

Effects of Goat Theft on Women Farmers in Rural Communities of Kwara State, Nigeria

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Abstract

The concern for incessant theft of goats in the rural communities and its attendant consequences on the wellbeing of the resource-poor women farmers in Kwara State informed this research. The specific objectives of the research are to describe the socioeconomic characteristics of women farmers, identify the sources of information on goat production, examine the management practices used in goat rearing, enumerate the reasons for involvement in goat rearing, investigate the pattern of goat theft in the study area, examine the perceived effects of goat theft on the farmers, and identify the coping strategies used by farmers against goat theft. A three-stage sampling technique was employed in the selection of 160 respondents from 4 Local Government Areas (LGAs) each from the 4 agro-ecological zones in Kwara State. Data was collected using interview schedules and analyzed using frequency counts, percentages, mean scores, Spearman Rank Order Correlation and Kendall Tau's Statistics. Findings from the study revealed that a typical respondent in the study area was aged 69 years. 66.3% were married with an average household size was 9 persons. Less than half (42.5%) of the respondents had primary education and an average herd size of 12 goats. Respondents also had an average of 12 years of goat farming experience with an average annual income of 45,000 Naira. Further analysis showed that Household size (0.185, $p < 0.05$) and average annual income (0.153, $p < 0.05$) have a positive significance on the severity of goat theft. Also, Herd size (0.234, $p < 0.05$) and years of experience (0.228, $p < 0.05$) have a positive significance on the coping strategies adopted by the farmers. The study therefore concludes that incidence and pattern of goat theft has a linkage with the goat production system used by the women as extensive and semi intensive goat production systems allow the goats to roam freely in the villages to scavenge without much security and monitoring. This factor is probably taken as an advantage by offenders to steal the goats. The theft is severe at nights and during dry seasons as the animals stay longer scavenging. The effects of goat theft as indicated by respondents are decimation of stock population, food insecurity and low productivity. The study therefore, recommends that NGOs and other Government agencies should as a way of empowering rural women, support in building goat sheds for women farmers as a way of reducing scavenging of goats and theft.

Key words: Effects, Goat Theft, Women Farmers, Rural Communities,

Introduction

Livestock animals domesticated in agricultural settings not only for food, fiber and milk but also for safety net purposes particularly during off seasons. They are often regarded as producers of milk and

meat, income generators, and reservoirs of wealth (Coppock *et al.*, 2006). Imai (2003) believes that livestock farming plays an important role in helping households to cope with negative shocks, because

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livestock provide diversification of income sources as farmers can easily sell their livestock to get cash. Heffernan and Misturelli (2000) also stated that the vulnerable groups, particularly women and the landless, frequently engage in livestock production. This shows the myriads of potentials of livestock production in eradication of extreme poverty and hunger. The State of Food and Agriculture report for 2009 concluded that rural women are as likely as men to keep livestock, although the numbers of animals they keep tend to be lower and they are more likely to own poultry and small ruminants than large animals (FAO, 2009). According to Elliot *et al.* (1998), sheep and goats are animals that are favorites for the poor because they are cheap to manage and they mature early and breed readily, therefore increase in number quickly. Goat rearing is a popular enterprise in rural areas especially among women who consider goats as companions and keep them for many other reasons. Goat is a good source of meat, milk, manure, hides and skin, fiber, and wool. These products are further processed to produce yoghurt, cosmetics, leather shoes and bags and many

other products. To this end, goat population has witnessed a positive growth rate in the last 20 years (Morand-Fehr, 2003).

In recent time, goat theft has been a prevalent crime in rural communities. When the goats stolen, they are taken far away from the area to be sold to people who buy them to keep, resell or use for other purposes. Moreover, factors that actually predispose goats to theft are not yet known. This study is therefore poised to provide insights into the subject matter with a view to bridging the existing knowledge gap on the causes and effects of theft of goats on rural women. In view of the foregoing, this study is designed to describe the socio-economic characteristics of women who engaged in goat rearing, identify the sources of information on goat production in Kwara State, Nigeria, examine the management practices used in goat rearing, enumerate the reasons for respondents involvement in goat rearing, investigate the patterns of goat theft in the study area, examine the perceived effects of goat theft on farmers and identify the coping strategies adopted by the farmers against goat theft in Kwara State, Nigeria.

Methodology

The study was carried out in Kwara State, Nigeria. The projected population of Kwara State stood at 2,748,148 (National Bureau of Statistics, 2012). Goat rearing is a common enterprise in virtually all rural communities in the State, particularly among the women. The State Agricultural Development Programme (KWADP) has 4 administrative zones (A, B, C & D) spreading over the 16 Local Government Areas. A three-stage sampling technique was employed in the selection of respondents from the study area. Stage one

involved the purposive selection of one Local Government Area each from the 4 ADP zones. The Local Government areas selected are; Baruten LGA in Zone A, Edu LGA in Zone B, Ilorin South LGA in Zone C and Oke Ero LGA in Zone D. Stage two involved a random selection of 2 communities from the communities from each of the selected LGAs. The communities are; Ilesa Baruba and Okuta in Baruten LGA, Kusomonun and Songa in Edu LGA, Kangile and Joromo Osin in Ilorin South LGA and Ilofa and Ekan in

Oke Ero LGA. The final stage involved a random selection of 20 respondents from the list of registered women goat farmers from each of the selected communities giving a sample size of 160 respondents. Data collection was done using interview schedule. Data obtained was analyzed using

descriptive statistics such as; frequency counts, means and percentages, while inferential statistics such as Spearman Rank Order Correlation and Kendall Tau Statistics were used in testing the two hypotheses.

Results and Discussion

Table 1 Socioeconomic characteristics of the women goat farmers

Age (yrs)	Frequency	Percentage (%)	Mean
21-30	2	1.3	69 Years
31-40	18	11.3	
41-50	37	23.1	
51-60	53	33.1	
61-70	37	23.1	
71-80	11	6.9	
81-90	2	1.3	
Marital status			
Single	10	6.3	
Married	106	66.3	
Divorced	16	10.0	
Widowed	28	17.5	
Religion			
Christianity	32	20.0	
Islam	122	76.3	
Others	6	3.8	
Household size			
<3	21	13.1	9 Persons
4-6	41	25.6	
7-9	53	33.1	
>10	45	28.1	
Educational qualification			
No formal education	21	13.1	
Primary school	68	42.5	
secondary school	56	35.0	
Post secondary education	15	9.4	
Herd size			
<10	86	53.8	12 Goats
11-20	45	27.1	
21-30	5	3.2	
31-40	6	3.8	
41-50	5	3.2	
51-60	6	3.8	
61-70	2	1.2	
>71	5	3.1	

Table 1 (Contd.)

Age (yrs)	Frequency	Percentage (%)	Mean
Years of experience in goat farming			
<10	49	30.6	15 Years
11-20	68	41.6	
21-30	27	16.9	
31-40	11	6.9	
>41	5	3.2	
Average Annual income on goat farming			
<30,000	72	45.0	45,500 Naira
31,000-60,000	40	25.0	
61,000-90,000	11	6.9	
91,000-120,000	3	1.8	
121,000-150,000	7	4.4	
151,000-180,000	4	2.5	
181,000-210,000	2	1.3	
>211,000	21	13.1	

Source: Field survey, 2017

Table 1 shows the socioeconomic characteristics of the respondents. The study found that the mean age of the respondents was 69 years. This simply implies that the women goat farmers are no longer in their active and productive age and have resulted to goat production. Also, majority (66.3%) of them were married while the average household size was 9 persons. Large household size could allow for cheap family labour and this is corroborated by the findings of Mignouna *et al.* (2013) who documented an average of 9 persons per family in the study on rural communities. The literacy level of the respondents was poor as less than half (42.5%) of them indicated primary education. Education is relevant if farmers are to access and apply livestock technology appropriately (Marinda *et al.*, 2006). Furthermore, a typical farmer in the study area had 12 goats while the average farming experience among respondent was 15 years. Ihaenacho (2000) opined that farming experience is directly related to managerial know-how and decision making. Also, the mean average annual income from goat production as indicated by the respondents stood at N45, 500 00. This shows that

(Rahman, 2008) the satisfaction derived in terms of income from agriculture by women is low.

Table 2 Frequency of access to extension services

Source of information	Frequency	Percentage %
Radio	12	7.5
Television	5	3.1
Goat farmers association	11	6.9
Friends and neighbors	60	37.5
Extension agents	72	45.0

Source: Field survey, 2017

Table 2 shows that majority (54.4%) of the respondents had access to extension services on annual basis, 33.8 % of them indicated fortnightly, 6.3% had quarterly while only 5.6% had access to extension services on monthly basis. This shows that access to extension service in the study area was poor. However, 33.8% of the respondents who indicated access to extension service could have taken veterinarians for extension agents as observed by Boz (2011) that goat farmers

have more travels to cities, and have more contacts with veterinarians.

Table 3 Goat production system

Goat production system	Frequency	Percentage %
Extensive	81	50.6
Semi-intensive	75	46.9
Intensive	4	2.5

Source: Field survey, 2017

Table 3 shows that about half (50.6%) of the respondents practiced extensive system, 46.9% practiced semi-intensive system while the remaining 2.5% of them practiced intensive system. This is in consonance with the findings of Ajala and Gefu (2003) who observed that small ruminants were mostly managed under extensive system in Northern Nigeria.

Table 4 Management practices among farmers

Management practices	Regularly	Occasionally	Never	Mean	Rank
Sanitation	65 (40.60)	92 (57.50)	3 (1.90)	2.8	1 st
Disease prevention/control	130 (81.3)	28 (17.5)	2 (1.3)	2.8	1 st
Feeding	128 (80.00)	30 (18.80)	2 (1.30)	2.7	3 rd
Monitoring of goats health	47 (29.4)	95 (59.4)	18 (11.3)	2.2	4 th
Marketing of goats	40 (25)	116 (72.5)	4 (2.5)	2.2	4 th
Provision of water	8 (5)	131 (81.9)	21 (13.1)	1.9	6 th
Care of the pregnant doe	1 (0.6)	132 (82.5)	27 (16.9)	1.8	7 th
Vaccination	5 (3.10)	99 (61.90)	56 (35.00)	1.7	8 th
Breeding Management	1 (0.4)	87 (54.4)	72 (45)	1.6	9 th
Record keeping	4 (2.5)	22 (13.8)	134 (83.8)	1.2	10 th

Source: Field survey, 2017

Table 4 shows that cleaning of goat house and disease prevention and control ranked 1st respectively, feeding ranked 3rd. while record keeping had the least (10th) ranking. This implies that respondents recognized the need for adequate sanitation, provision of feeds and disease prevention as important

activities to enhance productivity in goat production enterprise. However, respondents were yet to appreciate that Yami (2009) record keeping is an important and necessary aspect of operating even the smallest farming enterprise and showed in Table 4.

Table 5 Respondents reasons for involvement in goat rearing

Reasons	Strongly agree	Agree	Undecided	Disagree	Strongly disagree	Mean	Rank
Safety Net Reasons	97(60.6)	63(39.4)	-	-	-	4.6	1 st
Economic Reasons	105(65.6)	54(33.8)	-	1(0.6)	-	4.6	1 st
Food Security Reasons	81(50.6)	70(43.8)	7(4.4)	2(1.3)	-	4.4	3 rd
Religious Reasons	71(44.3)	56(35.0)	2(1.3)	27(16.9)	4(2.5)	4.0	4 th
Cultural Reasons	16(10.0)	75(46.9)	14(8.8)	53(33.1)	2(1.3)	3.3	5 th
Social Reasons	13(8.1)	38(23.8)	3(1.9)	98(61.3)	8(5.0)	2.7	6 th

Source: Field survey, 2017

Table 5 represents the respondents' reasons for involvement in goat production. Safety net reasons and economic reasons ranked 1st. Food security reasons ranked 3rd and religious reasons ranked 4th, cultural reason ranked 5th while social reason ranked 6th. The above findings shows that most of the women farmers keep goats for economic and safety net reasons. This result is in agreement with the findings of Baah (2012) who reported that financial motivation was a key in raising sheep and goats among urban households.

Table 6 reveals the number of goats the respondents have lost to theft. 80% of the respondents have lost 0-5 goats to theft, 14.4% have lost about 6-11, 2.5% have lost about 12-17 and 3.1% have lost 18-23 of their goats to theft. Only 12.5% of the respondents have never lost their goats to theft. This implies that goat theft had assumed a wider dimension in the study area and something drastic may need to be done in order not to send the resource-poor farmers out of goat rearing business.

Table 6 Number of goats lost to theft in the last 1 year

Number of goats	Frequency	Percentage %	Mean
0-5	128	80.0	5 Goats
6-11	23	14.4	
12-17	4	2.5	
18-23	5	3.1	

Source: Field survey, 2017

Table 7 shows the pattern of goat theft in the study areas. The result revealed that goat theft was most severe among Bucks which ranked 1st, Does ranked theft of goats during dry season ranked 2nd respectively while theft of goats during scavenging ranked 4th. The theft of pregnant goats had the least (11th) ranking. The above result shows that the mature goats (bucks and does) were mostly stolen probably because of their economic values. Also, during dry seasons, the animals stay longer on scavenging and this makes it easy for offenders to steal them as theft occurs in the absence of the owners.

Table 7 Pattern of goat theft on farms in the study area

Severity of goat theft in terms of	Very severe	Severe	Undecided	A little severe	Not severe	Mean	Ranking
Bucks	42(23.6)	109(68.1)	-	3(1.9)	6(3.8)	4.1	1 st
Does	24(31.3)	108(67.5)	2(1.3)	7(4.4)	9(5.6)	4.0	2 nd
Dry Season	43(26.9)	98(61.2)	2(1.3)	14(8.8)	3(1.9)	4.0	2 nd
While on Scavenging	25(15.6)	116(72.5)	-	13(8.1)	6(3.8)	3.9	4 th
Night	31(19.4)	72(45.0)	1(0.6)	30(18.8)	26(16.3)	3.3	5 th
Day Time	14(8.8)	76(47.5)	3(1.9)	55(34.4)	12(7.5)	3.1	6 th
Number of goats stolen	9(5.6)	45(28.1)	-	95(59.4)	11(6.7)	2.7	7 th
Rainy Season	9(5.6)	54(33.8)	1(0.6)	43(26.9)	53(33.1)	2.5	8 th
While in Confinement	-	24(15.0)	16(10.0)	79(49.4)	41(25.6)	2.4	9 th
Infants	14(8.8)	16(10.0)	11(6.9)	34(21.3)	85(53.1)	2.0	10 th
Pregnant Goats	9(5.6)	13(8.1)	4(2.5)	56(35.0)	78(48.8)	1.9	11 th

Source: Field survey, 2017

Table 8 Perceived effects of goat theft on women farmers

Perceived effects	Strongly agree	Agree	Undecided	Disagree	Strongly disagree	Mean	Rank
Decimation of goat population	38(24.1)	114(72.2)	5(3.2)	1(0.6)	-	4.2	1 st
Food insecurity	49(30.6)	89(55.6)	3(1.9)	17(10.6)	2(1.3)	4.0	2 nd
Low productivity	52(32.5)	73(45.6)	8(5.00)	21(13.1)	6(3.8)	3.9	3 rd
Psychological trauma on the path of owner	40(25.0)	76(47.5)	3(1.9)	40(25.0)	1(0.6)	3.7	4 th
Low survival chances of kids	31(19.4)	62(38.8)	9(5.6)	48(30.0)	10(6.3)	3.4	5 th
Increased vulnerability	14(8.8)	68(42.5)	5(3.1)	69(43.1)	4(2.5)	3.1	6 th
Cultural insecurity	9(5.6)	74(46.3)	3(1.9)	67(41.9)	7(4.4)	3.0	7 th
Poverty	26(16.3)	38(23.8)	2(1.3)	86(53.8)	8(5.0)	2.9	8 th
Social insecurity	7(4.4)	64(40.0)	1(0.6)	83(51.9)	5(3.1)	2.9	8 th
Impediment of religious and cultural practices	16(10)	49(30.6)	11(6.9)	75(46.9)	9(5.6)	2.9	8 th
Inability to pay children's school fees	11(6.9)	34(21.3)	7(4.4)	101(63.1)	7(4.4)	2.6	11 th
Unemployment	8(5.0)	30(18.8)	6(3.8)	106(66.3)	10(6.3)	2.5	12 th
Inability to foot health bills	8(5.0)	19(11.9)	8(5.0)	120(75.0)	5(3.1)	2.4	13 th
Broken family ties	7(4.4)	9(5.6)	15(9.4)	97(60.6)	32(20.0)	2.1	14 th

Source: Field Survey, 2017

Table 8 shows the perceived effects of goat theft on the respondents. Decimation of goat population ranked 1st, food insecurity ranked 2nd while low productivity ranked 3rd. Psychological trauma on the path of owner, low survival chances of kids, Increased vulnerability, Cultural insecurity, Impediment of religious and cultural practices, Social insecurity, Poverty, Inability to sponsor education of children, unemployment ranked 4th, 5th, 6th, 7th, 8th, 11th and 12th respectively while inability to foot health bills and broken family ties ranked 13th and 14th. This result indicates

that theft leads to decimation in the goat population, food insecurity and low productivity were the most perceived effects of goat theft in the study area. Theft of the matured goats also leads to reduced productivity because the owners have to wait for the kids to mature before reproduction. These findings disagree with the findings of Dzimba and Matooane (2005) who indicated that as a result of stock theft, many children left school at early stage because parents cannot afford to pay for their schooling.

Table 9 Coping strategies adopted by farmers against goat theft

Coping strategies	Strongly agree	Agree	Undecided	Disagree	Strongly disagree	Mean	Rank
Use of identification tags	76(47.5)	82(51.3)	-	1(0.6)	1(0.6)	4.4	1 st
Selling goats at maturity	57(35.3)	99(61.9)	-	3(1.9)	1(0.6)	4.3	2 nd
Feeding goats with crop residues and kitchen wastes	65(40.6)	89(55.6)	-	5(3.1)	1(0.6)	4.3	2 nd
Building of goat house	40(25.0)	117(73.1)	-	2(1.3)	1(0.6)	4.2	4 th
Petty trading	39(24.4)	113(70.6)	3(1.9)	4(2.5)	1(0.6)	4.1	5 th
Improvement of security	48(30.0)	102(63.8)	-	8(5)	2(1.3)	4.1	5 th
Crop farming	3(1.9)	89(55.6)	18(11.3)	45(28.1)	5(3.1)	3.3	7 th
Reducing stock	26(16.3)	46(28.8)	6(3.8)	75(46.9)	7(4.4)	3.1	8 th
Use of intensive system	12(7.5)	83(51.8)	6(3.8)	48(30.0)	11(6.9)	2.2	9 th

Source: Field survey, 2017

Table 9 revealed that putting identification tags on animals was ranked 1st, as the coping strategy adopted by the farmers. Selling goats as soon as they mature and feeding goats with crop residues from farms and kitchen wastes to avoid scavenging were the other coping strategies mostly adopted by the women farmers as they both ranked 2nd. Use of intensive system of production had the least (9th) ranking as a coping strategy against goat theft.

Test of hypothesis

H₀₁: There is no significant relationship between some selected socioeconomic characteristics of the respondents and the pattern of goat theft in the study area.

Table 10, shows the relationship between socioeconomic characteristics of respondents and the pattern of goat theft. Household size (0.185, $p < 0.05$) and average annual income (0.153, $p < 0.05$) are significant and positively related to pattern

Table 10 Kendall's tau-b showing the relationship between some selected socioeconomic characteristics of the respondents and pattern of goat theft

Variable	Co-efficient	P-value	Significant status
Household size	0.183*	0.018	S
Herd size	0.010	0.894	NS
Years of experience	-0.040	0.588	NS
Average income	0.153*	0.038	S

** Significant at $p < 0.05$

of goat theft in the study area. It could be inferred that respondent on higher annual income and large household size are more likely to fall victim of goat theft.

Conclusion and Recommendations

Women goat farmers in Kwara State have poor access to extension service and experienced loss of average of five goats over a period of one year and this mostly happened during dry seasons while the animals are scavenging. The pattern of goat theft has a linkage with the goat production system used by the women as extensive and semi intensive goat production systems allow the goats to roam freely in the villages to scavenge. Goat theft is severe at nights and during dry seasons as the animals stay longer scavenging. The effects of goat

theft as indicated by respondents are decimation of stock population, food insecurity and low productivity. The study therefore, recommended that NGOs and other Government agencies should as a way of empowering rural women, support in building goat sheds for women farmers as a way of reducing scavenging of goats and theft. Extension agents are also encouraged to provide capacity building services to enhance livestock productivity and women farmers' wellbeing.

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