Economic Analysis of Fresh Okra Marketing in Jalingo Metropolis, Taraba State, Nigeria

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Efficient marketing system is a sine qua non for the growth and development of vegetable production industry. Hence, the study analyzed the profitability of okra, the pricing efficiency, marketing efficiency and indeed the constraints to okra marketing in Jalingo metropolis of Taraba State, Nigeria. Results showed that on the average each respondent makes a monthly income of N6, 500.00. Pricing is inefficient in the market as the coefficient was (1.34) which is greater than unity. Analysis of marketing efficiency also indicated that it is inefficient (34.4%). Some of traders' problems include: perishability, storage facilities, lack of standard measurement and inadequate funds. The study recommends the amelioration of these constraints as it will go a long way to enhancing the growth of vegetable production and marketing in the study area.

Keywords: Okra marketing, pricing efficiency, marketing efficiency, Jalingo   metropolis.

Introduction

Agriculture is an important sector in most developing   countries.   Thus,   increased agricultural productivity depends heavily on its marketability. Efficient marketing and the link between producer and consumer, play a very important role, not only in stimulating production and consumption, but also in increasing the rate of economic development (Katharina and Stefan, 2011).

Okra is indeed a vegetable crop that belongs to the genus Abelmoschus, family malvacae which has two main species; *Abelmoschus esculentus* (*L*) *moench* and *Abelmoschus caillei* (A. chev) stevels (Siemonsma, 1982). It originates probably from East Africa and today is widely distributed in the tropics, sub-tropics and warmer parts of the temperate region (ECHO, 203). Okra (*Abelmoschus esculentus moench*) is one of the commonly marketed vegetables in Nigeria.

It is marketed mainly as a fresh fruit vegetable. It features prominently in most households in the preparation of soup and as an ingredient in the preparation of yam porridge (Anuebunwa and Obiechina, 1989). According to (Schippers, 2000), the fruits serve as a soup thickening (Farinde et al., 2007).

In Nigeria, two distinct seasons for okra are noticed; the peak and the lean seasons. During the lean period, okra fruits are produce in low quantities, scare and expensive to get. In the peak season, it is produced in large quantities much more than what the local populace can consume (Bamire and Oke, 2003). Therefore, proper processing, preservation, marketing and utilization of okra is necessary to arrest the wastage being experience during the peak season.

Unless marketing efficiency improves, there will be no incentives to increase production to attract the producers (Sangeetha and Banumathy, 2011).

Vegetable marketing begin at the farm gate and okra is not an exception as stated by (Olukosi and Isitor, 2005). The authors asserted that, the marketing task involves transferring goods from producers to consumers. They further stressed that, the function ensures the consumers acquires the product in the form, place and time desired.

Although, the crop (okra) holds a great promise for fostering economic growth and improving the diet of the people, research efforts on fresh okra marketing in the study area are scanty. There is, therefore, dearth information on fresh okra marketing. Hence, there existed knowledge gaps in policy and development. A study on fresh okra providing the necessary data required for planning and policy formulation.

Methodology

The study was carried out in Jalingo Metropolis, the administrative headquarters of Taraba State, Nigeria. Jalingo Local Government is located between the latitudes $8^0 47'$ to $9^0 01'$N and longitudes $11^0 09'$ to $11^0 30'$E. It is bounded to the North by Lau Local Government Area, to the South and West by Ardo-Kola Local Government Area. It covers a land area of bout $195 km^2$. Jalingo Local Government Area has a population of 139, 845 people according to the National Population Commission [NPC], 2006) with a projected growth rate 3% (Shawulu et al., 2008).

Jalingo Local Government Area has tropical continental type of climate marked by wet and dry seasons. The wet season usually begins from April and ends in October. The dry season starts in November and ends in March. The dry season is characterized by the prevalence of the northeast trade winds popularly known as the harmattan wind which is usually dry and dusty. The Local Government has a mean annual rainfall of about 1200mm and annual temperature of about 29^0C, relative humidity ranges between 60-70 per cent during the wet season to about 35-45 percent in the dry season. Jalingo Local Government Area is located within northern guinea savannah zone characterized by grasses interspersed with tall trees and shrubs.

The predominant occupation of the people is farming while other occupations include: trading, craftwork etc. Major crops grown are: maize, rice, groundnut, cowpea, yam, cassava, sorghum and sugarcane. Most of the farmers plant okra as mixed crop with some of these crops. Data for the study was mainly from primary source using structured questionnaire as the instrument facilitated by trained Agricultural Development Project (TADP) enumerators. The data used was for one cropping season. Also secondary data such as internet and journals were used for the study.

The study employed random sampling technique in the selection of respondents. Five major okra markets in the metropolis were considered for this study. They include: Nukkai, Mile Six, Mayo-gwoi, Sabon-gari and Jalingo main market. The target population for the study was okra farmers/retailers. The respondents were 80 in number and chosen at random. The data collected were analysed using descriptive statistics such as frequency distribution and percentages. Inferential statistics such as profit margin (i.e profit margin/pricing efficiency and marketing efficiency) was also used for the analyses.

The model for analyzing profit margin is as indicated below:

$\bar{\Lambda}$ = TR – TC

Where:

$\bar{\Lambda}$ = profit

TR = Total Revenue

TC = Total Cost

The model for analyzing pricing efficiency is shown below:

PE =

Where: $\frac{PU}{CU}$

PE = Pricing Efficiency

PU = Retail Price

CU = Traders Unit cost of okra

NB:

When PE = 1, it means there is pricing efficiency, meaning that, the retail price reflects all costs incurred in the marketing of okra. If PE < 1 or PE >1, that is, PE is less than or greater than 1, it indicates that the retail price does not adequately reflect the cost of marketing of okra (Arene, 1998).

Model for marketing efficiency (ME)

$$ME = \frac{TC}{TS_o} \quad x \quad \frac{100}{1}$$

Where: ME = Marketing Efficiency

TC = Total Cost of Okra

TS_o = Total Sales of okra

Results and Discussion

The socio-economic characteristics of okra marketing in the study area are presented in Table 1. The result showed that 51.25% of the respondents were females while 48.75% were males. The result indicated that okra marketing in the study area is dominated by females. However, Haruna et al., (2012) used tomato marketing to infer that, agricultural marketing is dominated by men in Bauchi metropolis. Also in Table 1, the result indicated that 59.50% of the respondents belong to the active population group of 20 – 40 years. The findings signified that, they are relatively young and active to engage in marketing. 12.50% of the respondents were less than 20 years old, while 18.75% and 11.25% fall between the age bracket of 41 – 50 and 50 years and above respectively.

Most (50%) of the respondents were married, 26.25% were single while 11.25% and 12.50% were divorced and widowed respectively. The result of Table 1 also showed that majority (66.25%) of the respondents had formal education ranging from primary to tertiary while 33.75% had no formal education. Thus, the result indicated that most of the respondents are educated, therefore signified that, they will not be rigid in marketing decision making process. This finding is in consonance with the work of Aighemi and Lyonga (1989) and Katharina and Stefan (2011) who reported that, literates traders have been found to adopt new marketing ideas more faster than illiterates ones and would also find it relatively easy in their dealings with people especially in the marketing process. Majority (61.25%) of the respondents within the study area had marketing as their main occupation while 38.75% combined marketing with farming. Also 53.75% of the respondents had 5 – 20 years' experience in marketing, while 23.75% and 22.50% had below 5 years and 20 years and above experience in marketing respectively. The result also indicated that 72.50% of the respondents had personal savings as their source of finance as against 16.25% and 11.21% who had friends/relatives and financial institutions as sources of finance for their okra marketing. On the mode of transportation, most (40%) of the respondents used vehicle to transport okra to the market where it is sold, while 26.25% and 33.75% used tricycle and other means of transport respectively.

Profitability Analysis of Okra Marketing in the Study A r e a

Results in Table 2 showed that the profit margin of okra marketing in the study area was N6, 500.00 per month over a period of six months. From the result it would be realized that, a sustainable income can be earned from the trade all things being equal. Analysis of pricing efficiency (PE) shows that PE was 1.34 which is greater than unity (1), thus, indicating that pricing was inefficient. On the other hand, Okeke, (2007) reported that cattle marketing in Jos metropolis in Plateau state was inefficient. Also the result agreed with the findings of Shaib (1997) who posited that cattle markets in Nigeria are characterized by pricing inefficiency. Okra marketing efficiency (ME) in the study area had a coefficient of 0.528 representing 52.8%. The result therefore means, cost constituted a high percentage of the total sales. Thus, a market that is efficient should have a lower p e r c e n t a g e .

Constraints to Okra Marketing

Table 3 shows the major constraints to okra marketing in the study area. The result indicated that perishable nature of okra (21.20%) was the major constraints of okra marketing in the study area which of course will lead to wastage of the produce. Also storage facilities (14.00%) and lack of standard of measurement (19.00%) as major constraints to okra marketing had affected the marketing margin as well as the profit margin. Similarly seasonality (15.30%) and transportation (14.80%) as well as inadequate funds (12.70%) constitute constraints to the smooth marketing of okra in the study area.

Conclusion and Recommendations

The finding of the study showed that females dominated okra marketing and most of them are young adults who are married, had one form of formal education and the other with reasonable number of years of experience in okra marketing but were mostly retailers. Okra marketing in the study area showed inefficiency in pricing efficiency and marketing efficiently owing to constraints such as perishability, storage facilities, and lack of standard of measurement, seasonality, transportation and inadequate funds. Marketers are encouraged to form cooperative groups to enable them assess funds from Government, NGOs and banks. Government on their part should provide storage facilities for the marketers to avoid the wastage of the produce in terms of its perishability and also standard of measurement be provided by the Government to attract price of the commodity in the study area.

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Table 1: Socio-economic Characteristics of Okra Marketers (n = 80)

Variable	Frequency	Percentage (%)
Gender		
Male	39	47.75
Female	41	51.25
Age (years)		
Below 20	10	12.50
20 – 30	30	37.50
31 – 40	16	20.00
41 – 50	15	18.25
52 and above	9	11.25
Marital Status		
Married	40	50.00
Single	21	26.25
Divorced	9	11.25
Widowed	10	12.50
Educational level		
Formal education	53	66.25
No formal education	27	33.75
Experience in marketing (years)		
Below 5	19	23.75
5 – 10	21	26.25
11 – 20	22	27.50
20 and above	18	22.50
Source of finance		
Personal savings	58	72.50
Fiends/Relations	13	16.25
Financial institutions	9	11.25
Mode of Transport		
Vehicle	32	40.50
Motor cycle	21	26.25
Others	27	33.75

Source: Field Survey, 2014

Table 2: Average price for the marketing of okra in the study area per month

Item	Value in Naira (₦)
Farm gate big container (basket)	12,000.00
Loading expenses	200.00
Off-loading expenses	200.00
Market gate fees	1000.00
Transportation	2000.00
Holding and guarding expenses	1500.00
Government agency on the road	1000.00
Government taxes (Revenue)	1000.00
Total marketing cost	18900.00
Selling price	25,400.00
Marketing margin (MM) (%)	25.60
Profit margin (MP)	6,500.00
Pricing efficiency (PE)	1.34
Marketing efficiency (ME) (%)	34.4

Source: Field Survey, 2014

Table 3: Constraints to Okra marketing in the study area

Constraints	Frequency	Percentage (%)
Perish nature of okra	50	21.20
Storage facility	45	19.00
Lack of standard measurement	40	17.00
Seasonality	36	15.00
Transportation	35	14.80
Inadequate funds	30	12.70
Total	**236***	**100**

Source: Field Survey, (2014)
    * Multiple Responses