Vegetable Marketing among Retailers in Kaduna South Local Government Area of Kaduna State, Nigeria

Suleiman, R., Olorukooba, M. M., Emeghara, U.U., Oladele, O.N., Yahaya, U.F., Olukotun, O.
Federal College of Forestry Mechanization P.M.B. 2273, Afaka-Kaduna, Nigeria

Abstract*:- The study was conducted to examine the marketing of vegetables among retailers in Kaduna South Local Government Area of Kaduna State, Nigeria. Multi-stage, purposive and random sampling techniques were adopted to select the 100 vegetable retailers used for this study. Data for the study were collected from the retailers using questionnaire and personal interview. Data obtained from the study were subjected to analysis using simple descriptive statistics such as frequency table, percentage and charts. The result revealed that female (64%) dominated the marketing of vegetables in the study area with about 80% of the retailers in their active productive age of between 20 – 59 years of age, majority of the retailers are married (55%) and 83% of them had one form of education or the other and about 88% of the marketers had vegetable marketing experience of 6years and above. The study also revealed that there are three market channels for vegetable distribution which are; producers to wholesalers to retailers to consumers or producers to retailers to consumers or producers to consumers and fourteen vegetable crops were identified to be on sale in the study area with tomato (63%) being the highest crop on sales among the retailers while water leaf (6%) is the least. Opportunities derived from selling vegetables by the retailers include income generation (100%), as main occupation (67%), source of food (95%) and pleasure derivation (27%), however the business is faced with some challenges such as physical damage of vegetable on transportation (81%), high transportation cost (80%), lack of storage facility (65%), poor packaging system (53%), seasonality(49%) and limited supply (45%) of vegetables as well as low patronage (8%) . The study therefore recommends that marketers should be trained on simple preservation techniques, government intervention in the areas of provision of storage facilities, subsidy in transportation cost as well as provision of low interest rate credit facilities to the marketers in the study area to boost their marketing efficiency.

***Keywords*: Marketing, Vegetables, Distribution Channel, Retailers, Opportunities, Constraints, Kaduna.**

I. INTRODUCTION

Vegetable is referred to as edible product of herbaceous plants; they can be grouped according to the portion and edible part of each plant: leaves (lettuce), stalks (celery), roots (carrot), tubers (potato), bulbs (onion), and flowers (broccoli). In other words, fruits such as tomato and seeds such as pea are commonly considered as vegetables. They are eaten either fresh or prepared in a number of ways, usually as a savoury. Vegetable is defined as any herbaceous plant part consumed as food by humans as part of a main meal. Vegetables have been part of human diet from time immemorial; some are perennials but mostly annuals and biennials, usually harvested within a year of sowing or planting. Vegetables are of great nutritional value and majorly comprise of minerals, vitamins, proteins, carbohydrates and dietary fibres in Nigeria and other sub-Saharan Africa. They form an important component in the human diet (Aju and Popoola, 2010). Vegetables, in no small measures, offer people with limited access to meat and fish sources of protein and some vital micro – nutrients needed for healthy living. They are crop plants with immature succulent roots, bulbs, stem, blossoms, leaves seeds, or fruit that are eaten (Musa, 2012). Leafy vegetables are eaten for their leafy parts e.g. amaranthus, spinach, lettuce and cabbage. Fruit Vegetables on the other hand are group of plants that produce edible fruits e.g. tomato and others. However, vegetables are the best sources for overcoming micro - nutrients deficiency and provide small holder farmers with much higher income and more jobs per hectare than staple crops. They contain water soluble vitamins like vitamin B and Vitamin C, fat soluble vitamins including vitamin A and vitamin D, they also contains carbohydrates and minerals.

They are referred to as horticultural crops, which play a significant role in developing countries like Nigeria, both in income and social spheres improving income and nutrition status of the people (Pasquini and Young, 2007). Due to the high level of dietary fibre in it and other important sources of essentials vitamins and minerals and trace elements, they play important role in human nutrition (KauAgri, 2013). Research has shown that with the inclusion of vegetables in diet resulted into reduction in the incidence of cancer, stroke, cardiovascular diseases and other ailments. The Indian Council of Medical Research (ICMR) has recommended the daily intake of 275g of vegetable per adult per day but the actual consumption is as low as 100g only (KauAgri 2013).

According to Agba, (2006), a market could be defined as a set of condition which facilitate a transaction whether or not the parties meet physically, thus, marketing is the sum total of activities involved in a market. The essential features of market are demand and supply. Marketing is defined as all processes involved from the production of a commodity until it gets to the final consumer. These processes ensure that the right product (form utility) is

available at the right place (place utility), at the right price (possession utility) and at the right time (time utility) to fully satisfy the consumer (Okoh *et* al., 2008). The perishable nature, seasonality and bulkiness of vegetables makes their marketing a complex phenomenon (Obi and Agbugba, 2016). However, marketing of vegetable is vital because it helps to guarantee the flow of the produce from the farmer or producer to the consumer (Agbugba *et.al*., 2011). Due to the important role vegetables play in the human diet, economy and environment, there is a universal recognition to develop a system of vegetable marketing in Nigeria (Okunlola, 2009). The marketing of vegetable is gradually developing as several people tend to develop interest in engaging in vegetable enterprise especially as market intermediaries and thereby, assist in the process of distribution. It is estimated that about 70% of the vegetables produced in Nigeria is sold and consumed fresh (Danso *et. al.,* 2011). It provides employment opportunities and also serves as a good source of income to the marketers.

Grema et al. (2015) carried out a study involving 5 Retail and 15 wholesale onion traders in the Gashua and Geidam Local Government Areas in Yobe state where two markets were purposively selected for the study each from Gashua and Geidam. They reported that majority (65%) of onion traders fall within the age bracket of 25-54 years and The years of onion trading experience of the respondents in the study area indicates that most of the respondents (37.5%) had less than 5 years of trading experience and 40% had between 5-14 years, while only 22.5% had between 15-24 years of experience. The result of the study also revealed that the major problems of onion marketing include the frequent price fluctuations and high transportation costs.

In a study conducted among fruits and vegetables sellers in Lagos, Nigeria by Ajani (2007). The author discovered that there is a wide difference in margins recorded by traders in different crops. Tomatoes seem to yield better margins than bananas and majority of the traders lack basic formal education which hinders their marketing efficiency, due to the fact that they do not keep records of day to day financial activities that also prevents them from obtaining loans from financial institutions. The result of the study also showed that traders in the study areas mainly got their initial start-up capital from personal savings, friends and local lending agents which make capital not to be readily available for further expansion. The lack of good and cheap means of transportation has posed a serious threat to the traders due to frequent fuel scarcity, long distances from the point of production, poor roads and the dilapidated condition of existing roads.

A survey was held among 42 wholesalers and 56 retailers at the two local fruit markets of Ibadan, Oyo state by Adeoye *et. al.* (2009) revealed that most of the wholesalers were men (88%), while retailers were mostly women (93%). The majority of the wholesalers (55%) and retailers (58%) were aged between 31-40 years and 95% of the traders were married and 67% of the wholesalers and 79% of the retailers had completed primary education. The study also revealed that 69% of the wholesalers had acquired 11-15 years of experience while 50% of the retailers had only 6-10 years of experience. The result also revealed that majority of wholesalers (71%) buy the product directly from farmers, while some buy through agents but female retailers buy predominantly from wholesalers. The respondents considered the tomato trade as their main occupation and source of income.

Mosisa (2018) conducted a study to investigate the constraints, challenges and opportunities of horticultural crops marketing in Ambo town, Ethiopia in which a total of 96 retailers were used for the study. Results of the study showed that both women and men participated in fruits and vegetables retailing business, of these and 41.7% of the respondents were between 20 to 30 years of age and 36.5% were 30 to 40 years of age. The highest percentages (78.1%) of the respondents had some education. Inappropriate marketing place, shade, storage, packaging and transportation practices were identified as principal causes for the fruits and vegetables post-harvest loss and short shelf-life in the study area.

This study therefore aimed at identifying the types of vegetables sold by marketers, distribution channels of vegetables, opportunities' and constraints associated with vegetable marketing in the study area.

II. MATERIALS AND METHODS

A. Study Area

The study was conducted in Kaduna South Local Government Area of Kaduna State. The local Government covers an area of 59.0km^2, density 9,214/km^2 and population 402,371 (NPC 2006), its headquarters secretariat is located at Makera and comprises of twelve wards namely: Television, Tundun Wada South, Tundun Wada North, Tundun Nupawa, Sabon – Gari North, Sabon – Gari South, Kakuri – Hausa, Kakuri – Gwari, Barnawa, Badiko, Ung. Sanusi and Makera. The area has mixed population but the dominant ethnic groups are: - Hausa, Gbagyi, Ham, Atyap, Igbo and Yoruba. The main occupation of the people is farming and marketing. Their mineral and agro – raw materials are; granite, bitumen, livestock, sorghum, maize, rice, millet, soybeans, groundnut, cowpea, mango, fruits and vegetable. The farmers participate in wet and dry season vegetable production.

B. Sampling Technique

A multi stage, purposive and random sampling techniques were adopted for this study. Vegetable retailers in the Kaduna South Local Government Area constitute the sampling frame or the population for this study. Kaduna South Local Government Area was purposively selected for this study because of its close proximity to the researchers. The second stage involved the selection of five wards from the local government area purposively due to high concentration of vegetable retailing activities in these wards as recognized

by the researchers in a recognizance survey carried out before the actual study. The wards selected for this study were Makera, Barnawa, Television, Badiko and Tudun Nupawa where twenty (20) vegetable retailers selling in major and minor markets, street, road sides and within neighbourhoods were selected randomly for this study giving a total of one hundred (100) retailers used for the study.

C. Method of Data Collection

Primary data was used for the study. The data for the study was collected from the vegetable retailers in the study area through the use of a well-structured questionnaires and personal interview of the marketers. Two enumerators were employed within each selected ward to facilitate and ease the collection of the data. The questionnaire was designed to obtain information on socio-economic status, types of vegetable sold, vegetables distribution channel, opportunities and constraints associated with vegetable retailing in the study area.

D. Analytical Techniques

The analytical technique employed to achieve the stated objectives are simple descriptive statistics such as percentage, frequency distribution table, bar and pie charts using IBM SPSS Statistics 25 Software package.

III. RESULTS AND DISCUSSION.

A. Socio Economic Characteristics of the Respondents in the Study Area

The information on the socio-economic characteristics in the study area with regard to age, gender, marital status, level of education, location of retailer, experience are presented and discussed below.

1). Age Distribution of Respondents: The bar chart in Figure 1 shows the age distribution of the respondents, it shows that none of the respondents are below 20 years of age. 5 % of the retailers are within the age range of 20 -29 years , 22% are 30 – 39 years old, 29% are 40 – 49 years of age, 24% are between the age of 50 – 59 years and 20% of the retailers are 60years and above. The result reveals that majority of the retailers are still in their active working age group thus making the sales of vegetable effective in the study area. The result also revealed that 80% of the retailers are within the age bracket of 20-59 years which agreed with the study of Mosisa (2018) who reported that 90.6% of horticultural crops marketers in Ambo town, Ethiopia were between the age of group of 20- 60 years although the author reported that 9.4 % of the marketers were less than 20 years of age which differs from the finding of this current study where none of the marketers of vegetables were below 20years of age.

2). Gender Distribution of Respondents: The study reveals that females are more active in marketing of vegetables with 64% and 36% are males as shown in Table 1. This shows that the females are more into retailing of vegetables men. The current finding is in agreement with many studies such as Mosisa (2018); Adeoye *et. al*. (2009) and Kughur *et. al.* (2015). They reported that women donated the horticulture marketing business.

3). Marital Status Distribution of Respondents: The Study shows that 5.0% of respondents are single, 6.0% are divorced, 34% are widow/widower and 55.0% are married as show in Figure 2. This indicates that the married, widow/widowers are the majority of people that engaged in the marketing of vegetables. The involvement of these two group of people may not be far fetch that they needed the income from the business to actually take care of their family members especially the widow/ widowers who has to take the responsibilities of two people alone as a result of the demise of her or his spouse. In this study the majority 55% of the marketers were married it agrees with the work of Mosisa(2018) and Adeoye *et.al.*(2009) that reported that majority of marketers in their studies were married but there are slightly differences in the percentage of married people while the present study had 55% married marketers, Mosisa (2018) and Adeoye *et.al.*(2009) reported 80.2% and 95% married marketers respectively.

4). Educational Level Distribution of the Respondents: It was revealed that 17.0% of respondents had no formal education, 25% had primary certificate and adult literacy respectively, 31% had secondary education while only 2% had tertiary education. The study shows that about 83% of the respondents have one form of education or the others which makes marketing vegetables efficient in the study area because with good quality education the marketers will be able to have knowledge and be able to adapt and adopt new marketing strategies to make them more efficient in the retailing of vegetables. Mosisa (2018) reported that 78.1 % of horticultural crops marketers in Ambo town, Ethiopia were able to read and write in which the current study corroborated.

5). Experience Distribution of Respondents: The experience gained by marketers in the study area is presented in Figure 3. The analysis shows that 4.0% of respondents have 21 years and above of experience n marketing of vegetables , 12% of the respondents have vegetable marketing experience of 1 – 5 years, 24% f of the respondents had 11 – 15 years of experience, 28 % had 16 – 20 years while 32% had 6 -10 vegetable marketing experience. This implies that most of the vegetables retailers in the study area had vegetable marketing experience that span over many years with about 88% of the marketers having more than 5years experience in marketing vegetables which ia a positive quality to then as the going says that experience is the best teacher. So the marketers are expected to bring their experience to bare therefore increasing their efficiency in marketing their products. This finding in this study was in agreement with the reports of Grema *et. al.* (2015) and Adeoye *et. al.* (2009). They reported that majority of the marketers of fruits and vegetables have marketing experience that is over 5years in their studies.

6). Source of Capital Distribution of the Respondents: The study shows that 7.0% got the start-up capital from friend/relative, 9.0% took loans from ban , 16.0% took loans from cooperative societies, 28.0% borrowed their start-up capital from money lenders whereas 40% of the marketers fund started the business with their own personal savings as shown in Table 3. The study showed that over 60% of the retailers had to source the capital for the vegetable marketing which shows that only 40% of the marketers has ability to avert risk in term of trading losses because they have better chance of absorbing shock from such losses since they are not paying back any fund. The source of start-up capital coming more from personal saving, followed by money lenders in this study supported the assertion by Ajani (2007) that traders of fruits and vegetables in Lagos, Nigeria mainly got their initial start-up capital from personal savings, friends and local lending agents which make capital not to be readily available for further expansion.

7). Vegetable Retailers Business Location or Selling Place: The result showing areas where the marketers carried out their retailing of vegetables is presented in Table 4. The results showed that 54% of the retailer actually sells their vegetables within the major markets in the study area, 26% sells within the minor markets that is local markets within the ward area, 14 % are within the neighbourhoods of the consumers while 6% were observed to sells vegetables along roads and streets within the ward area. The result from this study differs from that of Mosisa (2018) that reported that almost all of the marketers of horticultural crops in Ambo town, Ethiopia were selling their commodities along the road side and in area where there is inconveniency for perishable products

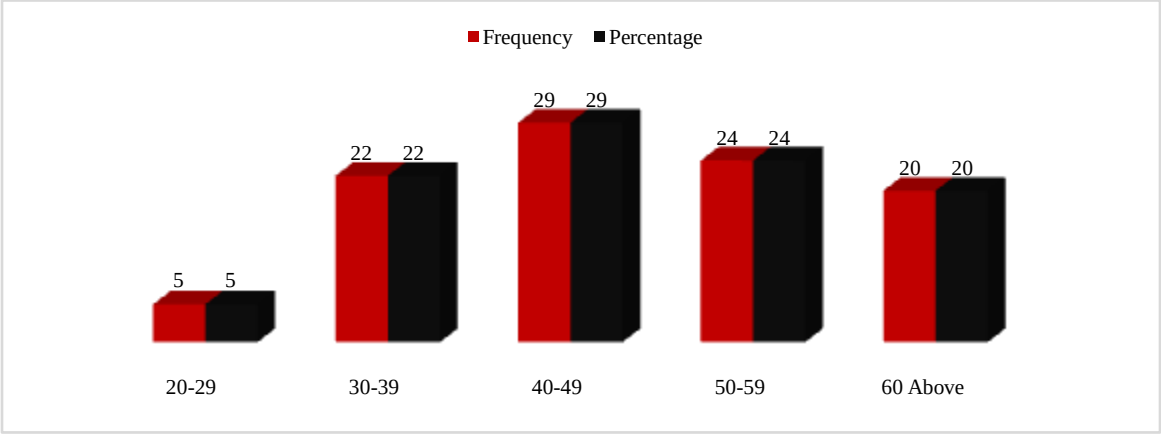

Figure 1: - Bar chart showing age distribution of respondents

Table 1: Gender distribution of respondents

Gender	Frequency	Percentage
Male	36	36.00
Female	64	64.00
Total	100	100.00

Source: Field survey, 2019.

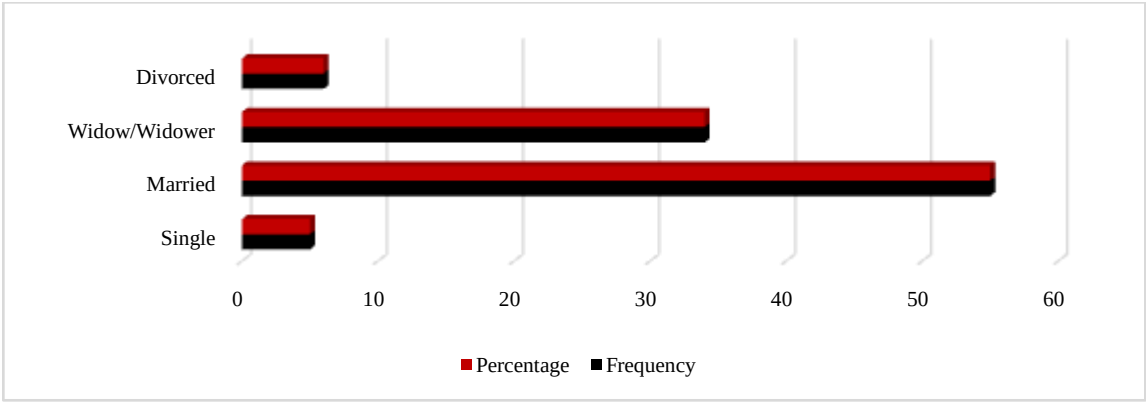

Figure 2: Bar chart showing marital status of the respondents

Table2: Educational level distribution of the respondents

Education Level	Frequency	Percentage
No Formal Education	17	17.00
Adult Literacy Education	25	25.00
Primary Education	25	25.00
Secondary Education	31	31.00
Tertiary Education	2	2.00
Total	100	100.00

Source: Field survey, 2019

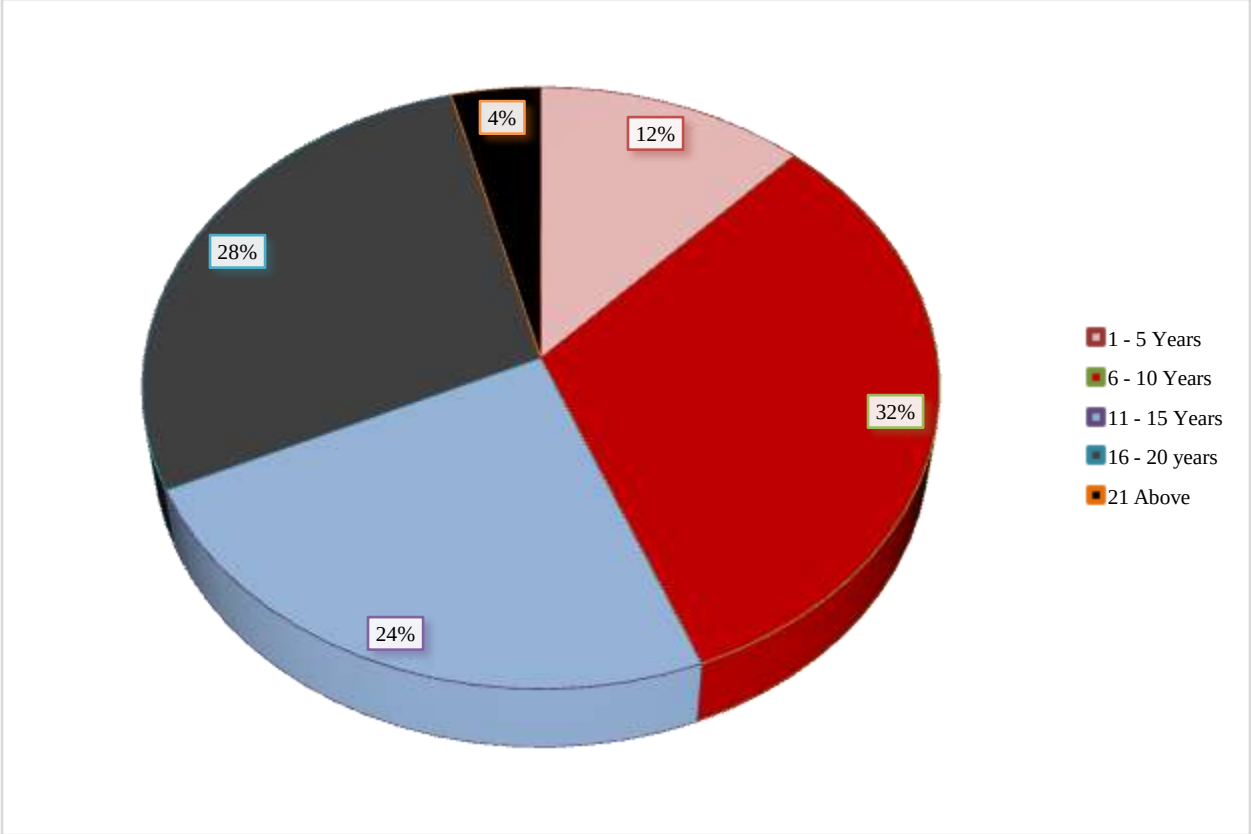

Figure 3: -Pie chart showing vegetable marketing experience of the respondents

Table3: Source of capital of the respondents

Source of Capital	Frequency	Percentage
Personal savings	40	40.00
Friends and Families	7	7.00
Money lenders	28	28.00
Cooperatives societies	16	16.00
Bank loans	9	9.00
Total	100	100.00

Source: Field survey, 2019.

Table 4: Distribution of the vegetable retailers based on where they sell vegetables

Selling Place	Frequency	Percentage
Major Markets	54	54.00
Minor markets	26	26.oo
Road side/ streets	6	6.00
Neighbourhoods	14	14.00
Total	100	100.00

Source: Field survey, 2019

B. Types of Vegetable on sales by the Retailers

The types of vegetable sold by retailers in the study area are presented in Table5. The table revealed that 6 % of the respondents are into marketing of water leaf, 9 % sells bitter leaf, 12% sells green pea, 16% sells lettuce , 18% sells garden eggs, 23% sells cucumber, 24% sells cabbage, 27% sells melon seeds and carrots respectively, 33% sells okra, 45% sells jute mallow, 53% sells African spinach, 54% sells fluted pumpkins , 55% sells onion and 63% sells tomatoes. The result of the study showed that fourteen vegetables were been sold by retailers in the study area. The retailers answer were in multiple response due to the fact that many of the retailers are into selling of multiple vegetables together while some sells a sole vegetable product. The results revealed that majority of the retailer are into selling of tomatoes, followed by onion, then fluted pumpkin, followed by African spinach and jute mallow which were the five major types of vegetables on sales in the study area.

C. Distribution Channel for Vegetable Marketing in the Study Area.

The study identified three channels of distribution of vegetables in the study area as shown in Figure 4. The study revealed that there producers who are in close proximity to the consumers within the study area who sells directly to the consumers. Some producers also sells directly to the retailers who in turn sells to the consumers. These two market channels are common with the leafy vegetables such as jute mallow, African spinach, fluted pumpkin, cucumber, lettuce, green pea and okra. Most of the other classes of vegetables that are very bulky in nature and sold mainly among the male folks are seen to pass from the farmers who are the producers to agents who acts as wholesalers then to retailers and then to the consumers. Although the study identified that the channels of distribution are interwoven since sometimes the leafy vegetables may also pass from producers to wholesalers to retailers and to the consumers just as other vegetables such as tomatoes, onion, carrots and cucumber may also pass directly from producer to consumers or from the farmers to retailer directly then to the consumers. The three channels of distribution of vegetables identified in this study was in agreement with the work of Mosisa (2018) that also identified similar three marketing channels for horticultural crops marketing in Ambo town, Ethiopia. The study shows that the principal actors in the vegetable marketing channels are farmers, wholesalers, retailers and consumers.

Table 5: Types of vegetables on sales in the study area

Types of Vegetable	Frequency	Percentage
Jute Mallow	45	45.00
African Spinach	53	53.00
Lettuce	16	16.00
Cabbage	24	24.00
Okra	33	33.00
Onion	55	55.00
Tomato	63	63.00
Green pea	12	12.00
Garden egg	18	18.00
Fluted Pumpkin	54	54.00
Bitter leaf	9	9.00
Water leaf	6	6.00
Melon seed	27	27.00
Cucumber	23	23.00
Carrot	27	27.00

Source: Field survey, 2019. (Multiple Responses)

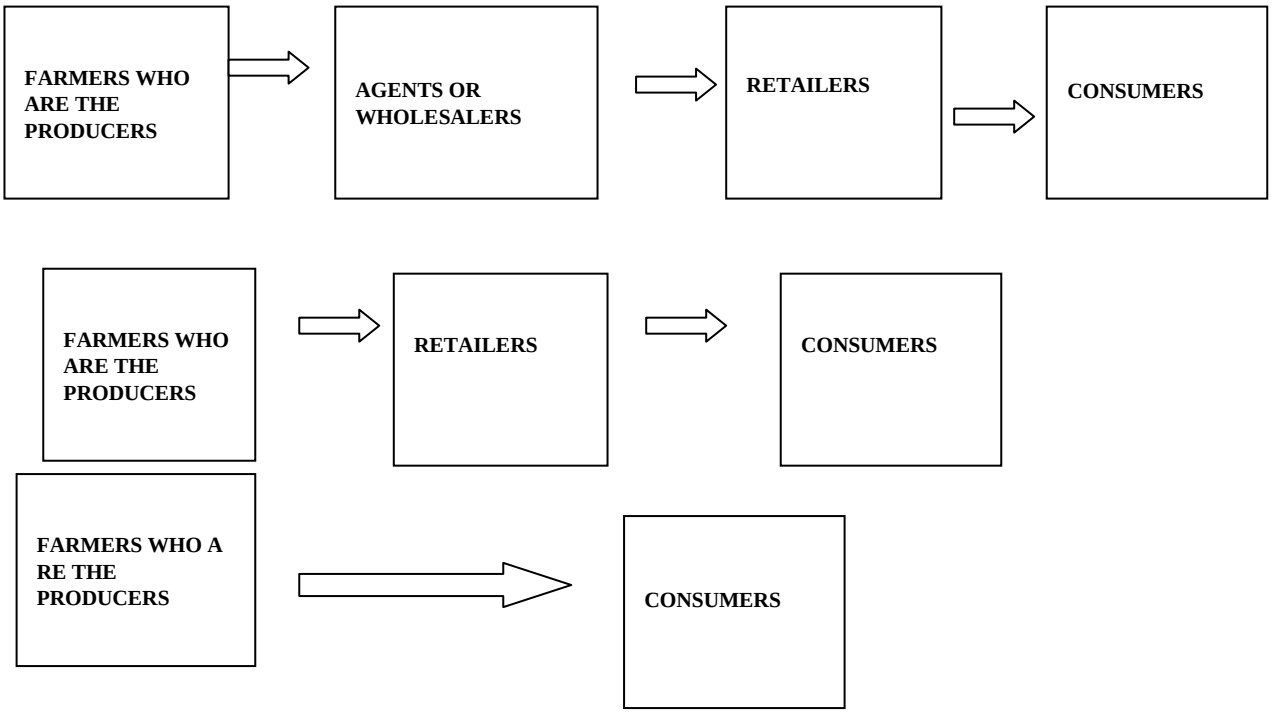

Figure 4: Flowcharts showing the three channels of vegetable distribution in the study area.

D. .Opportunities Associated with Vegetable Marketing (Retailing)

The result of the opportunities associated with vegetable marketing among the retailers in the study area is presented in Table 6. The result revealed that 100% of the retailers said they derived income from selling vegetables which contributes to the family household income. 67% of the retailers said it is their main source of livelihood which means it is there main occupation why 33% of them take it as a part time job in which they derived more money in addition to other sources of income as a civil servant or artisans or factory workers. About 95% of the marketers said they also derived their food need from the left over after daily sales. This means that majority of the retailer consume part of their vegetables meant for sales in other to derived essential mineral elements and vitamin required for healthy living. 27% of the traders derive pleasure in selling vegetables. Adeoye *et. al.* (2009) reported that most of the marketers of fruits and vegetables in Ibadan. Oyo State, Nigeria considered the tomato trade as their main occupation and source of income. As reported in Mosisa (2018) work, the CSA (2014) report shows that 56.2% of the respondents practice horticultural market as their main occupation, while 42 (43.8%) of them have other occupations such as temporary jobs, other trading, pension allowances and few of them combine farming. Mosisa (2018) also reported that Ali (2008) indicates that horticulture revolution can benefit the poor by generating employment and income opportunities through commercialization of horticulture. AgBit (2015) reported that the transformation of horticulture sub sector played great role in Zambia economy through creation of jobs and income generation as coined out from the report of Mosisa (2018). Mosisa (2018) also reported that 67% of horticultural crops marketers in Ambo town of Ethiopia used about quarter of their products for consumption.

E. Constraints Affecting Vegetable Retailing in the Study Area.

The analysis of constraint faced by the respondents is clearly shown in Table 7. The result revealed that 8.0% are faced with low patronage, 45.0% of the respondents has limited supplies of vegetables, 49% complaint about the seasonality of vegetable supply, 53.0% lack packaging facility, 65.0% lacks storage facilities, 80 % high are faced with transportation cost and about 81% of the retailers complaint about physical damage that occur to vegetables during transportation from farm to market. Grema et al. (2015) identified high transportation costs as one of the major problems of onion marketing in their study. Ajani (2007) also identified lack of good and cheap means of transportation as a serious threat to the traders in their study. The ranking of the constraints revealed that physical damage during transportation ranked first, followed by transportation cost, then lack of storage facility, poor packaging facility ranked 4th, seasonality of vegetable supply ranked 5th , limited supplies of vegetables ranked 6th and low patronage ranked 7th. The major constraints affecting vegetable marketing in the study area are physical damage that occurred during transportation, high transportation cost, poor and lack of storage facility, poor packaging facility and seasonality of vegetable products. All these identified constraints reduce the marketing efficiency of the retailers. Zenebe *et al.* (2015) identified that lack of

appropriate facilities like Packaging, storage and transportation together with perishable nature of the produce results in marketing inefficiency.

Table 6: Opportunities derived from marketing of vegetables by retailers in the study area.

Opportunity Type	Frequency	Percentage
Income generation	100	100.00
As main occupation	67	67.00
As part- time job	33	33.00
Source of food	95	95.00
For pleasure	27	27.00

Source: Field survey, 2019. (Multiple Responses)

Table 7: Constraints affecting vegetables marketing in the study area

Constraint	Frequency	Percentage	Ranking
Limited supply of vegetables	45	45.00	6th
Low patronage	8	8.00	7th
Seasonality in supply of vegetables	49	49.00	5th
Poor packaging facility	53	53.00	4th
Lack of storage facility	65	65.00	3rd
High transportation cost	80	80.00	2nd
Physical damage during transportation	81	81.00	1st

Source: Field survey, 2019. (Multiple Responses)

IV. CONCLUSION

The study was conducted in Kaduna South Local Government Area of Kaduna State, Nigeria to identify the types of vegetables on sales in the market by retailers, channel of distribution of vegetables, opportunities derived from marketing of vegetables and constraints that hampered the retailing of vegetables in the study area. Data were obtained from 100 vegetable retailers in the study area which were randomly selected from five wards in the local government area and the data were analysed using simple descriptive statistics such as frequency table, percentage and charts. The result revealed that female dominated the marketing of vegetables in the study area with about 80% of the retailers in their active productive age of between 20 – 60 years of age, majority of the retailers are married and 83% of them had one form of education or the other and about 88% of the marketers had vegetable marketing experience of 6years and above. The study also revealed that there are three market channels for vegetable distribution which are; producers to wholesalers to retailers to consumers or producers to retailers to consumers or producers to consumers and fourteen vegetable crops were identified to be on sale in the study area with tomato being the highest crop on sales among the retailers while water leaf is the least. Opportunities derived from selling vegetables by the retailers include income generation, employment, source of food and pleasure derivation; however the business is faced with some challenges such as physical damage of vegetable on transportation, high transportation cost, lack of storage facility, poor packaging system, seasonality and limited supply of vegetables as well as low patronage. The study therefore recommends that marketers should be trained on simple preservation techniques, government intervention in the areas of provision of storage facilities, subsidy in transportation cost as well as provision of low interest rate credit facilities to the marketers in the study area to boost their marketing efficiency.

REFERENCES

[1]. Adeoye, I. B., Odeleye, O., Babalola, S. O. & Afolayan, S. O. (2009), Economic analysis of tomato losses in Ibadan metropolis, Oyo State, Nigeria. *African Journal of Basic and Applied Sciences*, vol. 1, no. 5-6, pp. 87-92.

[2]. Agba, A.V., (2006). *Intermediate Modern Eonomics*, EVI – Coleman Publisher, Ibadan, pp 240.

[3]. AgBit (2015). Horticulture Sub-Sector study report 2015. Mapping Investment Opportunities in Horticulture SubSector: The Case of Vegetable Value Chains in Zambia

[4]. Agbugba, I. K., Okechukwu, F. O., and Solomon,R. J., (2011). Challenges and Strategies for Improving the Marketing of Indigenous Leafy Vegetables in Nigeria through improved packaging. [Online] Available: http://worldfoodscience.com/cms/index.htm@pid=1005132.html (May 15, 2014).

[5]. Ajani, O. I. (2007), Economic analysis of the marketing of fruit in Lagos State of Nigeria (A case study of Oyingbo, Oshodi and Ikotun markets). *Nigerian Journal of Horticultural Science*, vol. 10, no. 1, pp. 38-46.

[6]. Aju, P. C., and Popoola, L.(2010). The dietary role of traditional vegetables in rural communities of Imo State. *Nigeria Journal of Sustainability Development in Africa*, Vol. 12(7), 104-113.

[7]. Ali, M., (2008). Horticulture Revolution for the Poor: Nature, Challenges and Opportunities. Washington, DC: World Bank. © World Bank..

[8]. Central Statistic Authority (CSA)(2014). Urbam employment/unemployment survey, FDRE, Central Statistic Authority, Addis Ababa, Ethiopia.
[9]. Danso, G., Fialor, S. C., and Drechsel, P.(2011). Perceptions of organic agriculture by urban vegetable farmers and consumers in Ghana. *Urban Agriculture Magazine* ,6 : 23 – 24.
[10]. Grema, I. J., Gashua, A. G. snd Makinta, A. A. (2015), Marketing Analysis of onion in Bade and Geidam Local Government Areas of Yobe State, Nigeria, *IOSR Journal of Applied Physics.*
[11]. Kau Agri. (2013). InfoTech Portal, Centre for learning, Kerala Agricultural University.
[12]. Kughur, PG, Iornenge, GM, Ityonongu, BE. (2015). Effects of post-harvest losses on selected fruits and vegetables among small-scale farmers in Gboko local government area of Benue State, Nigeria. *Int. J. Innov. Sci.Res.* 19 (1):201- 208.
[13]. Mosisa Chewaka Aga (2018). Constraints, Challenges and Opportunities of Horticultural Crops Marketing in Ambo Town, Ethiopia. *International Journal of Innovative Research & Development* , 7(5):29-35.DOI No. : 10.24940/ijird/2018/v7/i5/APR18030.
[14]. Musa, A. (2012). Principles and Practices Horticulture Crops in the Tropic Training Manual, Katsina State.
[15]. NPC,(2006):National Population Commission, Federal Office Office of Statisitics. Census 2006.
[16]. Obi, A., and Agbugba, I. K., (2016). Casualty and Integration analysis of Dry Season tropical leafy vegetables markets in South-East, Nigeria. Proceeding of 10th Africa Farm Management Congress, Mauritius.
[17]. Okoh, R. N., Ugwumba, C. O. A., and Elle, H. O., (2008). General Roles in food stuff marketing in Delta-North Agriculture Zone: The case of Rue, "In. Umeh, J.C., et al (eds.), Prospects and Challenges of Adding Value to Agriculture products, proceedings of FAMAN, Makurdi, pp. 114 – 123.
[18]. Okunlola, A. I., (2009). Factors Associated with Fadama production of Vegetables by Small Scale farmers in Ondo State. *Nigerian Journal of Food, Agric. Environment,* 7 (394): 551 -555.
[19]. Pasquini, M. W., and Young, E. M., (2007). Network to promote the sustainable production and marketing of indigenous vegetables through urban and peri-urban Agriculture in Sub-Saharan Africa (indigenoveg), ISHS, Acta Horticultural Proceeding of the International conference on Indigenous vegetables and Legumes: Prospects for fighting Poverty, Hunger and Malnutrition, Vol. 752(3), pp. 41 – 48.
[20]. Zenebe, W., Ali, M., Derbew, B., Zekarias, Sh., Adam, B., (2015). Assessment of Banana Post-harvest Handling Practices and Losses in Ethiopia. *Journal of Biology, Agriculture and Healthcare.* Vol.5, No. 17