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ANALYSIS OF PEPPER RETAILING IN TWO SELECTED MARKETS WITHIN KADUNA METROPOLIS OF KADUNA STATE, NIGERIA

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ABSTRACT
The study examined the analysis of pepper retailing in two selected markets in Kaduna metropolis. Purposive and random sampling techniques were used to select the fifty marketers used for this study. Data were collected from marketers and respondents using structural questionnaires. The data collected were then analysed using descriptive statistics and market margin analysis. The result indicated that about 56% of marketers are male and about 86% are between the ages of 21- 60 years. The market margin analysis values were 40.48% in both markets which signify that pepper marketing is highly profitable in the study areas. The result also revealed that there are three channels of marketing of pepper in the study area. However, the marketers are faced with the problem of pepper spoilage, lack of preservation facilities and fluctuation in price. It is recommended that marketers should form co-operative society in other to put their resources together to enable them to purchase preservation facilities in order to reduce the level of pepper spoilage.

KEY WORDS
Pepper, marketing channels, marketing margin, retailers, Kaduna.

Agricultural sector plays significant roles in developing countries. Increase in agricultural productivity is subject to its marketability so as to improve its contributions to national economy. According to Idah, Ajisegiri and Yisa, (2007), efficient market in addition to linking sellers and buyers in reacting to current situations in supply and demand also stimulates consumption of outputs which are essential elements of economic development. Agricultural marketing articulates all processes that take place from when the farmer plans to meet specified demands and market prospects to when the producer finally gets it to the consumers. In a typical vegetable marketing, retailers were observed to sell pepper and tomato at the same time in addition to other vegetables such as cabbage, salad and onions (Aminu, 2004). Production and specialization are stimulated by marketing consequently resulting in an improved productivity. Market systems complement the farm production effort toward the realization of its goals through the provision of utility of time, place, possession and form.

Pepper, by virtue of its versatile use in the modern world, earned a reputation as king of spices. It rules the spice trade both in terms of volume as well as value and contributes about 34% of the total of spice trade by volume (CEDA, 2004). It is the world's most important vegetable next to tomatoes. In Nigeria, pepper is cultivated in many parts of the country, especially from the northern part of the country in which Kaduna state belong. Pepper (Capsicum Spp.) is a high value crop that is grown for cash by farmers all over the world. Nigeria is known to be one of Nigeria is known to be one of the major producers of pepper in the world accounting for about 50 percent of the African production (Idowu-Agida *et al.,* 2010). Nigeria has good soils and weather that can readily support the growth and production of pepper. The area for pepper production is the northern region of the country that lies between latitudes 10oN and12º30'N.

In Nigeria, pepper is consumed in different forms and it is a of almost all foodstuffs. It is unlikely to see Nigerian traditional meals consumed devoid of pepper. Pepper production offers a means of livelihood to several smallholder farmers in Africa. Pepper (in combination with other crops) offers a source of food and income security to farmers, providing trade and

component employment to about 70% of local labour population in Nigeria, Its cultivation forms the major and sometimes the only agricultural activity of rural women (Onwubuya, Okporie, and Nenna, 2009).

Pepper (Capsicum Spp.) is used as spices, vegetable or drugs. According Dimelu (2010), pepper is an important source of vitamins and minerals thus form essential component of human diet. Pepper is a rich source of vitamins A, B and C and a therapeutic agent for cancer. As a result of this, there had been increased trade activities surrounding this commodity.

In many households, pepper provides countless needs such as enhancing diets intake, storing of grains and mild drugs. Bosland and Votava (2000) reported that pepper is used for flavouring, adding taste in food, colouring cosmetics and imparting heat to medicine by manufacturing industries. It is also used as ornamental plant and the red powdered pepper is used for colouring flamingos in the zoo. Baluk and Daniel (2009) stressed that pepper is used as pepper spray and tear gas for weapons. He further reported that pepper fruits vary in sizes, shape, colour, flavour and pungency and the variation reflected in their nutritional composition. Despite the importance of pepper in human nutrition, poor marketing practices, price instabilities and poor handling practices of pepper are problems that discourage farmers from cultivating pepper. The problems in turn resulted in supply shortage in the area. Hence, improving the market environments should be a priority for improving the supply and satisfying the market demand of pepper. Also, the wide gap between rural and urban prices of any agricultural products weakens the farmer's morale thereby reducing productivity; and even in some cases leads to complete stoppage of production as pointed out by Emeka *et* al., 2014.

The study therefore aimed at analyzing pepper retailing in Kawo and Mando markets within Kaduna metropolis.

METHODS OF RESEARCH

The study was conducted in Kawo and Mando Markets. The two markets are located within Kaduna metropolitan town. Kaduna state is located within the Guinea Savannah Region on latitude 10^{o} 32' E and longitude 7^{o} 17' N. It has an estimated annual rainfall of about 1000mm-1500mm per annum and a land mass area of about 3,174.5sq kilometers. The state has contributed immensely to the Nigerian economy especially in the area of agricultural production of major crops like tomato, yam, cassava, maize, millet and pepper. The selected markets are known for marketing of various agricultural products such as tomatoes, pepper, maize, beans, yam, sweet potatoes, Irish potatoes, onions, okra and other vegetables. The markets have several tribes and ethnic groups i such as Yoruba, Hausa, Ibo and Fulani land other locals interacting together harmoniously.

Two stage sampling techniques were used for the study. The first of sampling technique is the purposive selection of two markets from Kaduna metropolis. The markets selected purposively are Kawo and Mando markets respectively. The second stage of sampling is the random sampling of pepper retailers in the selected markets. 30 and 20 pepper retailers were selected from Kawo and Mando markets respectively making a total of 50 marketers that were used for the study.

Primary data were used for this study. The primary data were obtained by administering of well-structured questionnaire to the respondents. The data collected were analyzed using descriptive statistics such as frequency percentages, tables and flow charts to achieved objectives relating to socio economic characteristics of the pepper retailers and marketing channels of pepper while marketing margin analysis was used to achieve the pepper marketing margin value. It was employed to determine the fraction of consumer's expenditure on a commodity that is received by producer and each of the marketing agents. The formula that was used for marketing margin is given as:

$$\text{Marketing margin (\%)} = \frac{\text{Selling price of pepper} - \text{Cost price of pepper} \times 100}{\text{Selling price of pepper}}$$

RESULTS AND DISCUSSION

The information on the socio-economic characteristics of pepper retailers in Kawo and Mando markets were considered. Information on variables such as; age, gender, education level and marketing experience were gathered for the study.

Table 1 below shows the distribution of respondents based on their age. 24.00 % of the respondents are between the age of 31 – 40 years, 22.00 % have an age range of between 41 – 50 years and 51 – 60 years respectively, 18.00 % of the respondents age ranges between 21 – 30 years, 10.00% of the respondents are below 21 years while only 4.00% are 61 years and above. The result reveals that 96.00% of the retailers are still in their working age group which signifies that they still possess the energy and strength to carry out their marketing activities effectively.

Table 1 – Age distribution of the respondents

Age range(years)	Frequency(F)	Percentage (%)
Below 21	5	10.00
21 – 30	9	18.00
31 – 40	12	24.00
41 – 50	11	22.00
51 - 60	11	22.00
Above 61	2	4.00
Total	50	100.00

Source: Field Survey 2021.

Table 2 indicated that 56.00 % of the respondents are males while 44.00 % are female. This shows that the retailing of pepper is not gender bias in the study area. This result revealed that the males are more involved pepper retailing than the females in Kawo and Mando markets. The result was in agreement with the findings of Rahman, Ogungbile, and Tabo (2002) which stated that men were the main providers of the household and supports the family more than women.

Table 2 – Gender distribution of the respondents

Gender	Frequency (F)	Percentage (%)
Male	28	56.00
Female	22	44.00
Total	50	100.00

Source: Field Survey, 2021.

Table 3 showed that 64.00 % of the respondents are married, 24.00% are still single, 8.00% are widow and 4.00 % are divorce or divorcee. This reveals that married people are more into marketing of pepper than the singles. This might be as a result of the singles migrating from place to place while the married are looking for income to sponsor their children to schools, settle medical bills, feeding and shelter.

Table 3 – Distribution of respondents based on marital status

Marital status	Frequency (F)	Percentage (%)
Single	12	24.00
Married	32	64.00
Divorce(e)	2	4.00
Widow	4	8.00
Total	50	100.00

Source: Field Survey, 2021.

Table 4 shows that 44.00 % of the respondents had household size that ranges between 1-5 persons, 34.00 % of the respondents had household size that ranges between 6-10 persons, 18.00 % of the respondents had household size that ranges between 11 – 15

persons and 4.00% of the respondents had household size that ranges between 16 – 20 persons. The result revealed that majority of the respondents have household size that ranges between 1 to 10 people which shows that their labour need may be complemented by the family in addition to hired labour. Rahman *et al*. (2002) stated that family size or household size is the total number of individuals who live within and feed in the household. A household is made up of head, wives, and children and to some extent family relatives.

Table 4 – Distribution of respondents based on household size

Household size	Frequency (F)	Percentage (%)
1 – 5	22	44.00
6 – 10	17	34.00
11 – 15	9	18.00
16 – 20	4	8.00
21 and above	0	0.00
Total	50	100.00

Source: Field Survey, 2021.

Table 5 shows that 32.00 % of the respondents had secondary education, 30.00 % of the respondents received tertiary education, 24.00 % of the respondents had no form of formal education and 14.00 % of the respondents attended primary school. The result revealed about 76.00 % of the pepper retailers had formal education which might have positive effect on their rate of accepting new innovations concerning marketing strategies. This implies that reasonable populations of the respondents are educated and due to their education level, it will be easier to adopt new technologies in marketing and deal with problems of risk and uncertainty in marketing Rahman *et al.* (2002).

Table 5 – Distribution of respondents based on educational level

Educational level	Frequency (F)	Percentage (%)
No formal education	12	24.00
Primary education	7	14.00
Secondary education	16	32.00
Tertiary education	15	30.00
Total	50	100.00

Source: Field Survey, 2021.

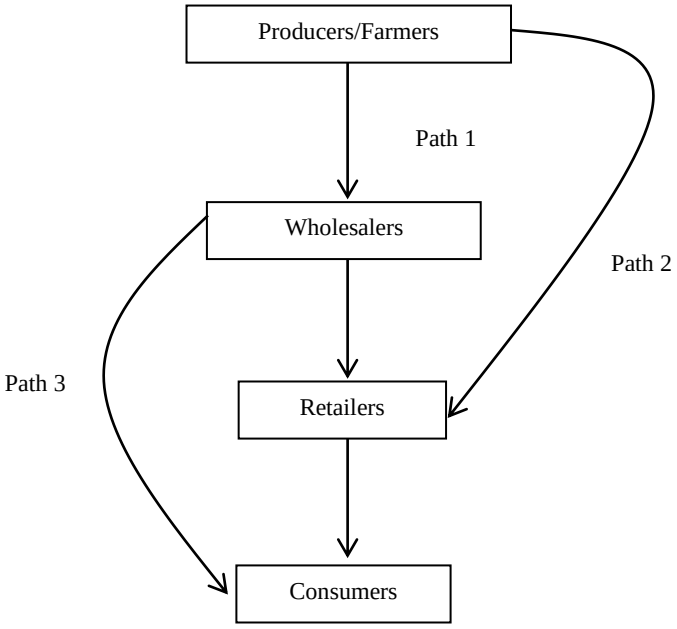

Figure 1 – Marketing Channels for Pepper Marketing in the Study Area.

The marketing channel for pepper in the study area is presented in Figure 1. The figure shows that the channel of pepper marketing is interwoven with about three different marketing chains identified. The first chain is from the farmers to wholesalers to retailers and finally to the consumers. The second path is that the retailers by cut the wholesalers and purchase pepper at the farm gate from the farmers directly while the third path is that sometimes the consumers by cut the retailers to buy pepper from the wholesaler directly.

The result of marketing margin analysis of pepper retailing in two selected markets in Kaduna metropolis is presented in Table 6. The result shows that the marketing margin in both markets is 40.48 %. The result signifies that there is no differential in both the cost and selling prices of pepper in both markets. The result revealed that the entire market margin in both markets was high which signifies that pepper retailing is highly profitable venture in the study area. According to Abbott and Makeham (1986) asserted that high marketing margin reflects a high level of profitability.

Table 6 – Marketing Margin of Pepper in the Two (2) Selected Markets in Kaduna Metropolis per Bag

Market	CP(Naira)	SP(Naira)	MM	MM (%)
Kawo	10000.00	16800.00	0.4048	40.48
Mando	10000.00	16800.00	0. 4048	40.48

Source: Field Survey, 2021. Note: CP - Cost Price for a bag of Pepper in Naira; SP - Selling Price for a bag of Pepper in Naira; MM - Marketing Margin.

Table 7 – Problems facing pepper retailing in the study area

Problem	*Frequency (F)	Percentage (%)
Price fluctuation	32	64.00
Spoilage	45	90.00
High transportation cost	16	32.00
Low sales	17	34.-00
Lack of preservation facility	40	80.00

*Source: Field Survey, 2021. * Multiple Responses.*

The result of Table 7 shows the various problems facing pepper marketing in the study area. Three major problems were identified to be the major constraints militating against pepper retailing in the study area. Pepper spoilage accounted for 90.00 % of the problem facing pepper retailing as indicated by the retailers which was followed closely by 80.00% of the respondents who identified lack of storage facilities as the second major problem militating against the sales of pepper in the study area. The third major problem facing pepper retailing in the two selected markets is the fluctuations in price (64.00%).. Other problems identified but not that serious include low sales (34.00%) and high cost of transportation (32.00%). According to the result problems of low sales observed might be as a result of high selling price of pepper.

CONCLUSION

The study was carried out to examine the analysis of pepper retailing in two selected markets in Kaduna metropolis of Kaduna state. Primary data was collected by the use of structured questionnaires and personal interview. The result showed that 76.00 % of marketers are in their active age of between 18-60 years, while about 62. 00% of the retailers had post primary school Three paths of channel of marketing were identified. The result of the marketing margin showed that pepper marketing is profitable venture in the study area. However, spoilage of pepper, lack of storage facilities and price fluctuations were identified as the major problems facing pepper retailing in the study area. Based on the result it is concluded that pepper marketing in the study area is profitable and a good venture to imbibe in for self-reliance and self-employment. The study recommended that there is a need for a processing and preservation facilities to be provided so as to reduce the level of spoilage of pepper and loan facilities should be provided to the marketers to enable them expand their business as well as to encouraged more people participating in the business.

REFERENCES

1. Abbot, J.C. and Makeham, J.P. (1986): Agricultural Economic and Marketing in the tropics, London: Longman Group Ltd.
2. Aminu, A. (2004). Marketing of Tomato and Onion in Jigawa state: A spatial and Seasonal Price Analysis. A dissertation in Agricultural Economics (Ph.D dissertation). Ahmadu Bello University, Zaria, Nigeria.
3. Baluk, S. and Daniel, J. S. (2009). Economic analysis of pepper production, marketing and management in Georgia. The Cooperative Extension Offers Educational Programmes, the university of Georgia College and Agricultural and Environmental science and Valley StateUniversity.AGECON05-www.ces.uga.edu/agriculture/agecon.
4. Bosland, P.W. and Votava, E.J. (2000). Pepper: Vegetable and Spice Capsicum. CABI publishing, New York, 1-16.
5. CEDA (Caribbean Export Development Agency) (2004). Caribbean Regional Program for Economic Competitiveness. Discussion Paper, Barbados.
6. Dimelu, I. N. (2010). Preservation Responsibilities of Homemakers in Processing, Storage and Preservation of pepper (capsicum species) in Southern Nigeria, African Journal of Teacher Education, 1(1): 185-114.
7. Emeka, N.C., Akogwu, C. I. and Ugwu, J. N. (2014). Cost-return analysis of cocoyam marketing in Nsukka agricultural zone of Enugu State, Nigeria, Sky Journal of Agricultural Research, 3(11): 215- 222.
8. Idowu-agida O. O., Nwaguma, E.I. and Adeoye, I.B. (2010). Cost Implication of Wet and Dry Season Pepper Production in Ibadan, Southwestern Nigeria. National Horticultural Research Institute, Ibadan, Nigeria. Agriculture and Biology Journal of North America, 1(4):495-500.
9. Idah P.A., Ajisegiri, E.S.A. and Yisa, M.G. (2007) Fruits and Vegetables Handling and Transportation in Nigeria. Journal of Assumption University of Thailand, 10(3): 176 -183.
10. Onwubuya, E. A., Okporie, E. O. and Nenna, M. G. (2009). Nsukka yellow pepper processing and preservation techniques among women farmers in Enugu State. African Journal of Agricultural Research, 4(9), 859–863.
11. Rahman, S.A., Ogungbile, A.O. and Tabo, R. (2002): Factors Affecting Adaption of KSA III and ICS.V 400 Sorghum Varieties in Guinea Sudan Savannah of Nigeria. Journal of crop Research, Agro Forestry and Environment, 1(1): 21.