

## MARKETING ECONOMICS OF MEAT POULTRY IN KHARTOUM STATE, SUDAN

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### ABSTRACT

The study aims to measure the marketing efficiency of meat poultry in Khartoum State in the year 2010. The study depended mainly on primary data which was collected through questionnaire. About 10 and 20 of wholesaler and retailer were selected, respectively. Secondary data was also collected from sources related to topic of the study. The data was analyzed using descriptive statistics tool. Also, quantitative analysis techniques were used to calculate net marketing margins and marketing efficiency for wholesalers and retailers. The study described marketing channels of meat poultry beside constraints that facing marketer of meat poultry in Khartoum State. The study revealed that; the majority of respondents were aged ranged from 21 to 40 years and about 100% of respondents be male. About 10%, 40% and 50% were represented primary, secondary and university education level for wholesalers, respectively. The retailers had education level as follows: secondary (20%) and university (80%). The wholesalers shared about 53.71% of the total marketing costs while retailers shared only about 46.28% of them. The results reflected to the fact that rent, transportation and taxes costs represented higher percentages in the total marketing costs for each trader. Retailers got higher marketing efficiency than wholesalers. Retailers got higher net marketing margins (1.26 SG/Keg) than wholesalers (1.099 SG/Keg). Meat poultry channels in Khartoum State markets passes from producer to consumer through: wholesaler, wholesaler and processor or wholesaler and retailer. Also, the study showed that about 50% and 35% of wholesalers and retailers, respectively, were facing obstacles in transportation. 90% of wholesalers and 75% of retailers were facing constraints in poor extension services. Increasing marketing efficiency at wholesaler's meat poultry in Khartoum State market through reducing marketing costs, Provision of extension and credit services and encourage investment in this efficiency activity represented the main recommendations that drawn from the results.

**KEYWORDS:** Marketing Efficiency, Marketing Channel Wholesaler, Retailer,

### INTRODUCTION

Poultry are domesticated birds which provide human with nutritional and economical products under his management. They include many and among them are chickens (Hassan, 1998). The poultry production sector creates about 30000 positions (Ministry of Animal Resources and Fisheries, 2006). Poultry is classified as white meat and its consumption about 26% of total meat consumption in Khartoum State (State Ministry of Agriculture, 2004). The population of Khartoum State has grown by tenfold since 1956 and continues to grow by about 4% annually, faster than national average of 2.8% (FAO, 2002). In spite of the increasing investment in this industry, there are an obvious gap between the production of meat poultry and its needs (Ministry of agriculture, Animal wealth and irrigation, 2005). Although there increase in poultry production, but still the prices are increasing, and it is not well known whether this is due to increase in demand or to high cost of inputs. The main objective of the study is to evaluate marketing economics of meat poultry in Khartoum State in 2010. Specifics objectives are to highlight on: socioeconomic characteristics of traders, net marketing margins, marketing efficiency, Marketing channels and marketing constraints that facing traders.

### METHODOLOGY

The study depended mainly on primary data while secondary data was also collected. The primary data was gathered through a questionnaire given to 10 and 20 of wholesalers and retailers of meat poultry in Khartoum State, respectively. The secondary data was collected from different sources related to the topic of the study.

### Data Analysis

The descriptive statistics, marketing margin and the marketing efficiency analyses were used in analyzing the

data for the study.

#### Descriptive Statistics

Descriptive statistic was used to analyze the data gathered on the socio-economic characteristics of meat poultry marketers in the study area.

#### Marketing Margin Analysis

Marketing margin analysis was used to estimate the margin in terms of revenue and profit that accrue to the meat poultry marketers. According to Kohls (1980), marketing margin can be estimated as

$$\text{Marketing Margin} = \text{Selling Price} - \text{Cost Price}$$

$$\text{Net Marketing Margin} = \text{Marketing Margin} - \text{Marketing Cost}$$

$$\text{Net Marketing Margin for Wholesaler} = \text{Wholesale Marketing Margin} - \text{Wholesale Marketing Cost}$$

$$\text{Net Marketing Margin for Retailer} = \text{Retailer Marketing Margin} - \text{Retailer Marketing cost}$$

$$\text{Gross Marketing Margin} = \text{Wholesaler Selling Price} - \text{Retailers Cost Price}$$

Marketing Efficiency: For the Marketing efficiency analysis, marketing efficiency is measured as

$$\text{Marketing Efficiency} = (\text{Gross Marketing Margin} \div \text{Marketing Cost}) \times 100$$

## RESULTS AND DISCUSSION

### Socioeconomics Characteristics:

Age: Table 1 showed that the majority of respondents were aged group between 21 and 40 years for wholesalers and retailers of meat poultry. The implication of the results showed that most of the traders were within the economically active age. These finding agreed with previous study (Adinya and *et al*, 2008). The study found that people in age group of 21-60 years are more economically active and independent than those in the age group less than 21 years and above 60 years. Upton (1987) recorded that age influence managerial decision making.

Table 1: Socio-economic Characteristics of Wholesalers and Retailers of Meat Poultry

Age (years):	Wholesalers		Retailers	
	Number	%	Number	%
< 20	0	00.00	2	10.0
21-30	5	50.00	8	40.0
31-40	3	30.00	4	20.0
> 41	2	20.00	6	30.0
Total	10	100.0	20	100.
Gender:				
Male	10	100.0	20	100.
Female	0	00.0	0	00.0
Education:				
Primary	1	10.0	0	00.0
Secondary	5	50.0	4	20.0
University	4	40.0	16	80.0
Total	10	100.0	20	100.
Marketing Experience:				
< 1	2	20.0	4	20.0
2-3	3	30.0	3	15.0
3-5	5	50.0	6	30.0
> 5	0	00.0	7	35.0
Total	10	100.	20	100.

Source: Data collected and calculated, 2010.

Gender: About 100% of respondents are male (Table 1).

Education: Table 1 illustrated that about 10%, 40% and 50% represented primary, secondary and university education level for wholesalers, respectively. The retailers had education level as follows: secondary (20%) and university (80%). Upton (1987) reported that education has an important influence in managerial ability and decision making. This means that the meat poultry marketing is practically done by experienced traders.

Analysis of Marketing Cost at Wholesalers and Retailers: Table 2 showed that total marketing costs was 3.539 SG/Keg (1.901 SG/Keg for wholesalers + 1.638 SG/Keg for retailers). The wholesalers shared about 53.71% of the total marketing costs while retailers shared only about 46.28% of it. The higher shared of wholesaler in the total marketing costs was reflected mainly to the fact that wholesalers conducted many marketing functions than retailers. Emam (2002) reported that wholesalers run many marketing functions than retailers. The table illustrated that the total marketing costs items were distributed as the descending order for different traders. At wholesalers: rent cost (25.25%), others (22.57%), transportation (20.52%), taxes (16.83%), storage (9.31%), handling (7.89%), packing (1.58%) and sorting and grading (1.35%). They were at retailers as: rent cost (34.80%), others (24.85%), transportation (10.38%), taxes (9.77%), handling (9.16%), storage (8.18%) and packing (2.87%). The results indicated that rent, transportation and taxes costs represented higher percentages in the total marketing costs of each trader.

Table 2: Marketing Costs at Wholesaler and Retailer of Meat Poultry

	Wholesaler		Retailer	
	SG/Keg	%	SG/Keg	%
Marketing cost:	1.901	100.00	1.638	100.00
Transportation	0.390	20.52	0.170	10.38
Handling	0.150	07.89	0.150	09.16
Rent Cost	0.480	25.25	0.570	34.80
storage	0.177	09.31	0.134	08.18
Taxes	0.320	16.83	0.160	09.77
Sorting and Grading	0.025	01.32	0.00	00.00
Packing	0.030	01.58	0.047	02.87
Others	0.429	22.57	0.407	24.85

Source: Data collected and calculated, 2010.

Gross Marketing Margins: Table 3 showed the Gross Marketing Margins for wholesalers and retailers of meat poultry in Khartoum State. Wholesalers (3.00 SG/Keg) generally got higher Gross Marketing Margins than retailers (2.90SG/Keg). This may be due to higher marketing costs at wholesaler (1.901 SG/Keg) than retailers (1.638SG/Keg).

Table 3: Net Marketing Margins at Wholesaler and Retailer Level of Meat Poultry

Variable	Wholesale	Retailer
Wholesale Price (Consumer Price)	12.50	15.40
Farm Gate Price (Retail Price)	9.50	12.50
Gross Marketing Margin	3.000	2.900
Marketing costs at:	1.901	1.638
Net marketing Margins	1.099	1.262

Source: Data collected and calculated, 2010.

Net Marketing Margins: Table 4 illustrated that Net Marketing Margins at meat poultry wholesalers and retailers. Retailers got higher Net Marketing Margins (1.262 SG/Keg) than wholesalers (1.099 SG/Keg). The lower Net Marketing Margins of wholesalers was reflected to the higher marketing cost which came as a results of higher transportation (0.390 SG/Keg), storage (0.177 SG/Keg), taxes (0.320 SG/Keg) and sorting (0.025 SG/Keg).

Table 4: Marketing Efficiency of Traders (S. G/Keg)

Variable	Wholesale	Retailer
Gross Marketing Margin	3.000	2.900
Marketing Cost	1.901	1.638
Marketing Efficiency %	157.81	177.05

Source: Data collected and calculated, 2010.

Marketing Efficiency: A market that is efficient does not only bring sellers and buyers together, it enables entrepreneurs to take advantage of opportunities, to innovate and improve in response to demand and price changes (Fakayode *et al*, 2010). Table 4 indicated that retailers got higher marketing efficiency than wholesalers. The result indicated that the meat poultry product is efficient in the study area.

Marketing Channel: Figure 1 showed meat poultry channels in Khartoum State Markets. It passes from producer to consumer through; wholesaler, wholesaler and processor or wholesaler and retailer. Many traders in marketing channels lead to increase marketing costs and hence constituted welfare cross to the final consumers (Ugwumba and Okoh, 2010).

**Producers**

**Wholesalers**

**Retailers**

**Consumers**

Figure (1): Meat poultry channels in Khartoum State, 2010.

Source: Field Survey, 2010.

Marketing Constraints: Table 5 depicted the percentage of traders according to marketing constraints of Meat Poultry in Khartoum State. The table showed many constraints that facing traders of such commodity. It illustrated that about 50% and 35% of wholesalers and retailers, respectively, face obstacles on transportation. 90% of wholesalers and 75% of retailers were face constraints on poor extension services. This result was supported by analysis of marketing costs this study especially on the transportation cost. Transportation cost got high percentage of marketing costs on each trader (Table 2). Also, the results was assured with previous study (Emuron and etal, 2010). The study recorded that one of major constraints in the marketing of local chicken in Kampala city markets is costly transport (22.4%).

Table 5: Percentage of Traders According to Marketing Constraints of Meat Poultry in Khartoum State

Constraints	Wholesalers (%)	Retailers (%)
Poor Transportation	50%	35%
Poor Extension Services	90%	75%
Inadequate Credit	20%	20%

Source: Data collected and calculated, 2010.

#### RECOMMENDATIONS

Increasing marketing efficiency at wholesaler's meat poultry in Khartoum market through reducing marketing costs (rent, transportation and taxes cost items) must be ensured. Provision of extension and credit services should be done. Encourage investment in this efficiency activity.

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