

ECONOMICS OF BEEF MARKETING IN BODIJA MARKET IN IBADAN NORTH LOCAL GOVERNMENT AREA, OYO STATE

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Target audience: Policy makers, researchers, cattle traders,
environmentalists. animal health workers.

ABSTRACT

The study was undertaken with the objectives of determining the marketing channels of distribution of beef, the marketing margins of the various participants involved in beef marketing and the pricing methods of cattle and beef and the environmental implications of beef marketing in Bodija market. Marketing margin analysis revealed that exorbitant prices were paid by consumers. This was due to high cost of performing the various marketing functions. Serious limitations were posed by poor and inadequate management conditions, environmental degradation and poor sanitary conditions due to improper waste management disposal system. The effect of the remarkable change noticed in the waste management and disposal system in the market during the study period may not have been felt but this will later have impact on the utilization of resources and hence step up profitability in the trade and improve the health status of meat purchased from the market.

Key words: Beef marketing economics; butchers; middlemen;
environmental issues; Bodija market.

DESCRIPTION OF PROBLEM

The need for animal protein in the diet as a source of essential amino acids cannot be overemphasised. The growing population in the country of different categories of individuals, like nursing mothers, infants and children, need protein for growth, development and sustenance while adults need protein for regeneration of ageing, building of worn out tissues and also for maintenance (1). Beef consumption is a major source of protein in an average Nigerian family food table due to its wide acceptability devoid of religious and socio-cultural constraints. In Nigeria it has been discovered that only 8.4 g of the total protein comes from animal sources. The ability of the average Nigerian family to sustain animal protein consumption has become a sensitive barometer for assessing not only the physical but also the economic well being of the nation.

Local meat production though inadequate is being supplemented with local imports (Tables 1 & 2). In spite of this, the ratio of human population to slaughtered cattle per head is about 89:1.3 (2). This further buttresses the problem of inadequate animal protein intake due to such factors as low elasticity and disposable income level.

Table 1: Local Meat Production (Metric Tons)

Meat Type	1991	1992	1993	1994	1995
Beef	217573	226276	244378	254153	267000
Goat Meat	128063	140869	754956	170451	187000
Mutton	82953	90268	98473	108321	119000
Pig	41022	51277	64096	80121	100000
Total	469611	508689	1,161903	613046	673000

Source: Federal Ministry of Agriculture, Abuja. 1993.

Table 2: Major Livestock (Live) Imports (Metric Tons)

Meat Type	1991	1992	1993	1994	1995
Cattle	365000	91290	205058	68597	28684
Goat	1,844500	84222	377131	31209	87861
Sheep	2,788169	53606	97695	38084	10845
Pig	N.A	6209	22642	N.A	101
Total	4,997669	235327	702526	137890	127491

Source: Federal Ministry of Agriculture, Abuja 1993.

The marketing of cattle and beef generally is determined by such factors as the demand and supply of the commodity, disposable income, prices of substitutes, taste and preferences, size of household, social and cultural factors, sources of supply etc.

The marketing channels for beef in Nigeria: This defines the sequence of intermediaries or middlemen and markets through which beef passes enroute from producers to the consumers (3). The marketing channels of beef starts with the producers of cattle in the far north (Shuwa and Fulani herdsmen) and ends with the final consumers. The cattle, both from the internal and external trade sources, are collected in the major collection centres in the north, such as Kano, Sokoto and Maiduguri. Findings revealed that the marketing channel for beef in Nigeria follows the pattern mentioned above (3).

Sales intermediaries have essential functions performed by them ranging from providing guarantee buyer and acting as commissioned agents. The study seeks to find out whether any restriction in the trade has hindered the availability of beef for consumers as well as identifying constraints to

beef marketing in the study areas. Retailers, wholesalers and butchers are maintaining good bargaining relationship in the marketing of beef thus creating a perfectly competitive market for beef in Ibadan.

MATERIALS AND METHODS

Cross sectional data of marketing activities between December, 1997 and January, 1998 were collected in Bodija market in Ibadan using structured questionnaires with open and close ended questions. Responses of beef marketers were analysed using descriptive analysis, gross margin analysis and hypotheses testing.

Sixty respondents who were retailers and wholesalers were selected randomly from the list of beef marketers i.e. 30 retailers and 30 wholesalers. The socio-economic characteristics of these respondents with respect to their ages, sex, marital status, educational level, and source of funds for financing the beef trade were sought for using the cross sectional, survey. This methodology becomes very important in capturing the profitability of marketing venture rather than time series information in order to know the return on investment on an annual basis.

The gross margin analysis was used to measure the return on each Naira invested in performing any form of marketing function. The total cost of marketing to the cattle trader and retailer was calculated and this was subtracted from the total revenue generated from the sale of cattle either in part or as a whole.

$$\text{Marketing margin} = \frac{\text{Consumer payment} - \text{Producer receipt}}{\text{Consumer payment}} \times 100 \%$$

The net margin was also calculated. It is gross margin less the marketing cost. Inspection of infrastructural facilities that can help in the performance of meat processing was done. These are number of boreholes, slaughter slabs, weighing machines, and sanitary facilities for waste disposal.

RESULTS AND DISCUSSION

The socio-economic characteristics of cattle traders considered were found to contribute significantly to the success of the middlemen in business. The mean age of beef wholesalers was 38 years (Table 3a and b). Older persons do not participate in beef marketing in Bodija market. This may be due to the stressful nature of slaughtering the animal and processing to get beef. Beef retailers were a mixture of both male and female traders while the wholesalers were all males (Table 4). This may be due to the cost of establishing each type of trade as the retailing is easier and cheaper in terms of capital requirements than wholesaling (Tables 5a & 5b). As indicated by the retailers, these amounts were either from friends and

Table 3a: Age Distribution of Respondents (Wholesalers)

Age Group (Yrs)	Frequency	Percentage	Cum. Percentage
Below 20 years	3	10.0	10.0
21 - 30	6	20.0	30.0
31 - 40	10	33.3	63.3
41 - 50	3	10.0	73.3
Above 50	8	26.7	100.0
Total	30	100.0	100.0

Source: Field Survey, 1997

Table 3b Age Distribution of Respondents (Retailers)

Age Group (Yrs)	Frequency	Percentage	Cum. Percentage
Below 20 Years	3	10.0	10.0
21 - 30	5	16.7	26.7
31 - 40	11	36.7	63.4
41 - 50	7	23.3	86.7
Above 50	4	13.3	100.0
Total	30	100.0	100.00

Source: Field Survey, 1997.

Table 4: Sex of Respondents

Wholesalers			Retailers		
Sex	Frequency	%	Sex	Frequency	Percentage
Males	30	100.0	Males	21	70.00
Females	0	00.0	Females	9	30.00
Total	30	100.0	Total	30	100.00

Source: Field Survey 1997.

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Table 5a: Amount of Capital in Business (Wholesalers)

Amount	Frequency	Percentage	Cum.%
1 - 10,000	8	26.7	26.7
10,001 - 20,000	4	13.3	40.0
20,001 - 30,000	8	26.7	66.7
30,001 - 40,000	3	10.0	76.7
40,001 - 50,000	0	00.00	76.7
Above 50,000	7	23.3	100.00
Total	30	100.00	100.00

Source: Field Survey 1997.

relatives or from their personal savings, which mostly comprised of retained profits made from previous earnings. However, Table 6 shows the sources of funds to wholesalers.

The literacy level of the respondents is relatively very high as about 33 % of the cattle traders (wholesalers) had informal education while only 6.7 % did not have any form of education. As for the retailers, 40 % of the respondents did not have any form of education as against the 26.7 % and 33.3 % that had primary and secondary school education respectively

Table 5b: Amount of Capital in Business (Retailers)

Amount	Frequency	Percentage	Cumulative Percentage
0 - 10,000	5	16.7	16.7
10,001 - 20,000	6	20.0	36.7
20,001 - 30,000	10	33.3	70.0
30,001 - 40,000	9	30.0	100.00
40,001 - 50,000	-	-	-
Above 50,000	-	-	-
Total	30	100.00	

Source: Field Survey 1997.

Table 6: Sources of funds for financing Beef trade (Wholesalers)

Source of Capital	Frequency	Percentage	Cumulative Percentage
Personal Savings	16	53.3	53.3
Friends & Relatives	6	20.0	73.3
Co-operative Societies	5	16.7	90.0
Inheritance	3	10.0	100.0
Total	30	100.0	

(Tables 7a & 7b). For retailing business, the probable reason for having about 40 % of the respondents not having any formal education and then coping well in the business may be due to the fact that beef selling does not require any skill that can be acquired through formal means.

Table 7a: Educational Status of Respondents (Wholesalers)

Educational Status	Frequency	Percentage	Cumulative Percentage
NCE	4	13.3	13.3
School Certificate	5	16.7	30.0
Primary	9	30.0	60.0
Informal	10	33.3	93.3
None	2	6.7	100.0
Total	30	100.0	

Table 7b: Educational Status of Respondents (Retailers)

Educational Status	Frequency	Percentage	Cumulative Percentage
School Certificate	8	26.7	26.7
Primary	10	33.3	60.0
Informal	-	-	60.0
None	12	40.0	100.0
Total	30	100.0	

Sixty percent of cattle wholesalers had up to five sources of purchasing cattle in the north at an average cost of N12,833.33/cattle, paid an average of N1,233/cattle for transportation down south and N1,000 for cattle checkpoints along the transportation routes. This constitutes less than 10 % of the total investment cost (Tables 8 and 9). Also, 46.7 % of the cattle

Table 8: Marketing Margin Analysis of Cattle Dealers

	Average Cost N/Cattle
Consumer Price	20,066.67
Producer Price	12,833.33
Gross Margin	7,233.34
Transportation Cost	1,233.00
Intermediary Charges	280.00
Association Dues	11.00
Storage Cost	100.00
Drugs/Veterinary Charges	109.33
Feed/Water Charges	82.00
Cattle Checkpoints	1,100.00
Agent Charges	300.00
Sales Representatives	137.00
Total Marketing Cost	3,352.33
Net Margin	3,881.01

Source: Field Survey 1997

$$\begin{aligned} \text{Marketing Margin} &= \frac{N(20,066.67 - 12,833.33)}{N20,066.67} \\ &= 36.05\% \end{aligned}$$

Table 9: Marketing margin Analysis of Beef Sellers

Item	Average Cost (N/Cattle)
Consumer Price	22,535.87
Producer Price	18,833.33
Gross Margin	3,702.54
Abattoir Charge	160.00
Storage Cost	100.00
Instalmental Stall Cost	200.00
Stall Rent	47.50
Other Expenses	1,050.00
Total Marketing Cost	1,557.00
Net Margin	2,145.00

$$\begin{aligned} \text{Marketing Margin} &= \frac{N(22,535.87 - 18,833.33)}{N22,535.87} \\ &= 16.43\% \end{aligned}$$

Source: Field Survey 1997

wholesalers have middlemen between them and the traders. These ones charge an average amount of N300 each for a cattle while 66.7 % of the wholesalers have middlemen between them and the final consumers in Bodija market which charge an average amount of N250 on each cattle per intermediary. Sixty percent of the cattle traders sold an average of three cattle each week at an average price of N20,066,67. The cattle wholesalers pay an average amount of N82 on feed and water per cattle daily while N109.33 is paid for drugs and veterinary charges occasionally.

The marketing margin analysis revealed that for wholesalers, 63.98 % of production costs were borne by the dealers while 36.05 % contributed to the marketing functions performed by the traders while in the case of retailers, for every naira paid to them, 16.43 kobo went into the performance of marketing services while 83.5 kobo went as profit from the retailing business.

Beef is the most widely accepted meat in Nigeria devoid of religious or cultural bias by all classes of people, ages and social strata. Results on the sanitary waste disposal facilities in Bodija market revealed that they are all in deplorable conditions. There was one functional borehole in the whole of the abattoir where cattle are slaughtered on a daily basis. This can only be drawn by manual a system. The slaughter slabs were devoid of well concreted surfaces while the weighing machines were non-functional. There is no efficient means of exhuming waste from the abattoir so these are dumped in designated sites which are not too far from where meat is sold. This makes the site of slaughtering to stink so much that flies are regular visitors although meat inspectors work in the market and are paid as government officials to ascertain the fitness of cattle to be slaughtered for consumption. This situation can be said to be very deplorable due to inadequate water supply in the market but a new Administrator in the state (Col. Ahmed Usman, 1997 - 1998) used bold government intervention to bring a major reorganisation in the whole market such that all market wastes including cattle dung in the abattoir were transformed into organo-chemical fertilizer in the newly opened fertilizer plant in the heart of Bodija market. There was also another major reorganisation in the market such that the animals were restricted to their confined area from where they are taken to graze or to be given water. Initially before this organisation, cattle were allowed to roam and even cause major traffic hold-ups and little consideration was given to environmental situation in the market and its environs. There was such massive land and air pollution which could have led to outbreak of disease and it is in the atmosphere of this environmental degradation that food peddlers in the market operate.

It became important for Health/Community workers to intensify their work of meat inspection in order to ascertain their fitness for human consumption. Meat sold in the market has to be validated before it could be sold.

CONCLUSIONS AND APPLICATIONS

Agricultural marketing is the link between production and consumption of agricultural commodities hence the performance of the beef market is a good yardstick in measuring how well the sector is satisfying the aspirations of the entire citizenry. In this study, it has been established that the performance of marketing functions in the study area was inefficient for wholesaling franchise because little profit is being made while for retailing much more profit is made because consumers pay exorbitant prices. This suggests that since beef is the most widely accepted meat in Nigeria, its marketing efficiency can be improved.

The waste generated in the course of engaging in the business is being turned into organic fertilizer by the recently established fertilizer plant thereby improving the environmental situation associated with beef trading. There is however room for more improvement in beef marketing to the extent that pricing of the commodity can be standardized using measures which will ensure fair bargaining among beef consumers. Also the reduction of touts/middlemen in beef marketing will reduce the gap between intended price and final price per measure and so ensure buyer's and seller's satisfaction.

Result of this research can be very useful in planning the growth of the national herd such that the marketing of beef can be simulated to be perfectly competitive in nature and the price of beef can reflect the challenge to environmentalists, cattle investors, animal health workers and policy makers such that the present situation can be adjudged to be fair although there is always room for improvement.

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