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## ECONOMIC EVALUATION OF BEEF MARKETING IN IBADAN METROPOLIS, OYO STATE

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The marketing of Beef in Ibadan Metropolis is the focus of this study which seek to assess the efficiency of the market through cost and revenue analysis of 20 beef sellers each from four selected markets.

Result of the composition analysis reveals average purchase cost of cattle to be 92.86 percent of the total marketing cost with average facilitating and institutional costs accounting for 4.95 and 2.11 percent respectively. Transportation cost constitutes highest proportion of the facilitating cost; that is 44.04 percent of facilitating cost items and is 2.18 percent of the total marketing cost. On the same vein, agreement fee (Lada) constitutes 1.59 percent of the total marketing cost and is 75.35 percent of the institutional cost. Further, the gross margin analysis shows a relatively high seller's marketing margins and marketing profits per cattle and average marketing revenue-Marketing cost ratio of 1.0829 showing that the market is fairly efficient.

The study however suggest means of reduction in transportation cost and outright scrapping of agreement fees. The need for drilling of boreholes and provision of storage facilities to ensure better meat quality and for better conduct of the market are recommendations of this study.

#### 1.0 INTRODUCTION

There have been a wide gap between the FAO recommended quantity of animal protein intake (35 grammes per person per day) and the actual intake (7 grammes per person per day) in Nigeria (FAQ, 1985), and this could be attributed to several factors. One of which is the chains of problem associated with the distribution of the animal protein sources which translates to high cost of these coinmodities. And without a commensurate rise in income of consumers, these products are less consumed compared to the plant sources of protein which are relatively cheaper.

Though there are many different sources of animal protein, studies have shown that beef is the most commonly consumed in Nigeria. Adegeye (1975) reveals that 45 percent of the meat consumed in the Western states is beef. Also, Ikpi (1990) shows that between 1970 and 1989, beef contributed 70.93 percent of the total meat consumed in Nigeria while goat meat, pork and mutton contributed 13.58, 9.22 and 6.27 percent respectively. Further, NISER (1980) reveals that about 55 percent of all the cattle slaughtered in Oyo state in a day are slaughtered in Ibadan with the remaining going to small towns throughout the state.

In order that the level of animal protein intake be raised, there is the need to analyse the beef marketing situation in Ibadan metropolis. This is done by examining the size of the different components of the marketing costs and revenue so that the areas of potential savings in cost can be identified. Hence, this paper is concerned with the assessment of the efficiency of the beef marketing system in Ibadan metropolis through an analysis of the costs of performing the different marketing functions.

In pursuance of this objective, section two of this paper focuses on the sources of data and analytical techniques. Section three presents the results of the analysis while section four contains the summary and conclusion.

#### 2.0 METHODOLOGY

The study was carried out in Ibadan, the Oyo state capital. Ibadan was selected for the study because it is a commercial centre that has a link with the Northern part of the country as regard the distribution of cattle.

A multistage sampling technique was used in the selection of the samples. In the first stage, four major markets in four local government areas were purposively selected based on the volume of beef business transaction.

These are: Bodija beef market in Ibadan North L.G.A (Mrk. I); Moniya beef market in Akinyele L.G.A (Mrt. II); Gege/Oritamerin beef market in Ibadan Southwest (Mrt. III) and Dugbe beef market in Ibadan Northwest L.G.A (mrk. IV).

The second stage of sampling is the random selection of twenty beef sellers each out of the list of sellers supplied by the chairmen of beef sellers associations in the four market locations. Primary data collected via a well structured questionnaire was used for the study.

#### 2.1 ANALYTICAL TECHNIQUE

i. The size and component of marketing cost was done using

C./TC x 100 i = (1,2,...,n)

Where C<sub>i</sub> is the cost of item i and TC is the total marketing cost.

ii. The size and component of marketing revenue was analysed using

 $R_i/TR \times 100$  i = (1, 2, ..., n)

Where R<sub>i</sub> is the revenue from item i and TR is the total marketing revenue.

- iii. The absolute marketing margin is defined as MM = TR PC Where MM is the absolute marketing margin, TR is the total marketing revenue and PC is the purchase cost.
- iv. The marketing profit from each market location was estimated by MP = MM OMC.

Where MP is the marketing profit and OMC is the other marketing cost.

v. The efficiency in each market in performing their functions was given as:

ME = TR/TC

Where ME is the marketing efficiency.

#### 3.0 RESULTS AND DISCUSSION

#### i. Analysis of the size and Component of Beef Marketing Revenue

Since the butchers in the markets do not use weighing scale, revenue was got by asking how much realised from the sales of the cattle parts like legs, skin, head, tail, viscera, blood, etc. In addition, the value of home consumption and those offered as gift are part of the revenue.

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Table 1: Average Revenue Per cattle in beef marketing

Markets	Mrk I	Mrk II	Mrk III	Mrk IV	Average
Revenue items:	N.K %	N.K %	N.K %	N.K %	N.K %
Sales from cattle parts	17573 96.35	16575.0 95.8	16575.0 95.8	16932.5 96.08	17134.08 96.1
Other revenue	694.45 3.83	666.67	726.67 4.2	690.22 3.92	694.5 3.9
Total marketing revenue	18149.95 100	18240	17301.67 100	17622.72 100	17828.58 100

Source: Marketing Survey 1997.

From the table, the average sale revenue per cattle is 96.1 percent of the total marketing revenue. Other (home consumption and gifts) contribute the remaining 3.9 percent of the N17,828.59. It should be noted that revenue realised is a function of various factors: the bargaining power of the butchers; the standing relationshexisting between the butchers and their buyers who are mainly the retailers and the level of pilferage. However the selling price may not have been determined by the quality assessment of the meats.

#### ii. Analysis of the Size and Components of Beef Marketing Cost.

Marketing cost refers to the purchase price of cattle and the cost of performing economic, institutional activities at every stage of the marketing process. The table below shows the amount spent on these costs.

items and their percentage contribution to the total marketing cost.

Table 2 Average Cost Per Cattle in beef Marketing axos ya qaxayayada ... saxayaq STT xaasayagar , qalimad xa**xt**ina, STT qorqol

Markets	Mrk. I	Mrk. II	Mrk. III	Mrk. IV	Average
Cost items	N.k	N.K %	N.K %	N.K %	N.K
Purchase cost of cattle	15,485.50	14,683.33	14,808.33	16,175	15,288
	93.99	90.21	92.96	94.2	92.86
Facilitating cost items:			20 0 HD	ti a princi	A gainging A
Transportation	95. 50	846.67	272.5	223.13	359.45
	0.58	5.2	1.71	1.3	2.18
Staughtering	9.50	8.33	7.92	5.63	7.85
	0.06	0.05	0.05	0.03	0.05
Processing fee	130.40	135	101.25	123.75	1226
	0.79	0.83	0.64	0.72	0.75
Storage cost	75.78 0.46		70.83 0.45		36.65 0.22
Veterinary fee	45.50	13.33	42.5	45.0	36.58
	0.28	0.08	0.27	0.26	0.22
Water	59.85 0.36		58.75 0.37	41.25 0.24	39.96 0.24
Wrapping materials	31.85	25	32.92	23.75	28.38
	0.19	0.15	0.21	0.14	0.17
Labour	178.50	227.83	168.33	165.0	184.92
	1.08	1.4	1.06	0.96	1.12
Sub total	626.88	1256.16	754.73	627.51	1919.79
	3.8	7.71	4.76	3.65	4.95
Institutional cost items:		90		The same of	
Government levy	74.55	29.49	73.33	71.43	62.2
	0.46	0.18	0.46	0.42	0.38
Association (ce	15.20	30	14.17	30	22.34
	0.09	0.18	0.09	0.18	.0.14
Agreement fee (Lada)	260.5	256.67	262.5	255	261.17
	1.58	1.64	1.65	1.49	1.59
Sub total	350.25	326.16	350.00	356.43	345.71
	2.13	2.00	2.20	2.09	2.11
Other charges	13.78 0.08	11.41 0.07	16.64. UT 11 11 01 0.11	12.08 0.07	13.48
Grand total marketing	16,476.41	16,277.06	15,969.97	17,171.02	16,463.62
	100	100	100	100	100

Source: Market Survey, 1997.

From table 2, the average purchase cost of cattle was found to be 92.86 percent of the total marketing cost with average facilitating and institutional costs accounting for 4.95 and 2.11 percents of N16463.62 respectively. Specifically, for the facilitating cost items, transportation cost accounts for 2.18 percent on the average and is the highest percentage in all the four studied markets because almost all the beef sellers buy their cattle in large numbers directly from shinkand livestock market near Jebba. Further, labour cost, being the amount paid to hawkers who are either casually employed or are members of the sellers' families, represents 1.12 percents of the marketing cost. The cost of water constitutes only 0.24 percent of marketing cost. But butchers in market II (Moniya) beef market do not spend on water due to the availability of borehore provided by the local government authority.

For the institutional cost items, agreement fee "Lada" paid to the Hausa owners of the cattle in the market constitute the major cost item and represents on the average, 1.59 percent of the marketing cost. Other charges which include rents paid on stall and depreciation of the butchers' tools represents a very negligible percent of the total marketing cost and is only 0.08 percent.

#### iii. Marketing Margin and Profit Analysis

Table 3 below shows the marketing margin and profit of beef marketing in the four markets.

Table 3: Marketing Margin and Profit Per Cattle (N.K)

Markets	Mrk I	Mrk II	Mrk III	Mrk IV	Average
Costs items:	t de la composition de la comp			4 1 2	
Purchase cost	15485.5	14683.33	14808.33	16175.00	15288.04
Other marketing cost	990.91	<b>15</b> 93.73	1121.64	1-96.0 <b>2</b>	1175.58
Total marketing cost	16476.41	16277.06	15929.97	17171.02 .	16463.62
Total marketing revenue	18149.95	18240.00	17301.67	17622.72	17829.59
Marketing margin	2664.45	3556.67	2493.34	1447.72	2540.55
Marketing profit	1673.54	1962.94	1371.70	451.70	1364.97
Relative marketing margin	16.17	21.85	15.65	8.43	15.43
Relative marketing profit	10.16	12.06	8.61	2.63	8.29
Marketing efficiency	1.1016	1.1206	1.0861	1.0263	1.0829

Source: Compiled from the market survey data, 1997.

iv.

The table shows that the percentage of the total marketing cost earned as gross margins are 16.17, 21.85, 15.65 and 8.43 percent for Bodija, Moniya, Gege/Oritamerin and Dugbe beef markets respectively with the average being 15.43 percent. In other words, it means that for every N100 spent on marketing of cattle, N16.17, N21.85, N.5.65 and N8.43 are earned as marketing margins in each of the markets. Also, for every N100 spent on marketing cost, N10.16, N12.06, N8.61 and N2.63 are earned as marketing profit in the four markets respectively. However, the profit margin for Dugbe is very low because of the high cost of purchasing a cattle as shown in table 2.

#### **EVALUATION OF EFFICIENCY IN BEEF MARKETING**

A market is efficient if it performs its functions effectively at the least possible cost. In other word, it is the maximization of the total marketing revenue-total marketing cost ratio. Table 3 shows that on the average, the butchers are efficient and will remain in business. However, the efficiency level of the butchers is not static per say. If marketing cost is increased by 8 percent, the market-would not efficient any longer.

#### 4.0 SUMMARY AND RECOMMENDATION

The study revealed that the purchase cost cattle constitutes 92.86 percent of the total marketing cost. Transportation cost and the agreement fee (Lada) make up 2.18 and 1.59 percent of the total marketing cost while other cost items constitute 3.37 percent of the marketing cost. From the budgetary analysis, the average marketing

margin and marketing profit were N2,540.55 and N1,364.97 per cattle respectively.

The high cost of purchasing cattle is attributed to the high cost of production and that of high transportation cost of the cattle from the North to the South. It is recommended that farmers should exploit ways of reducing the cost of production, especially in the area of feeding and that the railway system of transportation should be encouraged in preference to the currently used trailer system. Hence, the government should reactivate the North West railway line for easy and prompt transportation of cattle cargoes to the metropolis.

An agreement fee (Lada) constitutes a major institutional cost item which partially added to the high marketing cost. This fee however is uncalled for and should be discouraged. Further, to ensure better sanitary and hygienic condition of the abattoirs, source of constant and potable water should be provided jointly by the LGAs and the butchers and this could be in form of boreholes. Moreso, to enhance keeping quality of the beef for considerable number of days, storage facilities should be provided in the abattoirs. This is imperative as freezing technique of storage will inhibit the growth of Salmonella spp and other bacteria that cause meat spoilage and also maintain the p<sup>H</sup> value of the stored meat as that of the fresh meat.

Conclusively therefore, though the beef marketing in Ibadan metropolis is efficient and profitable, the performance could be improved if the market is well conducted and some item of cost removed. This will ensure better meat quality at reduced price to the consumers and better renumeration to the sellers.

#### REFERENCES

Adegeye, A.J. (1975) "Statistical Analysis of Demand for Beef in the Western State of Nigeria" Bulletin of Rural Economics and Development. 1(i)pp 70-74.

FAO (1985): Proceedings of Agricultural Development in Nigeria 1965-1985. FAO, Rome.

Ikpi, A.E. (1990): Livestock Marketing and Consumption in Nigeria 1970-1989. An Unpublished Research in the Department of Agricultural Economics, University of Ibadan, Ibadan.

NISER (1980): A survey of Resources for Development of Oyo State, Ibadan.

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