

# AN ANALYSIS OF THE MARKETING OF ONION IN MONGUNO LOCAL GOVERNMENT AREA OF BORNO STATE, NIGERIA

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## ABSTRACT

This paper determined the profitability, marketing channel and marketing efficiency of onion marketing in Monguno Local Government Area of Borno State, Nigeria. Data were collected using well-structured questionnaires from 45 respondents selected using random sampling technique. The market analyses were done using descriptive statistics, gross margin, marketing margin and market efficiency formulae. The study revealed that onion marketing was profitable. The with a gross margin of ₦ 2,888.00 and ₦ 3,130.00 for wholesalers and retailers return on naira invested was 0.32% for wholesaler and 0.34% for retailer, which when compared to the cost of capital in the economy, showed that the marketers can generate enough capital to meet the obligation of repaying any loan could borrow in the course of their marketing activities. The marketing margin obtained was 32% for wholesalers and 33.3% for retailers. The marketing efficiency was 42% and 44.8% for wholesalers and retailers respectively. The problems of onion marketing in the study area include inadequate storage facilities, lack of adequate transport facilities, and lack of capital which affect the profits realized by the marketers. It was recommended that transport facilities should be provided marketing loans and credit made available to marketers and adequate and conventional storage facilities made available in the market by the government to prevent spoilages.

**Keywords:** onion, gross-margin, marketing margin, marketing efficiency.

## INTRODUCTION

Onion growing is widely distributed among countries and regions in the world. In the last decade, production figures have shown an upward trend with a production volume of 33 million tonnes in 2003 and 64 million tonnes in 2007. This represents a 51.6% increase, with Nigeria producing 618,000 tonnes in year 2007 (FAO, 2010). Onion producing states in Nigeria include Borno, Sokoto, Kebbi, Jigawa, Zamfara, Kano and Kaduna where it is a major commercial crop (AERLS, 1985). Onion marketing is very profitable in Nigeria, but returns vary widely from place to place. Revenue of ₦ 206.7 per bag has been estimated for onion in 2004 (Abduljabar, 2004).

Onion is the most widely used flavouring vegetable crop of major commercial importance throughout the world, believed to have originated from tropical, central or western Asia (FAO, 1984). Onion is appreciated by people due to the distinctive flavour it possesses. The young green plants are eaten raw in salad, while matured bulbs are cooked or eaten raw as vegetable because it contains essential nutrients which may not be readily available from other sources (Abdullahi and Ibrahim, 2004). They are used in sauces and as flavouring agents in many dishes (Brewster, 1977).

Agricultural marketing is the process of making agricultural products available in the form, place and time required by the consumer (Olukosi et al., 2005). A well-developed market for agricultural produce provides access to consumers who depend on the market for their food supplies, and farmers who shift from subsistent farming to commercial production. An increase in marketable crops, call for larger and improved marketing facilities. If markets function efficiently, farmers would allocate their resources according to their comparative advantages and intensify their production. An efficient marketing system is an important means for raising the income levels of farmers and for promoting economic development of a region (Tamimi, 1999).

The major aim of the marketing system is to achieve efficiency, but most of Nigerian agricultural markets are inefficient due to high market margin, abnormal profits, poor infrastructural facilities, high marketing cost, and poor pricing performance (Bila and Bulama, 2007; Ditto, 1994; Adeyege, 1986; Hays and Mc Coy, 1978). Improvements need to be done in order to improve efficiency of the markets.

Failure on the part of both public and private sectors to invest and improve on the marketing and productivity as well as the welfare of farmers in the country may have contributed to the dwindling fortune in onion marketing in the country. Reasons for the inefficiency in the marketing of onion in the area may include lack of storage facilities, use of local and primitive marketing techniques, lack of market information as well as infrastructural problems. It is against this back drop that marketing analyses of onion marketing in Monguno Local Government Area was conceived with the view of assessing its performance.

The main objective of the study was to carry out market analyses of onion marketing in Monguno Local Government Area of Borno State. The specific objectives of the study were to:

- i). examine the costs and returns associated with onion marketing;
- ii). estimate the marketing margin of onion marketers;
- iii). determine the marketing efficiency of onion marketing, and
- iv). identify the problems of onion marketing in the study area.

## METHODOLOGY

The area of study is Monguno Local Government Area, Borno State of Nigeria. The Local Government Area is made up of two district; Monguno district and Ngumati district (Bukar, 2008). It is located in the northern part of Borno state which lies between latitude  $12^{\circ} 45''$  and  $13^{\circ}$  N and longitude  $13^{\circ} 13''$  and  $13^{\circ} 48''$  E. Monguno Local Government has an area of  $2,340 \text{ km}^2$  with a population of 109,851 persons (NPC, 2006).

The climate is distinct with wet and dry season. The wet season lasts for 3 to 4 months while the dry season lasts for 6 to 7 months beginning from September to May with an average annual rainfall of 500mm-600mm. The average temperature ranges from  $20^{\circ}\text{C}$  -  $23^{\circ}\text{C}$  minimum and  $35^{\circ}\text{C}$  -  $40^{\circ}\text{C}$  maximum (Bukar, 2008).

Greater percentage of the population is full time farmers predominantly engaged in subsistence agriculture, with some form of commercial agricultural production not uncommon among the people. The major crops cultivated include onion, maize, millet, cowpea, while livestock kept include cattle, sheep, goat e.t.c. (Bukar, 2008).

Simple random sampling was used to select a representative sample of onion marketers from the Monguno market. Forty five (45) respondents were selected from the list of onion marketers in the market which served as the sampling frame for the study. The list of onion marketers was obtained from the onion marketers association in the market. Primary data were used for the study and the data were collected using questionnaire.

The market analyses were done using descriptive statistics, gross margin, marketing margin and market efficiency. Descriptive statistics i.e frequency distribution table and simple percentage were used in examining the problems associated with onion marketing. Gross margin analysis was used to determine the profitability associated with onion marketing. It is the difference between the gross revenue and the total variable cost incurred in the marketing process. It is expressed as:

$$Gm = GR - TVC$$

Where:

GM= Gross margin per 50kg bag (₦).

GR= Gross revenue per 50kg bag (₦).

TVC=Total variable cost per 50kg bag (₦).

Marketing margin is the difference between purchase price and the price received on resale (Olukosi and Isitor, 1990). The Marketing margin reflects the effect of the product characteristics on the complexity of the marketing functions that must be performed as the product passes through the marketing system, (Ijarafu, 2010). It is expressed as:

$$mm = \frac{sp - cp}{sp} \times 100$$

Where:

MM= market margin per 50 kg bag (₦).

CP= cost price per 50 kg bag (₦).

SP= selling price per 50kg bag (₦).

Marketing efficiency formulae was used to determine the efficiency of onion marketing, which is expressed according to Olukosi and Isitor (1990) as:

$$\text{Marketing efficiency} = \frac{\text{value of output}}{\text{value of input}} \times 100$$

Where:

Value of output = difference between the selling price and purchase price of onion per 50 kg bag (₦).

Value of output = cost of marketing services per 50 kg bag (₦).

## RESULTS AND DISCUSSION

### Costs and Returns in Onion Marketing

The costs and returns associated with onion marketing are presented in Table 1. It shows that the average gross revenue for marketing a 50 kg bag of onion amounted to ₦ 12,000.00 and ₦ 13,865.00 for wholesalers and retailers respectively. While the total variable cost was ₦9,112.00 for wholesale marketing of onion, it was ₦ 735.00 for the retailing aspect.

**Table 1: Average Cost and Return per 50 kg Bag of Onion Marketed**

Variables	Wholesale Value (₦)	Retail Value (₦)
<b>Gross Revenue</b>	12,000.00	13,865.00
<b>Variable Costs</b>		
Purchase Cost	8,162.00	10,085.00
Transportation Cost	200.00	100.00
Loading and Offloading	50.00	50.00
Handling(cleaning, sorting & packaging)	250.00	250.00
Rent/Storage	50.00	-
Damages	400.00	200.00
Miscellaneous	50.00	50.00
<b>Total Variable Cost</b>	<b>9,112.00</b>	<b>10,735.00</b>
<b>Gross Margin Per Bag</b>	<b>2,888.00</b>	<b>3,130.00</b>
Returns per Naira Invested (%)	0.32	0.29

Source: Market survey, 2011.

Analysis from Table 1 showed that the average gross margin per 50 kg bag for wholesalers was ₦ 2,888.00 and ₦ 3,130.00 for retailers. This means that onion marketing in Monguno Local Government Area is a profitable business for both the retailers and the wholesalers. The net return per naira invested was 0.32% for wholesalers and 0.29% for retailers. The implication of this is that for every one naira invested in the wholesale marketing of onion, thirty-two kobo (0.32k) was generated as profit. And for every one naira invested in the retail marketing of onion, twenty-nine kobo (0.29k) was realized. This implies that wholesale marketing of onion was more profitable than retailing.

#### **Marketing Margin in Onion Marketing**

The market margin for onion marketing in the study area was computed as follows:

Market margin for wholesalers:

$$MM = \frac{1200 - 8162}{1200} \times 100$$

$$= 31.98\%$$

Market margin for retailers:

$$MM = \frac{13865 - 10085}{13865} \times 100$$

$$= 27.27\%$$

The market margin for wholesalers and retailers were 32% and 27% respectively. This margin of below 50% indicates an average return on investment in providing the marketing services. It could be concluded that the marketers get a fair share of the profit realized in the marketing of onion in the study area.

#### **Marketing Efficiency of Onion Marketing**

The marketing efficiencies for onion marketers in Monguno market were calculated as follows:

Marketing efficiency of wholesalers:

$$ME = \frac{12000}{9112} \times 100$$

$$= 132\%$$

Marketing efficiency of retailers:

$$ME = \frac{13865}{10735} \times 100$$

$$= 129\%$$

The marketing efficiency analysis showed that the wholesalers had an efficiency of 132% while the retailers had an efficiency of 129%. This shows that the wholesalers were more efficient in performing their marketing functions compared to the retailers. This collaborates with the findings on returns to investments as wholesalers were found to rake-in more returns compared to retailers. The reasons for this could not be unconnected with the nature of cost incurred in performing the marketing functions. The wholesalers incur a

higher marketing cost (₦1000.00) per 50 kg bag of onion marketed compared to the retailers (₦650.00) in the study area.

#### Problems Associated with Onion Marketing

Onion marketing is associated with a number of problems, which to some extent influence their profitability. For this reason, onion marketers in the study area were asked to rank they faced in their marketing activities. Table 4.7 shows the different problems encountered by onion marketers.

**Table 4.7 Problems of Onion Marketing**

Problems	Frequency	Percentage*	Rank
Inadequate Storage Facilities	34	75.6	1
Inadequate Transport Facilities	30	66.7	2
Lack of Capital	17	37.8	3
Total	81	180.1	

Source: Market survey, 2010.

\*multiple responses existed percentage >100

Table 4.7 shows that inadequate storage a facility was the major problem faced by marketers with 75.6% of the respondents attesting to it. Inadequate transportation facilities followed with 66.7% of the respondents and lack of capital was third with 37.8% of the respondents. Onion being a highly perishable farm produce, needs to be stored properly in order to minimize losses due to deterioration in quality. Marketers in some cases suffer losses of between 50% -70% due to inadequate storage facilities. Monguno, being a Local Government Area needs to be served by functional transport facilities such as lorries to facilitate easy and timely movement of onion into the State capital. Where the means of transportation are not readily available as is mostly the case, marketers are forced to sell their onion below the market value, as the gloat in the market pull down the price of onion to their disadvantage or stand the risk of losing their investment because lack conventional storing facilities. These problems have adverse effects on the marketer's profit by causing damage due to inadequate storage facilities and increased marketing cost due to inadequate transportation facilities. Furthermore, lack of capital and credit facilities have effect on the size of marketers holding as well as their marketing scope.

#### Conclusion and Recommendations

The study revealed that onion marketing was profitable with a gross margin of ₦ 2,888.00 and ₦ 3,130.00 for wholesalers and retailers. The return on naira invested was 0.32% for wholesaler and 0.34% for retailer, which when compared to the cost of capital in the economy, showed that the marketers can generate enough capital to meet the obligation of repaying any loan could borrow in the course of their marketing activities. The marketing margin obtained was 32% for wholesalers and 33.3% for retailers. The marketing efficiency was 42% and 44.8% for wholesalers and retailers respectively. The problems of onion marketing in the study area include inadequate storage facilities, lack of adequate transport facilities, and lack of capital which affect the profits realized by the marketers.

Based on the findings of this study, the following recommendations are made:

- Transport facilities should be provided either through cooperative efforts or by Government to link the farms with the market as well as the Local Government Area with the state capital to help reduce marketing costs as well as increase marketers' profit.
- Marketing loans and credit should be made available to marketers at a low interest rate to help them finance their marketing activity.
- Adequate and conventional storage facilities should be made available in the market by the government to counteract the problem inadequate storage facilities.

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