

## MARKETING OF PLANTAIN IN IKONO LOCAL GOVERNMENT AREA, AKWA IBOM STATE OF NIGERIA

*Obinaju, L. C.*

### ABSTRACT

*Department of Agricultural Economics and Extension, University of Uyo, Uyo, Akwa Ibom State, Nigeria.  
lawrence\_obinaju@yahoo.com ; 08064615820*

*This study analyzed plantain marketing in Ikono Local Government Area. A sample size of 120 plantain marketers was selected for the study. Primary data were collected with the aid of structured questionnaire administered on plantain marketers who were purposively selected. Data was analyzed using descriptive statistics – frequency counts, percentages and mean. Findings revealed that plantain marketing was mainly carried out by women with majority of them within the age bracket of 31 – 40 years; making an average profit of ₦3,865.01 from their plantain marketing activity. Major constraints faced by these marketers were inadequate funds, poor road network and high transportation cost. The study recommended that marketers should join marketing cooperatives which would enable them obtain loans, and the government should provide good roads to reduce transportation cost and enhance the plantain marketing business in the area generally.*

**Keywords:** *Plantain marketing, Net profit, marketing margin, marketing efficiency, constraints*

### INTRODUCTION

Plantain (*Musa paradisiaca*) is a starchy staple food which is fried, baked, boiled, roasted and consumed alone or together with other foods by both rural and urban populace (Aina *et al.*, 2012). Its attractiveness as food is that it fruits all year round making them a reliable all-season staple food (Osudare *et al.*, 2014). Plantain is most popular in West and Central Africa which accounts for about 49.6 %, Asia and Central America 15.7 % and 9.6 % respectively. Over 45 million tons of plantains are now produced worldwide. The high production figures for plantain has been attributed to the cheaper methods of growing that require few labour inputs, little soil preparation and little weeding needed once the plant has established vegetative cover (Food and Agricultural Organization, 2004). Plantain is a good carbohydrate diet no matter what form is consumed. It is also a good source of protein, mineral and vitamins. It contains 70% moisture, 25% carbohydrate, 1.2% protein, 0.2% fats, 0.6 % crude fibers and 0.8% ash (Udoh *et al.*, 2005). In Nigeria, all stages of the fruit (from immature to over ripe) are used as sources of food in one form or the other. The immature fruits are peeled, sliced, dried and made into powder and consumed as ‘plantain fufu’. The mature fruits (ripe and unripe) are consumed boiled, steamed, baked, pounded, roasted and sliced and fried into chips. Overripe plantains are processed into beer or spiced with chili pepper, fried with palm oil and served with snacks. Industrially, plantain fruits serve as composite raw materials in the making of baby food, bread, biscuit and other foods. The leaves are also used for wrapping packaging, marketing and serving of food (Ogazi, 2006).

The plantain business is faced with a lot of marketing problems which determine whether production can be expanded or not (Adetunji and Adesiyani, 2008). Worldwide, relative attention given to plantain is focused on the technical and productive viability while little or nothing is done on its marketing. According to Idachaba (2000), it is not sufficient for policy makers to concentrate on solving production problems because even though actual production maybe adequate and marketable, marketed surplus maybe inadequate and unreliable. Inefficiency in plantain marketing system affects both its production and consumption in Nigeria (Aina *et al.*, 2012). It is obvious that increased production without corresponding increase in marketing may amount to wastage of resources leaving people on the same platform of malnutrition. Plantain is a seasonal crop with relative short shelf life, hence it is available for a limited period and post-harvest losses are very high. It is to this end that this study carried out a scientific survey of its marketing system and to find out how profitable plantain marketing was in the study area.

### METHODOLOGY

The study was conducted in Ikono Local Government Area of Akwa Ibom State. Ikono Local Government Area is bounded in the North by Ini Local Government Area, in the south by Ikot Ekpene Local Government Area, in the East by Ibiono Ibom Local Government Area, and in the West by Obot Akara Local Government Area. Ikono has a total population of 131,904 (National Population Commission, 2006). The major occupation of the people is farming but they also engage in other activities such as trading, teaching, handicraft and hunting (Uffia, Effiong, Eyo and Akpan, 2013). A two stage sampling technique was used in selecting respondents for this study. The first stage was the purposive selection of 6 major markets out of 14 markets in the study area. The second stage then

involved the random selection of twenty (2) plantain marketers from each of the six (6) markets to give a total sample of one hundred and twenty (120) respondents. Frequency counts percentages mean and ranks were used to analyze the socioeconomic characteristics of plantain marketers and constraints associated with plantain marketing. The profitability of plantain marketing was ascertained using budgetary approach which included Net profit, marketing margin and marketing efficiency and these were computed as follows:

Net profit was computed as

$$\text{Net Profit} = \text{TR} - \text{TC} \quad \text{--- equation (i)}$$

Where TR = Total Revenue = selling price per bunch x Number of bunches sold

TC = Total Cost (TVC + TFC) in Naira

Where TVC = Total Variable Cost ; and

TFC = Total Fixed Cost

The major variable cost items taken into consideration during this study were transport cost, labour cost, and cost of trading material while the cost of renting a shop constituted the fixed cost.

Marketing Margin (MM) for the Retailer was computed as:

$$\text{Marketing margin (mm)} = C_p - R_p \quad \text{--- equation (ii)}$$

Where  $C_p$  = Consumer's Purchase Price = Retailer's Selling price per bunch

$R_p$  = Retailer's purchasing price = cost of plantain obtained from the wholesaler

Marketing Efficiency (ME) was calculated thus:

$$ME = \frac{\text{Total Revenue}}{\text{Total Cost}} \times \frac{100}{1} \quad \text{..... (iii)}$$

The constraints to plantain marketing were ascertained using a 3-point Likert type scale of: Not a constraint, minor constraint and major constraint assigned nominal values of 0, 1, and 2 respectively. The main value for each constraint item was obtained by summing up the ratings 0, 1, and 2 and dividing the sum by the number of ratings. Based on the mean values, the constraints were ranked from 'Not a constraint' to 'severe constraint'.

## RESULT AND DISCUSSION

### Socio-economic characteristics of the respondents

The study revealed that majority of the respondents was between the ages of 31 and 40 years. It was observed as indicated in Table 1 that plantain (*Musa paradisiaca*) marketing is mainly carried out by women (86) in the study area. This result corroborates Oladejo and Sanusi (2008) who reported that women are more into the marketing of plantain and other food items than men. It was also observed that most of the respondents had an appreciable level of functional literacy and most of them were married (86) and had personal savings as their major source of capital to finance their plantain marketing business. This shows that marriage is a highly cherished virtue by the people of Ikono Local Government Area. Adetunji and Adesiyani (2008) pointed out that income which accrues to plantain marketers as a result of their marketing activity is a reliable source of income for sustaining the family. It was observed that majority of the marketers (105) in the study area did not belong to any cooperative. However, this contrasts with the findings of Eronmwom, Alufohai and Ada-Okugbowa (2014) who reported that most plantain marketers in Edo State belong to Marketing Associations.

### Profitability of plantain marketing in the study area

It could be observed from Table 2 that a marketing margin of ₦8,435.00 was realized by each plantain marketer from plantain marketing activity. This corroborates Eronmwom *et al.* (2014) who reported that plantain marketing is a profitable venture. Results for the marketing efficiency (119.2 percent) shows that information on the market price of plantain was readily available to all participants in the plantain market and this provided maximum opportunities for buyers and sellers to carry out their transactions at minimum transaction costs.

### Constraints to plantain marketing in the study area

The results in Table 3 below reveal that inadequate funds ( $x = 1.73$ ), poor road network ( $x = 1.68$ ) and high transportation cost ( $x = 1.28$ ) were the major constraints faced by the marketers of plantain in the study area. As a result of limited fund, the plantain marketers can only afford a few bunches which they ferry back to sell at very exorbitant rates to retailers and consumers due to the high transport cost they incur in transporting the produce.

Table 1: Socio-economic characteristics of the respondents in the study area

Socio Economic Characteristics	Frequency	Percentage	Mean
Sex			
Male	34	28.0	
Female	86	72.0	
Age			
21 – 30 years	25	20.8	
31 – 40 years	46	38.3	43 years
41 – 50 years	31	25.8	
51 – 60 years	14	11.7	
61 – 70 years	4	3.4	
Marital Status			
Single	16	13.3	
Married	86	71.7	
Divorced	4	3.3	
Widowed	14	11.7	
Membership of Cooperative			
Yes	15	12.5	
No	105	87.5	
Years of Marketing Experience			
1 – 10 year(s)	83	69.2	
11 – 20 years	32	26.7	8 years
21 – 30 years	4	3.3	
31 – 40 years	1	0.8	
Source of Capital			
Personal Savings	60	50.0	
Friends and Relatives	41	34.2	
Cooperative Loan	18	15.0	
Bank Loan	1	0.8	
Monthly Income			
Less than ₦40,000	103	85.8	₦ 37,
₦40,001 – ₦80,000	16	13.4	420
₦80,001 – ₦120,000	1	0.8	

Source: Field Survey, 2016

Table 2: Profitability of plantain marketing in the study area (in Naira)

Items	Total cost (₦)	Average cost (₦)	Percentage
Fixed cost			
Rent	88,600.00	738.33	69.63
Trading materials	38,650.00	322.08	30.37
Total fixed cost (TFC)	127,250.00	1,060.41	100
Variable cost			
Supply price	1,934,400.00	16,210.000	82.2
Transportation	301,950.00	2,516.25	12.76
Cost of Labour	119,200.00	993.33	5.18
Total Variable Cost (TVC)	2,355,550	19,719.58	100
Total Cost (TFC + TVC)	2,482,800	20,779.99	
Total revenue	2,957,400.00	24,645.00	
Net profit	474,600	3,865.01	
Marketing margin	1,023,000	8,435.00	
Marketing efficiency	119.2 Percent		

Source: Field Survey, 2016

This corroborates (Musa *et al.*, 2012) who reported that in most rural areas in Nigeria, transport facilities are in short supply. Motor able roads to convey farm produce are lacking and where they do exist, they are either not motor able throughout the year or they are in deplorable conditions and this in turn affects the evaluation of farm produce to nearby markets for sale.

## CONCLUSION AND RECOMMENDATIONS

This study investigated into the marketing of plantain in Ikono Local Government Area of Akwa Ibom State. The study set out to analyze the profitability of the enterprise and also to find out and highlight the constraints faced

by plantain marketers in the study area. The results show that plantain marketing was a profitable venture in the study area. However, it was observed that inadequate funds, poor road network and high transportation costs were the major constraints the respondents faced in their marketing activity. Based on the findings of this study, there is convincing rationale to conclude that a lot still needs to be done to improve the marketing of plantain in the area. I therefore recommend that plantain marketers should be encouraged to join marketing cooperative societies so as to facilitate the process of obtaining loans from banks and other financial institutions to aid them in the marketing process. The government should intensify effort to provide basic amenities such as good roads, portable water and electricity to those in the rural areas as this will help reduce transport cost incurred by marketer, hence a reduction in marketing cost.

Table 3: Constraints to plantain marketing in the study area

Constraints	Not a constraint	Minor Constraint	Severe Constraint	Mean	Rank
Inadequate funds	4*(3.3)**	25* (20.8)**	91* (75.8)**	1.73	1 <sup>st</sup>
Rapid deterioration in quality	38(31.7)	55(45.8)	27(22.5)	0.91	6 <sup>th</sup>
High transport cost	24(20.0)	38(31.7)	58(48.3)	1.28	3 <sup>rd</sup>
Seasonality of plantain supply	17(14.2)	80(66.7)	23(19.2)	1.05	4 <sup>th</sup>
Price fluctuation	17(14.2)	83(69.2)	20(16.7)	1.03	5 <sup>th</sup>
Pilfering	96(80.0)	17(14.2)	7(5.8)	0.26	11 <sup>th</sup>
Pest and diseases	98(81.7)	12(10.0)	10(8.3)	0.27	10 <sup>th</sup>
Inadequate storage facilities	112(93.3)	7(5.8)	1(0.8)	0.08	13 <sup>th</sup>
Lack of organized market	84(70.0)	36(30.0)	0(0.0)	0.30	9 <sup>th</sup>
Inability to sell plantain quickly	50(41.7)	56(46.7)	14(11.7)	0.70	7 <sup>th</sup>
Poor marketing channel	108(90.0)	9(7.5)	3(2.5)	0.13	12 <sup>th</sup>
Lack of cooperation from buyers	59(49.2)	53(44.2)	8(6.7)	0.58	8 <sup>th</sup>
Poor road network	9(7.5)	20(16.7)	91(75.8)	1.68	2 <sup>nd</sup>

Source: Field Survey, 2016

Where \* - Frequencies, \*\* = Percentages in parenthesis

Rank 1 is considered the most severe constraint while rank 13 is considered the least severe constraint.

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