



CONSUMERS' PREFERENCE FOR AGRICULTURAL PRODUCTS IN NIGERIA SUPERMARKET IN OSOGBO METROPOLIS OSUN STATE NIGERIA

Oyetero John Oyewole^{1*}, Ogundijo Sekinat Dupe¹, Adebayo Rasheedat Adeola¹

and Kareem Kafayat Oyindamola²

¹Department of Agricultural Extension and Rural Development, Ladoke Akintola University of Technology, Ogbomosho, Nigeria.

²Agricultural Education Department, Federal College of Education Special Oyo, Oyo State, Nigeria.

*Corresponding Author's Email: oyeterojo@gmail.com

Cite this article:

Oyetero, J. O., Ogundijo, S. D., Adebayo, R. A., Kareem, K. O. (2024), Consumers' Preference for Agricultural Products in Nigeria Supermarket in Osogbo Metropolis Osun State Nigeria. African Journal of Agriculture and Food Science 7(3), 171-182. DOI: 10.52589/AJAFS-C2RENWAW

Manuscript History

Received: 11 May 2024

Accepted: 18 Jul 2024

Published: 5 Aug 2024

Copyright © 2024 The Author(s). This is an Open Access article distributed under the terms of Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0), which permits anyone to share, use, reproduce and redistribute in any medium, provided the original author and source are credited.

ABSTRACT: *The study assessed the consumers' preference for agricultural products in Nigeria supermarket in Osogbo metropolis, Osun state, Nigeria. Data was collected from sixty respondents with the aid of a structured questionnaire. The data collected were described using frequencies counts, percentages and means, while Pearson's correlation was used to test the hypothesis. Most (65%) of the respondents were married. The mean age of the respondents was 42.80 years. The study further indicated that most (65%) of the respondents completed tertiary education and therefore highly literate. The study also revealed that quality of farm produce and packaging were considered benefits of buying agricultural products from supermarkets. There is significant relationship between age ($r=0.039^*$, $p=0.016$), income ($r=0.264^*$, $p=0.042$), years of patronage ($r=0.293^*$, $p=0.023$) and consumers' preference for agricultural products. It was concluded that respondents preferred to buy agricultural products like green pea, apple, cassava flakes, ginger, fish, chicken and oats from supermarkets. The study recommended that supermarkets should design their packaging in such a way to cater for low-income earners to encourage more people patronize them.*

KEYWORDS: Nigeria Supermarket, Agriculture, Agricultural Products, Consumers' Preference, Cashless Policy.



INTRODUCTION

Agricultural sector is inarguably the major fuel in raising the nation through production of food and high valuable commodities. Its contribution to the economy has been evident to the national Gross Domestic Product (GDP) as it has been a non-stop necessity and basic want for all individuals in the society. This has given rise to the high demand of agricultural products globally.

Consequently, in the 21st century where increase urbanization has been attributed to the development of any fast rising city, this has significantly lead to the establishment of modern outlets including supermarket (Watenga,2014) for buying and selling ,including the purchase of agricultural products. However, the high and sufficient buying power applicable to supermarket retail has an implication on food access to low income individual (Meng *et al.*, 2014). In addition to this problems, Supermarkets are mostly involved with selling of processed, canned and longtime stored food products which is detrimental to human health and dietary intake at large (Bader *et al.*, 2010).Furthermore, the lack of proper information on products on supermarkets shelves may mislead the consumer's preference thereby leading to distrust and subsequently low income for the supermarkets.

The expansion and development of modern sales outlets in various cities has been linked to growing consumer preference of diverse food and outlet attributes (Okello *et al.*, 2012). And since the supermarkets has been recognized as an important point of purchase in the environment, it is important to understand it significance to consumers in general. Also, the availability of varieties of options and selection preference of agricultural products in supermarkets motivates its choice as a marketing outlet for consumers (Dadzie and Nandonde 2018).

It has been noted that consumers' wants are unlimited, the study therefore provided distinct reasons for consumers preference to buy agricultural products in the supermarkets. It also enhance the knowledge of researchers on supermarket specificity and consumer's behavior towards it .In view of this, the study broadly evaluate consumers' preference for agricultural products in Nigeria supermarket in Osogbo metropolis Osun state. Specifically, the study described the socio-economic characteristics of the respondents; identified the type of agricultural products the consumers buy from the supermarket and determined the benefits of buying agricultural products from the supermarket.

METHODOLOGY

The study was carried out in Osogbo metropolis, Osun state, Nigeria. It became the capital of Osun state in 1991, Osogbo city seats the headquarter of both Osogbo local government area (situated at Oke Baale area of the city) and Olorunda local government area (situated at Igbonna area of the city) it is 88 kilometers by road to northern of Ibadan, Oyo state capital and 108 kilometer (67 mi) by road to south of Ilorin, Kwara state and 108 kilometer north of Akure, Ondo state. Osogbo shares boundaries with Ikirun, Ede, Egbedore, and Iragbiji and is easily accessible from any part of the state because of its central nature. It is about 48km from Ife, 32km from Ilesa, 46km from Iwo, 48km from Ikire and 46km from Ila-Orangun. Osogbo is a major commercial center, with a strong focus on agriculture, trade, and commerce. The city is known for a culturally rich city, with a strong heritage of Yoruba tradition and history. The city



is home to the Osogbo Palace, the seat of the Ataoja of Osogbo, the traditional ruler of the city. Notable landmarks in Osogbo include the Osun Osogbo Sacred Grove, a United Nations Educational Scientific and Cultural Organization (UNESCO) World Heritage Site, the Osogbo National Museum, and the Olusegun Obasanjo Presidential Library. It has a decent road network, with several highways connecting it to other major cities in Nigeria. Also, it is home to several institutions of higher learning, including the Osun State University. Osogbo has a tropical savanna climate, with two distinct seasons: the rainy season (April-October) and the dry season (November-March). Osogbo has numerous supermarkets among which are Justrite superstore, Borepo supermarket, Doyinlat supermarket, Ace supermarket. It is the trade center for a farming region like yam, cassava, maize, rice, groundnut, cocoa, oilpalm, coffee, rubber, timber and fruits..

The population of the study consists of all consumers of agricultural products from supermarkets in Osogbo metropolis. Simple random sampling techniques was used to select 13% of supermarkets available in the study area which were: Shoprite, Justrite superstore and Ace supermarket. Convenient sampling technique was used get 120 respondents that patronized these supermarkets to buy agricultural products, out of which 50% random sampling was used to get sample size of 60 respondents. A structured questionnaire was used to collect data. There are two categories of variables in this study, they are the dependent variable and the independent variables. The dependent variable of this study is the consumers' preference for agricultural products in Nigeria supermarket in Osogbo metropolis. Agricultural products available in super markets were listed. The consumers' preference was scored as: Always (2), Occasionally (1), and Never (0). The independent variable for the study captured all the socio-economic characteristics of the respondents. The data for study was analyzed using descriptive statistics such as frequency distribution, mean, and percentages and inferential statistics tool was Pearson Product Moment Correlation (PPMC).

RESULT AND DISCUSSION

Socio-economic characteristics of respondents

The result of the socio-economic characteristics of the respondents as depicted in Table 1 shows that 16.7% of the respondents were 30years and below, 35.1% were between the age range of 31-40 years, 25% were between the age range of 41-50 years, 13.4% were between the age range of 51-60 years and 10.2% were between the age range of 61years and above with their mean age of 42-80 years. This implies that most of the consumers that purchase agricultural products in the supermarket at the study area are mostly young adults. This may be attributed to their high purchasing capacity. This attribute is in line with the findings of Koutras (2006) which says that the spending power of youths is overtaking those of their parents and their spending money has increased over the GDP growth rate.

The result in Table1 also indicated that the 60% of the respondents were female while 40% were male. This implies that women purchase agricultural products the more from supermarkets. This may be because women are mostly in charge of domestic duties. It was also indicated in table1 that (65%) of the respondents were married and few (8.3%) of the respondents were divorced. This implies marriage is honorable in the study area, a married



person is recognized as being responsible in the society and also highly knowledgeable in understanding importance of high-quality commodities for the wellbeing of her family.

Furthermore, Table 1 revealed the distribution of respondents according to religion and this shows that 75% of the respondents claimed Christianity while 23.3% of the respondents were Muslims. This implies that both religions purchase agricultural products in supermarkets in the study area. The level of education of the respondents was also indicated and it shows that only 1.7% didn't complete secondary education, 11.7% respondents completed secondary education, and 21.7% didn't complete tertiary education while 65.0% completed tertiary education. This means that the respondents acquired at least secondary level education. Their level of literacy and exposure makes them prefer supermarkets to local markets for agricultural products. This is in line with the claims of (Pham, 2020) which says that consumers who are well informed are more likely to shop from modernized outlets where products have labels, tags and other relevant information.

Also (41.7%) of the market respondents claimed civil servants as their primary occupation while (1.7%) claimed transport services as their primary occupation. This implies that the respondents were mostly civil servants. In addition, (53.4%) of the respondents had farming as their secondary while 25% had trading as secondary occupation and 6.7% had transport services as their secondary occupation. This implies that respondents in the area have other means of income to supplement the income they earned from their primary occupation. Table 1 also showed that (68.4%) had less than 5 person as their household size while 31.7% had 6-10 person as their household size. This means that household size can influence place to shop commodities. This is in consonance with that of Terano *et al.*, (2014) who concluded that the consumer's household size influences where they shop.

The monthly income (in naira) of the respondents. Half (50.1%) of the respondents' monthly income were between the range of ₦51,000 to ₦100,000 while few (5%) of the respondents income were in the range ₦201,000 to ₦300,000. This implies that most respondents that patronize supermarkets for their agricultural products are not poor and are well to do. This is supported by the conclusion of Oghojafor and Nwagwu (2013) which says that, consumers of higher-income class usually prefer luxurious shopping, which can be achieved through the supermarket. Their years of patronage as revealed in table 1 indicated that the majority (73.3%) of the respondents has been patronizing supermarkets for agricultural products in the area for less than five years while 6.7% had been patronizing supermarkets for agricultural products in the area for 16-30 years. This mean respondents had considerable number of years patronizing supermarkets for agricultural products.

**Table 1: Distribution of respondents by their socio-economic characteristics**

Socio-economic characteristics	Frequency	Percentage	Mean
Age (years)			
<30	10	16.7	
31-40	21	35.1	
41-50	15	25	42.80
51-60	8	13.4	
61 and above	6	10.2	
Sex			
Male	24	40	
Female	36	60	
Marital status			
Single	9	15.0	
Married	39	65.0	
Divorced	5	8.3	
Widowed	7	11.7	
Religion			
Christian	45	75.0	
Muslim	14	23.3	
Traditional	1	1.7	
Education			
Secondary incomplete	1	1.7	
Secondary complete	7	11.7	
Tertiary incomplete	13	21.7	
Tertiary complete	39	65.0	
Primary occupation			
No primary occupation	2	3.3	
Farming	4	6.7	



Civil servant	25	41.7	
Trading	18	30.0	
Artisan	7	11.7	
Transport services	1	1.7	
Clergy man/ Clergy woman	3	5.0	
Secondary occupation			
Farming	32	53.4	
Civil servant	1	1.7	
Trading	15	25.0	
Artisan	7	11.7	
Transport services	4	6.7	
Clergy man/ woman	1	1.7	
Household size (persons)			
<5	15	68.4	
6-10	19	31.7	5
Income (Naira)			
<50,000	16	26.6	
51,000-100,000	30	50.1	
101,000-200,000	11	18.3	
91250.00			
201,000-300,000	3	5	
Years of patronage			
<5	44	73.3	
6-15	12	20.1	
16-30	4	6.7	

Source: Field Survey, 2023.



Types of agricultural products the consumers buy (preferred) from the supermarkets

Table 2 revealed the types of agricultural products consumers buy from the supermarkets in the area. It indicated that Green Pea was ranked first (1st) with the Weighted Mean Score (WMS) of 1.53 while soy bean was ranked second (2nd) with WMS of 1.40. This implies that the green pea and soy bean are the legumes that most consumers prefer buying from supermarkets.

Also for cereals, wheat was ranked first (1st) with WMS of 1.63 while maize was ranked fourth (4th) with the WMS of 0.78. This means that wheat is among the cereals that most consumers prefer buying. Under nuts, it was indicated that both peanuts and cashew nuts were ranked first (1st) with the WMS of 1.42, walnuts was ranked third (3rd) with the WMS of 1.17, while almonds was ranked fourth (4th) with the WMS of 1.00. This means that peanuts and cashew nuts were more preferred and consumed by the consumers than other nuts.

For tubers and its products, it was indicated that cassava flakes was ranked first (1st) with the WMS of 1.35 while cocoyam was ranked sixth (6th) with the WMS of 0.75. This implies that cassava flakes is among the tubers products the consumer preferred buying while cocoyam was the least tubers consumer buy from supermarkets. For fruity vegetable, it indicates that carrot was ranked first (1st) with the WMS of 1.58, while okra was ranked sixth (6th) with the WMS of 0.60. This implies that carrot was among the fruity vegetables consumers preferred buying while okra was the least fruity vegetables consumers from the supermarkets. Under imported fruits, it indicated that apple was ranked first (1st) with WMS of 1.88, while local fruits was ranked 8th with WMS of 0.93. This means that apple was the preferred among the imported fruits while local fruits were the least fruits consumers preferred buying from the supermarket.

For spices, it indicated that Ginger was ranked first (1st) with WMS of 1.68, while Cinnamon was ranked 4th with WMS of 0.85. This implies Ginger is the spices that most consumers preferred buying from supermarkets. For livestock products, it indicated that chicken was ranked first (1st) with WMS of 1.80, turkey was ranked 2nd with WMS of 1.60 while Pork was ranked 6th with WMS of 0.55. This means that chicken and turkey were more preferred and consumed by the consumers. Under Crustaceans/seafood, it indicated that fish was ranked first (1st) with WMS of 1.75, while Prawns/oysters were ranked 4th with WMS of 0.75. This implies that fish was among the seafood consumers preferred buying from supermarkets while prawns/oysters were the least seafood consumers preferred purchasing from supermarkets.



Table 2: Distribution of respondents by types of agricultural products the consumers buy (preferred) from the supermarkets

*Agricultural produce	Always	Occasional	Never	WMS	Rank
Legumes					
Green pea	35(58.3)	22(36.7)	3(5.0)	1.53	1 st
Cowpea	23(38.3)	24(40.0)	13(21.7)	1.17	3 rd
Soybean	32(53.3)	20(33.3)	8(13.3)	1.40	2 nd
Beans	22(36.7)	23(38.3)	15(25.0)	1.12	4 th
Cereals					
Wheat	44(73.3)	10(16.7)	6(10.0)	1.63	1 st
Rice	35(58.3)	19(31.7)	6(10.0)	1.48	3 rd
Maize	12(20.0)	23(38.3)	25(41.7)	0.78	4 th
Oats	39(65.0)	16(26.7)	5(8.3)	1.57	2 nd
Nuts					
Peanuts	32(53.3)	21(35.0)	7(11.7)	1.42	1 st
Almonds	20(33.3)	20(33.3)	20(33.3)	1.00	4 th
Cashew nuts	30(50.0)	25(41.7)	5(8.3)	1.42	1 st
Walnuts	21(35.0)	28(46.7)	11(18.3)	1.17	3 rd
Tubers and its products					
Cassava flakes	31(51.7)	19(31.7)	10(16.7)	1.35	1 st
Yam	15(25.0)	22(36.7)	23(38.3)	0.87	5 th
Cocoyam	13(21.7)	19(31.7)	28(46.7)	0.75	6 th
Sweet potato	21(35.0)	20(33.3)	19(31.7)	1.03	2 nd
Irish potato	18(30.0)	22(36.7)	20(33.3)	0.97	4 th
Yam flour	19(31.7)	23(38.3)	18(30.0)	1.02	3 rd
Leafy vegetables					
All green vegetables	13(21.7)	26(43.3)	21(35.0)	0.87	



Fruity vegetables

Onion	18(30.0)	22(36.7)	20(33.3)	0.97	4 th
Tomato	24(40.0)	18(30.0)	18(30.0)	1.10	2 nd
Okra	9(15.0)	18(30.0)	33(55.0)	0.60	6 th
Pepper	26(43.3)	16(26.7)	18(30.0)	1.13	3 rd
Carrot	39(65.0)	17(28.3)	4(6.7)	1.58	1 st
Melon	12(20.0)	23(28.3)	25(41.7)	0.78	5 th

Imported fruits

Apple	54(90.0)	5(8.3)	1(1.7)	1.88	1 st
Grapes	35(58.3)	9(15.0)	16(26.7)	1.32	7 th
Pears	45(68.3)	8(13.3)	7(11.7)	1.63	2 nd
Strawberries	41(68.3)	16(26.7)	3(5.0)	1.63	2 nd
Lemon/limes	29(48.3)	22(36.7)	9(15.0)	1.33	5 th
Avocado	36(60.0)	13(21.7)	11(18.3)	1.42	4 th
Blackberries	35(58.3)	10(16.7)	15(25.0)	1.33	5 th
Local fruits	12(20.0)	32(53.3)	16(26.7)	0.93	8 th

Spices

Ginger	43(71.7)	15(25.0)	2(3.3)	1.68	1 st
Garlic	42(70.0)	13(21.7)	5(8.3)	1.62	2 nd
Cinnamon	17(28.3)	17(28.3)	26(43.3)	0.85	4 th
Turmeric	22(36.7)	13(21.7)	25(41.7)	0.95	3 rd

Livestock products

Beef (cow meat)	17(28.3)	19(31.7)	24(40.0)	0.88	5 th
Pork (pig meat)	10(116.7)	13(21.7)	37(61.7)	0.55	6 th
Mutton (pig meat)	20(33.3)	26(43.3)	14(23.3)	1.10	4 th
Chicken	49(81.7)	10(16.7)	1(1.7)	1.80	1 st
Turkey	39(65.0)	18(30.0)	3(5.0)	1.60	2 nd
Eggs	32(53.3)	26(43.3)	2(3.3)	1.50	3 rd



Crustaceans/seafood

Fish	45(75.0)	14(23.3)	1(1.7)	1.73	1 st
Cabs/crayfish	40(66.0)	17(28.3)	3(5.0)	1.62	2 nd
Lobsters/shrimps	15(25.0)	17(28.3)	28(46.7)	0.78	3 rd
Prawns/oysters	16(26.7)	13(21.7)	31(51.7)	0.75	4 th

Source: Field survey, 2023 * Multiple response

Benefits of buying agricultural products from the supermarket

Table 3 revealed the benefits of buying agricultural products from the supermarket. Data on Table 3 revealed that quality of farm produce and packaging were the major(98%). This was followed by branding (96.3%) , availability of farm produce year round as (90%) , followed by customer relation (88.4%) , easy access (63.4%) and lastly price tag (31.7%). This implies that, the first benefit consumers derive from buying agricultural products from supermarkets is the quality of farm produce and packaging and the least benefit is price tag. The benefits made the consumers prefer supermarkets to local markets for agricultural products. Fei *et al.*, (2010) also elaborated that service and price are the critical positioning variables supermarkets use to attract customers. Dadzie and Nandonde (2018) further highlighted that quality of products drive consumers to use supermarkets.

Table 3: Distribution of respondents by benefits of buying agricultural products from the supermarket

Benefits*	Yes	No
Price tag	19(31.7)	41(68.3)
Customer relation	53(88.4)	7(11.7)
Quality of farm produce	59(98.3)	1(1.7)
Packaging	59(98.3)	1(1.7)
Branding	58(96.3)	2(3.3)
Easy access	38(63.4)	22(36.7)
Availability of farm Produce year round	54(90.0)	6(10.0)

Source: Field survey, 2023 * Multiple response



Pearson Product Moment Correlation analysis showing the relationship between the socio-economic characteristics of the respondents and consumers preference for agricultural products in Nigeria supermarkets

Data on Table 4 revealed that there is significant relationship between the selected socio-economics characteristics as as age ($r=0.309^*$, $p=0.016$) and income ($r=0.624^*$, $p=0.042$) and years of patronage ($r=0.293^*$, $p=0.023$) and consumer's preference for agricultural products in Nigeria supermarkets. This implies that, the higher the age of a consumer, the more they prefer to buy agricultural products in Nigeria supermarket. Aged people prefer to get agricultural products from supermarket because of the quality and need to avoid stress from local open markets. Some aged consumers also prefer to get agricultural product from supermarket because most of what they consume due to their health can only be found in supermarkets.

Also, it was observed that the higher the income of the consumer's the more they prefer to buy /purchase agricultural products from Nigeria supermarkets. This implies that consumers that get more income tend to patronize supermarket for agricultural products more. The more their year of patronage increases, the more they get used to it and derive more benefits.

Table 4. Pearson product moment correlation analysis showing the relationship between the socio-economic characteristics of the respondents and consumers preference for agricultural products in Nigeria supermarkets

Variables	Correlation coefficient(r)	P-value	Remark
Age	0.309*	0.016	significant
Household size	0.194	0.137	not significant
Education	0.078	0.556	not significant
Income	0.264*	0.042	significant
Years of patronage	0.293*	0.023	significant

Source: Computed Data, 2023.

CONCLUSION AND RECOMMENDATION

Based on the findings of the study, it was concluded that respondents preferred to buy agricultural products like green pea, apple, cassava flakes, ginger, fish, chicken and oats from supermarkets. Benefits derived from buying agricultural products from supermarkets include: produce/products quality, packaging, availability of some farm produce year round. The female consumers were majorly the ones that patronize supermarkets for agricultural products in the study area. The study therefore recommended that supermarkets should design their packaging in such a way to cater for low income earners to encourage more people patronize them.



REFERENCES

- Bader, M, Purciel, M., Yousefzadeh, P., K., Neckerman. (2010). "Disparities in Neighborhood Food Environments: Implications of Measurement Strategies." *Economic Geography*, 86(4): 409-430.
- Dadzie, S.H. and Nandonde, F.A. (2018), "Factors influencing consumers' supermarket visitation in developing economies: the case of Ghana", *Food Retailing and Distribution*, 2(2007). doi: 10.1016/B978-0-08-102037-1.00005-0.
- Fei, L., Bu, M., Gao, W. and Xiang, L. (2010), "An empirical study on the positioning point of successful retail enterprises in China", *Nankai Business Review International*, 1 (2), pp. 152-165, doi: 10.1108/20408741011052564.
- Koutras, E. (2006). The use of mobile phones by Generation Y students at two universities in the city of Johannesburg. Master's Dissertation. UNISA, Pretoria.
- Meng, T., Florkowski, W.J., Sarpong, D.B., Chinnan, M.S. and Resurreccion, A.V.A. (2014), "Consumer's food shopping choice in Ghana: supermarket or traditional outlets?" *International Food and Agribusiness Management Review*, Vol. 17 No. Special Issue A, pp. 107-129, doi: 10.22004/ag.econ.164600.
- Ngigi, M.W., Okello, J.J., Lagerkvist, C.L., Karanja, N.K. and Mburu, J. (2011), "Urban consumers' willingness to pay for quality of leafy vegetables along the value chain: the case of Nairobi kale consumers, Kenya", *International Journal of Business and Social Science*, 2 (7), pp. 208-216, available at: <http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/13652>.
- Oghojafor, B.E.A., Nwagwu, K.O. (2013), "Choice of shopping outlets for grocery products and the socio-economic profile of females consumers in Lagos Nigeria", *Journal of Sustainable Development Studies*, 4 (2), pp. 88-113.
- Okello, J.J., Lagerkvist, C.J., Hess, S., Ngigi, M. and Karanja, N. (2012), "Choice of fresh vegetable retail outlets by developing-country urban consumers: the case of kale consumers in Nairobi, Kenya", *The European Journal of Development Research*, 24 (3), pp. 434-449, doi: 10.1057/ejdr.2011.58.
- Pham, H.C. (2020), "Factors affecting consumer goods buyers' choice in e-commerce sites: evidence from Vietnam", *The Journal of Asian Finance, Economics and Business*, 7 (11), pp. 947-953, doi: 10.13106/jafeb.2020.vol7.no11.947.
- Terano, R., Yahya, R., Mohamed, Z. and Saimin, S.B. (2014), "Consumers' shopping preferences for retail format choice between modern and traditional retails in Malaysia", *Journal of Food Products Marketing*, 20 (1), pp. 179-192.
- Watenga, K.J. (2014), "Effectiveness of supermarkets as retail outlet of fast moving consumer goods in Nairobi county", *Journal of Business and Change Management*, 3 (3), pp. 89-97.