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PROFITABILITY OF RETAIL TOMATO MARKETING IN MUBI NORTH LOCAL GOVERNMENT AREA OF ADAMAWA STATE, NIGERIA

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ABSTRACT
Tomato marketing in Nigeria has gained prominence in the efforts towards achieving self-sufficiency in food production. This study therefore focused on Analysing the Profitability of Retail Tomato Marketing in Mubi North Local Government Area of Adamawa State, Nigeria. Simple random sampling technique was used to select and collect data from 60 tomato marketers with the aid of well-structured questionnaires. Both descriptive and Gross Margin statistics were employed for the analysis of the data. The results revealed that majority (60%) of the respondents were male and 83.33% of the respondents were married while 3.33% had no formal education. The Gross margin analysis revealed that the retail tomato marketing in the area was profitable with a margin of ₦10, 013/hectare and marketing efficiency of 111.38%. Inadequate storage facilities was identified as a critical constraint to overall marketing enterprise in the area. It was recommended that the policy of Government in promoting tomato marketing should focus more on addressing the challenges of proper storage and handling of the product by the marketers

Keywords: Tomato, Marketing, Profitability, Retail, Gross margin, Marketing Efficiency.

INTRODUCTION

Marketing plays an important role not only in stimulating production and consumption, but also in accelerating the pace of economic development. It plays a dual role in the economic development especially in developing countries like Nigeria where the economy is dependent directly or indirectly on agriculture (Shehu and Mohammed, 2017). The important factor that energizes agricultural development towards commercialization and diversification according to Shrestha (2008) is the development of proper marketing system. Tomato clearly stands out as the most important vegetables grown in Nigeria both in terms of scale of production and level of consumption (Adejobi *et al*., 2011). The welfare of smallholder tomato marketers is paramount in sustaining the food sufficiency and encourage improved productivity. According to Idachaba (2000) tomato marketing in Nigeria is characterized mainly by the problem of seasonality and perishability amongst others. Venance and Deus (2018) identified the constraints in the marketing of fresh tomato to include the challenge of storage, transportation problems, cost of purchase and rent paid for warehouse and shops. A lot of tomato grown in Nigeria suffer post-harvest losses incurred from in-adequacy in storage and transport of fresh tomato. The major challenge in agricultural marketing in Nigeria forms the main impediment against the growth of food production in the country. Obayelu *et al.* (2014) suggested that means of transportation and storage facilities should be made available to smallholder tomato marketers so as to reduce the marketing costs and facilitate marketing of tomato.

The priority of the Nigerian Government in the recent times centered on the reducing the volume of imports while improving local food production while creating enabling environment for viable marketing of agricultural products. For instance, the trade in agricultural goods by Nigeria in 2018 had a deficit of N548 billion, with the country importing far more agricultural goods than it exported. Also, out of N1.15 trillion in agricultural goods traded between Nigeria and other countries, imports accounted for 73.82 per

cent, while exports accounted for 26.18 per cent. According to National Bureau of Statistics (NBS) in its quarterly Foreign Trade Statistics for the year 2018; the imported agricultural goods accounted for N852.11 billion, a 4 per cent decrease from N886.7 billion in 2017. The 2017 figure was however an increase of 35.09 per cent when compared to N656.4 billion in 2016. On the other hand, Nigeria exported a total of N302.24 billion worth of agricultural goods in 2018. The report reveals the crucial need for increasing local production of agricultural goods with adequate attention to efficient marketing of the products (NBS, 2018).

Objectives of the Study

The main objective of the study is to analyze the cost and returns in retail Tomato Marketing in Mubi North Local Government Area of Adamawa State, Nigeria. The specific objectives include;

Identifying the socio-economic characteristics of the Tomato marketers;

Analyzing the profitability in retail Tomato Marketing in the area.

Determining the factors affecting the marketing of Tomatoes in the area.

METHODOLOGY

Study Area

The study was conducted in Mubi North Local Government Area of Adamawa State. It is located in the Eastern region of Northern guinea savannah of Nigeria, on latitude 90°20¹ and longitude 13°50¹East covering an area of 24,000km^2. Mubi North Local Government shares an international boundary with Cameroon Republic (Adebayo, 2004). It is inhabited by many tribes such as Fulani, Fali, Hausa, and others with Fali and Fulani as the predominant tribes. The people have rich cultural heritage and are predominantly farmers who engage mostly in cultivating cereal crops such as maize, guinea corn, cowpea and groundnuts. They also grow vegetable crops which include tomatoes, pepper, onion etc.

Data Collection and Sampling Technique

The primary data were collected through the administration of questionnaires and personal interviews. Simple random sampling was used to select sixty (60) tomatoes marketers from the two well-known markets (Mubi main market and Sabon kasuwa Market) in which various vegetables such as tomatoes, pepper, garden eggs etc are in high supply. Thirty (30) marketers were selected randomly from each of the two major markets sampled.

Data Analysis

Data collected were analyzed using simple descriptive statistics such as frequency distribution tables and percentages. The Gross margin analysis was used to determine the profitability in tomato marketing in the area.

Gross Margin Analysis

The gross margin is an analytical tool which measures the difference between the gross revenue earned and the variable costs incurred in an enterprise. Gross Margin has been used by many researchers (Yohanna *et al.,* 2010; Arifalo and Daramola, 2006; Kudi, 2010 and Kadiri *et al.*, 2014) in determining the profitability of Agricultural enterprises both in production as well as marketing stage. Obayelu *et al.* (2014) used Gross Margin analysis to establish the profitability of Fresh Tomato Marketing in Kosofe Local Government Area of Lagos state, Nigeria.

The Gross Margin model is presented as follows;

GM= TR - MC …….. (i)

Where,

GM= Gross margin …….……. (ii)

TR= Total revenue ……... (iii)

TR = $\sum$ p q ……..…. (iv)

(Where p is the unit price of standard measure of tomatoes in the market, and q is the quantity of tomatoes sold)

MC= Marketing cost …….…… (v)

MC = Fixed Cost + Variable Cost …. (vi)

Marketing Efficiency (ME) = $\frac{Total\ Revenue}{Mrketing\ Cost} \times 100$ ……. (vii)

If ME > 100% the marketers are making profits; ME <100% the marketers are recording losses while ME = 100% the marketers are breaking even in the trade. Marketing Efficiency

measures the level of the profitability of the trade (Simpa and Olukosi, 2019).

RESULTS AND DISCUSSION

Socio-economic Characteristics of the Respondents

The results in Table 1 showed that majority of the respondents (above 63%) were within the age group 30 – 40. This implies that the marketers were within active age which is necessary for the rigorous activities involved in the marketing of tomatoes in the area. Similar result was obtained by Venance and Deus (2018) that the people who participate in tomato marketing comprise of active young people because of the labour need in the business. Also, most of the marketers were married men as revealed in the result; and about 96% of them had one form of formal education or the other, showing that majority of them had access to education. Access to formal education has been shown to contribute greatly to high performance of most marketers of agricultural produce in many developing countries such as Nigeria. Obayelu *et al.* (2014) also noted that education was among the significant factors which influenced the efficiency of tomato marketers in Nigeria. The results further showed that 80% of the marketers had spent 10 years and below in the business. This implies that the more the years spent in the marketing of tomatoes; the better their efficiency in the business because they would had gained experience in running the business.

Table 1: Socio-economic Characteristics of the Respondents

Variables	Frequency	Percentage
Age		
20 – 30	15	25.00
30 – 40	38	63.33
40 – 50	07	11.67
Total	60	100
Gender		
Male	36	60
Female	24	40
Total	60	100
Marital Status		
Married	50	83.34
Widow	06	10
Divorce	02	3.33
Single	02	3.33
Total	60	100
Educational Level		
No Formal Education	02	3.33
Primary	10	16.67
Secondary	42	70
Tertiary	60	100
Marketing Experience		
<5	24	40
5 – 10	24	40
11 – 15	08	13.33
>15	04	06.67
Total	60	100

Source: Market Survey, 2019

Profitability in Tomato Marketing

The result of the Gross Margin analysis in Table 2 revealed that the purchase cost represents about 98% of the total marketing cost; while shop rent and transportation were 1.14% and 0.59% respectively. The total revenue by the retail marketer was N98, 033 while the total cost was N88, 500. The Gross Margin was estimated to be ₦10, 013. The result in Table 2 further showed that the Marketing Efficiency of the retail tomato marketers in the study area was 111.38%. The marketing margin obtained from the results is greater than 100%; hence it indicates that the marketing of the tomatoes in the area is

profitable. This implies that the marketers were able to cover the costs of marketing and earn profits in the trade. The result buttresses the findings of other researchers that tomato business is a profitable venture (Abubakar and Sani, 2019; Shehu and Mohammed, 2017; Obayelu *et al., 2014*).

Table 2: The Results of Gross Margin Analysis

Variables	Values (₦)	Percentage (%)
Total Revenue	98, 033	
Purchase Cost	86, 500	98.27
Shop Rent	1, 000	1.14
Transportation	520.50	0.59
Marketing Cost	88, 020	100.00
Gross Margin	10, 013	
Marketing Efficiency	111.38	

Source: Market Survey, 2019

Problems in Tomato to Marketing

The major problem in tomato marketing in the area as shown in Table 3 is that of storage facilities which accounted for 65%. Many other researchers (Obayelu *et al.*, 2014; Shehu and Mohammed, 2017) similarly observed that the lack of adequate storage facilities forms a major constraint in marketing of Agricultural products.. Other challenges of tomato marketing identified include problems associated with market shops (10%), Intermediaries (10%), cost of transport (8.33%) and the problem of bad roads (6.67%).

Table 3: Problems in Tomato to Marketing

Problems	Frequency	Percentage (%)
Storage Facilities	39	65
Market Shops	6	10
Intermediaries	6	10
Cost of Transport	5	8.33
Bad Road	4	6.67
Total	60	100

Source: Market Survey, 2019.

CONCLUSION AND RECOMMENDATIONS

Marketing of tomatoes in Nigeria requires increased attention and priority from all stake holders towards improving economy and poverty alleviation. The results of this research has shown that majority (above 63%) of the tomato marketers in the area were within the youthful age which implies were within active age necessary for the rigorous activities involved in the marketing of tomatoes. Also, most of the marketers were married men as revealed in the result; and about 96% of them had one form of formal education or the other, showing that majority of them had access to education. The findings revealed that the tomato marketing in the area is profitable venture with a Gross Margin of ₦10,013 and Marketing Efficiency of 111.38%. The problems identified in tomato marketing in the area were lack of storage facilities, inadequate market sheds, problem of intermediaries, cost of transport and the problem of bad roads.

Based on the findings of the study, the following recommendations were made;

i. Tomato marketers should be encouraged to form cooperatives and sell their produce through group marketing practices so as to minimize the influence of middle-men and improve their profit margin.
ii. Government needs to assist marketers through the provision of more improved storage and processing infrastructures such product warehouses, canning machine, juice extractors etc.
iii. There should be improvement in road networks in rural areas to ease the

transportation of perishable agro produces like tomatoes.

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