MARKETING CHANNEL AND MARKETING MARGIN ANALYSIS OF LOCALLY PRODUCED WEANING FOODS IN ENUGU STATE, NIGERIA.

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ABSTRACT
The study analysed the marketing channels and marketing margins of locally produced weaning foods marketed in Enugu State, Nigeria. Data used for the study were collected from a cross- sectional survey of 18 markets through the use of a structured questionnaire. A multi-stage sampling procedure was used to select 207 respondents for the study. Data collected were analyzed using descriptive statistics and marketing margin analysis. Results of the study showed that the local weaning foods moved through several marketing chains comprising of producers, wholesalers, retailers and consumers. The wholesalers of agidi in Enugu State had the highest marketing margin of 52% followed by that of akamu oka and akamu okiri which were 39% and 30% respectively. For retailers, those selling akamu okiri had the highest (23.7%) marketing margin followed by akamu oka (23.4%) and agidi (20%). The major components of the marketing margin were identified to be mark-up, transportation cost, storage cost, processing cost and market charges with the mark-up accounting for a large proportion of the marketing margin followed by transportation cost. It was therefore recommended that adequate and improved processing and storage facilities should be put in place to reduce the margins and improve the marketing of local weaning foods in the study area.
Keywords: Marketing Margin, Marketing Channel, Locally produced, Weaning foods, Enugu State, Nigeria.

INTRODUCTION

Weaning foods, scientifically known as complementary foods are formulated food mixtures meant to be fed along with breast milk for infants from 6 months until completely weaned off breast milk (WHO, 2002). Complementary foods in Nigeria are often given to babies as gruels made from cereals or legumes. Weaning is the process of gradual withdrawal of breast milk which is no longer sufficient to meet the nutritional requirements of infants and introduction of other foods and liquids known as weaning foods which can either be locally produced or foreign-made.

Marketing of locally produced weaning foods which can be prepared easily from available raw materials like maize, millet, guinea corn and soyabean using simple processing technology that is within the reach of the producer is of great importance since most consumers prefer locally produced weaning foods due to its perceived freshness (Okoye *et al*., 2021). Moreover, no product is of any value to a buyer unless it is placed at his or her convenience. If marketing channel is appropriately handled, it will create easier accessibility to customers and increase sales, thus channels are an integrative part of marketer's activities (Alufohai and Izekor, 2020). The marketing of locally produced weaning foods is not restricted to a particular channel but the choice of channel varies depending on the product. The channel of distribution may be from the producer direct to consumer or from a large scale wholesaler to a retailer who then sells to the consumer. Marketing margin here refers to the difference between the selling price and production cost for wholesalers while for the retailers, it is the difference between the selling price and the purchase price. In other words, marketing margin reflects the costs and profits of market intermediaries or agents (popularly referred as middlemen). These costs are incurred mainly in adding utilities of form, time, place and possession to the product. A complete analysis of price spread or marketing margin is only possible through an analysis of the complete set of market-behaviour equations (Carambas, 2005). Theoretically, the analysis of marketing costs and margins would reveal how efficient pricing in market is, and gives an indication of the importance of transaction costs facing farmers and market intermediaries. Also, marketing margin analysis is a useful tool to examine the nature of the marketing system, particularly, when marketing margins are deconstructed into various functions performed by the market participants (Abbott and Makeham, 1992). The specific objectives of this paper were to identify the marketing channels and determine the marketing margins of locally produced weaning foods marketed in the study area.

METHODOLOGY

The study was conducted in Enugu State, Nigeria. Enugu State lies within the geographical coordinates of Latitudes 05^0 56" North and 07^0 06" North of the Equator and Longitudes 06^0 53" East and 07^0 55" East of the Greenwich Meridian. It has a land mass of approximately 7,625km^2 with a total projected population of 5,396,098 (National Population Commission, NPC, 2022) spread across the 17 Local Government Areas (LGAs) of the State with the capital city in Enugu. The State is divided into six agricultural zones namely: Nsukka zone (Igbo-Etiti,

Nsukka and Uzo-Uwani LGAs); Enugu Ezike zone (Udenu, Igbo-Eze South and Igbo-Eze North LGAs); Enugu zone (Enugu North, Enugu East and Isi-Uzo LGAs); Agbani zone (Nkanu East, Nkanu West and Enugu South LGAs); Awgu zone (Awgu, Oji-River, and Aninri LGAs); Udi zone (Udi and Ezeagu LGAs) (Enugu State Agricultural Development Project, ENADEP, 2012).

Economically, the State is based around trading and services along with agriculture. They are mainly agrarian, producing crops such as yam, cassava, cocoyam, rice, maize, guinea corn and oil palm some of which are raw materials for the weaning foods. A large proportion of the population is engaged in farming, fishing, carving and agricultural marketing. The study covered three agricultural zones in Enugu State.

Primary data used for the study were collected from a cross-sectional survey of selected markets in the study area through the use of a structured questionnaire. A multi-stage sampling procedure was used in selecting the respondents for the study. The first stage was a random selection of three blocks (LGAs) from three agricultural zones in Enugu State according to ADP delineation which gave a total of nine LGA's. The selected blocks (LGAs) in Enugu State were Enugu North, Enugu East and Isi-Uzo LGAs from Enugu zone, Nsukka, Igbo-Etiti and Uzo-Uwani LGAs from Nsukka Zone, Agwu, Oji-River and Aninri LGAs from Agwu zone.

The second stage was the purposive selection of two major markets from each block which gave a total of eighteen markets. This was based on the level of marketing activities of local weaning foods in the markets. The selected markets were Ogbete main market, New market, Eke Obinagu market, Oye Emene market, Eke Eha-Amufu main market, Nkwo Neke market, Ogige main market, Afor Opi market, Nkwo Ogbede central market, Eke Aku market, Eke Akiyi Umulokpa market, Adani market, Orie Agwu market, Oye Agbogugu market, Oji River main market, Nkwo Inyi market, Orie Oduma central market and Ndeaboh market. The third stage was a proportionate random selection of 75% of marketers of local weaning foods from the selected markets from the sampling frame obtained from the preliminary survey given a total sample size of 220 marketers. This is based on rule of thumb and central limit theorem which states that sample sizes greater than or equal to 30%, should provide enough information to make a statistically sound conclusion about a population. However, only 207 copies of the questionnaire were found useful for analysis. The marketing channels identified and marketing margins determined were analysed using descriptive statistics and marketing margin analysis. Marketing Margin (MM) is the difference between purchase price and selling price of the different marketing intermediaries given as:

$$MM\ (₦) = Selling\ Price - Purchase\ Price \ldots\ldots\ldots\ldots\ldots\ldots\ldots (1)$$

(Kohls and Uhl, 1990; Abbott and Makeham, 1992).

The proportion of marketing margin to selling price for market participants is given as:

For wholesaler: $\frac{Wholesale\ Selling\ Price - Wholesale\ buying\ Price}{Wholesale\ selling\ price}\ X\ \frac{100}{1}$ …… (2)

For retailer: $\frac{Retail\ Selling\ Price - Retail\ buying\ Price}{Retail\ Selling\ price}\ X\ \frac{100}{1}$ ……..……(3)

RESULTS AND DISCUSSION

(a)Marketing Channel for Locally Produced Weaning Foods in the Study Area

The marketing channels identified for locally produced weaning foods in the study area is depicted in Figure 1 and Figure 2. It showed that locally produced weaning foods moved through different marketing intermediaries comprising of producers (who are also marketers), wholesalers, retailers, and the consumers. The marketing channel for *akamu oka*, *akamu okiri* and *agidi* are broadly the same. It was observed that there is relatively short marketing chain as shown by the few intermediary levels and direct sales to consumers. The implication of this is that some of the marketers are the producers of these locally weaning foods themselves and as such may have their personal reasons which could have motivated their decision to choose either or combination of these three major types of marketing levels operated. This is because, the marketers acting as the producer may decide to sell directly to the consumers or sell to wholesalers or retailers who then sell to the consumers.

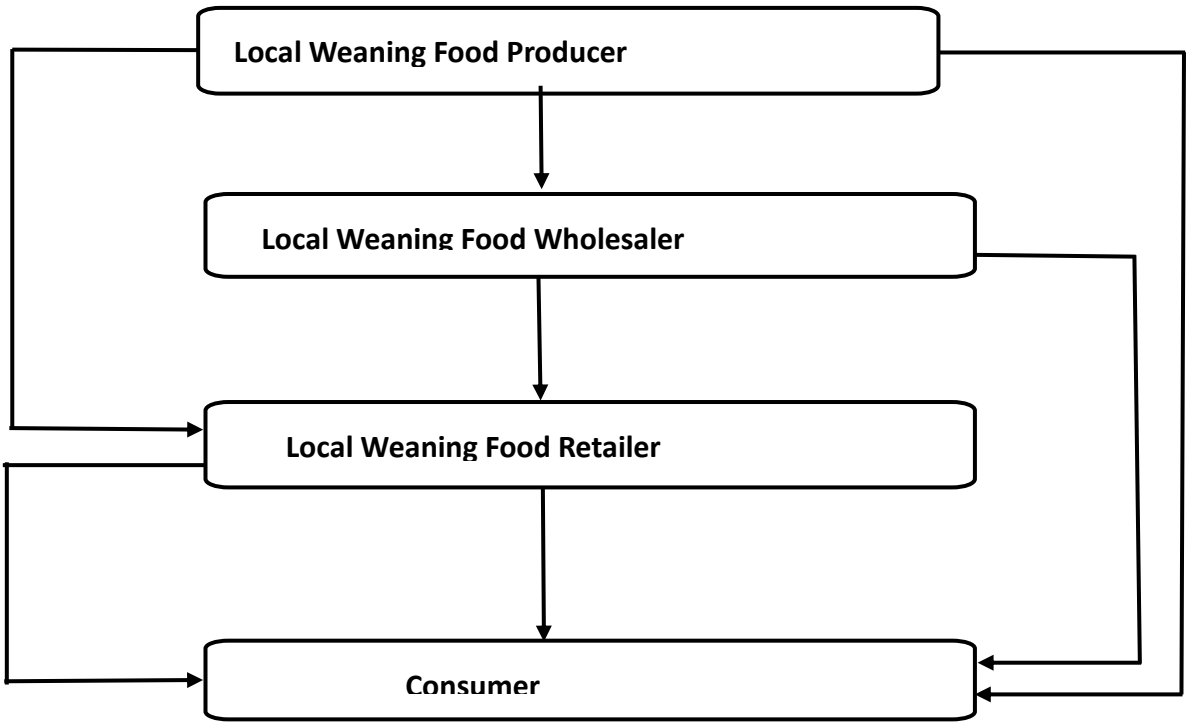

Figure 1: Marketing Channel for *akamu oka, akamu okiri* and *agidi.*
Source: Survey Data, 2022

(b)Analysis of the Marketing Margin per kilogramme of the Locally Produced Weaning Foods

The average marketing margin for marketers of locally produced weaning foods are presented in Table 1. The results showed that the average marketing margin per kg for wholesalers of *akamu oka, akamu okiri* and *agidi* in Enugu State were ₦183.85, ₦160.48 and ₦188. 98 respectively while that of the retailers were ₦ 118.09, ₦145.71 and ₦120.00 respectively. The marketing margins for wholesalers in the State were generally higher than that of retailers. This was probably because retailers typically bought and sold the local weaning foods in the same market, with little or no value addition, thereby incurring less risks and costs, this agrees with the findings of Achike and Anzaku (2010), who found similar result for benniseed marketers in Nasarawa State. Apriori expectation was met because wholesalers generally earn more of the marketing margin than the other market intermediaries. Specifically, from the result, wholesalers of *agidi* in Enugu State had the highest marketing margin of 51.56% followed by that of *akamu oka* and *akamu okiri* which were 39.34% and 29.96% respectively. For retailers, those selling *akamu okiri* had the highest marketing margin of 23.72% followed by *akamu oka* and *agidi* which were 23.40% and 20.00% respectively. However, for locally produced weaning foods, the bulk of the consumer price went to the wholesalers, a possible reason may be due to the relatively short marketing chain observed for locally produced weaning foods in the study area.

Table 1: Average Marketing Margin (per Kg) of Locally Produced Weaning Foods

Item	*Akamu oka*		*Akamu okiri*		*Agidi*	
	Wholesaler Mean (₦)	Retailer Mean (₦)	Wholesaler Mean (₦)	Retailer Mean (₦)	Wholesaler Mean (₦)	Retailer Mean (₦)
Purchase Price (Product cost)	283.46	386.67	375.20	468.60	258.33	480.00
Selling Price	467.31	504.76	535.70	614.30	533.33	600.00
Marketing Margin	183.85	118.09	160.48	145.71	275.00	120.00
Marketing Margin (as % of selling price)	39.34	23.40	29.96	23.72	51.56	20.00

Source: Computed from Survey Data, 2022

The analysis of the components of marketing margin for the local weaning foods presented in Table 2 showed that the major components of the marketers' marketing margin were mark-up, transportation cost, processing cost, storage cost and market charges. The result also showed that the percentage of mark-up for wholesalers of *agidi*, *akamu okiri* and *akamu oka* were 77%, 79% and 84% respectively while for retailers, the mark up were 79%, 86% and 89% respectively of the marketing margin. This showed that mark-up accounted for a greater proportion of the marketing margin for both wholesalers and retailers in the study area. This may imply that the marketers' conscious inclusion of high profit was a major determinant, which is an indication of profiteering. This collaborates with the findings of Eronmwon *et al* (2014), who reported that mark-up was the major component of the marketing margin of plantain marketers in Edo State.

Table 2: Identified Components of the Marketing Margin for Marketers of local weaning foods (per Kg)

Item	*Akamu oka*				*Akamu okiri*				*Agidi*			
	Wholesaler		Retailer		Wholesaler		Retailer		Wholesaler		Retailer	
	Mean (₦)	% of MM	Mean (₦)	% of MM	Mean (₦)	% of MM	Mean (₦)	% of MM	Mean (₦)	% of MM	Mean (₦)	% of MM
Transportation	19.90	10.82	17.04	14.43	14.75	9.20	9.17	6.29	19.75	7.18	10.83	9.03
Storage	3.92	2.14	4.44	3.76	3.92	2.44	3.97	2.73	4.36	1.59	3.06	2.55
Processing	15.22	8.28	-	-	12.37	7.71	-	-	18.07	6.57	-	-
Market charges	2.74	1.49	2.89	2.45	3.17	1.98	3.10	2.13	2.88	1.05	3.06	2.55
Mark- up	142.07	77.27	93.72	79.36	126.17	78.67	129.47	88.85	229.94	83.61	103.05	85.87
Marketing Margin (MM)	183.85	100.00	118.09	100.00	160.38	100.00	145.71	100.00	275.00	100.00	120.00	100.00

Source: Computed from Survey Data, 2022

CONCLUSION AND RECOMMENDATIONS

The study established that the locally produced weaning foods moved through several marketing chains comprising of producers, wholesalers, retailers and consumers. The average marketing margin for wholesalers were generally higher than that of retailers of locally produced weaning foods in the study area and the major components of the marketing margin were identified to be mark-up, transportation cost, storage cost, processing cost and market charges with the mark-up accounting for a large proportion of the marketing margin followed by transportation cost. It was therefore recommended that adequate and improved processing and storage facilities should be put in place and reduction of market charges and taxes should be implemented so as to reduce the margins and improve the marketing of local weaning foods in the study area. Marketers are also advised to reduce their mark-up so as not to be seen as being exploitative and this will equally help to reduce the size of the marketing margin. There should also be provision of good roads in order to reduce the cost of transportation as it is one of the major components of the marketing margin.

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