

# Economics of Kola Nut (*cola acuminata*) Marketing in Onitsha South Local Government Area, Anambra State

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Article History	Abstract
Original Research Article	<i>This study explore the economics of Kola-nut marketing in Onitsha South Local Government Area, Anambra State. A structured questionnaire was used to collect data from a random sample of 100 kola-nut marketers. The study employed various analytical techniques, including descriptive statistics, and budgetary analysis. The study analyzed the socioeconomic characteristics, marketing channels and costs and returns, in kola-nut marketing. The research revealed that the majority of Kola-nut marketers are female (85%), with a mean age of 38 years and a high level of education (39% tertiary). The primary marketing channels included retail (50%) and wholesale (30%), with varying amounts sold and diverse transportation methods. Financially, the marketers face high costs and moderate returns, with significant constraints related to transportation costs, market organization, and price instability. The study recommended that the cooperative societies or market organizers should set a price policy to avoid price instability and in fluctuations.</i>
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## 1.INTRODUCTION

Agriculture serves as the primary means of sustenance for numerous individuals, serving as the foundation of our nation's economic stability. Marketing involves communication between a company and its customers aimed at selling products or services, products are considered incomplete until they reach customers (Adesina, & Chukwu, 2023).

Kola is a key cash crop for many Nigerian farmers, traders, and industries, Nigeria produces about 70% of the world's kola nuts. This crop boosts the economy in both local and national markets, improving the standard of living for people involved in its trade in both rural and urban areas (Adejoke, et al., 2020). Both male and females are involved in the marketing of kola nut, most kola nut marketers can be farmers, traders, processors, or retailers, and some may have multiple roles, such as full-time marketers, part-time marketers, or having other jobs like farming or trading (Agbugha, 2018). The kola nut (*cola acuminata*) comes from a large tree native to Africa and is now grown commercially worldwide. The kola nut serves as an energizer for consumers and is also used to make beverages and cough syrup from its juice. Kola nuts and their by-

products are widely recognized for many industrial and household uses (Adeyemo, & Olaniyi, 2024).

In Africa, it has numerous uses in social, religious, ritual, and ceremonial functions. It is used during ceremonies related to marriage, child naming, and installation of Chiefs, funeral, and sacrifices made to the various gods and is a symbol of life. When served to a visitor, a kola nut traditionally symbolizes hospitality, respect, and welcome. In many West African cultures, offering a kola nut to a guest is a gesture of friendship and goodwill, often used to honor and celebrate the presence of the visitor. (Chinweike, Modinat, Kehinda, Mutiat, Adejoke, Qudus and Ayodele, 2020). Kola nuts can increase the income of both farmers and middlemen. Kola nut has many benefits as well as side effects. The side effects are dependent on the quantity of caffeine intake (Akinwumi, & Ogunjobi, 2019). Caffeine is a stimulant like the bromine and Kalinin, which are also present in coffee, tea and chocolate. Right amount of kola nut depends on factors such as age, physiology and health status, and as such, more effort should be channeled into the area of investigating a more appropriate quantity of kola nut that should be consumed in relation to people's status

Adejoke et al. (2020). Several studies have been carried out in Kola-nut marketing in Nigeria.

Okon (2021) highlighted how kola nut marketing benefits rural communities economically and suggested that better marketing strategies could improve rural lives. Nwachukwu and Ukoha (2022) looked at different ways to sell kola nut and how these affect the profits of farmers and traders. Mensah and Agyapong (2023) examined how infrastructure and market information can make kola nut marketing more efficient, pointing out areas for improvement.

Despite all this research there are little information on kola nut marketing in Onitsha South Local Government Area, Anambra State, Nigeria. It is this gap that this research sought to fill by examining the economics analysis of kola nut marketing in Onitsha south Local Government Area. The broad objective of this study was to analyze the economics of kola nut marketing in Onitsha South Local Government Area, Anambra State. The specific objectives of the study were to: describe the socio-economic characteristics of kola nut marketers; identify marketing channels of kola nuts; and estimate costs and returns of kola nut marketing.

## 2.LITERATURE REVIEW

### Concept of Socio-Economic Characteristics of Kola nut marketers

Several studies have found various socio-economic factors of farmers that affect how efficiently they use inputs. These factors include the farmer's age, education, experience, contact with extension agents, income, and access to credit (Fagbohun, & Oyekale, 2021).

Kola nut, is a type of non-timber forest product, provide valuable nuts and pods, very important and are used as cash crops. Kola-nuts hold a special place in West Africa and Central Africa (Adesope et al. 2020). Kola nut marketers make different amounts of money, ranging from low to middle to high incomes, depending on market conditions and how big their business operates. Farmers who have received extension support tend to be more productive than those who have not had any contact. Having a larger family can also increase productivity because more family members mean more hands to help with farm work, leading to higher yields. This is because having family members available for labor allows for timely completion of important tasks like fertilizing and weeding, resulting in better harvests. Moreover, since many farmers have limited finances, having family labor available makes it easier to avoid hiring additional labor. Furthermore, larger farm sizes have been found to be positively and significantly associated with higher agricultural productivity (Taiwo, Shitu, & Lawal, 2017). In summary, the socio economic

characteristics of farmers affects their productivity and profitability of kola nuts marketing.

### Concept of Marketing Channels of Kola nut

Agricultural products move from one place to another through different routes and these routes involve people and companies who help make products available for people to use or buy. Marketing channels are groups of organizations that work together to make sure products get from the producer to the people who use them (Arene, 2016).

Marketing channels are like different paths that products take from the people who make them to the people who use them. When the process of selling gets more complicated, there are more middlemen between the makers and the buyers. These middlemen are part of the marketing channels. The structure of these channels shows who's involved in making the product and who ends up using it. How long the marketing channel is depends on things like how big the market is, what the product is like, and how people want to buy it (Arene, & Okwu, 2017). A zero channel (also called direct marketing channel) involves producers selling their products directly to consumers. Here are the outlined channels:

Producer----- wholesaler-----retailer---consumer

Producer-----wholesaler-----consumer

Producer-----retailer-----consumer

Producer-----consumer (Olubunmia, et al., 2019; Kotler, et al., 2012).

### Concept of Marketing Structure

Market structure refers to how a market is set up, which can affect how companies compete and decide on prices in that environment. Market structure is all about the features of a market that shape how it works. It decides how business competition and prices works in the market environment, and the challenges which that affects how well the market performs (Agbugba, 2018). Market structure considered how many sellers and buyers are in the market, how different the products are from each other, whether it is easy or hard for new businesses to join, and who controls how products are distributed (Brown, 2022). Market structure is usually evaluated by looking at the number and size of companies compared to the number of consumers and producers at specific times and places. By estimating how many companies there are, their sizes, and where they are located, we can understand the local market setup and the options available to people buying, selling, and hiring within the market (Egesi & Ebe, 2021). The main types of market structures are perfect competition, monopolistic competition, oligopoly, and monopoly. Perfect competition, oligopoly, and monopolistic competition are the three main theoretical models used to analyze market structure (Brown, 2022).

## Theory of Consumer Behavior

Consumer behavior theory studies how people make purchase decisions. It helps businesses and marketers predict when and how consumers will buy, allowing them to take advantage of these behaviors (Brown, 2022). According to this theory, consumers choose from different groups of products, each offering a certain benefit, and they will naturally pick the group that gives them the most benefit. The development of consumer behavior and utility theory is based on the concept of cardinal utility. Cardinal utility suggests that utility can be measured on a numerical scale, where consumers assign values to different product bundles based on their benefits, with utility measured in monetary terms. However, this idea faced criticism for assuming that utility can be objectively measured and added up. Because of these issues, the concept of cardinal utility was replaced by ordinal utility. In this study, it is assumed that households try to maximize their utility by deciding how much of each product to consume, produce, buy, and sell, while considering constraints like cash, resources, and production capacity (Brown, 2022).

## 3.METHODOLOGY

### Research Design

This study used a survey design, because it is suitable for social research (Okonkwo-Emegha et al. 2025).

### Study Area

The study took place in Onitsha South Local Government Area in Anambra state, Nigeria. Located on the banks of the Niger River, Onitsha is one of Nigeria's largest and southernmost cities. The community is very multicultural and multi-ethnic, with a vibrant social life, including many festivals, celebrations, and cultural events. Onitsha is primarily known as a large port and an important transportation spot for the whole region. (www.anambrastate.govt.ng 2015).

Anambra state was created in 1991, With Awka as its capital city. The state lies between longitude 7.0700° E and Latitude 6.2100° N. The state has a population of 4.18 million people by the census figure of 2006 (NPC, 2006). Anambra State has 21 Local Government Areas (LGAs). They include Aguata: Anambra East, Anambra West, Anaocha, Awka North, Awka South, Ayamelum, Dunukofia, Ekwusigo, Idemili North, Idemili South, Ihiala, Njikoka, Nnewi North, Nnewi South, Ogbaru, Onitsha North, Onitsha South, Orumba North, Orumba South, Oyi. It has an average annual rainfall about 213.02 millimeters. The rainfall is heavier in July with a short break in August. The state has an annual average temperature range of 29.08°C. It has an estimated land area of 4,844 square kilometers, and is bounded in the East by Enugu State, in

the North by Kogi State, in the South by Rivers and Imo States, and in the West by Delta State. There is potential for production of crops, fish and livestock and marketing of vegetables in the area. The major economic activities of the people are farming and trading. The crops grown are tree crops such as kola nut, rubber, oil palm, tuber crops, cereals and assorted vegetables.

### Population of the Study

The population of the Study were all the registered kola nut marketers (1,310) in Onitsha South Local Government Area of Anambra state.

### Sampling Procedure / Technique

Two multistage sampling techniques were used in selection of the kola nut marketers for the study. In stage 1, Onitsha South Local government area was purposively selected because of the dominance of Kola nut marketers. **In stage 2** five markets were randomly selected (Ochanja market, Relief market, Bridge head market, Ose market and Main market). **In stage 3**, twenty (20) kola nut marketers from each of the selected markets were randomly selected, making it a total of hundred (100) respondents that was selected for the study.

### Gross Margin Analysis

Model for gross margin analysis as follow:

$$GM = TR - TVC$$

$$NFI = GM - TFC$$

Where;

GM =Gross margin (N)

TR =Total revenue (N)

TVC = Total variable cost (N)

NFI = Net farm income (N)

ROI = Net return/Total cost

Profitability Index = Revenue / Total variable cost

## 4.RESULTS AND DISCUSSION

### Socioeconomic characteristics Kola nut Marketers

The socioeconomic characteristics of the kola nut marketers in Onitsha South Local Government Area as shown in Table 1 reveal significant insights into the demographics and operational patterns within this sector. A predominant majority of the respondents are female (85%), which underscores a gendered dimension in kola nut marketing, aligning with broader agricultural trends where women often play a central role. Age distribution shows a concentration in the 31-40 year range with a mean age of 38 years, indicating a relatively mature and experienced workforce. The marital status data suggests stability within the sector, with 62% of respondents being married, which may reflect the economic necessity and stability provided by family structure. Household size is predominantly

between 6 and 10 persons, with a mean of 9, which might influence the labor availability and household support for marketing activities. Educational attainment among the marketers is notably high, with 39% having tertiary education and 34% having secondary education. This level of education may contribute to better marketing strategies and business management practices (Brown, 2022). In terms of farming experience, the mean of 19 years suggests a seasoned group with considerable expertise in kola nut

marketing. Most respondents rely on hired labor (52%) and personal savings (44%) for funding, highlighting a dependence on external labor and personal resources (Lee & Kim, 2021). The average monthly income is ₦85,863.33, with a majority earning less than ₦100,000, reflecting the financial constraints and challenges faced in the sector (Oni & Adeoti, 2023). Membership in trade unions (52%) indicates an organized effort towards collective bargaining and support within the marketing community.

**Table 1: Socioeconomic characteristics of kola nut marketers**

Variable	Frequency	Percentage	Mean
<b>Gender</b>			
Male	15	15.0	
Female	85	85.0	
<b>Age (years)</b>			
Less than 21	13	13.0	
21 – 30	25	25.0	
31 – 40	32	32.0	38 years
41 – 50	18	18.0	
51 – 60	8	8.0	
61 and above	4	4.0	
<b>Marital status</b>			
Single	30	30.0	
Married	62	62.0	
Divorced	5	5.0	
Widowed	3	3.0	
<b>Household size (persons)</b>			
1 – 5	39	39.0	
6 – 10	42	42.0	9 persons
11 – 15	12	12.0	
Above 15	7	7.0	
<b>Educational level</b>			
No formal	7	7.0	
Primary	20	20.0	
Secondary	34	34.0	
Tertiary	39	39.0	
<b>Farming experience (years)</b>			
0 – 10	28	28.0	
11 – 20	31	31.0	19 years
21 – 30	25	25.0	
Above 30	16	16.0	
<b>Farm labor</b>			
Family labor	48	48.0	
Hired labor	52	52.0	
<b>Source of fund</b>			
Personal savings	44	44.0	
Friends and relations	19	19.0	
Cooperatives	12	12.0	
Microfinance bank	8	8.0	
Commercial bank	7	7.0	
Bank of Agriculture	10	10.0	

<b>Other businesses</b>			
Yes	60	60.0	
No	40	40.0	
<b>Membership of Trade union</b>			
Yes	52	52.0	
No	48	48.0	
<b>Monthly income (₦)</b>			
Less than 100,000	55	55.0	₦85,863.3
			3
100,000 – 200,000	18	18.0	
200,001 – 300,000	17	17.0	
Above 300,000	10	10.0	

Field Survey: 2024

## 2. Marketing channels of kola nut

The marketing channels for kola nut in Onitsha South Local Government Area in Table 2 illustrate a diverse array of distribution methods and transactional behaviors. The predominant position in the market is held by retailers (50%), followed by wholesalers (30%) and producers/suppliers (20%), highlighting the critical role of retailers in the final distribution of kola nut. The amounts sold for custard bucket sizes reveal a concentration in the ₦901 – 1,200 range (45%), with a notable proportion also selling above ₦1,200 (40%). This distribution suggests variability in pricing strategies based on market dynamics and buyer preferences. The diverse customer base includes wholesalers, retailers, and consumers, each constituting 25% to 50% of the respondents, indicating a multi-tiered

market structure that caters to various levels of the supply chain. In terms of purchasing and sales frequency, a majority of respondents purchase kola nut weekly (50%) and sell it on a weekly basis (60%). This regularity in transactions reflects a stable market rhythm, though there is also significant variation with some engaging in daily or monthly transactions. The means of transportation used for kola nut distribution are varied, with tricycles (30%) and taxis (25%) being the most common, followed by wheelbarrows (20%) and buses (15%). This range of transportation methods highlights the logistical flexibility required to meet market demands and manage distribution efficiently. The use of tricycles and taxis particularly indicates an adaptation to the local infrastructure and the need for relatively fast and flexible delivery options.

**Table 2: Marketing channels of kola nut**

Variable	Frequency	Percent
<b>Position in market</b>		
Producer/supplier	20	20.0
Wholesaler	30	30.0
Retailer	50	50.0
<b>Amount sold for custard bucket size (₦)</b>		
500 – 900	15	15.0
901 – 1,200	45	45.0
Above 1,200	40	40.0
<b>Customers</b>		
Wholesalers	25	25.0
Retailers	50	50.0
Consumers	25	25.0
<b>Quantity bought (bags)</b>		
1 – 5	40	40.0
6 – 10	35	35.0
Above 10	25	25.0
<b>Quantity sold weekly</b>		
1 – 5	30	30.0
6 – 10	50	50.0
Above 10	20	20.0
<b>How often are they bought?</b>		
Daily	10	10.0



Weekly	50	50.0
Monthly	40	40.0
<b>How often are they sold?</b>		
Daily	20	20.0
Weekly	60	60.0
Fortnightly/every two weeks	20	20.0
<b>Means of transportation</b>		
By hand or head	10	10.0
Wheelbarrow	20	20.0
Tricycle (Keke)	30	30.0
Taxi	25	25.0
Bus	15	15.0

**Field survey: 2024**

### Costs and returns of Kola nut Marketing

The financial breakdown of kola nut marketing in Onitsha South Local Government Area in Table 3 reveals detailed insights into the cost structures and profitability within the sector. The total fixed costs amount to ₦1,344,768.33, encompassing significant expenditures such as housing (₦352,678.34) and a truck (₦505,432.22). These investments reflect the capital-intensive nature of kola nut marketing, where substantial infrastructure and transportation costs are critical for operational efficiency. The substantial fixed costs underscore the initial financial commitment required to establish and maintain a successful marketing operation, which is consistent with findings that highlight the importance of infrastructure in agricultural

businesses. In terms of variable costs, a total of ₦51,826.06 is incurred, with major expenses including hired labor (₦24,469.00) and transportation (₦15,324.87). These figures indicate ongoing operational costs that vary with the level of marketing activity, which is crucial for understanding the cost dynamics in the sector. The total cost of ₦1,396,594.39 is offset by a total revenue of ₦1,535,527.81, resulting in a gross margin of ₦138,933.42. This margin highlights the profitability of kola nut marketing despite high initial and variable costs, supporting the sector's viability as a profitable enterprise. The profitability and financial structure outlined here align with similar agricultural marketing studies that emphasize the role of cost management and revenue generation in achieving business success (Mensah, & Agyapong, 2023).

**Table 3: Cost and returns of kola nut marketing**

Items	Quantity	Unit price (₦)	Amount (₦)
<b>Fixed cost</b>			
Storage facility	1	112,345.67	112,345.67
Housing	1	352,678.34	352,678.34
Wheelbarrow	1	28,987.12	28,987.12
Truck	1	505,432.22	505,432.22
Basket	2	5,357.65	10,715.30
Bowl	3	2,666.77	8,000.31
Watering can	2	1,067.45	2,134.90
Bicycle	1	23,678.22	23,678.22
Motorcycle	1	309,876.45	309,876.45
<b>Total Fixed cost</b>			<b>1,344,768.33</b>
<b>Variable cost</b>			
Nylon	5	312.55	1,562.75
Water	50	47.62	2,381.00
Hired labor	20	1,223.45	24,469.00
Transportation			15,324.87
Communication			8,089.44
<b>Total variable cost</b>			<b>51,826.06</b>
<b>Total cost</b>			<b>1,396,594.39</b>
<b>Total revenue</b>			<b>1,535,527.81</b>
<b>Gross margin</b>			<b>138,933.42</b>

**Field survey: 2024.**

## 5. Conclusion

The profitability of kola nut marketing in Onitsha South is influenced by several factors, including high transportation costs and price instability, which impact the financial stability of marketers. Despite the positive gross margin, the constraints such as an unorganized market and inadequate capital highlight areas needing improvement. The high level of education among marketers suggests potential for improved market practices, but existing infrastructural and financial challenges must be addressed to enhance profitability.

## 6. Recommendations

The following recommendations are made based on the results of the study:

- i. Establishing more structured and organized market systems can help reduce inefficiencies and price instability.
- ii. Investments in better infrastructure, including storage facilities and transportation networks, are crucial to reduce costs and improve market operations.

## REFERENCES

1. Adesina, A. A., & Chukwu, A. (2023). Market dynamics and profitability of kola nut production in Nigeria. *Journal of Agricultural Economics*, 75(3), 456-470.  
<https://doi.org/10.1016/j.agecon.2023.05.002>
2. Adejoke, A., et al. (2020). Health benefits and risks associated with kola nut consumption: A review. *Nigerian Journal of Health Sciences*, 12(2), 75-82.
3. Adeyemo, R. A., & Olaniyi, A. (2024). Cost-benefit analysis of kola nut marketing in Nigeria. *International Journal of Agribusiness*, 30(1), 25-36.  
<https://doi.org/10.1108/IJA-03-2024-0010>
4. Agbugba, I. E. (2018). Market structure and agricultural product pricing: A study of kola nuts in Nigeria. *Nigerian Journal of Economic and Financial Issues*, 9(3), 102-115.
5. Akinwumi, O. J., & Ogunjobi, A. A. (2019). Marketing strategies for kola nut in Nigeria: Challenges and opportunities. *Journal of Marketing and Consumer Research*, 56, 45-54.
6. Arene, C. J. (2016). Understanding agricultural marketing channels: The case of Nigeria. *Journal of Agricultural Economics*, 67(2), 458-472.
7. Arene, C. J., & Okwu, D. E. (2017). Impact of agricultural marketing on kola nut production and trade in Nigeria. *Journal of Business and Management*, 19(2), 56-65.
8. Brown, J. R. (2022). Education and agricultural productivity: Implications for marketing strategies. *African Journal of Agricultural Research*, 10(4), 234-240.
9. Chinweike, O. M., Modinat, A. A., Kehinda, O. A., & others. (2020). Cultural significance of kola nut in West Africa. *International Journal of Cultural Studies*, 5(2), 88-95.
10. Egesi, C. N., & Ebe, S. N. (2021). Assessing market structures in Nigeria's agricultural sector. *Nigerian Journal of Agricultural Economics*, 12(1), 50-65.
11. Fagbohun, E. D., & Oyekale, A. S. (2021). Market dynamics and price fluctuations in kola nut trade in Nigeria. *Journal of Economic Research*, 26(2), 115-130.
12. Gayatri, A. (2020). Agricultural marketing: An overview of the Nigerian context. *Journal of Agriculture and Environmental Sciences*, 8(3), 67-73.
13. Mensah, J., & Agyapong, A. (2023). Infrastructure and market information systems in kola nut marketing. *Journal of Agribusiness in Developing and Emerging Economies*, 13(1), 12-29.
14. Nwachukwu, I. D., & Ukoha, O. (2022). Profitability analysis of kola nut marketing in Nigeria. *African Journal of Business Management*, 16(5), 34-45.
15. Okon, E. (2021). The role of kola nut marketing in rural economic development in Nigeria. *Journal of Rural Studies*, 15(4), 245-256.
16. Okonkwo-Emegha, K., Umehali, E.E., & Obiekwe N. J. (2025). Determinants of loan Repayment Performance Among smallholder vegetable farmer cooperators in Anambra State, Nigeria. *International Journal of Research and Innovation in Applied Science*. DOI: <https://doi.org/10.51584/ijrias.2025100103>. Vol.10 (1), pp. 429-442
17. Oni, S. A., & Adeoti, J. O. (2023). Financial constraints in agricultural marketing: A study of kola nut traders. *International Journal of Finance and Economics*, 28(1), 120-135.
18. Taiwo, A. A., Shitu, A., & Lawal, A. O. (2017). Kola nut: An overview of its economic importance and trade in Nigeria. *Journal of Agricultural Science and Technology*, 3(2), 150-161.