

ANALYSIS OF BEEF MARKETING IN BENIN CITY, NIGERIA*Emokaro*, C. O. and Amadasun, O. J.***ABSTRACT**

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This study analyzed the marketing of beef in Benin City Metropolis. Specifically, the study determined the marketing channel for beef in the Metropolis, estimated the marketing cost and marketing margins for beef and analyzed the marketing efficiency index for beef in Benin City. Primary data used in this study were generated through the administration of well structured questionnaire to the 120 respondents, randomly selected from the list of registered butchers in Benin City. Data collected were analyzed using descriptive statistics, charts, percentages, marketing efficiency ratios and marketing margins. Results from the study showed that majority of the marketers were retailers (79%), who dealt directly with the final consumers. Only 21% of the marketers were wholesalers. The wholesalers were shown to be more efficient in beef marketing, with marketing efficiency ratio of 1.90 as against 0.89 recorded for retailers. Results also indicated that marketers complained of transportation difficulties, poor access to credit facility, high marketing charges and perishability of beef as the most serious constraints they faced in their marketing effort. It was therefore recommended that relevant government agencies and other stakeholders in the beef industry should help to ameliorate these constraints so as to ensure the sustainability of the industry. For instance, effort could be geared towards the provision such marketing facilities like mobile cold-rooms at affordable fees for easy transportation, handling and storage of beef so as to reduce spoilage. This would not only enhance the quality of beef marketed in the metropolis, it would also ensure the sustainability of the business.

Key words: Beef, Marketing Channel, Marketing Cost, Marketing Efficiency Index, Marketing Margin, Profit.

INTRODUCTION

The flesh of bovine animal that is in butchery is called beef. It is used generally to refer to the meat of a heifer, cow, bull, young bull, bullock or steer, even if the tenderness and flavour may vary greatly. It is a rich source of protein, lipid, vitamins, phosphorous and other substances that are nutritionally important. The demand for animal protein in Nigeria, like in other developing countries of the world, is far from being met. The average minimum supply of animal protein per head per day for Nigeria was put at 13.26g (Okuneye, 2002), far below the recommended minimum of 35g of protein expected to come from meat products (Oyenuga, 1987). The world shortage of protein particularly in developing countries like Nigeria has necessitated the investigation into several sources of protein. The acute shortage of protein has been attributed to the phenomenal rise in the price of animal feed which accounts for about 60-80% of the cost of intensive production, particularly for ruminants. This has the effect of escalating the prices of animal products beyond the reach of the average Nigerian (Afolabi, 2002). Although there are many sources of animal protein, studies have shown that products from cattle are the most commonly consumed in Nigeria. Ikpi (1990), stated that between 1970 and 1989 beef contributed over 70.93% of the total meat consumed in Nigeria; consequently the cattle industry provides a better nutrition through which the living standard of the people can be improved. The issues raised so far tend to center more on production. However, production and marketing are intricately linked. Olukosi *et al.* (2007), viewed marketing as part and parcel of the production process since it creates utilities of form, place, time and possession with goods and services produced, thus constituting a bridge between production and consumption.

In Nigeria, there exists a high rate of spoilage of agricultural products, including beef, arising from poor storage and transportation facilities thereby hampering the total supply of food reaching the consumers' table (Okuneye, 2002). According to the National Livestock Project Division (NLPD, 1992), The supply of Cattle and its product have been declining while the demand has been increasing, the short fall in supply of cattle has often been linked to the high cost of cattle marketing, because the cattle are brought from the Northern part of the country to the South, usually there is high cost of transporting the Cattle considering the long distance that the traders have to travel with them. This among other factors probably explains why Benin City currently ranks among the Cities one is likely to record the highest unit price for retail beef among major Cities in Southern Nigeria. Other factors that could also affect marketing of beef include, market policy, marketing development, market infrastructure, market information, and enabling environments. The pricing of cattle in designated urban markets across Nigeria is shrouded in secrecy until a bargain is struck. According to Olukosi *et al.* (2007), the exact number of agents in these markets is difficult to determine and various unfixed charges and commissions are paid by the buyer, depending on his bargaining power. Most of the butchers and merchants are registered, but the brokers are not recognized to be registered officially, so they operate without license. It is alleged that the involvement of too many middlemen in the marketing of animal products and by-products leads to an inefficient distribution system,

high marketing costs and margins (Ekunwe *et al.*, 2008). Also, it is a known fact that most agricultural product are bulky, perishable and highly prone to microbial attack which leads to their deterioration in quality and finally results in the spoilage and wastage of these products. Ezekiel (1988), identified two marketing channels for beef cattle in Gongloa State. The first one was within the State and was quite simple, moving from producer to butcher/wholesaler to retail butcher before getting to the final consumer. The second channel linked terminal markets outside the State and included brokers, merchants, terminal markets and butchers as middlemen.

In order to maintain the quality and quantity of beef required by consumers so as to meet their desires and recommended minimum protein level, there is need to have an efficient marketing system. Improved marketing efficiency is a common objective of farmers, food marketing firms, consumers and the society at large (Olukosi *et al.*, 2007). Marketing efficiency, which is a percentage of value added by marketing over cost of marketing, could be achieved by decreasing input per unit of output. At this juncture, one may wish to ask, what are the most important beef marketing channels in Benin Metropolis? The general objective of this study was thus to analyze the marketing of beef in Benin Metropolis. The specific objectives were to determine the marketing channel for beef in the Metropolis, estimate the marketing cost and marketing margins for beef and to analyze the efficiency of beef marketing in Benin City. This analysis intends to serve as a source of information to market policy makers and government on ways in which they can assist the beef industry to be efficient in the marketing of beef in Benin City. Also the findings from this study will be useful to both producers, processors, distributors as well as anyone interested in investing in beef marketing in the area.

METHODOLOGY

Area of Study: The area for this study is Benin City, Edo State. The study was carried out at the main abattoir in Benin City, as well as other slaughtering slabs and some major markets in the City between June and August 2011. Edo State is one of the 36 States of Nigeria and it lies within the geographical co-ordinates of longitude 05 04' East and 06^o 43' East and latitude 05^o 44' North and 07^o 34' North of the Greenwich. It is bounded in the North by Kogi State, in the South by Delta State, in the West by Ondo State and in the East by Kogi and Anambra States. The Local Government Areas (LGAs) in Benin metropolis are Oredo, Egor, Ikpoba-Okha and Ovia North-East. The City is characterized by two climatic seasons: the rainy season between April and October, and the dry season between November and March. The vegetations identified in the State are mangrove Forest, Fresh Swamp and Savannah vegetations. The mean annual rainfall in the southern part of the State is about 252mm-254mm, with average temperature ranging from a minimum of 24^oC to a maximum of about 33^oC.

The main occupation of the people is farming and carving. They also engage in other occupations like livestock farming, small and medium scale business and engage in jobs done by Artisans. Many of the civil servants engage in farming on part-time basis. **Sampling Procedure/Method of Data Collection:** Primary data that were used for this study were collected through the use of well-structured questionnaire administered to respondents and through personal interviews. The sampling frame was drawn from the list of registered butchers in Benin main abattoir, other slaughtering slabs and some markets (Oba, New Benin and Uselu) in Benin City. This list was obtained from the Registered Butchers' Association in Benin City. Information gathered from reconnaissance survey indicated that there are about 300 registered butchers in Benin main abattoir and about 100 others scattered around the ten slaughtering slabs in Benin.

A simple random sampling method was used in selecting 120 respondents from the sampling frame of the registered butchers in Benin. Half of this (60) were selected from the main abattoir while the remaining (60) were selected from the other slaughtering slabs and markets to give a total of 120 respondents.

Data Analysis: The marketing channel for beef in the study area was analyzed using a table and chat. The Marketing cost, marketing margins and marketing efficiency were analyzed using percentages, ratios and profit margins as presented below:

Marketing Margin (MM) is the difference between purchase price and price of resale (Abbott and Makeham, 1986), it is usually expressed as a percentage of producer prices (Adekanye, 1988) i.e. $MM_i = \frac{Sp - Cp}{Sp} \times 100$(1)

The efficiency of beef marketing was analyzed using the Marketing Efficiency Index (MEI) which measures the amount of profit per naira spent in the marketing of one unit of beef. It is the ratio of the profit margin to whatever cost was incurred in arriving at the margin and is given as: $MEI = \frac{\text{Value added by marketing (₦)}}{\text{cost of marketing (₦)}}$ (2)

(Olukosi *et al.*, 2007; Ekunwe *et al.*, 2008; Erhabor *et al.*, 2008 and Musa *et al.*, 2011)

RESULTS AND DISSCUSSION

The Marketing Channel for Beef in Benin Metropolis: The results as presented in Table 1 indicates that the marketing channel comprised of wholesalers and retailers only, with majority of the marketers being retailers

(79%) who dealt directly with the final consumers. Only 21% of the marketers were wholesalers, suggesting that beef marketing in Benin metropolis involves mainly retailers as can be found in the marketing of other sources of meat. However, more complex marketing channels have been reported for other foodstuffs. For instance, Asumugha *et al.* (2008), in a study on the marketing channels for yam in Nigeria, reported a complex web of eight possible flow channels for the movement of yam to complete the marketing chain. The relatively less perishable nature of yam, as against beef could be a ready explanation for this. Irrespective of the critical role played by middlemen in the distribution channel, a chain that is too complex could impact negatively on the marketing system in the long run. The finding reported in this current study compares favourably with the finding of Erhabor *et al.* (2008), who equally reported wholesalers and retailers as the only middlemen in the study carried out on the efficiency of beef marketing in Edo State. Attention must therefore be placed on the activities of the retailers, who constituted the bulk of the middlemen reported in this study (79%). Relevant regulatory bodies must ensure that these retailers are properly monitored to ensure safety of products for consumers.

Table 1: Marketing distribution for beef to consumers

Source	Frequency	Percentage
Wholesaler	25	20.8
Retailers	95	79.2
Total	120	100

Source: Computed from Field Survey Data, 2011.

The most direct and frequently used channel for beef marketing (as shown in fig.1) was that from cattle rearers (producers) in the Northern part of Nigeria through the wholesale merchants from the North to local merchants in Benin City, who sell directly to wholesale butchers who are then patronized by retail butchers that sell directly to final consumers in the open markets. This appears to be the quickest (and by implication, cheapest) route to get beef in Benin City probably due to reduced activities of middlemen. Consumers also prefer this channel due to the high level of freedom it affords buyers to select their preferred beef parts and to haggle for suitable price. Such opportunities seldom exist in organized meat shops where prices are fixed and beef are stored in frozen form, making it difficult to decipher preferred parts. Consumers however expressed deep reservations about the unhygienic conditions in which the meet is displayed in the open market which predisposes it to infestations by flies. This analyses compares favourably with the report by Waziri *et al.* (2011), who studied goat and chevon meet marketing in Delta State and posited that consumers preferred the shortest channel that gets the meat to them in the open market, arguing that meat hawkers usually had little quantity of chevon making it difficult for consumers to compare meet parts before purchase.

Marketing Cost, Marketing Margin and Marketing Efficiency Index: As shown in the marketing channel analysis, cattle can only be slaughtered and processed to beef by wholesale butchers. This section would thus centered on wholesalers and retailers who form the bulk of the middlemen in the beef business. A summary of the average marketing cost, marketing margin and marketing efficiency index per kilogramme of beef is presented in Table 2. The components of the marketing cost are shown in Table 3. The cost of transportation constitutes almost 60% of the marketing cost for retailers and only 19% for wholesalers. Wholesalers however, spent more on market charges (32%) and processing (39%). This is because the function of slaughtering and singeing is their responsibility. Another clear area where retailers incurred more marketing cost was in storage, since they handle raw beef (sold and unsold). The market charges are largely arbitrary, depending to a large extent on the haggling powers of the butchers. These findings agree with Olukosi *et al.* (2007), who observed that the exact number of agents in these markets is difficult to determine and various unfixed charges and commissions are paid by the buyer, depending on his bargaining power. From the analysis, the bulk of the money paid by the final consumer (about 57 - 62%) goes to the producers as selling price. This is also reflected in the marketing margin (17.72% and 27.91% as retailer and wholesaler margin respectively).

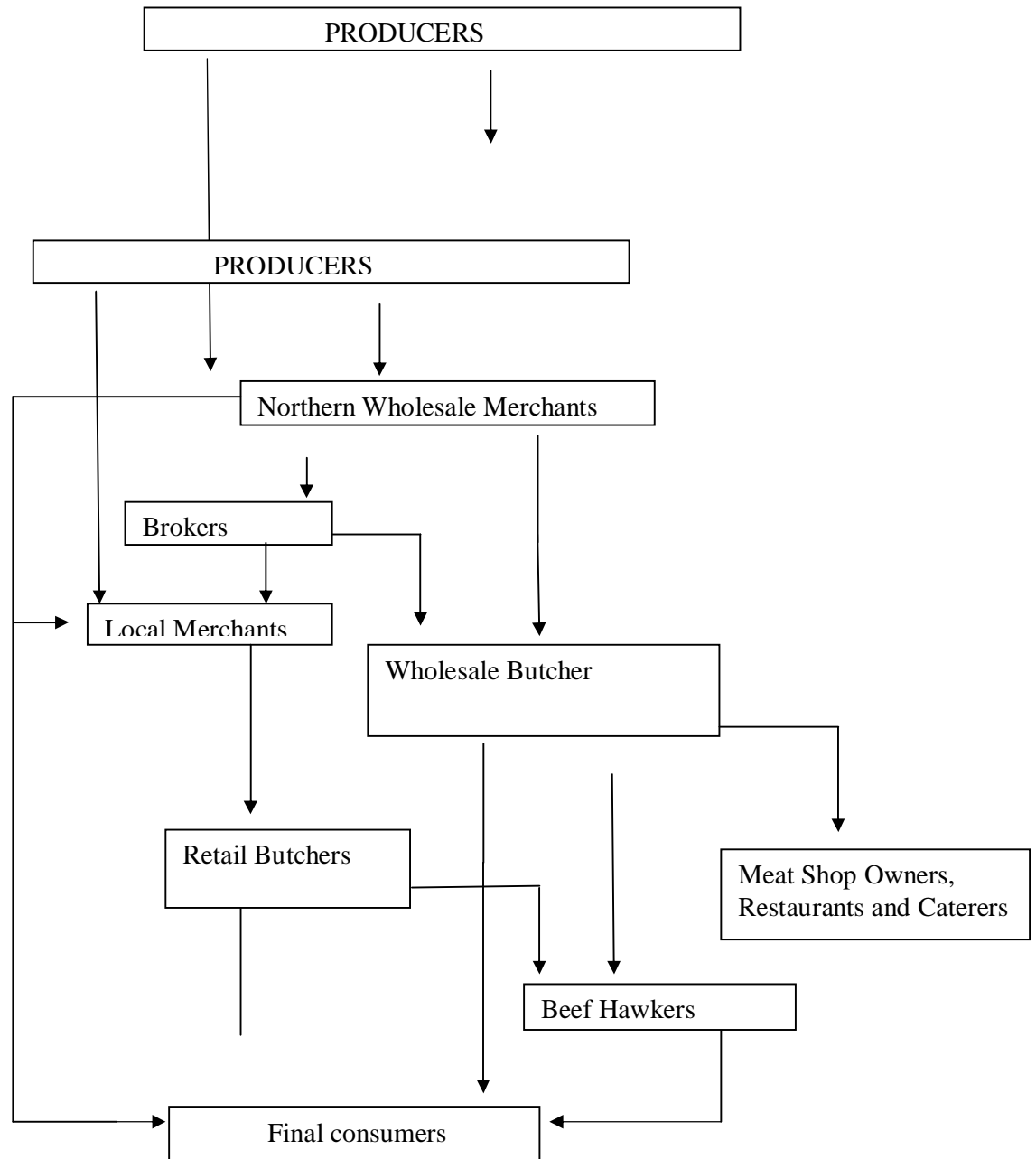


Figure 1: Marketing Channel for Beef in Benin Metropolis.

A comparative analysis of wholesaler and retailer margin showed that retailers incurred higher marketing cost (₦168.81/kg as against ₦78/kg for wholesalers). Further analysis of the marketing efficiency index indicated that retailers were making ₦0.89 from every naira invested in beef marketing, while wholesalers made ₦1.90/invested. This result agrees with the findings of Musa *et al.* (2011), who reported wholesale and retail marketing margins of 20.52% and 16.39% respectively for mutton marketing in Kano. It however contrasts with the findings of Erhabor *et al.* (2008), who reported higher margins for higher marketing efficiency index for retail beef marketing (4.89%) than for wholesale marketing (1.82%). Given the mean daily beef sales of 34kg by retailers and 138 kg by wholesaler respectively, these middlemen could earn decent incomes in present day Nigeria, where monthly minimum wage is still below ₦20,000. However, this can only be realizable if the market for beef in Benin City is stable enough to ensure regular sales.

Table 2: Marketing Cost, Marketing Margin and Marketing Efficiency Per kilo of Beef

	Purchasing Price	Marketing Cost	Selling Price	Marketing Margin (%)	Marketing efficiency index
Retailer	531.19	168.81	850.75	150.75 (17.72%)	0.89
Wholesaler	305	78	531.19	148.19 (27.91%)	1.90
Mean	418.09	123.40	690.97	149.48 (22.81%)	1.39

Mean daily quantity of beef sold by retailers = 34kg

Mean daily quantity of beef sold by wholesalers = 138kg

Source: Computed from Field Survey, 2011.

Table 3: Major Components of Marketing Cost per kilo of Beef in Benin City (₦)

	Transportation Cost	Marketing Charges	Packaging Cost	Processing Cost	Rental Charges	Storage Cost	Total
Retailers	101 (59.8%)	23(13.6%)	4.21(2.5%)	6.6(3.9%)	15(8.9%)	19(11.3%)	168.81
Wholesalers	15(19%)	30(39%)	-	25(32%)	6(7.5%)	2(2.5%)	78
Mean	58(47%)	26.5(21.47%)	2.11(1.7%)	15.8(12.8%)	10.5(8.5%)	10.5(8.5%)	123.40

Source: Computed from Field Survey, 2011.

Constraints faced by Beef Marketers in the Study Area: Beef marketers in the study area identified constraints faced in the business of beef marketing. The identified constraints were ranked in a Likert-type scale and the most important constraints faced by these butchers are presented in Table 4. Transportation difficulties, poor access to credit facility, high marketing charges and perishability of beef were the most serious constraints faced by the marketers, since these variables had a mean that was ≥ 3 while, processing and storage constraints had means less than 3, and as such were not considered as major constraints in the study area. These important constraints also contribute to increases in the marketing cost and could even reduce marketing efficiency. Transportation difficulties would for example, eventually translate to high cost of transportation. If marketing efficiency is to be achieved, serious attempt must be made to address these constraints. This result is in consonant with the findings of Ogisi and Begho (2011), who reported spoilage, absence of credit facilities and market infrastructure as some of the most important constraints faced by fish marketers in Delta State, and recommended that government should provide adequate affordable transportation to prevent losses in transit as well as stores and cold storage to check spoilage.

Table 4: Constraints faced by beef marketers in the study area

Constraints	Mean value	Standard deviation
Transportation difficulties	3.58	1.39
Poor access to Credit	3.59	1.41
High Marketing charges	3.51	1.72
Perishability of beef	3.10	1.70
Processing	2.79	1.47
Storage	2.39	1.52

Source: Computed from Field Survey, 2011.

CONCLUSION

It has been shown in this study that beef is mainly marketed in Benin City by wholesalers (21%) and retailers (79%). Comparative analysis of wholesalers and retailers showed variations in marketing cost components. Wholesalers were also shown to be more efficient in beef marketing, with marketing efficiency ratio of 1.90 as against 0.89 recorded for retailers. Results of constraints faced by beef marketers in their marketing effort indicated that transportation difficulties, poor access to credit facility, high marketing charges and perishability of beef were the most serious constraints. It is therefore safe to recommend that:

Government and Community Based Organizations (CBOs) as well as other non-governmental organizations (NGOs) should provide mobile cold-rooms for easy transportation of beef. This would reduce the constraint of high perishability/spoilage of beef and result in quality enhancement.

Government authorities and regulatory bodies could also intervene in the area of high/arbitrary marketing charges by helping to reduce such charges.

Efforts should be made to sensitize retailers of beef on the need to invest wisely on critical aspects of beef marketing that would help reduce exposure to flies and harsh weather conditions. This would ultimately ensure increased profitability and by extension, sustainability of the business.

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