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## MARKETING ANALYSIS OF SMALL SCALE EGGS RETAILING IN JOS NORTH LGA OF PLATEAU STATE

By

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### ABSTRACT

Eggs marketing in Nigeria is becoming an important enterprise. This study analyses small scale eggs retailing in Jos-north LGA of Plateau State with a view to determining the profitability of the business. Sixty (60) traders were randomly selected from an already purposively chosen six (6) markets. Data were collected through questionnaires and analysed using descriptive statistics. Result indicates that while 48.33% of the respondents were between 35 – 50 years of age, 90.00% of them were literates and 68.33% acquired marketing experience of 1 – 10 years. The study, also, confirms that most traders (43.33%) sourced capitals through personal savings and capital volume was as low as ₦30, 000 or less for 90.00% of respondents. While 66.67% of the traders sale less than 100 crates per week, the major eggs quality preferred by consumers is size (80.00%). Furthermore, the result depicts that, the average total cost, average total return and average net income per respondent per week were ₦51, 621.17, ₦57, 459.00 and ₦5, 837.80 respectively. More over, the net return per naira invested was found to be ₦0.20. Lastly, the study reveals that the major constraints to small-scale eggs retailing in the area were eggs breakages and storage related problems (100.00% each). Though the enterprise is profitable, there is need to safeguard and protect eggs during storages and while on transits.

**Keywords:** Marketing, Small-scale, Eggs and Retailing

### INTRODUCTION

Poultry industry is one of the major sources of animal proteins in Nigeria. Poultry products (meat and eggs) are among the most nutritional foods known to man. Of all the animal protein sources, only cow milk is equal to eggs in terms of protein content. Poultry, also, contributes about 10.00 percent of the total national meat production in Nigeria. Furthermore, poultry production is the fastest means of addressing protein deficiency. According to Musa and Mohammed (2005), due to high prolificacy and quick returns, the industry has become a diverse one with a variety of interest such as egg production, meat production etc. Thus, small-scale eggs' marketing is becoming prominent despite the continuous existence of large dealers. Marketing, itself, is defined as the performance of all business activities, which directs the forward flow of goods and services to consumers in order to accomplish the producers' objectives (Kohls and Uhls, 1980; Olukosi and Isitor, 1990; Salawu, 1994; Murtala *et al.*, 2005). Accordingly, the importance of the small scale eggs trading cannot be over-emphasized. Hence, this study attempts to evaluate this nature of eggs marketing in Jos north LGA. However, the specific objectives are to:

- i) Examine the socio-economic characteristics of small-scale egg retailers in the study area.
- ii) Determine the traders' sources and volume of initial capital
- iii) Determine the traders' average volume of sales and eggs characteristics influencing selection.
- iv) Compute the costs and returns of the enterprise in the study area.
- v) Identify the constraints associated with small-scale eggs marketing in the area

## MATERIALS AND METHODS

### The Study Area

Created in 1991, Jos north LGA is situated at the extreme north of Plateau State. It is bordered by Jos south LGA to the south, Jos east LGA to the east and Bassa LGA to the west. However, it shares boarder with Toro LGA of Bauchi State to the north (Mailumo, *et al.*, 2006). Jos north LGA has an area of 6,955sq.km with a population of 435,000 people (NPC, 1991). According to meteorological unit (1999), the annual rainfall in Jos north ranges from 131.75cm – 147.00cm. The local government lies wholly in the guinea savanna belt where the vegetation is grassland. In addition to agricultural production, business and marketing activities serve as major livelihood sources of the inhabitants.

### Sampling Procedure

Six (6) major markets were purposively selected within the area because of high availability of eggs in the markets. The chosen markets are Yan kaji, Kwararafa, Abattoir, Gangare, Tudun Wada and main market. Ten (10) small-scale egg retailers were then, randomly, picked from each market, thus making a sample size of sixty marketers.

### Data Collection and Analysis

Information on socio-economic as well as marketing variables were collected in 2005 using questionnaires. Furthermore, frequency distribution and percentages were employed to analyse the data collected. This is in addition to budget analysis that was used to compute costs and returns of small scale eggs marketing in the area. The specification of the budgeting model is given as:

$$\begin{aligned} \text{NI} &= \text{TR} - \text{TC} \\ \text{GM} &= \text{TR} - \text{TVC} \\ \text{TC} &= \text{TVC} + \text{TFC} \end{aligned}$$

Where:

NI	=	net income from egg sales
TR	=	total revenue from egg sales
GM	=	gross margin from egg sales
TC	=	total costs from egg sales
TVC	=	total variable costs from egg sales
TFC	=	total fixed costs from egg sales

While:

Return per naira invested was calculated as:

$$\text{RNI} = \frac{\text{NI}}{\text{TC}}$$

Where: RNI = net return per naira (₦) invested  
 NI = net income from egg sales  
 TC = total costs

## RESULTS AND DISCUSSIONS

### Socio-Economic Characteristics of Eggs Sellers

This plays a vital role in creating awareness and knowledge among marketers and, hence, shaping their marketing activities. The variables of interest considered included age, education level, length of marketing experience and occupation of the respondents. Table 1 shows that while none of the respondents was above 65 years in age, 29 (48.33%) fall between 36 – 50 years. This indicates that majority of the respondents were in their active ages, hence are capable of withstanding any form of marketing difficulties. The table also depicts that while 90.00 percent had one form of education or the other, 40.00 percent acquired primary education. Thus, the respondents' level of education is not discouraging and thus, it is expected, would have positive impact on marketing abilities. Mohammed *et al.* (2005) reported that educational background of respondents usually accounts for their managerial ability and make them more receptive to new ideas. Furthermore, the result indicates that 68.33 percent and 31.67 percent of the sampled respondents had marketing experience of 1 – 10 years and more than 11 years respectively. The number of years egg sellers spend in marketing, gives an indication of the practical knowledge acquired over the years; and it is possible for egg sellers to improve on their marketing efficiency. Similarly, the result discloses that 83.33 percent of the traders engaged in trading alone while others combined trading with either farming or civil service. Information, gathered during data collection, further confirmed that even the former group partakes in eggs trading hand in hand with other provision goods.

### Marketing Variables

#### Sources and volume of initial capital

The study confirms that personal savings, friends/relatives and commercial financial institutions as capital sources, were patronized by 43.33, 40.00 and 16.67 percents of the respondents respectively. This shows that informal sources of capital generation still play a major role in agricultural commodity marketing in the area. To embark in any business, irrespective of its size, the entrepreneur needs to handle certain amount of money to start with. Accordingly, table 2 shows the respondents' volume of seed money. From the result, while up to 36.67 percent of the traders acquired initial capital investment of less than ₦10, 000, only 10.00 percent were able to take off their businesses with more than ₦30,000 and the remaining respondents fell between the two (2) extremes. The implication of this finding is that total net income may be limited due to lower volume of capital.

### **Volumes of sales**

Table 3 depicts that 66.67 and 28.33 percents of the respondents sell not more than 100 and between 101 – 200 crates of eggs per week. The implication of this finding is that small scale eggs retailing in the area is very subsistence, probably due to capital constraint (Tables 2 and 6).

### **Characteristics of eggs preferred by consumers**

Products are demanded because of their utilities, which depend upon the products characteristics (Musa, 2003). Accordingly, the price consumers are willing to pay for products reflect the value they place on the commodity characteristics (Lancaster, 1966 and 1971). The major characteristic preferred was size of eggs (80.00%) and the least was smoothness of egg shells (10.00%). Other qualities of market value included shell colour and weight of eggs represented by 23.33 and 16.67 percent respectively. The lesser consideration of weight as a preferred characteristic, despite its relevance, might be a sign of under development in the marketing system. Notwithstanding, weight has a direct correlation with volume (size) of eggs. The implication of this finding is that breeders, feed compounders, producers and traders should target those characteristics much valued by consumers.

### **Costs and returns analysis of eggs marketing (n=60)**

All respondents (100%) opined that small scale eggs retailing in the area was profitable. Accordingly, a budget analysis was carried out with a view to determining the profitability level of the venture and the results is expressed in table 5. The result depicts that the average total cost, average total revenue and average net income per respondent per week were ₦51, 621.17, ₦57, 459.00 and ₦5, 837.80 respectively. Furthermore, the net return per naira (₦) invested was ₦0.20. The interpretation of this is that for each naira invested into the business, 20 kobo would be realized as net profit.

### **Constraints to small scale eggs retailing**

The traditional system of marketing agricultural commodity in Nigeria as in much of tropical Africa has been under considerable stress (Abu *et al.*, 1998). Accordingly, all the respondents (100%) identified egg breakages and storage related problems as the most serious constraints to eggs retailing. Other important obstacles, as depicted by Table 6, were eggs spoilage (3<sup>rd</sup>), inadequate market information (4<sup>th</sup>) and inadequate capital (5<sup>th</sup>). However, the less important constraints were weather conditions, seasonality of production, price instability and inadequate supply of commodity.

### **Conclusion and Recommendations**

The study, conducted in 2005 with the main objective of determining the economics of small-scale eggs retailing in Jos north LGA, confirms the profitability of the enterprise. Accordingly, average net income per respondent per week and net return per naira invested were found to be ₦5, 837.80 and ₦0.20 respectively. However, to improve in the areas of shortcoming, there are needs to find solutions to low capital volume, eggs breakages and storage/spoilage related problems. In addition, all stakeholders should target those characteristics of eggs valued most by consumers.

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**Table 1: Socio-economic variables of respondents**

<b>Variables</b>	<b>Option</b>	<b>Frequency</b>	<b>Percentage</b>
Age (years)	21 – 35	20	53.33
	36 – 50	29	48.33
	51 – 65	11	18.33
<b>Total</b>		<b>60</b>	<b>100.00</b>
Educational Level	Never been to school	6	10.00
	Primary school	24	40.00
	Secondary school	16	26.67
	Adult education	10	16.67
	Tertiary education	4	6.66
<b>Total</b>		<b>60</b>	<b>100.00</b>
Experience (years)	1 – 5	23	38.33
	6 – 10	18	30.00
	11 – 15	9	15.00
	16 and above	10	16.67
<b>Total</b>		<b>60</b>	<b>100.00</b>
Occupation	Trading and crop raising	3	5.00
	Trading and civil service	5	8.33
	Trading alone	50	83.33
	Trading and livestock keeping	2	3.33
<b>Total</b>		<b>60</b>	<b>100.00</b>

Source: Field Survey Data, (2003)

**Table 2: Sources and initial volumes of capital**

Sources of capital	Frequency	Percentage
Sources of Capital		
Personal savings	26	43.33
Friends/Relatives	24	40.00
Commercial institutions	10	16.67
<b>Total</b>	<b>60</b>	<b>100.00</b>
Volume of Capital (₦)		
Less than 10,000	22	36.67
10,000 – 20,000	20	33.33
21,000 – 30,000	12	20.00
More than 30,000	6	10.00
<b>Total</b>	<b>60</b>	<b>100.00</b>

Source: Field Survey Data, (2005)

**Table 3: Quantity of eggs sold per week (crates)**

Quantity	Frequency	Percentage
Less than 100	40	66.67
100 – 200	17	28.33
201 – 300	1	1.67
More than 300	2	3.33
<b>Total</b>	<b>60</b>	<b>100.00</b>

Source: Field Survey Data, (2003)

**Table 4: Characteristics of eggs preferred by consumers**

Characteristics	Frequency	Percentage
Colour of shells	14	23.33
Size of eggs	13	50.00
Weight of eggs	10	16.67
Smoothness of eggs	6	10.00
<b>Total</b>	<b>60</b>	<b>100.00</b>

Source: Field Survey Data, (2003)



**Table 5: Costs and returns analysis of eggs retailing (n=60)**

Items	Amount (₦)/Week
Average total cost	51,621.17
Average total revenue	57,459.00
Average net income	5,837.80
Return per naira invested	0.20

Source: Field Survey Data, (2003)

**Table 6: Constraints to small scale eggs retailing (n=60)**

Constraints	Frequency	Percentage	Rank
Eggs breakages	60	100.00	1 <sup>st</sup>
Eggs spoilage	50	83.33	3 <sup>rd</sup>
Inadequate supply	25	41.67	6 <sup>th</sup>
Storage problem	60	100.00	1 <sup>st</sup>
Inadequate capital	39	65.00	5 <sup>th</sup>
Seasonability of production	8	13.33	8 <sup>th</sup>
Whether condition	7	11.67	9 <sup>th</sup>
Price instability	9	15.00	7 <sup>th</sup>
Inadequate market information	40	66.67	4 <sup>th</sup>

Source: Field Survey Data, (2003)