved in backyard livestock farming at various levels with chicken been the livestock kept by majority in the study area. In this study we discovered that apart from funding, activity of predator as well as high cost of feeding are most reported constraints among the backyard livestock farmers in the study area. It is recommended that stake holders should make financial supports in terms of grants and single digit loan available to the respondents while factors that contribute to high cost of livestock feed be looked into as these will increase the profitability of backyard livestock farming in the study area. It is also important to recommend that more potable water points be provided in the study area especially at Fugar district as this will reduce the cost of water for livestock.

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