PROFITABILITY OF SNAIL MARKETING IN BENIN METROPOLIS, EDO STATE, NIGERIA

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ABSTRACT

The study examined the profitability of snail marketing in Benin metropolis, Edo state, Nigeria. Random sampling procedure was used to select 60 respondents from selected markets in the study area. Structured questionnaire and interview schedule were used to collect primary data from the respondents. The data were analyzed using descriptive statistics, market margin, gross margin and marketing efficiency ratio. The results showed that marketing of snail in Benin metropolis was predominantly a female activity. The result also shows that 44.9% of the respondents were above 50 years of age. Majority (58.3%) of the respondents had household size of five or less than five persons. The predominant channel of distribution for snail marketers was from hunters/producers, to wholesalers, to retailers and finally to the consumers. Snail marketing was found to be profitable with the marketers making a gross margin of $\aleph3,255.90$ per 196 small size snails sold in the study area per week. Some of the constraints faced by the marketers were high cost purchase, high cost of transportation and inadequate storage facilities. It was recommended from the findings of the study among others, that snail marketers should form cooperative societies so as to tackle the problem associated with high cost of purchase.

Keywords: marketing margin, gross margin, marketing efficiency ratio, snail

INTRODUCTION

Snail is a small soft creature with a hard shell on its back that moves very slowly and often eats garden plants (Adeniyi, Shobanke,& Omotoso, 2013). Snails are the largest groups of molluscs constituting the largest animal groups after arthropods (Yoloye, 2002).

Agricultural marketing can be defined as the performance of all business activities included in the flow of products from the beginning of agricultural production until they are in the hands of consumers (Roy, 2006). Agricultural marketing comprises of a supply chain which combines capital items such as land and livestock, labour, purchased inputs, equipment, transportation, and advertising, processing, and selling (Roy, 2012). It is the link between agricultural production and food consumption (Bekkerman, 2012). Marketing ensures that products are produced in the right quantities and marketed at the correct time, and it also helps to raise farm incomes and lower consumer price (FAO, 1997). Snail marketing is slowly becoming popular, especially since the advent of snail domestication in this Nigeria (Ebewore & Odemero, 2012). Several intervention has been made to develop the snail sub-sector of the Nigeria economy, yet the sector is still behind, compared to other livestock. Generally there is scarcity of snails in the market, mostly during the dry season which leads to the few available snails being expensive (Ebenso & Okafor 2002; Ebenso 2003). Marketing seems to be the missing variable in the intervention programme, this is because according to Achoja (2005) "marketing stimulates production and consumption in an economic system".

To the snail farmers, marketing efficiency may mean selling his product at the highest profit, but to the consumer it may mean getting his commodities at the cheapest price (Jatau & Shidiki, 2012). But if prices are too high, this will limit the consumer's purchases, which will in turn affect the farmers' production. "As a result marketing efficiency can be seen as the movement of snail from the farmers to the wholesalers, retailers and consumers at the lowest cost consistent with the provision of the services consumers desire''(Jatau, and Shidiki 2012).

The objectives of this study were to describe the socio-economic characteristics of snail marketing, identify the channel of snail marketing, determine the marketing efficiency and marketing margin, determine the profitability in snail marketing and identify the constraints faced by snail marketers in the study.

MATERIALS AND METHODS

Area of the Study

The study was conducted in Benin metropolis of Edo-state, Nigeria. The State has a land mass of 19,794 km square. Its geographical coordinates are latitudes 5^0 44' North and 7^0 34' North of the Equator and longitudes 5^0 4' East and 6^0 45' East of the Greenwich Meridian. It is bounded in the South by Delta State, in the West by Ondo State, in the North by Kogi State and in the East by Kogi and Anambra States. It occupies a land area of about 17,802 Km2. She has eighteen Local Government Areas with Benin City as the major urban centre in the state. Benin City comprises mainly of three local government areas namely; Oredo, Egor and Ikpoba local government areas. Agriculture is the predominant occupation of the people in Edo State. The major cash crops produced are rubber, cocoa and palm produce. In addition, the State produces such crops as yams, cassava, rice, plantains, guinea-corn, and assorted types of fruits and vegetables such as mango, banana, and pineapple, orange. The marketing of snail is a major business enterprise among the indigenes of the state and in Benin City.

Sampling Size and Sampling Technique

The sample for the study was obtained using a multi-stage random sampling technique. Two markets were randomly selected from each of the three Local Government Areas (Oredo, Egor and Ikpoba-okha) that make up Benin metropolis given a total of six markets chosen for the study. The markets are Oba market, New Benin market, Uselu market, Egor market, Oregbeni market and Satana market. Ten snail marketers were selected using the simple random sampling method from each of the six markets from the list of snail marketers in the markets. This gave a total of 60 respondents that were selected and used for the study. The instrument used for data collection was questionnaire and interview schedule.

Methods of Data Collection

The data for the study was collected from primary source. The primary source includes information gotten through the administration of questionnaire supported with scheduled interview. Data were collected using structured questionnaire. Sixty questionnaire was distributed to the respondents.

Methods of Data Analysis

Descriptive statistics such as frequency counts, percentages and mean were used to describe the socio-economic characteristics of snail marketers. A schematic figure was used to represent the various channel is snail marketing. The marketing efficiency was determine using the formula:

 $ME = \frac{totalreturn}{totalcost} , \text{ in other words, } ME = \frac{outputofmarketing}{inputofmarketing} = \frac{valueofoutput}{valueofinput}$ (1) Where: ME is marketing efficiency.

Also, marketing margin was determined using the formula below MM= Sp-Pp	(2)
Where MM= Marketing margin Sp= selling price Pp= purchase Price (Olukosi and Ositor, 1990) It can also be expressed in percentages relating to the snail price:	
MM= Sp-pp X100 Gross margin analysis as adopted by Folorunso and Bifarin (2009). Gross Margin	(3) was expressed

as: GM = TR-TVC GM= Gross Margin TR= Total Revenue TVC= Total variable cost

(4)

RESULTS AND DISCUSSION

Socio-Economic Characteristics of the Snail Marketers in Benin Metropolis

The result as presented in Table 1 shows that males were (15%) while majority (85%) of the marketers were females. This indicates that snail marketing is essentially an activity carried out by the women folk. This indicates the importance of women in snail marketing as they play major role. Developmental programs organised for snail marketers should be channeled through women groups. This agrees with the findings of Ebewore and Achoja (2013), who reported that majority (100%) of snail marketers were women in Delta State, Nigeria.

Table 1 further shows that majority (44.9%) of the respondents were in the age range of 50 and above. This shows that snail marketing is more rampant among the aged due to the seasonality of the product. This disagrees with the findings of FAO (1994), that economically productive age group in a population is between 39-45 years. Majority (66.7%) of the marketers were married. This indicates that married people were more involved in snail marketing in the study area. This probably would be to increase the income of the household. This is in agreement with the findings of Ebewore and Achoja (2013), who reported that there were more married people involved in snail marketing in Delta State, Nigeria.

This result revealed that majority (58.3%) of the household had less than or equal to five persons as household size. This high percentage of household size indicates that majority of the marketers have nuclear family and they understand family planning. The mean household size was five persons.

Items	Frequency(n=6	i0)Percentage (%)) Mean
Gender: Female	51	85.0	
Male	9	15.0	
Age: ≤20	1	1.7	
21-30	4	6.8	
31-40	12	19.9	49
41-50	16	26.7	
Above 50	27	44.9	
Marital Status:			
Single	7	11.7	
Married	40	66.7	
Widowed	11	18.3	
Divorced	2	3.3	
Household Size:			
\leq 5 persons	35	58.3	
6-10 persons	21	35	5
11-15persons	4	6.6	
Educational Status:			
No formal Educ	cation 4	6.7	
Primary Education	n 5	8.3	
Secondary Educat	tion 26	43.3	
Tertiary Education	n 25	41.7	
Marketing Experience:			
1-10 years	34	56.7	
11-20years	18	30.1	12
21-30years	4	6.7	
31-40years	3	1.7	
41-50years	1		

Table 1: Socio-economic characteristics of snail marketers in Benin metropolis

Source: Field data 2016

In terms of educational level 43.3% of marketers had studied up to secondary school, while 6.7% had no formal education. This result also indicated that 93.3% of the respondents were literate and will be willing to learn and adopt innovations that will positively affect the marketing of snail. This is in line with findings by Yusuf (2002) who reported that all (100%) the marketers of snail in Ibadan were educated.

The high level of literacy of the respondents might afford them some level of managerial ability in their marketing activities. The result also revealed that majority (56.7%) had marketing experience ranging from 1-10 years. The number of years in the business of snail traders enables them to know the best ways to make profit and avoid losses.

Table 2. Shan Marketing Channel		
Items	Frequency	Percentage (%)
Category of marketers		
Wholesaler	30	50.0
Retailer	26	43.3
Others	4	6.7
Who do you buy your snail		
from?		
Producer/hunters	27	45.0
Wholesaler	26	43.4
Retailer	6	10.0
Others	1	1.7
Who do you sell your snail to?		
Consumers	41	68.3
Retailers	15	25.0
Wholesalers	4	6.7

Marketing Channel employed by the Respondents: Table 2 below shows the marketing channel of the respondents

Table 2: Snail Marketing Channel

Source: field survey, 2016.

Table 2 revealed that 45% of the marketers bought snail from other farms which are the producers, 50% of the marketers belong to the category of wholesaler, 25% of the snails were sold to retailers, while majority of the snails were sold to consumers (68.3%). Thus the common channel involves producers, wholesalers, retailers and consumers.

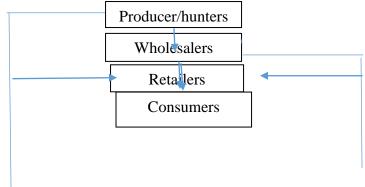


Figure1: marketing channel of snail marketers in Benin metropolis

Marketing margin of snail marketers in the study area

The result of the marketing margin and marketing efficiency of the respondents in the study area is shown in Table 3 below. The result indicated that the average purchasing price per snail was \$17.80, and the average selling price per snail was \$50.45. The average purchasing price per 196 snail was, \$3,488.80 and the selling price was \$9,885.2 with a marketing margin of \$6,399.40.

Unit price per snail(₩)	Number of snails purchased per week	Purchase price for snails (₦)	Selling price per snails(₩)	Marketing margin per snail	Revenue from snails(₩)	Marketing margin for snail
17.80	196	3,488.80	50.45	32.65	9885.20	6,399.4

Table 3: Marketing Margin of Snail Marketers in Benin Metropolis

Source: field survey, 2016.

This result shows that the marketing of snail is profitable in the study area. Adekanye (1988) reported that small margins can be regarded as a proof that distribution or marketing is efficient from these regard; snail marketing in Benin metropolis can therefore be seen as efficient because of the snail marketing margin of 32.65 per snail. The marketing margin is an evidence of efficiency in the Snail market in Benin City.

Profitability of snail marketing in the study area

The various costs incurred and the revenue obtained from sales were estimated based on the prevailing market price as at the period of survey as presented in Table 4. The average total revenue obtained from the sale of snail per week per 196 snails was \$9,885.20, while the average total cost was \$6,629.226. The result shows that snail marketing was a profitable venture with a gross margin of \$3,255.90. The marketing efficiency ratio was 1.49. This shows that snail marketing in the study was a profitable business. This agrees with the findings of Ebewore and Achoja (2013). This profit level can be higher with better marketing system and more efficient management. The relatively lower input cost makes even the poor members of the society to embark on this activity to complement their income

Items	Amount(₦)
Average total revenue	9885.65
Transportation cost	1098.17
Labour cost	897.33
GSM calls	645.00
Market levy	500.00
Purchasing price	3488.80
Gross margin	3255.90
Market efficiency ratio	1.49
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 Table 4: Average Costs, Revenue and Profitability in Snail Marketing

Source: field survey, 2016.

Constraints by snail marketers in the study area

The major constraints identified by the marketers was high cost of purchase; about 91.7% of the respondents indicated this as a major constraint faced by them. Transport ranked 2^{nd} with 90%. This problem has many dimensions. In some cases there are insufficient vehicles to carry goods from the farms to the rural markets and from the rural markets to the towns. In this case, transport accounts for a high proportion of marketing cost. In most cases there are no roads and where they exist, they are seasonal feeder roads which are usually few and in most cases, have to

be constructed and maintained by communal efforts. Inadequate storage and warehousing facilities rank 3rd with 75%. Most markets lack storage facilities and warehousing facilities and the amount of loss that occurs due to lack of these facilities often accounts for increasing cost of marketing snails and, hence, higher retail prices to consumers. Unavailability of produce was ranked 4th, this is due to the seasonality in snail production.

Constraints	Frequency*	Percentage (%)	Rank
High cost of purchase	55	91.7	1^{st}
High cost of transportation	54	90.0	2^{nd}
Inadequate storage facilities	45	75.0	3 rd
High cost of labour	39	65.0	4^{th}
Unavailability of produce	26	65.04	5 th

Table 5: Distribution of Constraints to the Marketing of Snail
The Table below shows the constraints of the marketers.

Source: field survey, 2016. * Multiple response

The growth of urban centres and the awareness in the consumption of snail meat has created problems of inadequate supply to meet the increased number of consumers. The seasonal variation in price of snail meat is due to lack of storage facilities, processing, preservation and insufficient supply of produce due to lack of snail farms. Most marketers depend on wild picked snails which are mostly abundant during the rainy season.

CONCLUSION AND RECOMMENDATIONS

The marketing of snail in Benin metropolis of Edo state Nigeria is a profitable economic venture if properly managed, as indicated from the results of the gross margin, marketing margin analysis; it is also a seasonal business. The result shows that snail marketing is faced with high cost of transportation and purchase.

Based on my findings of this study it was recommended that:

- 1. Low income earners should be encouraged to invest in snail marketing since it requires low capital investment and it's a profitable venture. This can be achieved through sensitization of both the low income earners by relevant agencies and stakeholder.
- 2. Snail marketers should be encouraged to form cooperative societies so as to expand their scope of marketing especially in the area of purchasing large quantity.
- 3. More marketing information should be made available to the snail marketers to improve on their profit level

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