

Prospects and Constraints of Marketing *Musa* spp. in Southwest Nigeria

Abioye Olabode* • Olagorite Adetula • Gbenga Akinwumi

National Horticultural Research Institute, P.M.B.5432 Idi-shin, Oyo State, Nigeria

Corresponding author: * olagorite@yahoo.com

ABSTRACT

The bulk of *Musa* spp. output come from large numbers of very small scattered farms making the task of collection and distribution more complicated. A survey was undertaken to study the prospects and constraints of marketing of banana and plantain in south west Nigeria, during the period of January to May 2008. 150 marketers were selected in six states at random for the interview using structured questionnaires. Data were analyzed using descriptive statistics, marketing margin and *t*-test. The result of the analysis showed that 80% of respondents were female and 20% male. Majority of respondents had ten years experience. Above (68%) were middle aged people. Analysis also indicated that 40, 35 and 53% sourced their fund through contribution (Esusu), family and personal savings respectively. The majority of respondents (72%) had the problem of collection since farms are small and scattered with little access. According to respondents the average purchasing price of big and small bunch of plantain were N251 and N95.60 respectively while, big and small banana bunch were found to be N104.60 and N62.80 respectively. Also average selling price of big and small bunch of plantain were N573 and N188.60 respectively. While big and small bunch of banana were sold for N250.80 and N125.00 respectively. The result of *t*-test analysis showed that the cost price was significant ($P < 0.05$) different from the selling price of plantain and banana. This indicated that marketing of the crops is highly profitable. Finally, these surveys revealed high level of profitability associated with the marketing of plantain and banana, if government assists in the provision of credit facilities to the sellers and accessible roads to the producers.

Keywords: consumer, marketing efficiency, marketing margin, marketing channel

INTRODUCTION

Over 70 million people in Africa including Nigeria depend on Banana and plantain (*Musa* spp.) as major staple food. This population is at the risk of hunger if immediate solution is not provided to solve the problem of banana and plantain production in the continent (IITA 2007). Also, the recent policy thrust of Nigerian government towards addressing the effect of the global food crisis attached little or no emphasis on banana and plantain (Eki news, 2008). They are widely grown in more than 120 countries throughout the world and are cheap to produce, grow in a range of environments and produce fruit year round.

Banana and plantain are dominantly produced by small-holder farmers who sell surplus production at the farm-gate or local collection centres for onward transport to the larger urban centers. In this way, the farmers earn a large part of their cash income for sustaining their livelihoods (Bagamba *et al.* 2010). Therefore, how the excess of *Musa* produced on thousands of small scattered farms reach the million consumers in order to earn more income with which the farmers can purchase other goods and services not produce by them is of great important. Also, the more they are available for marketing, the more the people employed in their marketing and hence the more people are employed. In order to improve the production of Banana and plantain and the income of farmers and marketers through a conducive marketing system, it is important to examine the actual market status and constraints of banana and plantain in south-west Nigeria. This study examines the socio-economic characteristics of the respondents, marketing channel, marketing margin and relationship between the selling and cost price of banana and plantain and also possible constrains faced by the marketers.

MATERIALS AND METHODS

A survey was conducted between January and May, 2008 to understand the prospects and constraints of plantain and banana marketing in South-west, Nigeria. The major markets of the state capital (Edo, Ekiti, Lagos, Osun, Ondo and Oyo states) were selected for the study. However, the geographical characteristics of the study area favour the production of plantain and banana. The rainfall ranges between 150-200 cm annually with average daily temperature of about 21°C. The respondents on whom questionnaires were administered were selected randomly. Samples of 25 marketers were selected from the major markets of each state capital to make a total of 150 respondents. Data collected on socio-economic characteristics were marketing channels, margin, constraints and other relevant information. The descriptive statistics involved the use of frequency distribution and percentages to identify and discuss socio-economics of sampled marketers. The different between cost and selling price of plantain and banana were obtained using T-test analysis.

RESULTS AND DISCUSSION

In the course of this survey, the socio economic characteristics of banana and plantain sellers were examined as they are essential in determining their performances in banana and plantain marketing. The result of the analysis showed that 80% of respondents were female. In all the respondents, 63.3, 23.4 and 13.3% are married, singled and widowed respectively, while their ages ranges between 18 and 65 years, 68% of which falls between 31 and 50 years which could be regarded as active working period. The level of education of respondents indicated that majority 48% attended primary school, 18.6% with no formal education while 33.4% attended secondary education. In all the marketers interviewed, none of them attended tertiary education. The number of

years a marketer spent in marketing is an indication of the practical knowledge which he has acquired. 56.7% has between 5-9 years of experience, while only 10% has less than 5 years. The purchase, transport and storage of banana and plantain cost money. However, 53% of sellers sourced their money through personal savings, 40% from thrift society (esusu), 35% obtained their own through relations and friends as non of the respondents acquired loans from banks.

Marketing channels

In the study area, there was no perfect wholesale as such. Each market serves as both wholesale and retail market. As per how the sellers source banana and plantain, majority of respondents (72%) obtained their produce through country buyers commonly known as *alarobo* in the study area. The reason according to them is that farms are many, small and scattered with little or no accessible roads, thus, they employ the use of *alarobo* as collectors. However, 23.35% source their produce direct from farms, while only 7% got their own produce from road side as it is more expensive. Concerning the methods of purchase, plantain and banana are arranged in bunches according to their sizes i.e., small and big in dozens as no respondents employed the use of weighing scale. According to the respondents, it takes an average of ₦7,500 to hire a lorry that can carry an average of 370 bunches at a time depending on the distance, which they regarded as reasonable. Ramirez *et al.* (2008) referred to the period between harvesting of banana and initiation of normal ripening as green-life. This is the period when the majority of the respondents 98% sold their plantain and banana to avoid wastage. The peak of the price was always in the second and third quarters of the year. This may be attributed to principle of demand and supply. These quarters of the year are regarded as off season and the resultant effect is the high prices of the fruit (Adeoye *et al.* 2010).

Marketing margin and efficiency of marketers

Marketing margin represent the price paid to the first seller and that paid by the final buyer. Marketing in this case depends on its bulk purchase. Contrary to the report of (Tshunza *et al.* 1998) that plantain has relative to cooking banana, a very high market status was not the case in one of the study area at Ikire - Osun State where cooking banana is highly demanded for the processing of 'Dodo - Ikire' because of its low price. The purchase price of the big and small bunch of plantain from rural markets according to the respondents ranged from ₦220 to ₦300 with an average of ₦251 and ₦60 to ₦150 with an average of ₦95.60 respectively. While the purchase price of big and small banana range from ₦70 to ₦150 with an average of ₦104.60 and ₦45 to ₦90 with an average of ₦62.80 per bunch respectively (Table 1, 2). However, the size was not determined, since none of the respondents employed the use of weighing scale.

According to the respondents, the cost of transport and storage was independent of bunch size and cultivars of plantain and banana as marketers transport their produce to state capital in bulk and sell them to consumers, retailers and processors. The selling price of a big and small bunch of plantain ranges from ₦450 to ₦750 with an average of ₦573 and ₦150 to ₦250 with an average of ₦188.60 respectively. On the other hand, the selling price of big and small bunch of banana ranges from ₦200 to ₦300 with an average of ₦250.80 and ₦100 to ₦150 with an average of ₦125.00, respectively (Table 1, 2). The result of marketing margin indicated that big plantain and banana commanded high marketing margin (₦267.20 and ₦91.40) with marketing efficiency of 1.86 and 1.57 respectively, while the marketing margin of small plantain and banana was relatively small (₦38.28 and ₦7.40) with marketing efficiency of 1.25 and 1.06 respectively (Table 2). However, the respondents used the income of big plantain to augments sales of the small size.

Table 1 Marketing margin and efficiency of big size plantain and banana per bunch.

Variables	Plantain (₦)	Banana (₦)
Minimum purchasing price/bunch	220.00	70.00
Maximum purchasing price/bunch	300.00	150.00
Average purchasing price/bunch	251.00	104.00
Average transport cost/bunch	42.50	42.50
Average storage cost/bunch	12.30	12.30
Minimum selling price/bunch	450.00	200.00
Maximum selling price/bunch	750.00	300.00
Average selling price/bunch	573.00	250.80
Marketing Margin/bunch	267.00	91.40
Marketing efficiency	1.86	1.57

As at July, 2011 (1US\$ = ₦156.00)

Table 2 Marketing margin and efficiency of small size plantain and banana per bunch.

Variables	Plantain (₦)	Banana (₦)
Minimum purchasing price/bunch	60.00	45.00
Maximum purchasing price/bunch	150.00	90.00
Average purchasing price/bunch	95.60	62.80
Average transport cost/bunch	42.50	42.50
Average storage cost/bunch	12.30	12.30
Minimum selling price/bunch	150.00	100.00
Maximum selling price/bunch	250.00	150.00
Average selling price/bunch	188.60	125.00
Marketing Margin/bunch	38.20	7.40
Marketing efficiency	1.25	1.06

Table 3 The *t*-test analysis of the cost and selling price of big and small size plantain and banana.

Variables	Tabulated value at 5%	Calculated value of 't'
Big plantain	1.96	16.03
Small plantain	1.96	11.27
Big banana	1.96	17.03
Small banana	1.96	14.53

$P < 0.05$; $n = 150$

Marketing constraints

The major constraints according to the respondents were that ease of collections was seriously affected by non availability of assemblers, means of transportation and also feeder roads. Most of agricultural markets in African countries are inefficient and poorly integrated and agricultural marketing efficiency in Nigeria is low (Onyuma *et al.* 2006; Phillips *et al.* 2008). Transport costs are high due to poor road networks, poor access to inputs, credit, and output markets. All the traders interviewed had problems as uniform weights or measurements were not employed except by physical examination, thus making a pricing system more difficult.

Respondents also indicated that in many occasions they have problem with state revenue collectors who demanded unauthorised fees especially interstate movements. Also, there is possible loss of products in transit due to accidents or theft. Although, all the respondents indicated that plantain and banana are available throughout the year, there is also a lean period during which other fruit products were used to argument sales. Finally, all the respondents expressed their lacks of credit facility as none of them could afford to borrow from banks, as they relied on personal savings, friends and relations. This according to them hindered the scope of their bulk purchase and limited their marketing margin and their overall income.

Result of *t*-test

The analysis was used to test the significant difference between the cost price and the selling price of big and small plantain and banana. The results showed that there were significant differences between the cost prices and selling prices of big and small plantain and banana at 5% level of

significance. **Table 3** shows that the difference between cost and selling price is wide enough for the sellers to make good profit and high income.

CONCLUSION AND RECOMMENDATION

The present study revealed that the marketing of big banana and plantain is highly profitable with marketing margin of ₦91.40 and ₦267.00, respectively in the study area. It is therefore suggested that farmers should improve on the quality and size of plantain and banana they produce, since big size command higher profit. Government should direct more efforts on feeder roads to make farms accessible. Also, marketers should form themselves into cooperative societies so that problem of loan facilities could be solved. Government should correct the incidents of state revenue collectors who usually exploit the traders. It can be concluded from this study that marketing of banana and plantain is profitable and feasible if all the findings are considered.

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