Revenue and Income Analysis of Fresh pepper Marketing in Aba North Local Government, Abia State, Nigeria

Isibor, A.C. and Nkamigbo, D.C.

Department of Agricultural Economics and Extension, Faculty of Agriculture, Nnnamdi Azikiwe University, Awka, Nigeria, West Africa.

KEYWORDS

Fresh pepper,
Marketing
Revenue

*CORRESPONDING AUTHOR

dc.nkamigbo@unizik.edu.ng

ABSTRACT

The study examined revenue and income analysis of fresh pepper marketing in Aba North local government area, Abia State, Nigeria. Specifically, it described the socioeconomic characteristics of the marketers, marking channel and volume of trade among the channels, profitability and economic efficiency of the marketers and constraints to pepper marketing in the study area. A multistage sampling procedure involving simple random sampling methods were used to select one hundred and twenty five marketers. Primary data were collected by means of structured questionnaire and were analyzed using descriptive statistics, enterprise budgeting, Sherpherd-Futrell technique and relative importance index. Finding from socioeconomic characteristics showed that majority of the marketers were within the age bracket of 30 and 49 implying that the marketers are young, energetic, flexible in accepting new ideas and taking risk and there is a female. The result of marketing channel revealed that third channel recorded the highest percentage of (64%). The result of profitability of fresh pepper marketing showed that out of the total cost of ₦628, 257.5 spent by the marketers, purchases constituted (89.39%) while the least expense was interest on loan (2.68%). The enterprise generated a net return on investment of 0.3266 and the implication of this is that the marketers return 33 kobo for every 1 Naira invested in the enterprise. Decay and Rotting (Perishability), price fluctuation, Sit-at-home palaver and Cough and Catarrh were perceived as the most serious constraints in the enterprise. Stakeholders should address the economic sabotage of sit-at-home palaver which is adversely affecting perishable produce were recommended among others.

INTRODUCTION

Nigeria agriculture is the major source of food and accounts for about 35% of the Gross Domestic Product (GDP), 37% of merchandised export, 75% of the rural household income and 70% of employment (Gbughemobi, Nkamigbo and Meludu, 2021). Agricultural sector is an engine room for sustaining growth of Nigeria economy and still remain the mainstay of our economy by providing food for the teeming population, create jobs as well as wealth, raw materials for industrial sector and foreign exchange earnings. Nigeria is one of the sub Saharan African countries of which agriculture was the back bone of her economy before the oil boom of 1970s (Nkamigbo, Isibor and Ekeke, 2021).

Pepper (*Capsicum specie*) is a genus of plant from the family *Solanacea* used as spices, vegetables or drugs. They are commonly called chilli, red, green pepper or just pepper (Brinker, 2009, Dimelu, 2010 and Ibitoye, Oyibo and Shaibu, 2019). It is an important agricultural crop not only because of its economic importance but due to the nutritional and medicinal value of its fruits as well as being an excellent source of natural colours and antioxidant compound (Alawode and Abegunde, 2016). Pepper is one widely used food crop and mostly grown spice crop in the world (Ugwu, 2016). It is ranked third among the world's most important vegetable crops after tomato and onion and considered the first spice to have been used by humans (Stoeffel, 2013). Adaigho and Tibi (2018) opined that pepper is one of the varied and widely used spices in the world, highly value crop that is grown for cash by farmers all over the world.

Pepper originated in Mexico around 7500BC and was introduced to England and Central Europe in 1548 and 1585 respectively. There are about 22 wild species and mostly five are widely domesticated and these are Cannum L., C. frutescent L., C. chinenses, C.

baccatum l and C.pubenscens R. (Bosland and Votawa, 2000). Pepper is mostly grown type of specie providing colour and flavor to food while providing essential nutrient requirements at the same time. The capsicum fruit is an excellent source of natural, micronutrient antioxidants (Vitamins C, E and Carotenoids) which appear to be critically important in preventing chronic and age related diseases) (Delegan (Bosland and Votawa, 2000, 2011 and Ibitoye, et al. 2019). Alawode and Abegunde (2016) stated that statistics estimated world production of pepper in 2001 at 21.3 million tonnnes from a harvested area of 1.6 million and Nigeria is one of the major producers of pepper in the world accounting for about 50% of the African production. The fruits from hot type pepper plant are historically employed in traditional medicine and are being used in modern herbology and conventional medicine (Paleecciteh and Craker, 1996 as cited by Delegan, 2011).Pepper is a rich source of Vitamin A and E and Vitamin C that helps in preventing clods in human than any other vegetable crop. Pepper contains high amount of pro vitamins A, B, Citrin B_1(thiamine), B_2 (riboflavin) and B_3 (niacin) and in addition to vitamins, pepper acts as therapeutic agent for cancer. Pepper stimulates the flow of saliva and gastric juice, raises body temperature, relieves cramps, improves complexion and soothe gout.

Pepper is widely grown primary for its pungency due to concentration of the alkaloid, capsoicnoid that makes pepper an important ingredient used for spice commodity in the world (Bosland and Votalla, 2000, Dipeolu and Akinbade ,2007, Abdel, 2008 and Ibitoye, *et al*., 2019).

In many household, pepper provides variety of needs such as enhancing intake of dull diets, storing grains and as mild drugs (Bosland and Votalla, 2000). It is also used in stew and some local dishes all over the Country although the type's quantities utilized vary in different areas. Pepper is used for production of spice blends, use to decorate food to give it a pungent flavor, industrial use in pharmaceutical, offer relieve from colds, sore throats, fever, enhances blood circulation for cold hands and feet, regulates blood sugar, serves as heart stimulates, regulates blood flow, useful in preparing creams meant for lessening pains, inflammations and itching as well (Adaigho and Tibi, 2018). Opata, Ezeibe and Arua (2019) reported that pepper in combination with other crops offers a source of food and income security to farmers, providing trade and employment to about 70% of local labour population in South East.

Agricultural business includes all the activities within the agricultural food and natural resource industries that are involve in the production of food and fiber. Individual agribusiness may sell items to farmers for production, provide service to other agricultural business or be engaged in the marketing, transporting, processing and distribution of agricultural products (Saunders, 2012). In Nigeria, Agribusiness provides people with food, clothing and shelter. It helps in Nigeria economy by providing jobs for millions of people in science, research, engineering, education, advertisement, government agencies, trade organizations and commodity. In Agricultural business activities, social network cannot be left behind to achieve agricultural development.

Udegbe, Udegbe, Olumoko and Hassan (2012) further explained that the participants in pepper distribution and marketing include the producer (farmer), the assembler, the wholesaler, the retailer and finally the consumer. Isibor, Nkamigbo and Ekeke (2021) reported that marketing involves all processes in the movement of products that consumers need from the point of production to the point of purchase. Marketing can contribute to economic development in Nigeria by stimulating production and consumption, facilitating income to individuals and foreign exchange earnings to the Nation.

MARTERIALS AND METHOD

The study was carried in Aba North Local government area, Abia State. It lies along the west bank of the Aba River at the intersection of roads from Port Harcourt, Owerri, Umuahia, Ikot Ekpene,and Ikot Abasi (Opobo). The Capital of Aba North LGA is Umuahia, although the major commercial city is Aba, formerly a British Colonial government outpost. Aba LGA comprises of seven communities namely Ebenji, Umuola-Okpulor, Eziama, Osusu, Umuokoji, Uratta, Umuola-Egbelu. It has a density of 35,000/km^2, Lattitude 5. 1268^0N and longitude 7.3679^0E, land area of 49KM^2 and a population of 423,852 (NPC, 2006). The study population was made up of all the pepper marketers in the Aba LGA. Multistage and simple random methods were used to select five Communities, 5 daily markets and 125 marketers (respondents) for the study.

Stage one: Five Communities were randomly selected from the entire LGA

Stage two: This involves purposive selection of one daily market with large number of consumers from each of the selected communities (Chima avenue market, Morning market, Ultru market, Eziukwu market and Urata market).

Stage three: This involve random selection of twenty five marketers (respondents) from each of the markets earlier selected making it a total of 125 marketers for the study.

Method of Data Collection and analysis

Data for the study was collected from primary source. Primary data were obtained using well-structured questionnaire to the respondents from the list of pepper marketers that constituted the sampling frame for the study. The objectives of the study were achieved through the following analytical tools. Descriptive statistics such as tables, means, and percentages were used to describe some objectives (socioeconomic characteristics of the marketers, marketing channels and volume of trade), Enterprise budgetary and

Sherpherd Futrell techniques were used to achieve profitability and economic efficiency while relative importance index was used to achieve constraints to pepper marketing.

Model specification

The model was used to measure the influence of socio-economic characteristics on net marketing income of farmers. Socioeconomic factors are as follows:

NMI=Net Marketing Income
AGE= Age in years
GEN = Gender (dummy: male =0; female = 1)
MRS = Marital status
EDU = Educational level
SOF = Source of finance
HOS = Household size (number of persons living together)
TOU = Membership of trade union (dummy: member =0, non-member = 1)
EXP = Marketing experience
MKS = Marketing cost
PDP = Product price
e = Stochastic error term.
It is implicitly represented below as

$NMI = \beta\ (AGE_1, GEN_2, MRS_3, EDU_4, SOF_5, HOS_6, TOU_7, EXP_8, MKS_9, PDP_{10} \ldots\ldots e_1)$

The budgetary technique was used to determine the profitability of the marketers

$NER=\sum P_{yxi} Y_i-(\sum P_{xij} X_{ij} + \sum F_{ij})$

Where $\sum$ =sum

$P_{yi}Y_i$= unit price × quantity of ith respondents sales = Total revenue (TR) for i^{th} respondent.

$P_{xij}X_{ij}$ = Prices X quantities of ith respondents variable inputs= total variable cost (TVC) for j^{th} respondent.

F_{ij} = Depreciation values of equipment, annual rent for store, interest on loan, for j^{th} respondents = Total fixed cost (TFC) for j^{th} respondent.

TC = Total cost (TVC + TFC).

The marketing efficiency of marketers' was achieved using Sherpherd-Futrell technique.

The marketing efficiency

$$ME = \frac{TC}{TR} \times \frac{100}{1}$$

Where:

ME = coefficient of marketing efficiency

TC = Total marketing cost incurred

TR= Total value of product sold

Constraining variables

The relative importance index was used in determining the degree of importance of the problem. To make inferential statement, the mean score was compared with the critical mean, 2.5. If the calculated mean of a problem is greater than the standard critical value, then the problem is regarded as very serious.

RESULTS AND DISCUSSION

Socioeconomic characteristics of the marketers

Socioeconomic characteristics of the marketers in Table 1 indicates that majority of the marketers were within the age bracket of 30 and 49 years. This implies that the marketers are young, energetic, flexible in accepting new ideas and taking risk. This agrees with Nkamigbo, Chiekezie and Ozor, (2019) who stated that fresh tomatoes marketers in Nnewi Metropolis were relatively young, energetic and able to face the hustle of perishable marketing. The result revealed a female dominance (84.8%) in the study area. Most women in the study area engage in petty trading in order to assist their household due to economic hardship thereby they prefer little business with a minimal capital like pepper marketing. This agrees with Udegbe, Olumoko and Hassan, (2012) who reported in their study area that pepper marketing is more of female than male. The result indicates that majority of the marketers were married (86.4%) with a 60% of household size of 4- 6 persons. Also, the educational level of the marketers is interesting implying that majority of the marketers had one level of education or the other thus making the study area a vibrant centre in business activity as Aba is known as small China. This agrees with Agbugba, Nweze, Achike and Obi (2013) who noted in their study area that high

percentage of the marketers had formal education and some to tertiary education. From the result most marketers have spent 5-9 years (60.8%) in the enterprise. Source of finance revealed that friends and relative took the center stage (69.6%) implying that, in the study area most family members do help their wives/relatives to set up a business for their common goal. The result revealed that most of them belong to their trade union (91.2%) to carter for their welfare. Also, most of them engage in other trading activity due to the fact that fresh pepper is seasonal.

Table 1: Socioeconomic characteristics of fresh pepper marketers

VARIABLES	FREQUENCY	PERCENTAGES
AGE		
Less than 20 years	12	9.6
20-29	18	14.4
30-39	28	22.4
40-49	50	40
50-59	10	8
60 and above	7	5.6
Total	**125**	**100**
Gender		
Male	19	15.2
Female	106	84.8
Total	**125**	**100**
Marital Status		
Single	17	13.6
Married	79	63.2
Widow/divorced	29	23.2
Total	**125**	**100**
Household size		
1-3	31	24.8
4-6	75	60
7-9	19	15.2
10 and above	-	-
Total	**125**	**100**
Educational status		
0-6	21	16.8
7-12	87	69.6
13-18	17	13.6
Total	**125**	**100**
Marketing Experience		
1-4	31	24.8
5-9	76	60.8
10 and above	18	14.4
Total	**125**	**100**
Source of Finance		
Personal savings	21	16.8
Commercial bank	-	-
Bank of Agriculture	7	5.6
Friends and relatives	87	69.6
Microfinance Bank	-	-
Cooperatives/Isusu	10	8.0
Total	**125**	**100**
Trade Union		
Member	114	91.2
Non members	11	8.8
Total	**125**	**100**
Other Business actives		
No	96	76.8
Yes	38	23.2
Total	**125**	**100**

Source: Field survey, 2022.

Marketing channel and volume of trade among the channels

Marketing channel refers to the various means to the various path ways through which fresh pepper moves from producers/suppliers till it gets to the consumers. It is the sequence of intermediaries or middlemen and marketers through which produce pass from producers to final consumers Isitor, Otunaiya and Iyanda (2016).The distribution channels of fresh pepper in the study area indicated four marketing channels as shown below. The marketing channels identified were:

Producer/Supplier → Consumer (16%)
Producer/Supplier → wholesaler → Consumer (30%)
Producer/Supplier → Retailer → Consumer (64%)
Producer/Supplier → wholesaler → Retailer → Consumer (15%)

Fresh pepper is cultivated in Abia State and in all South Eastern States in commercial quantity and due to demand gap most marketers result in sourcing the product from Northern part of the Country to serve its teeming customers. The first channel from above indicates that the product flows from the producer/supplier to consumers. This channel recorded (16%) volume of trade in the study area and the consumers prefer this due to price slash because they buy directly from producer/supplier and pay less. The second channel, the supplier sold to wholesalers who sells to the consumers. This channel recorded 30% of the volume of trade in the study area. The third channel recorded the highest percentage of (64%) where the supplier sold to the retailers whose sells directly to the end users. The last channel comprises of wholesaler and retailer before it gets to the end users. The longer the channel the lower the market price accrues to the producer/supplier due to the activities of the middlemen.

Profitability of fresh pepper marketing

The enterprise budgeting analysis was used to estimate the monthly profitability of fresh pepper marketing as shown in Table 2. The analysis revealed that out of the total cost of ₦ 628,257.5 spent by the marketers, purchases constituted (89.39%) while the least expense was interest on loan (2.68%). From the result, purchasing of fresh pepper is the most vital cost/expenses in the enterprise. Also on the interest on loan, it implies that many marketers do not collect loan from Banks to set up this enterprise in the study area as it is viewed as a petty trading in combination of other activities and most times relatives and friends help their own in its establishment as a support.

On enterprise profitability, marketers realized ₦ 833, 495.3 after spending a total variable cost of ₦441, 878.5 and total cost of ₦628, 257.5. The enterprise generated a gross margin of ₦ 391,616.8, net marketing income of ₦205, 237.8 and net return on investment of 0.3266. The implication of the net return on investment is that the marketers return 67 kobo for every 1 Naira invested in the enterprise. The overall profitability indicators (gross margin, net marketing income and net return on investment proved that fresh pepper marketing was a profitable enterprise in the study area.

Table 2 Estimated monthly profitability of fresh pepper marketing

VARIABLE	PARAMETERS	%
Total Revenue	833, 495.3	
VARIABLE COST (VC)		
Purchases	395,017.8	89.39
Transportation	34, 707.7	7.85
Miscellaneous (Recharge card, water, nylon bag,)	12,153	2.75
TOTAL VARIABLE COST (TVC)	441,878.5	100
FIXED COST (FC)		
Monthly shop rent	50,189	26.9
Ground levy	82,190	44.09
Depreciation on equipment (chair, tarpoline,table, bucket, tray)	21,000	11.26
Local government charges	28,000	15.00
Interest on loan	5,000	2.68
TOTAL FIXED COST (TFC)	186,379.00	100
TOTAL COST TC =TVC+TFC	628,257.5	
Gross margin = TR-TVC	391,616.8	
Net marketing income NMI=GM-TFC	205,237.8	
Return on Investment TR/TC	1.32	
Net Return on Investment NMI/TC	0.3266	
Gross Ratio TC/TR	0.753	
Marketing Efficiency TC/TR*100/1	75.37	

Source, Field survey, 2022

Marketing efficiency of fresh pepper marketing

The Shepherd-Futrel technique was used to determine the coefficient of marketing efficiency. The method express marketing efficiency as the ratio of total cost to total revenue expressed as percentage. The lower the percentage, the better the marketing efficiency, since the less proportion of the revenue will be expanded on the total cost of marketing. The result of analysis revealed a market efficiency of 75% implying that the marketers were inefficient in the operation of fresh pepper marketing in the study area.

$$\text{Marketing efficiency ME} = \frac{TC}{TR} \times \frac{100}{1} =$$

$$\frac{628{,}257.5}{833,\ 495.3} \times \frac{100}{1} = \mathbf{75.37}$$

$$\text{Benefit Cost Ratio (BCR)} = \frac{\sum TR}{\sum TC}$$

If BCR > 1, then the business is profitable

If BCR < 1, the business is running at a risk.

$$= \frac{833,\ 495.3}{628{,}257.5}$$

= **1.32.** The enterprise is profitable.

Constraints to Fresh pepper marketing

The constraints associated with fresh pepper marketing in the study area were shown in Table 5. The findings show that decay and rioting (Perishability) (3.06) was perceived as the most serious challenge in fresh pepper marketing in the study area. This is in line with Isitor, Otunaiya and Iyanda (2016) who reported spoilage as a major constraint to the enterprise. Other major constraints of relevance to the marketers in the study area were price fluctuation (3.02), Sit-at-home palaver (2.95) and Cough and Catarrh (2.90). Marketers in the study area complained that incessant and irregular Sit-at-home-palaver is affecting their enterprise grossly both in revenue, reduces freshness of the produce due to over stay both in shops and inside the bus for fear of being attacked. There is always price variation in the marketing of fresh pepper in the study area. Marketers in the study area do complain of coughing and runny nose in their discharge of the enterprise. This is as a result of constant inhaling of the fragrance on daily basis. Other constraints in the study area were Irregularity in supply (seasonality) (2.50), Breakage (2.30), pepperish to the body and inappropriate storage facilities

Table 5: Constraints to Fresh pepper marketing

Constraints	Mean score	Rank
Decay and rotting (Perishability)	3.06	1st
Breakage	2.30	6th
Price fluctuation	3.02	2nd
Cough and Catarrh	2.90	4th
Pepperish to the body	2.08	7th
Irregularity in supply (seasonality)	2.50	5th
Sit-at-home palaver	2.95	3rd
Inappropriate storage facilities	2.02	8th

Source, Field Survey, 2022.

Summary

The study examined the economic analysis of fresh pepper marketing in Aba North local government area, Abia State, Nigeria. The study specifically described describe the socioeconomic characteristics of the marketers, marking channel and volume of trade among the channels, profitability and economic efficiency of the marketers and constraints to pepper marketers in the study area.

A multistage sampling procedure involving purposive random sampling methods were used to select 125 marketers.

Finding from socioeconomic characteristics showed that majority of the marketers were within the age bracket of 30 and 49 years and a female dominance (84.8%) in the study area.

The result of marketing channel revealed four channels of which the third channel recorded the highest percentage of (64%) . The result of profitability of fresh pepper marketing showed that out of the total cost of ₦628, 257.5 spent by the marketers, purchases constituted (89.39%) while the least expense was interest on loan (2.68%). From the result, purchasing of fresh pepper is the most vital cost/expenses in the enterprise. The enterprise generated a net return on investment of 0.3266 and the implication of the net return on investment is that the marketers return 67 kobo for every 1 Naira invested in the enterprise. The overall profitability indicators (gross margin, net marketing income and net return on investment proved that fresh pepper marketing was a profitable enterprise in the study area. Findings on constraints militating against fresh pepper marketing showed that decay and rioting (Perishability) (3.06), price fluctuation (3.02), Sit-at-home palaver (2.95) and Cough and Catarrh (2.9) were perceived as the most serious constraints in the enterprise. Other constraints in the study area were Irregularity in supply (seasonality) (2.50), Breakage (2.30), pepperish to the body and inappropriate storage facilities.

CONCLUSION

Fresh pepper marketing in Aba North LGA is a profitable venture given positive values of gross margin, net marketing income and return on investment. The marketers were efficient in the business although inefficiencies still exist due to marketing constraints. The level of profitability can improve if adequate measures are taken by stakeholders to address marketing constraints identified in the study.

RECOMMENDATION

Based on the findings of this study the following recommendations were made:

i. Government and other relevant agencies should assist the marketers of fresh pepper with affordable means of preserving the produce from decay and rioting.
ii. Relevant Stakeholders should address the economic sabotage of sit-at-home palaver which is adversely affecting perishable produce.
iii. Government and Stakeholders should liaise with health expects to find a lasting solution to cough and catarrh associated with constant inhalation of fresh pepper pungent odour.

REFERENCE

Adaigho, D. and Tibi, K. (2018). Assessment of Pepper Product and Socio Economics of Pepper Farmers in Delta State, Nigeria. *Asian Journal of Agricultural Extension, Economics and Sociology*, 28(2), 1-7.

Alawode, O.O. and Abegunde, V.O. (2016). Economic analysis of pepper marketing in Oyo State, Nigeria. *Applied Tropical Agriculture*, 21(3), 116-121.

Anuebunwa, F.O., Okoye, F.U and Achike, A.I. (2009). Assessment of the structure of

Wholesale paddy rice market at farm gate level in Northern area of Anambra State of Nigeria. In A.O, Olojede, B.C., Okoye, K.C., Ekwe, G.O. Chukwu, I.N. Nwachukwu and Alawode. (Eds.) Global Food crisis and Nigerian agriculture, Proceedings of 43rd annual conference of the agricultural Society of Nigeria held at the National Universities Commission and Raw Materials Research and Development Council, Abuja, Nigeria.

Arene, C.J. (2003). An introduction to agricultural marketing analysis and policy: Fulladu Publishing Company, Enugu, Nigeria.

Bosland, P.W. and Votava, E.J. (2000). Pepper: Vegetable and Spice Capsicum. CABI Publishing New York, 1-16.

Dipeolu, A.O. and Akinbode, S.O. (2008). Technical, economic and allocative efficiencies of Pepper production in South-West Nigeria: a stochastic frontier approach. *Journal of Economics and Rural Development*, 17(1), 24-33.

Ezeano, C. I., Ume, S. I., Okeke, C. C., & Gbughemobi, B. O. (2017). Socioeconomic Determinant Factors to Youths Participation in Broilers Production in Imo State of Nigeria. *International Journal of Research & Review*, *4*(1), 136-142.

Gbughemobi, B.O., Nkamigbo, D.C. and Meludu, N.T. (2021). Analysis of accessibility and Level of knowledge of farmers on the use of ICT among smallholder rice farmers in Southeast, Nigeria. *International journal of Research and Review* 8(9)31-37.

Isibor, A.C. and Nkamigbo, D.C. (2019). Comparative Analysis of Amounts of Applications and Disbursements of Loans to Beneficiaries by Bank of Agriculture in Anambra State, Nigeria. *International Journal of Agricultural Economics* 4(5), 195-200.

Mohammed, B. (2015). Analysis of income and constraints to Chilli pepper production in Kaduna State, Nigeria. *Journal of Scientific Research and Reports* 9(3), 1-7.

Nkamigbo, D.C., Isibor, A.C. and Ekeke, N.C. (2021). Socioeconomic determinants of farmers using social network in advancing agribusiness in Anambra State, Nigeria. *International Journal of Research and Review*, 8(8), 138-144.

Nkamigbo, D.C, Chiekezie, N.R. and Ozor, M.U. (2019). Performance Efficiency of FreshTomato Marketing in Nnnewi North LGA, Anambra State. *Intl. Journal of Applied Science and Research*, 5(2), 91-98.

Gbugbemobi, B.O, Nkamigbo, D.C. and Meludu, N.T. (2021). Analysis of Accessibiity and Level of Knowledge of Farmers on the Use of ICT among Small Holder Rice Farmers In Southeast, Nigeria. Intl J. of Research and Review,8(10),133-140.

Nkamigbo, D.C.and Isibor, A.C. (2019). Market structure, conduct and volume of trade among the channels of sweet potato marketing in Anambra State, Nigeria. Intl J. of Applied Science and Research, 4, (4), 256-262.

National Population Commission (NPC, 2006). Provisional Population Census Report, Abuja, Nigeria.

Nkamigbo, D.C., Ugwumba, C.O.A. and Okeke, U. (2019). Market Structure, Conduct and Volume of Trade among Channels of watermelon marketing in Anambra State, Nigeria. *Intl J. of Agriculture and Biosciences*, 8(2), 112-116.

Opata, P.I., Ezeibe, A.B. and Arua, R.N. (2019). Rethinking smallholder market participation drivers in WestAfrica: the case of yellow pepper farmers in Southeast Nigeria. Paper Presented at the6th African Conference of Agricultural Economists, September 23rd-26th, Abuja, Nigeria.

Olukosi, J.O. and Isitor S.U.(1990). Introduction to agricultural marketing and prices: principles and applications, Abuja, Nigeria, Living Book Series

Osundu, C.K., Nwadike, F.C., Ijeoma, J.C.Udah, S.C. and Ugboaja, C.I. (2014). Marketing Performance of salad vegetables: the case of cabbage marketing in Abia State, Nigeria. Intl J. of agricultural Science Research and Tech. in Ext and Edc Systems, 4(3), 151-162.

Udegbe, S.I., Udegbe, M.I., Olumoko, T.A. and Hassan, R.A. (2012). Marketing of pepper in the Metropolitan region of Lagos State, Nigeria. *Australian Journal of Business and Management Research*, 2(1), 27-36.

Ukwuaba,I.C., Agbo,F.U.and Adeosun, K.P. (2018). Socioeconomic and Institutional Determinants of watermelon marketing in Enugu State, Nigeria. Journal of Agricultural Extension,22(1),161-169.

INVESTOPEDIA, (2015). Price Discovery, Retrieved from http:/www,investopedia.com/trems/p/pricediscovery.asp.