

Socio-economic and cultural functions of goats in Niger Delta of Nigeria: Implication for education of farmers

C. N. IKEOJI

Delta State University, Abraka, Nigeria

ABSTRACT

Data on the socio-economic profiles of goat keepers were collected by structured interviews from 67 respondents who were involved in keeping goats. Oral interviews were used to collect information from Christian pastors, priests, and idol worshippers on their accepted use of goats for worship. Further information on limitations of goat keeping and cultural functions of goats were collected by oral and structured interviews from the respondents. Results showed that goat keeping was not popular in the study area because the people did not cherish goat meat; they see goats as destructive, dirty, and often associated with witchcraft. Forty-six percent of the respondents practised free range, and 18 per cent confined their goats. Goats were, however, found to be widely used during burial ceremonies, marriages, sacrifices, and atonement for certain wrongdoings. Most goat keepers were in the age range of 30 to 49 (73%); while 58 per cent of them were literate, and 42% did not have formal education. Farmers in the study area need education on the diverse use of goat meat and other products to create awareness on the place of goats in meeting the nutritional needs of people in the area.

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Introduction

Over 90 per cent of the world's nearly half billion goats (*Capra hircus*) are found in developing countries; many weigh less than 35 kg fully grown (NRC, 1991). Goats are small ruminants often weighing between 60 and 100 kg for the commercial breeds, while some micro-goats may

weigh less than 15 kg. They are selective browsers, and can subsist on many feedstuffs that would otherwise be left to waste. They may become stubborn and aggressive when threatened or thwarted, and can prove hard to confine (NRC, 1991).

The two important aspects of goats are to meet

man's social, cultural and recreational needs; and to provide meat, milk, fibre, and skin (Devendra, 1981). The NRC (1991) also reports that to many people, especially where pigs and poultry are not common, meat and milk from micro-goats are the primary animal protein consumed during a lifetime.

The socio-economic importance and cultural functions of goats have been discussed by several authors (Devendra, 1981; Okello & Obwollo, 1984; Ademosun, 1985; NRC, 1991; Ajala, 1995). Okello & Obwollo (1984) reported that goats can be given as part of dowry in marriage or as gifts to important persons at fund-raising functions.

Peters & Deichert (1984) observed that goats are reared not only for additional income, but also to have specific functions on occasions such as religious or family festivals or both, and marriages or burial of deceased relatives. Ajala (1995) reports that castrated he-goats (with male reproductive organs removed) attract higher market prices, and such meat is a delicacy in some restaurants and hotels.

Food production in Nigeria is still low. Between 1970 and 2000, agricultural production in Nigeria grew at 1.7 per cent per annum compared to its population growth of 2.7 per cent, increasing the problem of malnutrition and poverty. According to Ugbomeh (2002), the indications are that the level of protein consumption is much less now in Nigeria (the number of food-insecure people increased by over 26 per cent, and the prevalence of undernourishment increased by 0.3 per cent per year in the 1990s) as a result of the harsh economic conditions in the country. John (1993) reported that the necessary condition for the survival of any country is its ability to organize the production of food in sufficient quantity and quality for its people. Food shortages, especially in third-world countries like Nigeria, could be potential sources of social and political instability.

However, certain socio-economic factors affect the adoption of agricultural innovations and, by implication, agricultural productivity (Atala, 1984). Such socio-economic factors include sources of

agricultural information, literacy, awareness, formal education, social participation, ownership of land, farm incomes, farm labourers, level of living, community status, age, and farm size. Specifically, Ekpo & Olaniyi (1995) reported that the lives of Nigerians are characterized by poverty, misery, morbidity, and underdevelopment. Thus, according to Ekpere, Weideman & Ernie (1982), Nigeria is now faced with a situation in which the demand for food is rising compared to food supply; therefore, prices of foodstuffs have been increasing at a rapid rate. Consequently, supplies of protein food are inadequate, particularly for little and growing children, resulting in pronounced malnutrition with concomitant high infant mortality.

In the Niger Delta region of Nigeria, goat rearing is largely restricted to a few farming families, and goats are often left to roam in the streets. Goat meat is also seldom sold in the village markets, because its consumption is not popular.

Goat production in the Niger Delta part of Nigeria is not fully developed now to provide its quota of protein needs of the people. The socio-economic and cultural functions of goats need to be studied to improve its production in the area.

The main purpose of this paper was to determine the socio-economic and cultural functions of goats in the Niger Delta region of Nigeria.

Specifically, the paper sought to:

- i) determine the socio-economic and cultural functions of goats in Niger Delta part of Nigeria;
- ii) determine factors limiting goat rearing in the study area; and
- iii) assess the implications of the findings for educating farmers for improved production.

Materials and methods

The study area was Delta and Edo states in the Niger Delta region of Nigeria. The Local Government Areas (LGAs) are 43 in the two states (25 in Delta and 18 in Edo). Twelve LGAs were randomly selected from the study area, comprising

seven from Delta and five from Edo. Two farming communities were randomly selected from each LGA, totalling 24 communities. A random sample of six farming families were chosen from 20 communities, while eight and nine farming families were selected from three and one other communities, respectively, because of their high concentration of farming families. This yielded a random sample of 153 households identified in the two states.

However, the data for this study were part of a study to investigate the training needs of rural farmers in Delta and Edo states. This study, therefore, included the 67 respondents who agreed to keeping or selling goat meat. The small sample was because of the earlier remark that goat keeping was not a popular farming practice in the study area. The remark seems to be supported by the NRC (1991), which remarked that in some places there was a strong prejudice against goats and goat meat.

Data collection was by oral interview and structured interview schedules. The structured interviews were used to collect data about the socio-economic profiles of the respondents and reasons for rearing goats.

Ten Christian pastors or priests and five traditionalists were orally interviewed on the role of goats in sacrifices or offerings. The Christian pastors were those of the Anglican, Christ Embassy, Baptist, and Catholic faiths. Others were the Cherubim and Seraphim and the Brotherhood of the Cross and Star (Olumba Olumba Obu). The respondents were considered adequate because those interviewed were religious heads, and the beliefs of the wider congregation were summarized in their strict adherence to the religion's beliefs as directed by the leaders. Reliability for the instrument used was established using the split-half method. The items on the instrument were divided into two and their scores collated as A and B; the two sets of scores were then correlated using The Spearman Brown prophesy formula to obtain a reliability coefficient of 0.87. The coefficient was adjudged by the researcher as

adequate for the study. Thorndike & Hagen (1969) remarked that the appealing convenience of the split-half method had caused its wide application. Data were analyzed using frequencies and percentages.

Results

Socio-economic profile of goat keepers

The goat keepers in the study area provided their age profile by responding to the structured interviews (Table 1). Few respondents (9%) were adults of 60 to 69 years. About 6 per cent were of the age range of 50 to 59, while the largest group was 40-49 (46.2%). Those in the age range of 30 to 39 were 26.9 per cent, while rearers between the age of 20 to 30 were 11.9 per cent. The group mean was calculated to give 41.8 years. This implies that most goat keepers are middle-aged people. They are usually heads of families who are at the peak of their productive years.

Most goat rearers were males (77.61%) while 22.38 per cent were females. About 58 per cent of the goat keepers had some form of education ranging from primary six certificate to first degree, while 42 per cent had no form of formal education.

Table 2 shows that management systems adopted by the goat keepers were largely extensive or free range (69%). Few goat keepers (18%) kept their goats in confinement, while the semi-intensive system was adopted by 13 per cent of the farmers.

In some communities, such as Ovu in Ethiopia East Local Government Area of Delta State, goats were banned from roaming the streets, for which reason the owners were compelled to restrict or confine them. Sometimes the owners sent the goats to neighbouring communities where no such bans were in force.

Factors limiting goat rearing in Niger Delta

Table 3 shows some important factors that limit goat rearing in the Niger Delta. The respondents generally agreed that, culturally, their people did not cherish goat meat; hence, it was seldom sold in the village markets, as was mentioned by 68.7

TABLE 1

Age and Sex Distribution of Goat Keepers in the Study Area

<i>Age range</i>	<i>Number</i>		<i>Male & female</i>	<i>%</i>	<i>Mean age</i>
	<i>Male</i>	<i>Female</i>			
60-69	6	-	6	9.0	
50-59	3	1	4	6.0	
40-49	23	8	31	46.2	
30-39	14	4	18	26.9	41.8
20-29	6	2	8	11.9	
Total	52(77.61%)	15(22.38%)	67	100	

Source: Field Work

TABLE 2

Distribution of Respondents by Management Systems in the Study Area

<i>Management system</i>	<i>Number</i>	<i>Percentage</i>
Intensive (total confinement)	12	18
Semi-intensive	9	13
Extensive (free range)	46	69
Total	67	100

Source: Field Work

per cent of the respondents. They also thought that goats made the environment dirty (52.2%), and were very destructive (67.2%). This is why a ban is in force in some communities on leaving goats to roam the neighbourhoods. In communities that practice home or backyard farming, the ban is significant.

A saying in one community in Delta State implies that the goat is sneaky enough to be used to practice witchcraft. This accounted for 35.8 per cent of the responses. Some respondents (28.4%) said that some people disliked goat meat because of its peculiar smell, especially the he-goat. In some families, when they slaughter goats, they give them out to other people as gifts even when they may not eat the meat. Even among the religious bodies, rams (especially white rams) were more acceptable for thanksgiving as against goats.

The place of castrates, as reported by Ajala (1995), was not significant in the study area because castration was almost non-existent in most communities. Castration was rather practiced more with pigs.

TABLE 3

Factors Limiting Goat Rearing in the Study Area

<i>Factor</i>	<i>F</i>	<i>% response</i>
Goat meat not cherished as a source of animal protein	46	68.7
Goats make the surrounding dirty	35	52.2
Goats are destructive especially for home farms	45	67.2
Goats are associated with witchcraft	24	35.8
Goat meat has a peculiar smell disliked by some people	19	28.4

Source: Field Work

Socio-economic importance of goats in Niger Delta

There was an overriding agreement in the study area that goats are traditionally used during marriages, burial ceremonies, ancestral worships, and other traditional sacrifices.

Among the Urhobos, Isokos and Ijaws, a she-goat is usually slaughtered when a man or woman with children is being buried. The use of a she-goat is significant for the children of the deceased. Slaughtering a she-goat marks the end of the traditional rites.

Also, a male goat is usually slaughtered for the in-laws when a maiden is escorted to her husband's house. Some communities believe that blood of the goat slaughtered purifies the woman. In parts of Utagbu-Unor, castrates are used widely for charms and to make certain protective wares more potent.

Idol worship in rivers and sacrifices are commonly carried out using goats of various types, depending on the circumstance. A he-goat is the choice when the 'gods' need to be appeased to save the life of a man, while a she-goat is the choice when a woman is involved. Traditionally, a goat is bought (Table 4) and slaughtered if a married woman pushes down her husband during a quarrel or fight in parts of Ukwani and Ndokwa in Delta State.

The place of goats in religious worship

The spread of Pentecostal churches in the study area has significantly improved the use of goats for thanksgiving, irrespective of whether it is a whole goat or a castrate. As reported by Ajala

(1995), the belief among the Christians is that Christ has paid the ultimate price for our redemption, and so any offering from a Christian is acceptable before God. The Christian religious bodies (Roman Catholic, Baptists, Christ Embassy, and the Anglican) ordinarily accepted goats for thanksgiving as sources of protein for entertainment during Christian feasts and burials. In the Brotherhood of the Cross and Star (Olumba Olumba Obu), feasting is a common feature in their worship, and they freely use goat meat.

Among some Muslim families, especially in parts of Edo North, goat is a common feature in their Salah festivals, and they do not discriminate between castrates or non-castrates (Ajala, 1995).

For the traditionalist, the practice is not much different from what obtains in South-Eastern Nigeria (Ajala, 1995). Each type of goat (male or female) is required for specific sacrifice.

However, a goat castrate is specially required for some traditional charms, as reported earlier in parts of Ukwani LGA in Delta State. Thus, although a castrate is regarded as unwholesome, it is of special significance in certain traditional sacrifices such as protective charms for youths in warfare.

Implications for educating farmers in Niger Delta

The results of this study have implications for farmers' education as a way of boosting production of goats in the Niger Delta.

Some factors limiting goat production in the area were related to cultural beliefs of the people, such as not cherishing goat meat as a protein

TABLE 4

Market Values of Goat Types in the Study Area

Type	Unit price (₦)	Equivalent (US\$)
Average-sized he-goat	3500	26
Average-sized she-goat	4500	33
Average-sized castrate	4800	35

Source: Field Work

source and goats being destructive to home farms. These factors were found to be related to the finding that 69 per cent of the farmers adopted the free-range system, which opened the home farms to destruction. Farmers in the area need to be educated on the advantages of using intensive systems, because goat keepers who adopted such systems expressed higher net profit from their business and had higher standard of living compared to those who adopted the extensive system. Ajala (1995) reported that goat production proved to be profitable using intensive systems in South-Eastern Nigeria, including improved production, higher production efficiency, and less exposure of animals to environmental hazards.

Furthermore, the results of this study showed that the average age of the farmers was 41.8. This shows that many farmers were middle-aged and still energetic and active to be provided with further information concerning goat production. Goats require care for better results, because they are selective browsers and can subsist on many food stuffs that would otherwise be left to waste (NRC, 1991). To confine goats, therefore, requires knowledge about feeding goats effectively in confinement, which is more popular in the South-Eastern states of Nigeria (Ajala, 1995).

Generally, the potential of goats for meat, milk and skin is far from being fully exploited in Nigeria, especially in the Niger Delta. Among the uses of goats, the only one that seems understood in the study area is goat for meat. Although milk breeds of goats are not common in Southern Nigeria (Anyanwu, Anyanwu & Anyanwu, 1979), goats introduced from the northern parts of Nigeria have thrived well, suggesting that other breeds can be adapted to exploit other uses of goats in the area. It seems farmers in the study area know little about milk production from goats. This needs to be further investigated to educate farmers on the varied uses of goats and their products.

Conclusion

The study determined, in more specific terms, the socio-economic and cultural functions of goats

in the Niger Delta region of Nigeria. It was noted that the bulk of the people who kept goats were in the age range of between 30 and 49 (mean, 41.8), and were made up of 58 per cent literates and 42 per cent illiterates. Goat keeping is not a popular farming practice because the people did not cherish goat meat as a protein source. Goats were seen as stubborn, destructive, and dirty.

However, goats were significant for burial ceremonies, marriages, religious festivals and traditional sacrifices, and used to atone for wrongful deeds. Small breeds of goats are common in the developing world, but because they are often raised for subsistence rather than for commerce, the national and global contribution they make is often overlooked. The developing world's animal production is only a fraction of what it should be; hence, undernourishment in this part of the world is on the increase. The findings of this study show that in addition to such problems associated with animal production in the study area, the sociological disposition of the people tend to contribute to a diminishing access of the people to cheap source of protein.

This paper, therefore, concludes that protein intake in the study area can be improved by educating the farmers and the people on the role that goat meat could play in their nutrition. Goat meat may be the only available source of animal protein to some people in the area when compared to chicken, beef or pork, which attract higher prices in the study area. The economic and nutritional importance of goats need to be brought to limelight in the study area to encourage more serious keeping of goat.

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