

Cost and Returns on Chewing Stick Retail Marketing In Southwest Nigeria

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Abstract

Purposive sampling technique was employed for the selection of four LGAs in Ogun State and six LGAs in Oyo State where 40 chewing stick retailers were randomly selected equally in both rural and urban settings to give a total of 400 respondents i.e. 160 and 240 respondents in Ogun and Oyo state respectively. Responses from one hundred and seventy eight (178) retailers were used in the final analyses due to different degrees of non-completion. Data collected include demographic characteristics, year of experience in the business, frequency of trade, unit of purchase, form in which product is sold, awareness on cultivation of species marketed and cost associated with the trade, etc. Data generated were analyzed using descriptive statistics (such as frequency distribution and computation of percentages), Gross Margin (GM), Net Income and Rate of Return (ROR). Forty percent (40.4%) of the retailers fall within 16 to 30years of age. Each of these bundles was retailed at an average total cost of ₦900 to earn an average revenue of ₦1,440 and an average net income of ₦540. The study concludes that chewing stick retail trade is a lucrative business in the study area. The following recommendations are made: education of the respondents on the need to form themselves into social groups like cooperative societies so as to enhance their scale of operation through adequate funding and value-addition (such as better packaging) to their products so as to enhance their profit margin from the business.

Keywords: Retailers, Rate of return, Environmental degradation, Household, Livelihood

1. Introduction

Many trees in Africa are rich sources of food, building materials and medicines. Some of them give rise to different end products which are used both commercially and in many other ways by local people, for instance in rituals or in terms of medicinal or domestic applications (Sweetmore, 2006). Trade in Non Timber Forest Products (like chewing sticks) provides an opportunity to reduce the pressure on Nigeria's timber resources and consequently reduce further environmental degradation while ensuring that the growing population would have resources to meet its needs (Igbal, 1993). Chewing stick (a Non Timber Forest Product) trade offers a means of earning comfortable living for many people in Africa (Bosch, 2008). Popular species for commercial purposes are *Garcinia mannii*, *Rothmannia longiflora* and *Dacrodos edulis* usually chewed for buccal hygiene and treatment of recalcitrant cough (Okafor, 1989). Chewing stick trade involves both male and female gender but women dominate retail trade in all chewing stick types (Adedokun, 2001, Blay, 2004). The cash income earned by retail traders compare favourably with wages earned by unskilled wage labourers and transportation is the main cost in the industry (Adedokun, 2001). Adetutu (1979) indicated that chewing sticks are sold daily in most

rural and urban markets in Southern Ghana while Isanwumi (1978) stated that there were regional preferences for different species: *Massularia acuminata* are most popular in Ogun, Oyo and Osun States, whereas *Garcinia kola* is most popular in Cross River State of Nigeria.

2. Methodology

Purposive sampling technique was employed for the selection of respondents in Ogun and Oyo states based on where the use and trade in chewing sticks are widely acknowledged (Isanwumi, 1978). Four Local Government Areas (LGA) - Abeokuta South, Yewa South, Ijebu-Ode and Obafemi Owode) in Ogun State and six Local Government Areas - Egbeda, Kajola, Ibarapa Central, Ibadan North/East, Ogbomoso South and Saki East in Oyo state were purposively selected; representing 20 percent of the Local Government Areas in Ogun State and Oyo State respectively. In each of the LGAs, 40 chewing stick retailers were randomly selected equally in both rural and urban settings to give a total of 400 respondents i.e. 160 and 240 respondents in Ogun and Oyo state respectively.

Responses from one hundred and seventy eight (178) retailers were used in the final analyses due to different degrees of non-completion. Data collected include demographic characteristics, year of experience in the business, frequency of trade, unit of purchase, form in which product is sold, awareness on cultivation of species marketed, cost associated with the trade, etc.

- Data generated were analyzed using descriptive statistics (such as frequency distribution and computation of percentages) and Gross Margin (GM).

The gross margin was calculated as follows:

$$\begin{aligned} \text{Gross Margin (GM)} &= \text{TR} - \text{TVC} && \text{----- (1)} \\ \text{Net Income (NI)} &&& \end{aligned}$$

The net income was calculated using the formula:

$$\text{NI} = \text{TR} - \text{TC} \quad \text{----- (2)}$$

$$\text{TC} = \text{TFC} + \text{TVC} \quad \text{----- (3)}$$

Where:

TR = Total Revenue per scale of operation (Naira)

TVC = Total variable cost per scale of operation (Naira)

TFC = Total Fixed Cost per scale of operation (Naira)

TC = Total Cost per scale of operation (Naira)

NI = Net Income (Naira)

Rate of Return (ROR)

Rate of return was calculated using the formula:

$$\frac{\text{TR}}{\text{TC}} \times 100 \quad \text{----- (4)}$$

Rate of Returns on Investment (RORI)

The rate of returns on investment was also calculated to determine the rate of return to capital invested in the business according to the respective scale of operation to determine the profitability of investment in chewing sticks retailing using the mathematical formula below:

Rate of Return on Investment (RORI) was given as

$$\frac{\text{TR} - \text{TC}}{\text{TC}} \times 100 \quad \text{----- (5)}$$

Where:

TR=Total Revenue (Naira)

TC= Total Cost (Naira)

Adapted from Popoola *et al*, (2005).

Cost associated with other fixed assets like machines, generators, knives, cutlasses, etc. were depreciated using the straight-line method.

3.Results and Discussions

Table 1 shows that most (40.4%) of the marketers fall within 16 to 30years of age, 30.3% are within 31 to 45years of age across states though a greater percent (51.8%) of those within 16 to 30years are in Ogun state and for Oyo state more (37.6%) are within 31 to 45years of age. This implies that most of the chewing sticks marketers are within the economically active population though the younger ones below age of twenty are supposed to be in schools pursuing various courses of study. Generally, the active years would enhance the productivity/efficiency of the respondents in their chewing sticks retail business. About 80% of the marketers are female across the states though with a greater (83.9%) percent in Oyo state. More (24.7%) of the respondents in Ogun state are males. There is, therefore, female dominance in chewing sticks marketing at retail level in the study area as was the case in previous work in Ghana that confirmed female prominence in the collection, processing and distribution of most Non Timber Forest Products (Clark, 1994; Amponsah, 1978). Most (54.5%) of the respondents have 6 to 10 household members with a greater number (72%) falling to Oyo state. On the other hand, greater part (about 45%) of the respondents having 1 to 5 household members characterizes Ogun state. About 19% have household size of 11 to 15 persons. The implication is that all the respondents are persons with responsibilities in various capacities and they maintain a fairly large household size necessary to provide the needed family labor for the retail business in different markets and motor parks.

In terms of education, only 1.1% had no formal education. All the respondents have one form of education or the other which is expected to positively affect their marketing activities and afford them better managerial skills for enhanced profits. About 71% of the marketers are married and about 20% are single. This shows that the marketers are generally men and women with responsibilities.

Table 2 reveals that the commonly traded chewing stick species are in their order of importance- *Massularia Acuminata* (46.4%), *Garcinia kola* (29%), *Distemonanthus benthamianus* and others (5.8%), *Zanthoxylum zanthoxyloides* (4.3%) and *Vernonia amygdalina* and others (2.9%). This confirms the regional preference to specific chewing stick species (Isanwumi, 1978b) and an indication of preference for species based on taste and medicinal uses.

A close look at Table 3 revealed that 47 (26.4%) of chewing stick retailers have 4years experience, 28 (15.7%) have 8years experience, 19 (10.7%) each have 3 and 7years experience, 15 (8.4%) have 10years experience, 14 (7.9%) have 13years experience, 6 (3.4%) have 14 years experience, 5 (2.8%) each have 12 and 17years experience, 3 (1.7%) have 6years experience, 2 (1.1%) each have 2, 10 and 18years experience respectively while a respondent each have 1, 15, 19 and 58years experience respectively. Generally, the retailers have made chewing stick retail business their permanent means of livelihood in the study area. Table 3 further reveal that about 64% of the respondents were fully employed in chewing sticks marketing while 15.2%, 10.15%, 5.1%, 3.4%, and 2.8% are herbalist (Traditional Medical Practitioner), farmers, pensioners, contract appointments and petty traders respectively in addition to chewing stick marketing. This implies that chewing stick trading is lucrative enough as a sole business to sustain certain household and at the same time flexible enough to be combined along with other economic activities. This observation is in agreement with Sweetmore, (2006) who noted that most subsistence rice farmers in Madagascar take medicinal plants (like chewing stick) collection

and sales as a subsidiary occupation. Table 4 shows that about 77% of the retailers do not belong to any form of cooperative society, just a few (about 24%) belong to cooperative society. Table 4 also reveals that the principal sources of fund to chewing stick retailers are personal savings (82.5%) and Cooperative society (11.1%) while the minor sources of funds include friends and relations (2.9%) and Esusu (3.5%). The retailers need to be encouraged and educated to form themselves into virile cooperative societies in order to be able to access and benefit from the various funding currently available in Nigeria for Small and Medium Enterprises (SMEs) like chewing stick marketing.

Table 5 shows the cost and returns to chewing sticks marketing at retail level in the study area per transaction on per bundle basis. It reveals that presently, retail trade in chewing sticks is profitable with a single transaction of one bundle of chewing sticks yielding a Gross Margin of ₦640.00 and rate of return on investment of up to 60%. This shows that retail business in chewing sticks is a highly lucrative business venture.

4. Conclusion and Recommendation

The study concludes that chewing stick retail trade is a lucrative business in the study area. Based on the findings, the following recommendations are education of the respondents on the need to form themselves into social groups like cooperative societies so as to enhance their scale of operation through adequate funding and value-addition (such as better packaging) to their product so as to enhance their profit margin from the business.

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Table 1: Demographic characteristics of chewing stick retailers

Description	Ogun State		Oyo State		Total	
	Freq.	%	Freq.	%	Freq.	%
Age (years)						
Below 15	18	21.2	7	7.5	25	14.0
16-30	44	51.8	28	30.1	72	40.4
31-45	19	22.4	35	37.6	54	30.3
46-60	4	4.7	17	18.3	21	11.8
61 and Above	0	0.0	6	6.5	6	3.40
Total	85	100	93	100	178	100
Gender						
Male	21	24.7	15	16.1	36	20.2
Female	64	75.3	78	83.9	142	79.8
Total	85	100	93	100	178	100
Household Size						
1-5	38	44.7	19	20.4	57	32.0
6-10	30	35.3	67	72.0	97	54.5
11-15	16	18.8	5	5.4	21	11.8
16-20	0	0.0	2	2.2	2	1.10
Above 20	1	1.2	0	0.0	1	0.6
Total	85	100	93	100	178	100
Educational Level						
No formal education	0	0.0	2	2.2	2	1.10
Adult education	10	11.8	8	8.6	18	10.1
Primary	38	44.7	59	63.4	97	54.5
Secondary	23	27.1	22	23.7	45	25.3
Tertiary	7	8.2	2	2.2	9	5.10
Others	7	8.2	0	0.0	7	3.90
Total	85	100	93	100	178	100
Marital Status						
Single	19	22.4	16	17.2	35	19.7
Married	62	72.9	68	68.8	126	70.8
Divorced	3	3.5	5	5.4	8	4.5
Widowed	1	1.2	8	8.6	9	5.1
Total	85	100	93	100	178	100

Source: Field survey, 2009

Table 2: Distribution of retailers based on commonly traded chewing stick

Common Name of Chewing Stick	Botanical Name	Freq.	%
Pako Ijebu	<i>Massularia acuminata</i>	32	46.4
Orogbo	<i>Garcinia kola</i>	20	29.0
Ayan and others	<i>Distemonanthus benthamianus</i>	4	5.8
Orin Ata	<i>Zanthoxylum zanthoxyloides</i>	3	4.3
Ewuro and others	<i>Vernonia amygdalina</i>	2	2.9
Total		69*	100

Source: Field survey, 2009

*Lower due to non-response

Table 3: Distribution of chewing stick retailers based on subsidiary occupation and marketing experience

Description	Ogun State		Oyo State		Total	
	Freq.	%	Freq.	%	Freq.	%
Subsidiary Occupation						
Contract Appointment	1	1.2	5	5.4	6	3.4
Herbalist (Traditional Practitioner)	13	15.3	14	15.1	26	15.2
Pensioner/Retiree	6	7.1	3	3.2	9	5.1
Farming	12	14.1	6	6.5	18	10.1
No other Occupation	48	56.5	65	69.9	113	63.5
Petty Trading	5	5.9	0	0.0	5	2.8
Total						
Marketing Experience (years)						
1-5	30	35.3	47	50.5	77	43.3
6-10	35	41.2	32	34.4	67	37.6
11-15	18	21.6	8	8.6	26	14.6
16 and above	2	2.4	6	6.5	8	4.5
Total	85	100	93	100		100

Source: Field survey, 2009

Table 4: Distribution of retailers based on membership of co-operative society and sources of fund

Description	Ogun State		Oyo State		Total	
	Freq.	%	Freq.	%	Freq.	%
Membership of cooperative society	4	9.3	28	30.1	32	3.5
Yes						
No	39	90.7	65	69.9	104	76.5
Total	43	100	100	100	136	100
Sources of fund						
Personal saving	61	78.2	80	86.0	141	82.5
Friends and relation	5	6.4	0	0.0	5	2.9
Esusu	6	7.7	0	0.0	6	3.5
Cooperative society	6	7.7	13	14.0	19	11.1
Total	78	100	93	100	171*	100

Source: Field survey, 2009

*Lower due to non-response

Table 5: Cost and return on chewing sticks retailing in the study area per bundle

Description of Item	Amount (₦)
<u>Total Revenue (TR)</u>	1440.00
<u>Variable Cost</u>	
Cost of purchase	650.00
Transportation	70.00
Rope	40.00
Cutting/Splitting	40.00
<u>Total Variable Cost (TVC)</u>	800.00
Gross Margin	640
<u>Fixed Cost (Depreciated)</u>	
Cutlass	75.00
Knife	25.00
<u>Total Fixed Cost (TFC)</u>	100.00
<u>Total Cost (TC)</u>	900.00
Net Income	540.00
Rate of Return (ROR)%	160.00
Rate of Return on Investment (RORI) %	60

Source: Field survey, 2009.

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