

Profitability analysis of goat marketing in Ado Ekiti metropolis, Ekiti State, Nigeria

*Bamigboye, F. O., Sodiq, A. R. and Oluwasusi, J. O.

Department of Agricultural Sciences,

Afe Babalola University, Ekiti State, Nigeria



*Corresponding E-mail: familade@yahoo.com or bamigboyefo@abuad.edu.ng

Abstract

Profitability of a livestock business has a great influence on its sourcing, distribution and sustainability. Thus, this study was carried out to determine the profitability of goat enterprise. A total of sixty respondents were randomly selected from two major markets in Ado-Ekiti metropolis (Shasha and Oja-Oba markets). Data were collected through the use of structured questionnaire coupled with personal interview on socio-economic characteristics of the respondents, cost and returns from goat marketing. Data collected were analyzed using descriptive statistics and budgeting analysis. The results on socio-economic characteristics showed that goat marketers were predominantly married (63.3%) and relatively old (with a mean age of 58 years) in the study area. Mainly, goat marketers in the study area (75%) had household ranging between 6 and 10 members. Majority (53.3%) had over 10 years of experience in the business. The costs and returns analysis showed that mean Total Variable Cost (TVC) incurred in the marketing of goats per annum was N489, 700.00 while the mean Total Revenue (TR) was N720, 000.00 and the mean Gross Margin (GM) per seller was N230, 300.00. The results implied that goat marketing in the study area is a profitable business involving both young and old, male and female, educated and illiterate.

Keywords: goat marketers, Gross Margin, profitable, educated and illiterate

Introduction

Agricultural production is a multidisciplinary system with a complex structure comprising over ten economy branches (Kolosov *et al.*, 2013). At the same time plant growing and livestock farming (cattle, sheep and goat) are the main structuring industries (Yali *et al.*, 2011; Umeh *et al.*, 2011). However, livestock breeding and other related activities is one of the most important sectors of agriculture providing the population with food and essential raw materials supplying many branches of the industry including processing, marketing, as well as raw material to the manufacturing industries (Endris and Negussie, 2011). The sound management and conservation of this resource is one of the priority issues of the global strategy for sustainable development (Kolosov *et al.*, 2013).

In Nigeria therefore, goat is one of the major protein suppliers to its populace and the world as a whole. Nigeria has population of about 34.5 million goats, 22.1 million sheep and 13.9 million cattle (Lawal and Adebawale, 2012). The larger proportion of these animals' population is largely concentrated in the northern region of the country than the southern part. Specifically, about 90 percent of the country's goat population and 70 percent of the sheep and cattle populations are concentrated in the northern region of the country. Concentration of Nigeria's livestock industry in the northern region is most likely to have been influenced by the ecological condition of the region which is characterized by low rainfall duration, lighter sandy soils and longer dry season (Lawal and Adebawale, 2012). Hence, markets and marketing activities are very essential for the distribution of the goats to

Profitability analysis of goat marketing in Ado Ekiti metropolis

the final consumers. Goats are among the main meat producing animals in developing countries and the choicest meat with huge domestic demand (National Agricultural Extension and Research Liaison Services, 1990; Bourn *et al.*, 1994). Besides meat, goats provide products like milk, skin, fibre and manure (Prasad, 2010). Antonio and Silver (2011) predicted that demand for livestock products will be doubled in the next 20 years due to world population increase, urbanization and economic growth. This provides excellent opportunity for goat producers and marketers. However, focus in the past years had only been on increased productivity and not on effective and efficient marketing system to cater for the perceived industrialization and commercialization of animal agriculture in Nigeria (Amogu, 2010; Udedibe, 2010). This has the possibility of limiting the potential profitability of goat marketers from observed declining goat production in south west, Nigeria. Goat producers may not be enthusiastic to produce when marketers are not offering good prices to them as middle men in the goat marketing chain offered ridiculous prices for the local breeds. This possibly has led to effective marketing of breeds of goat from northern Nigeria, making northern breeds of goat more popular and acceptable among goat consumers. Goat supply, currently, does not meet with consumer's demand across time and space. Consequently, there are differences in prices paid by the consumers. Consumption patterns, however, may well have changed since these data were collected. Sheep and goats contribute about 35% of total nation meat supply (Food Agriculture Organization, 2003). The domestic production and noted importation are together still not enough to meet more than 60% of actual demand

(Mbanasoor, 2000). Accurate statistics on livestock production and marketing are not available and therefore, detailed projections of the supply and demand of the livestock subsector cannot be realistically made. It is clear, however, that over the last decade the supply of meat, milk and eggs has failed to keep pace with the increasing population (Amogu, 2010). Profitability of a business has a great influence on its sustainability; hence, the profitability of goat marketers in Ado-Ekiti metropolis, Ekiti state, Nigeria was examined.

Materials and methods

Study area

This study was carried out in Ado-Ekiti metropolis, Ekiti State, Nigeria. The area is mainly an upland zone, rising over 250 meters above sea level. It has a tropical climate with its characteristic high temperature all year round. The place is a tropical climate with two distinct seasons. These are the raining (April to October) and dry (November to March) seasons. Agriculture (crop farming) forms the base of the overall development thrust of the area.

Sampling method

Multi-stage sampling technique was used for the study. In the first stage, Ado Ekiti metropolis was purposively selected from the state due to the availability of major markets. Shasha market and Oja-Oba were purposively selected due to the high level of goat marketing activities. Lastly, 30 goat marketers were then randomly selected from each of the markets from the list of goat marketers in the market development programme making a total of 60 goat marketers. This is done on the basis of market accessibility, sizes of the market and the number of buyers and sellers of the goats.

Data analysis

Information on socio-economic

characteristics of goat marketers, cost and return from goat marketing was obtained using structured questionnaire and interview schedule. Descriptive statistics such as mean frequency distribution and percentages were employed to analyze the socio-economic data while the gross margin analysis was used to determine the cost and revenue in goat marketing.

The model used for the estimation of the gross margin according to Olukosi and Ernabor (1988) as

$$GM = GI - TVC$$

GM = Cross Margin

GI = Gross income

TVC = Total variable

The benefit cost analysis is also used to check for the acceptability of the project

$$\text{Benefit Cost Ratio} = \text{Total Revenue} / \text{Total}$$

cost

Results and discussion

The age distribution of the respondents is presented in Table 1. Minority (3.3%) of the goat marketers in the study area were within 30 years of age while majority (31.7%) was more than 60 years. The mean age of the goat marketers in the study area was 58 years. By implications many of the goat marketers were far above the productive marketing age, hence their quantity of sales was expected to be lower than those of the young goat marketers. The aged people have less physical energy to exert on such demanding agricultural activity. This will have a negative influence on their sales, decision making and productivity (Baruwa, 2013).

Table 1: Age distribution of goat marketers in Ado Ekiti Metropolis, Ekiti state, Nigeria

Age	Frequency	Percentage
30	02	3.3
31-40	09	15.0
41-50	11	18.3
51-60	12	20.0
61 -70	19	31.7
70 and Above	07	11.7
Total	60	100.0

Mean age = 58 years

Source: Field Survey, 2016

The distribution of the respondents by marital status is presented in Table 2. About 63.3% of the goat marketers were married, 21.7% were widow/widower and 15% divorced. Since most of them were married and advanced in age, family labour was expected to be employed by the respondents. In essence, the cost expended on labour and offloading is also expected to be reduced. Also it confers some level of

emotional stability on the respondents and this may have a positive link with the marketing performance. It is worthy to note that there were no singles among the respondents. Singles in the study area were not fascinated by this agro-enterprise. This is probably because most youths prefer white collar jobs or probably still depending on their parents for their means of livelihood.

Table 2: Distribution of respondents by marital status

Marital Status	Frequency	Percentage
Married	38	63.3
Widowed	13	21.7
Divorced	09	15.0
Total	60	100.0

Source: Field Survey, 2016

Profitability analysis of goat marketing in Ado Ekiti metropolis

The distribution of the respondents by household size is presented in Table 3 and it is expected that the size of the household should affect the amount of labour provided in goat marketing. It was observed that 16.7% of the goat marketers had household size of about 5 members, 75% had between 6-10 members while the

rest 8.3% had more than 10 members. The result revealed that the goat marketers had fairly large families which may serve as family labour in the sales of their goats and offloading. This agrees with Ekong (1988), who found that more than half of the respondents had family size ranging between 6 and 10.

Table 3: Distribution of respondents according to household size of goat marketers in Ekiti state of Nigeria

Household Size	Frequency	Percentage
1-5	10	16.7
6-10	45	75.0
11	5	8.3
Total	60	100.0

Source: Field Survey, 2016

The distribution of the respondents by years of goat marketing experience is presented in Table 5. Minority (21.7%) of the goat marketers had more than 21 years of goat marketing experience while majority

(53.3%) had between 11 and 20 years of experience. This implied that majority of the traders had appreciable years of trading experience that will help them improve trading operations and efficiency.

Table 4: Experience of goat marketers in the business in Ado Ekiti Metropolis, Ekiti State, Nigeria

Years of experience	Frequency	Percentage
1-10years	15	25.0
11-20years	32	53.3
Above 21years	13	21.7
Total	60	100.0

Source: Field Survey, 2016

Shown in Table 5 is the educational status of goat marketer in Ado-Ekiti, Ekiti metropolis. Most (31.7%) of the goat marketers had primary education, 26.7% had secondary education and 30% of the goat marketers had no formal education. It means that sales of goats in the study area were done mostly by literate. It was noted that most of the respondents were educated females. However, this is in disparity to the

findings of Familade *et al.* (2011) who reported that majority of the female respondents were illiterate. The reason for this discrepancy may be connected to the high level of education of Ekiti state. Ogunfiditimi (1981) and Meretiwon (1981) remarked that education is vital to the success of agricultural production and enhance the effectiveness of agricultural extension agent's work.

Table 5: Educational level distribution of goat marketers Ekiti state of Nigeria

Educational level	Frequency	Percentage
No formal education	18	30.0
Primary school education	19	31.7
Secondary school education	16	26.7
Tertiary education	07	11.7
Total	60	100.0

Source: Field Survey, 2016

Bamigboye, Sodiq and Oluwasusi

Presented in Table 6 is the monthly income of the goat marketer in Ado-Ekiti, Ekiti metropolis. It was revealed that most (60%) of the goat marketers earned between N11,000 and N15,000 per month while 15% earned over N16,000 per month. This implied that an appreciable number of goat marketers earned a little below the

minimum wage/salary. This low level of income generation may be connected to the fact that most of the respondents in the study area were old people who may not be ready to take too many risks. As a matter of fact, this low income may scare away youth that may want to choose marketing of goats as lucrative business in the near future.

Table 6: Distribution of goat marketers by monthly income

Monthly income (₦)	Frequency	Percentage
10, 000	15	25.0
11,000-15,000	36	60.0
16, 000	09	15.0
Total	60	100.0

Source: Field Survey, 2016

Revealed in Table 7 is the profitability analysis of the goat marketers. The result of gross margin analysis showed that mean total variable cost incurred in the marketing of goats per annum was N489, 700.00. This implied that goat marketing is profitable in the study area; hence the traders can

continue this trade in the location. While the mean total revenue was N720, 000.00 and the mean gross margin per seller was N 230,300.00. However, the result of the benefit cost ratio showed that for every ? 1 invested in the marketing of goat ? 1.45 is returned.

Table 7: Distribution of goat sellers according to cost and return incurred in goat marketing in Ekiti state of Nigeria.

Costs	Amount (₦)	TOTAL(₦)
Variable cost		
Cost of purchase	390,000	
Feeding cost	15,500	
Transportation cost	60,000	
Medication cost	12,200	
Middlemen cost	12,000	
Total variable cost		489,700
Fixed cost		
Temporary house cost	3,000	
Market revenue charges	4,000	
Total fixed cost		7,000
Total cost		489,700
Total revenue		720,000
Benefit cost ratio		1.45
Gross margin		230,300

Source: Field Survey, 2016

Constraints can be regarded as forces militating against human progress and development. The goat marketers have constraints which they encountered in the trading process. The constraints by

includes; Low capital, Inadequate shelter for goats, High bills of consulting veterinary doctor, high cost of feed, long distance to market, buying of stolen goats to sell, fluctuation in demand and inadequate

Profitability analysis of goat marketing in Ado Ekiti metropolis

market information. Fluctuation in demand (1.7%) and inadequate market information (25%) were worthy of note. It implied that there is high demand for goats in the area and inadequate market information constrained the marketer from meeting the demand. About 20% of the respondents had financial problems (low capital). This is an indication that financial constraint was very prominent among goat marketers in the study area. This might be attributed to the fact that majority of the goat marketers did not have access to credit facilities from

the government or any formal source besides their personal savings. This reduced their trading capacity, productivity and they encountered difficulty in maintaining sales peak. About 13.3% of the sampled goat marketers claimed that there was inadequate shelter for their goats, since cost of shed will add to the cost of production. About 16.7% of the goat marketers laid emphasis on long distance to the market as constraint which has reduced patronage and hence reduction in sales and profit.

Table 8: Distribution of respondents according to constraints of goat marketing in Ekiti state of Nigeria

Facilities	Frequency	Percentage
Low capital	12	20.0
Inadequate shelter for goats	08	13.3
High bills of consulting veterinary Doctor	06	10
High cost of feeding		
Long distance to market	06	10
Buying of stolen goats to sell	10	16.7
Fluctuation in demand	01	1.7
Inadequate market information	15	25
Total	60	100

Source: Field survey, 2016

Conclusion

This study on the socio-economic analysis indicated that goat marketing was female dominated and that most of the goat marketers were relatively old (with a mean age of 58 years) in the study area. However, the large household size of the marketers contributed their income thereby reducing the cost of labor and the gross margin analysis showed that goat marketing is a profitable business.

References

Amogu, U. 2010. Markets and Marketing Challenges in Nigeria Livestock Business. In: *Pro. Diversify the Economy: Animal production option.* (Ifut, O.J., Eds), University of Uyo,

Antonio, R. and Silvia, S. 2011. Livestock Thematic paper: Tools for Project Design, *World Animal Review.* Pp 1-6.

Balkrishna, B. R. and Kalia, A. S. 2008. Socio-economic Impacts of Freedom from Livestock Diseases and Export Promotion in Developing countries, Livestock Discussion Paper, no3,

Food and Agricultural Organizations of the United Nations. (FAO). Rome.

Banda, L. J, Dzanja, J. L. and Gondwe, T. W. 2011. Goat Marketing Systems and Channels in Selected Markets of Lilongwe district, Malawi. *Journal of Agricultural Science and Technology,* 54(1):1200-

1203

- Baruwa O. I. 2013.** Empirical Analysis of Costs and Returns to Goat Production under Tropical Conditions. *Research Journal of Animal Sciences*, 7: 13-17.
- Bourn, D., Wint, W., Blench, R. and Woolly, E. 1994.** Nigeria Livestock Resources Survey. Distribution in Cattle Slaughtered at Kombolcha Elfora Meat Factory, Ethiopia. *American-Eurasian J. Agric & Environ. Sci.*, 11(2): 173-176.
- Endris, J. and Negussie, H. 2011.** Bovine Cysticercosis: Prevalence, Cyst Viability and Distribution in Cattle Slaughtered at Kombolcha Elfora Meat Factory, Ethiopia. *American- Eurasian Journal of Agriculture & Environmental Science*, vol. 11, no. 2, pp. 173-176, 2011.
- Familade, F. O., Babayemi, O. J. and Adekoya, A. E. 2011.** Characterisation of small ruminant farmers in Iwo Local Government Area of Osun state, Nigeria. *African Journal of Livestock Extension*. Vol9: 64-67
- FAO, 2003.** Food and Agriculture Organization: Agriculture, Food and Nutrition for Africa: A resource Book for Teachers of Agriculture. *Publishing Management Group, FAO information Division, FAO of the United Nations 00100 Rome, Italy*, pp: 202-207.
- Prasad, 2010.** Plant Physiology (Plant Physiology Preview). *Plant Physiology Preview*. Published on May 28, 2010, as DOI:10.1104/pp.110.156976.
- Kolosov, Y. A. 2012.** The use of the gene pool of merino sheep domestic and import selection for the improvement of local merino. *Journal of Sheep, Goats, Woolbusiness*, 4: 13-16.
- Kumar, S. 2007.** Commercial Goat Farming in India: An Emerging Agribusiness Opportunity. *Agricultural Economics Research Review*, 20:503-520.
- Lawal and Adebowale, O. A. 2012.** Factors Influencing Small Ruminant Production in Selected Urban Communities of Abeokuta, Ogun State. *Nigerian Journal of Animal Production*, 39 (1): 218 – 228.
- Mbanasor, J. A. and Kalu, K. C. 2008.** Economic efficiency of commercial vegetable Production system in akwa ibom state, nigeria: a translog stochastic frontier cost function approach. *Tropical and subtropical agroecosystems*, 8 (2008): 313-318.
- Meretiwon, B. 1981.** Factors Associated with Maize Storage Techniques at Farmers' Level In Oyo State of Nigeria. *Nigerian Stored Product Research Institute Technical Report*, 8: 79 86.
- Ogunfiditimi, T. O. 1981.** Adoption of Improved Farm Practices: A Case Under Uncertainty. *Indian Journal of Extension Education* XVII(1 & 2), 30 - 35.
- Umeh, G. N. and Odom 2011.** Role and constraints of youth associations in agricultural and rural development: Evidence from Aguata L.G.A of Anambra State, Nigeria. *World Journal of Agricultural Science* 7 (5): pp 515-519
- Yali, F., Xiumin, W. and Xiaofeng, L.**

Profitability analysis of goat marketing in Ado Ekiti metropolis

2011. Analyses on the Willingness and the Influence Factors of the Provider to Establish the Livestock Products Traceability System-Take Chengdu for Example. *International Journal of Sustainable Agriculture*, 3(1): 05-10.

Received: 11th March, 2017

Accepted: 27th July, 2017