
Consumers' Perception and Acceptability of Nigerian Rice in Akwa Ibom State, Nigeria.

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Abstract

The study examined consumers' perception and acceptability of local rice brands produced, processed and packaged in Akwa Ibom State. The target population for the study comprised all the local rice consumers in the various households of the study area. A multi-stage sampling procedure was used in selecting 340 respondents for the study. Data were collected with the use of structured questionnaire and analysed using, means, standard deviation and rankings. Findings showed that consumers' perception of local rice in the study area was highly positive. The respondents perceived that local rice is tasty ($\bar{x}=3.63$), both the rich and the poor have access to local rice ($\bar{x}=3.63$), the rice has high nutritive contents ($\bar{x}=3.56$) and is cheaper when compared to foreign rice ($\bar{x}=3.54$). Also, respondents demonstrated good level of acceptability of local rice with an index value of 0.4029. Since the perception of the respondents promotes acceptability of the locally produced rice, more should be done to promote the positive perception while increasing acceptability level of the respondents through improvement of the quality of local rice produced by the state, product availability, advertisement, brand promotions and of course improved packaging of the rice products.

Keywords: Perception of Nigeria rice, acceptability of local rice in Akwa Ibom State

Introduction

Globally, rice consumption increased from 437.18 million metric tons in the 2008/2009 crop year to about 486.62 million metric tons in the 2018/2019 crop year (Shahbandeh, 2020). In sub-Saharan Africa (SSA), rice has become a major staple food as consumption patterns change and consumers' preference towards rice increases. Rice consumption has expanded against other roots and tuber products and its total consumption is projected to grow to around 36 million tons by the end of 2026 as against 27-28million tons at present (Nigatu, Hansen, Childs, and Seeley,

2017). Again, the USDA projected that rice imports will continue to grow from 12.3 million tons in 2017 to 15.4 million tons by 2026. With this, SSA is projected to be the largest rice importer in the world because of increasing demand and limited production growth plus tendency for many consumers to prefer imported rice over local rice. (Nigatu *et al.* 2017). As at 2016, the West African Region was reported to have imported more than 7million tons of rice.

Nigeria is currently the largest rice producing country in West Africa (Daoui, 2018), producing over 46% of the regions total production (Ajibola, Adeniji, Olaleye and Ojo, 2017) yet rice consumption outweighs production. Between 2011 and 2019, rice consumption in Nigeria has risen from 5.6million metric tons to 6.9million tons (Morse, 2019). The increasing demand for rice can no doubt, be attributed to the increasing number of hotels, fast food centres, restaurants and vendors in the major cities and use of rice for political campaigns by politicians in Nigeria.

The sharp increase in the consumption of rice as reported brings to bare the need for increased domestic rice production to complement or reduce rice importation. Unfortunately, use of low technologically empowered agricultural equipment that do not support large scale production poses a major challenge to increased productivity of rice farmers in Nigeria (Osabuohien, Okorie and Osabohien, 2018).

However, several governmental programmes have attempted to increase domestic rice production with the aim of bridging the demand-supply gap, making Nigeria to be more self-sufficient in rice production. Presently, more than 10 out of the 36 states of Nigeria and the Federal Capital territory are into rice farming and production with more than 10 modern rice mills (Okeke, 2017). Unfortunately, as importation of rice ahead of production intensifies in Nigeria and indeed Akwa Ibom state, increasing rice production and quality in terms of what is produced locally, has become an issue of great concern as these influence perceptions and acceptability by consumers.

In Nigeria, Onu (2018) reported that respondents preferred imported to local rice due to ease of preparation. In Malaysia, Abdul Latiff and Ayob (2017), identified consumers' knowledge, perception and attitude as factors influencing consumers' preference and attributed the situation to limited awareness or knowledge on domestic rice availability, and the quality characteristics. Also, in south east Nigeria Iweka & Ederewhevbe (2018) reported that, perceived quality of local rice influences consumers' preference while Obih & Baiyegunhi (2018), in accessing consumers' acceptability of local rice brands in Nigeria, lamented that, Nigeria has become Africa's largest rice importing country due to poor quality of locally produced rice.

Okeke, Iheanacho & Obasi (2015) stated that rice attributes such as colour, appearance, taste, stickiness after cooking, cleanliness, swelling capacity, availability and grain shape could trigger consumers' preference for it. Alhassan, Frimpong & Mohammed (2015) found that preference for imported rice was higher compared to local rice and consumers in Ghana. The respondents claimed that imported rice was of high quality, tasty, perfumed (aroma) and required less cooking time. Okeke (2017) reported that de-stoning and price were two identifiable basic problems to acceptability of local rice in Nigeria by consumers.

Again, consumers' social status, according to Zareei and Ashtiani (2015) dictates the acceptability of product, as consumers of a high social class often prefers foreign rice over locally produced rice. The state government, in 2017, provided 290 hectares of land for rice cultivation and commissioned a 1.5 metric tonnes capacity rice processing mill in 2018, in Ini Local Government Area, with an objective of ensuring that 80% of rice consumed in the state was produced within the state. (Nigerian Investment Promotion Commission {NIPC}, 2020). About 80 hectares of the farmland acquired had been cultivated producing 176, 000 tons per processing from the mill.

The Akwa Ibom state government in 2019 announced that 10,000 of 50kg bags of the Faro-52 type long- grain rice were ready for the market with a view to reducing the price of imported rice. Despite huge investments of over USD 1.65 billion made by the Nigerian government and private sectors in rice processing over the last six years with dramatic improvements in the quality of local rice brands, the consumers' preference for imported rice brands persists (Obih & Baiyegunhi, 2018). The study examined how consumers in Akwa Ibom State perceive the locally produced rice in the state and the level of local rice acceptability by the consumers.

Methodology

The study was carried out in Akwa Ibom State. The state lies between latitudes 4° 32' and 5° 53' N and longitudes 7° 25' and 8° 25' E and its 2016 projected population stood at 5.45 million people. (akwaibomstate.gov.ng/about-akwa-ibom/). Akwa Ibom State comprises 31 local government areas (LGAs), divided into three senatorial districts namely, Akwa Ibom North East (Uyo), Akwa Ibom South (Eket) and Akwa Ibom North West (Ikot Ekpene) senatorial districts as well as ten (10) federal constituencies.

The population of the study consisted of rice consumers in the wards that make up the ten (10) federal constituencies in Akwa Ibom State. Multiple-stage sampling method was used in the selection of respondents for the study. A selection of one (1) local government area from each of the ten (10) federal constituencies using simple random sampling was done and a simple random sampling procedure was used to select one (1) ward in each of the selected local government area. Thereafter, systematic random sampling technique was used to select thirty-four (34) households in each of the selected wards with particular interest on the household heads or a representative as the respondent. In all, 340 households were selected for the study. Primary data were used for the study, which were collected using a set of questionnaire consisting of subsections reflecting the specific objectives of the study.

To examine the perception of the respondents in the study area towards local rice, the respondents were made to express their agreement or otherwise on some properties and characteristics of locally produced rice with a four-point scale scored as follows; strongly agree (4), agree (3), disagree (2) and strongly disagree (1). Statements such as 'Local rice is tasty', 'Local rice have high nutritive contents' comprised the perception measure. The extent of their agreement with these

properties and characteristics portrays their level of perception of locally produced rice. In the same vein, a four-point scale was also used to determine the acceptability of the respondents to consume locally produced rice with the extent of agreement determining the level of acceptance. The mean responses of the respondents were also calculated and ranked. Any mean score from 2.5 and above was regarded as high perception and acceptability while mean scores below 2.5 was regarded as low perception and acceptability of that particular statement since the maximum response score for each item was 4 and minimum was 1. Data for the study were analysed using means, standard deviation and mean ranking

Results and Discussion

Perception towards Local Rice

Table 1 reveals that most of respondents were in agreement with most of the properties and characteristics of locally produced rice. Most statements had their mean perception above 2.5 indicating that the perception of the respondents towards local rice in the study area was very high. The respondents perceived that local rice is tasty (\bar{x} =3.63), that both the rich and the poor have access to local rice (\bar{x} =3.63), the rice has high nutritive contents (\bar{x} =3.56) and is less expensive (\bar{x} =3.54). This agrees with the findings of Reynolds (2016) that those who consumed local rice indicated that it was readily available, purchased mostly in the retailed market, very tasty and affordable.

Table 1: Level of perception of local rice

Statements	Mean	Standard deviation
Local rice is tasty	3.63	0.58
Both the rich and the poor have access to it	3.63	0.60
Local rice have high nutritive contents	3.56	0.65
Local rice is less expensive	3.54	0.59
Local rice is available everywhere (at local market)	3.27	0.91
Local rice have high water absorption capacity	3.08	1.01
Local rice have optimum cooking time	3.07	0.79
Local rice increase when cooked	3.06	1.01
Local rice have good aroma/flavour when cooked	2.97	0.81
Local rice have low sugar/starch content	2.96	0.98
Local rice is of high quality	2.95	1.11
Non-sticking of grains after cooking	2.85	1.00
Local rice are not polished	2.83	0.81
Local rice can be easily processed	2.82	1.04
Local rice have high rising capacity	2.70	1.04
Absence of foreign matter	2.58	1.04
Local rice have attractive grains	2.47	1.02
Local rice have low rate of breakage	2.45	1.06

Source: Field survey, 2019.

Acceptability of Locally Produced Rice

Table 2 reveals that respondents accept local rice for reasons ranging from good taste ($\bar{x}= 3.57$), high nutritive value ($\bar{x}=3.57$) to cheap price (affordability) ($\bar{x}=3.15$). The findings corroborate that of Reynolds, (2016) that most of the local rice consumers attested to the nutritional gains from local rice.

Table 2: Acceptability of local rice

Statements	Mean	Standard deviation
I love the taste of local rice	3.57	0.54
I eat local rice because its nutritive value is higher than foreign rice	3.53	0.63
I love local rice because it tastes well when cooked with coconut.	3.47	0.80
It's good for diabetic patients	3.39	0.79
I eat local rice anytime because it is cheap	3.15	1.10
I use local rice when cooking with palm oil	3.09	0.96
The shelf life of local rice is longer than foreign rice	2.85	0.97
I am a low income earner and can only afford local rice	2.61	1.04
I eat local rice because of its availability	2.01	1.30
I eat local rice because of its good quality	1.90	0.89

Source: Field survey, 2019

Conclusion and Recommendations

Consumers' perception of local rice was highly positive and could influence consumers' acceptability. However, with high level of acceptance of local rice, a gap needs to be filled if optimal consumption of local rice must be attained. Since the perception of the respondents promotes acceptability of the locally produced rice, more should be done to promote the positive perception while increasing acceptability level of the respondents through improvement of the quality of local rice, making products available, advertising, brand promotions and of course improved packaging of the rice products.

References

- Abdul Latiff, Z. A. B. & Ayob, M.A. (2017). Preference of consumer toward imported rice and local rice in Kelantan. *Informing Science: International Journal of Community Development and Management Studies*, 1,:73-83, Retrieved from: <http://ijcdms.org/Volume01/v1p073>
- Ajibola, B.O., Adeniji, O.B., Olaleye, R.S., and Ojo, M.A. (2017). Effect of urea deep placement technology on paddy yield of rice farmers in North Central Nigeria. *Journal of Wetlands and Waste Management*, 1(1-3), 1-7.

-
- Alhassan, H., Frimpong, T. and Mohammed, A. S. (2015). Do Ghanaian rural consumers prefer imported rice to local rice? Evidence from Akuapem North Municipality. *Applied Research Journal*, 1(3): 24-34.
- Daoui, A. (2018). Which Country is the Largest Producer of Rice in Africa? Retrieved from www.waystocap.com. accessed 07/07/2020.
- Government of Akwa Ibom State official website. akwaibomstate.gov.ng/about-akwa-ibom/ accessed December, 2019.
- Iweka, A. N. and Ederewhebe, I. G. (2018). The effect of Local rice quality on consumer choice of it: a study of rice consumers in southeast Nigeria. *Online Journal of Arts, Management and Social Sciences*, 3(1), pp. 137 – 151.
- Morse, M. (2019). Rising rice consumption in Nigeria: farming and the value of a value chain. *Global economies & markets and business, ethics & society*. <https://ideas.darden.virginia.edu/rising-rice-consumption-in-nigeria>
- Nigatu, G., Hansen, J. Childs, N. and Seeley, R. (2017). Sub-Saharan Africa Is Projected To Be the Leader in Global Rice Imports, United States Department of Agriculture, Economic Research Service, issue 09, October. Handle: *RePEc:ags:uersaw:266026*, DOI: 10.22004/ag.econ.266026
- Nigerian Investment Promotion Commission (NIPC) (2018). *Ini Rice Mill, Farm to be Commissioned in Akwa Ibom State*. Government Policy Document.
- Obih, U., and Baiyegunhi, L. (2018). Consumers' acceptability of local rice brands in Nigeria: Which marketing functions really matter? *Journal of Agribusiness and Rural Development*. 2(48), 183-196. <https://doi.org/10.17306/J.JARD.2018.00412>
- Okeke, A.M; Iheanacho, A.C & Obasi, C.C (2015). Determinants of local rice consumption among households in Makurdi Metropolis of Benue State: *International Journal of Food Science & Technology* (5)1:1-10.
- Okeke, J. (2017). Reasons most consumers prefer foreign rice. *The nationonlineeng.net*. accessed 21st April, 2019.
- Onu, S. E. (2018). Preference for imported and Nigeria Rice among rural households in Imo State Nigeria. *Journal of Agricultural Extension*. <https://dx.doi.org/10.4314/jae.v22i3.6>
- Osabuohien, E., Okorie, U. and Osabohien, R. (2018). Rice Production and Processing in Ogun State, Nigeria: Qualitative Insights from Farmers' Association. In Obayelu, E. (Eds). *Food Systems Sustainability and Environmental Policies in Modern Economics* (pp. 188-215), Hershey, PA: IGI Global. DOI: <https://doi.org/10.4018/978-1-5225-3631-4.ch009>
- Reynolds, A. A (2016). Analysis of the Demand for Locally Produced Rice in Kumasi, Ghana. An M.Sc Thesis Submitted to the Department of Economics, Kwame Nkrumah University of Science and Technology, Ghana.
- Shahbandeh, M. (2020). Total global rice consumption 2008-2020 report. Accessed online 21st March, 2020 on www.statista.com

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Zareei, Ali and Ashtiani, Peyman Ghafari (2015). Consumer perceptions of global and local brands. *Indian Journal of Fundamental and Applied Life Sciences Available at* www.cibtech.org/sp.ed/jls/2015/01/jls.htm 5, 4247-4255.