

## Analysis of Garri Wholesale Marketing in Bende Local Government Area, Abia State, Nigeria

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<sup>1</sup>Nzeakor, F. C., <sup>2</sup>Okafor, A. C., <sup>3</sup>Okpara, B. O., \*Udokure, U. J and <sup>3</sup>Obasi, I. O

<sup>1</sup>Department of Agricultural Extension and Rural Development

<sup>2</sup>National Root Crops Research Institute, Umudike

<sup>3</sup>Department of Agricultural Economics,

Michael Okpara University of Agriculture Umudike, Abia State, Nigeria

\* Correspondent Author: [ubongudokure@gmail.com](mailto:ubongudokure@gmail.com), +2348109810685

### Abstract

*The study analyzed garri wholesale marketing in Bende Local Government Area, Abia State, Nigeria. Specifically, the study determined the cost, returns and marketing efficiency of garri wholesale marketing in the study area; estimated the determinants of net returns of garri wholesale marketers and identified the challenges of garri wholesale marketing. The study population comprised of all garri wholesale marketers in Bende Local Government Area, Abia State. The sample size of this study was 60 respondents, selected using a multistage sampling procedure. Data for the study were obtained using a structured questionnaire and were analysed with means, frequencies, percentages, cost and returns, marketing efficiency and multiple regression models. Results showed that the marketers recorded net returns of ₦208,818.93, implying that wholesale garri marketing was lucrative, with the potential for higher net returns and should be taken as a source of livelihood. Age ( $p < 0.05$ ), household size ( $p < 0.05$ ), marketing experience ( $p < 0.01$ ), transport cost ( $p < 0.01$ ), and cooperative membership determined the net returns of the marketers. All (100%) of the respondents identified high transportation costs, high purchase costs, and limited access to finance as critical challenges in their operations. The study recommended that the government implement transport subsidies (Government transport services) for wholesale garri marketers to cushion the effect of high transport costs on their net returns.*

**Keywords:** Marketing channels, net return, variable cost, fixed cost, marketing efficiency, challenges

### Introduction

Garri is a staple food item widely consumed in Nigeria, Ghana, Benin, Togo, and other West African countries (Obekpa *et al.*, 2022). It forms the base of many traditional meals and can be enjoyed in different ways. In Nigeria, garri is typically eaten with soups, stews, or sauces after being soaked in water to create a dough-like consistency (Ettah and others, 2020). It is high in vitamins, minerals, weighs between 360 and 400 kcal, has 0–1 gram of fat, 1–2 grams of dietary fiber, and 1–3 grams of protein. Garri is a product with enormous marketing potentials in Nigeria.

There is a sizable market for garri marketers in Nigeria because of its steady demand across different demographic groups and geographical areas (Morris *et al.*, 2022). Garri marketing could be described as the set of activities that involves in the buying, selling, distribution and promotion of garri, aimed at ensuring that the product moves from the producer to the final consumer (Ebewore and Eldore, 2015).

Retailers and wholesalers are largely responsible for garri marketing in Nigeria, which calls for value addition, brand development, a diverse consumer base, efficient distribution routes, and the use of both traditional and digital tactics.

Wholesaler are intermediaries that buys garri in bulk straight from processors, facilitating the movement of the product from the processors to regional markets, acting as a middleman between garri producers and retailers (Okechalu *et al.*, 2022). They create distribution networks and supply chains to reach supermarkets, retailers, and other large purchasers. Depending on the size of their business, wholesale garri marketers in Bende Local government Area sell to both domestic and regional markets. For their marketing operations and procedures to run smoothly and generate profits, garri wholesalers need an efficient marketing system (Azubuike, 2023).

Agbebi and Adetuwo (2018) stated that a marketing system is considered efficient if it maximizes the ratio of marketing input to output or provides customers with satisfactory, reasonably priced services. It ensures high product standard, processing methods, and returns on investment. Efficient marketing system helps wholesalers to understand consumer preferences, demand patterns, and pricing dynamics (Isitor *et al.*, 2016). Furthermore, efficient wholesale garri marketing depends on fundamental market infrastructures including storage, transportation, and packaging facilities, as the implementation of appropriate storage and preservation methods can increase product quality and satisfaction (Ke'gah and Ndjouenkeu, 2023).

Nonetheless, the Nigerian garri wholesale marketing system face many challenges such as ineffective transportation infrastructure that prevents wholesalers from operating optimally. Due to poor roads, ineffective facilities, and clogged highways, garri wholesalers in Bende Local Government Area, Abia state, incur high transportation costs (Azubuike, 2023). Inadequate storage facilities are another problem facing wholesale garri sellers. Garri is susceptible to pests, heat, and dampness; however, insufficient storage facilities might reduce the quality and profit of the marketers.

There is a noticeable research gap on wholesale-on-wholesale garri marketing in Bende Local Government Area, despite the fact that numerous studies in Abia State have looked at garri value chain. For example, like Azubuike (2023) studied risk management practices by garri producers in Bende Local Government Area of Abia State, Nigeria; Onwukwe & Udokure (2021) analyzed enterprise combination and net profit of garri marketers in Ikwuano Local Government Area, Abia State, Nigeria. However, none of these studies have analyzed garri wholesale marketing in Bende Local Government Area, Abia State, Nigeria. This study sought to fill this research gap. The specific objectives of the study were to:

- i. determine the cost, returns and marketing efficiency of garri wholesale marketing;
- ii. estimate the determinants of net returns of the marketers;
- iii. and identify the challenges of garri wholesale marketing in the study area.

## **Methodology**

The study was conducted in Bende Local Government Area of Abia State, Nigeria. The LGA is made up of eleven communities, these include Ozuitem, Ugwueke, Okporoenyi, Itumbuzo, Umuju-ezechi, Umu-menyi, Igbere, Item, Alaye, Nkpa and Uzuakoli. Agriculture is the major occupation of the people in the local government area. The people produce food crops like rice, maize, cassava, plantain, banana also small ruminant animals are reared.

## **Sampling Technique.**

The study population comprised all garri wholesale marketers in Bende L.G.A, Abia State. The sample size of this study was 60 respondents. In the selection of 60 respondents, multistage sampling procedures were used. In the first stage, three communities namely; Bende District, Ugwueke and Uzuakoli were purposively selected for the reason of large markets for garri marketing. In the second stage, two (2) markets were randomly selected from each of the selected communities given a total of six (6) markets for the study (Afia Eke market, Orié Ugba market, Ebem market, Item market, Alayi market and Bende market) In the

final stage, ten (10) garri wholesale marketers were randomly selected from the six (6) markets, making it sixty (60) respondents.

### Data Analysis

Data for the study were obtained from primary source through the use of structured questionnaire.

Objective i was analyzed with budgetary approach as follows:

$$NR = TR - TC \dots\dots\dots 1$$

$$TR = P \times Q \dots\dots\dots 2$$

$$TC = TVC + TFC \dots\dots\dots 3$$

Where:

TR = Total Revenue,

TVC = Total Variable Cost,

TFC = Total Fixed Cost,

TC = Total Cost

NR= Net Return

Q = Quantity (kg)

P = Price (₦)

Marketing efficiency was realized using marketing efficiency ratio. The formula is specified as follows:

$$M. E = \frac{\text{Value added by marketing (Net profit)}}{\text{Total marketing cost}} \times 100 \dots\dots\dots 4$$

Where:

M. E = Marketing efficiency

Objective ii was analyzed with OLS multiple regression model.

The multiple regression model is specified implicitly thus:

$$Y = f(X_1, X_2, X_3, X_4, X_5, X_6, X_7, X_8, X_9, X_{10}, X_{11}) \dots\dots\dots 5$$

Y = Net returns (₦)

X<sub>1</sub> = Age (Years)

X<sub>2</sub> = Marital status (Married=1, others=0)

X<sub>3</sub> = Marketing experience (Number of years spent in garri marketing)

X<sub>4</sub> = Household size (No of household members)

X<sub>5</sub> = Level of Education (No of years spent in school)

X<sub>6</sub> = Transportation cost (₦)

X<sub>7</sub> = Storage cost (₦)

X<sub>8</sub> = Purchase cost (₦)

X<sub>9</sub> = Cost of loading/offloading (₦)

X<sub>10</sub> = Selling price (₦)

X<sub>11</sub> = Market union membership (Yes=1, no=0)

β<sub>0</sub> = Intercept

β<sub>1</sub>- β<sub>11</sub> = Parameter estimate

Objective iii was analyzed with descriptive statistical tools such as frequency, means and percentages.

### Results and Discussion

Distribution of the respondents according to cost, returns and marketing efficiency of garri wholesale marketing.

Results in Table 1 showed that the respondents' total revenue was ₦466,666.69, their total costs was ₦257,847.76, and their net income was ₦208,818.93. This implied that wholesale garri marketing was profitable, had the potential to increase net income, and ought to be considered a means of livelihood. This

finding is in tandem with Zakariya *et al.* (2019), who reported that wholesale garri marketing in Ankpa LGA of Kogi State was profitable.

Results also showed that the respondents were efficient with efficiency value of 100%. This implied that they achieved the highest possible return on their operating expenses, by successfully turning their investments into earnings. This also meant that their price policies, distribution plans, and general market strategy were set up to satisfy customer demands, while controlling expenses. This result is in line with that of Isitor, Babalola, and Abegunde (2019), who found that garri marketing in Kwara State was profitable and efficient.

**Table 1: The distribution of the respondents according to cost, returns and marketing efficiency of garri wholesale marketing**

Items	Amount (₦)	%
<b>Total Monthly Revenue</b>	<b>466,666.69</b>	
Average quantity sold (kg)	7	
Average selling price per kg	66,666.67	
<b>Variable cost (₦)</b>		
Average purchase cost	235,000.00	91.14
Transportation cost	5,020.00	1.95
Market charges	2,728.33	1.06
Storage cost	3,548.33	1.38
<b>Total Variable Cost (TVC)</b>	<b>246,296.66</b>	<b>95.52</b>
<b>Fixed cost (₦)</b>		
Rent	6,478.33	2.51
Depreciation on assets	5,072.77	1.97
<b>Total Fixed Cost (TFC) (₦)</b>	<b>11,551.10</b>	<b>4.48</b>
<b>Total cost (TVC+TFC) (₦)</b>	<b>257,847.76</b>	<b>100</b>
<b>Net Income (TR-TC)</b>	<b>208,818.93</b>	
<b>Marketing efficiency (%)</b>	<b>100.00</b>	

**Source: Field Survey, 2025**

#### **Determinants of net returns of garri wholesale marketers in the study area**

Results of the determinants of net returns of garri wholesale marketers in the study area are presented in Table 2. The linear functional form was chosen as the lead equation and it showed that the value of the coefficient of multiple determinations ( $R^2$ ) was 0.9585. This implied that 95.85% of the variations in the net returns of the respondents were explained by the regressors included in the model. The F-value of 90.46 was significant at 1% level, presaging the significance of the entire model. Age ( $p<0.05$ ), household size ( $p<0.05$ ), market union membership ( $p<0.01$ ) and transport cost ( $p<0.01$ ) were the determinants of net returns of the marketers.

The coefficient of age (0.23) was statistically significant at 5% level and positively related to the net returns of the respondents, implying that as the marketers grow older, their net returns also tended to increase. This trend may be attributed to several factors, including the accumulation of experience, enhanced skills, and better decision-making capabilities that often come with age. Older marketers are likely to have developed valuable relationships within the market, allowing them to negotiate better prices and access more lucrative opportunities. This finding contradicts with Aturamu *et al.* (2021) who analysed of profitability and market outlets of garri marketers in Ondo State, Nigeria and reported that age influenced the net returns of the marketers negatively.

**Table 2: Determinants of net returns of garri wholesale marketers in the study area**

Variable	+Linear	Exponential	Semi-log	Double log
Constant	-13.85 (-1.53)	1.36 (1.32)	-761.81 (-10.32) ***	-4.54 (-8.46) ***
Age	0.23 (2.05) **	0.03 (0.52)	30.02 (1.44)	0.23 (1.58)
Marital status	1.12 (0.67)	-0.02 (-1.37)	17.94 (2.14) **	0.05 (0.82)
Education	-0.36 (-0.91)	-0.06 (-1.51)	6.10 (0.65)	-0.01 (-0.28)
Household size	0.38 (2.44) **	0.06 (3.64) ***	-1.01 (-0.29)	0.01 (0.72)
Marketing experience	0.65 (3.49) ***	0.08 (4.01) ***	-18.95 (0.68)	0.50 (0.68)
Market union membership	0.05 (3.57) ***	0.04 (-2.39) **	-11.29 (-2.57) **	-0.07 (-2.31) **
Purchase price	-2.30 (-1.57)	-0.04 (-0.83)	-0.36 (-0.05)	-0.09 (-1.61)
Transport cost	-0.01 (-26.65) ***	9.92 (22.52) ***	114.52 (18.37) ***	0.98 (21.77) ***
Cost of Loading/Offloading	-0.01 (-0.76)	-6.80 (-0.03)	25.55 (2.36) ***	0.02 (0.32)
Selling price	-0.34 (-0.18)	-0.08 (-0.42)	-3.85 (-0.39)	-0.03 (-0.48)
Storage cost	0.06 (0.75)	0.08 (0.87)	9.63 (0.59)	0.12 (1.01)
<b>R<sup>2</sup></b>	<b>0.9585</b>	<b>0.9391</b>	<b>0.9087</b>	<b>0.9345</b>
<b>Adjusted R<sup>2</sup></b>	<b>0.9479</b>	<b>0.9236</b>	<b>0.8854</b>	<b>0.9177</b>
<b>F- statistic</b>	<b>90.46***</b>	<b>60.41***</b>	<b>39.00***</b>	<b>55.84***</b>
<b>No. of respondents</b>	<b>60</b>	<b>60</b>	<b>60</b>	<b>60</b>

**Source:** Field survey, 2025, \*\*\*, \*\*, and \* represents 1%, 5% and 10% levels of significance, Figures in parenthesis are t-ratio.

The coefficient of household size (0.38) was statistically at 5% level and positively related to the net returns of wholesale garri marketers. This implied that as the number of individuals in a household increased, the net returns for these wholesale garri marketers also tended to rise. A larger household may mean more hands available to assist in the business, leading to increased net returns. Family members can contribute to tasks such as transporting goods, managing sales, and handling customer interactions, which can ultimately enhance the overall performance of the business. This finding aligns with Nwajei *et al.* (2017), who examined the factors affecting income of garri marketers in Imo State and reported that household size increased the net income of the marketers.

The coefficient of marketing experience (0.65) was statistically significant at 1% level and positively related to the net returns of the respondents. This finding suggests that as the marketing experience of the wholesalers increases, their net returns also tend to rise significantly. Greater experience in the market allowed the respondents to develop essential skills, such as effective negotiation, pricing strategies, and customer relationship management, which are crucial for maximizing profitability. More so, their familiarity with market trends and consumer preferences enables them to make informed decisions that can lead to higher returns. This finding is in line with Oluwatusin (2017), who assessed economic of gari marketing in Osun State Nigeria and reported that experience influenced net income positively.

The coefficient of transport cost (-0.01) was statistically significant at 1% level and negatively related to the net returns of the respondents. This suggests that as transport costs increase, the net returns for wholesale garri marketers tend to decline. Higher transportation expenses can significantly erode profit margins, making it more challenging for marketers to maintain profitability in their operations. As costs associated with moving goods from one location to another rise, it directly impacts the overall financial performance of the business, leaving less income available after expenses. This finding is in tandem with Nwajei *et al.* (2017), who reported a negative relationship between transport cost and net income of garri marketers in Imo State.

The coefficient of cooperative membership (0.05) was statistically significant at 1% significant level and positively related to the net returns of the respondents. This implies that being a member of a cooperative significantly contributes to the net returns of wholesale garri marketers. Cooperative membership often provides access to collective resources, shared knowledge, and enhanced bargaining power, which can lead to higher net returns. Marketers who are part of cooperatives can benefit from lower purchasing costs, joint marketing efforts, and support in managing operational challenges, all of which can enhance their financial performance. This finding is in tandem with Onwukwe, and Udokure (2024) who assessed enterprise combination and net profit of garri marketers in Ikwuano Local Government Area, Abia State, Nigeria, and reported that cooperative membership influenced the net income of the marketers positively.

### Challenges of garri wholesale marketing in the study area

Results in Table 3 showed that all (100%) of the marketers identified high transportation costs, high purchase costs, and limited access to finance as the most pressing issues. High transportation costs increase operational expenses, thereby reducing net margins and limiting the ability of marketers to compete effectively. This aligns with the findings of Obekpa *et al.* (2022), who also reported high transportation costs as a major constraint in garri marketing in Kaduna State. Similarly, high purchase costs suggest that wholesalers acquire garri from producers at elevated prices, which limits their flexibility in pricing to attract customers while still maintaining profitability. Limited access to finance further compounds these challenges by restricting marketers' capacity to expand their operations, invest in bulk purchases, or adopt efficiency-enhancing measures. Other notable constraints with high prevalence include low patronage (98.33%), high market charges (76.67%), under-developed market infrastructure (76.67%), price fluctuations (73.33%), and storage issues (60%). Low patronage may be linked to reduced consumer purchasing power or competition from other food products, directly impacting sales volume and income.

**Table 3: Challenges of garri wholesale marketing in the study area**

Variables	Frequency*	%	Rank
Price fluctuation	44	73.33	4 <sup>th</sup>
High cost of transportation	60	100	1 <sup>st</sup>
High purchase cost	60	100	1 <sup>st</sup>
Storage issues	36	60.00	5 <sup>th</sup>
Limited access to finance	60	100	1 <sup>st</sup>
High market charges	46	76.67	3 <sup>rd</sup>
Low patronage	59	98.33	2 <sup>nd</sup>
Under-developed market	46	76.67	3 <sup>rd</sup>

**Source: Field survey, 2025 \*Multiple responses recorded**

### Conclusion

Wholesale garri marketing is profitable and efficient in the study area. Net income was influenced by age, experience, household size, transport cost and cooperative membership. Despite of the positive income earned by the marketers, the enterprise was hindered by several challenges, notably the burden of high

transportation and purchase costs, unpredictable price fluctuations that affect market stability, and limited access to affordable financing, which constrains business expansion and resilience against market shocks.

### **Recommendations**

1. In order to reduce transportation costs and ensure smooth movement of garri from producers to consumers, marketers should collaborate to pool resources for road maintenance or jointly arrange affordable transport services.
2. Cooperatives and microfinance banks should offer garri marketers soft loans and credit facilities to help them expand their businesses and effectively manage price fluctuations, as limited access to finance negatively influenced their net income.
3. Cooperative membership showed a positive influence on net income of the marketers, so efforts should be made by garri marketers to form/join cooperatives in order to benefit from bulk purchasing, collective bargaining, and training that can improve their profit margins and marketing abilities.

## References

- Agbebi F.O and Adetuwo, K. I. (2018). Analysis of Socio-Economic Factors Affecting Fish Marketing in Igbokoda Fish Market, Ondo State, Nigeria. *Asian Journal of Economics, Business and Accounting*, 21(6): 82-91
- Aturamu, O. A, Akinbola, A. E, Omosehin, O. O and Oguntuase, D. T. (2021). Analysis of Profitability and Market Outlets of Smallholder Garri Producers in Ondo State, Nigeria. *Asian Journal of Economics, Business and Accounting*, 21(6): 82-91.
- Azubuike, I. (2023). *Evaluation of risk management practices by garri producers in Bende Local Government Area of Abia State, Nigeria* (Undergraduate project, Michael Okpara University of Agriculture, Umudike). Retrieved from <https://mouau.afribary.org>.
- Bende Local Government Area profile. (2016). Nigerdeltapeople.com. Population projection: 192,621 persons (2016). Retrieved July 2025.
- Ebewore, S and Eldore, O. D. (2018). Analysis of marketing of garri in Delta state, Nigeria. *Journal of Northeast Agricultural University*, 22(1):53-64
- Ettah, I. O., Emmanuel, E. A, Ikuta, A and Ubi, G. M. (2020). Analysis of Marketing Margins and Efficiency of Cassava-based Product in Cross River Central Agricultural Zone, Nigeria. *Annual Research & Review in Biology*, 34(5): 1-7.
- Isitor, S. U, Otunaiya, T and Iyanda, I. (2016). Efficiency of Garri Marketing in Peri-Urban Areas of Ogun State, Nigeria. *Journal of Agricultural science*, 8(3):109-120.
- Kegah, A. N and Ndjouenkeu, R. (2023). Gari, a Cassava (*Manihot esculenta* Crantz) Derived Product: Review on Its Quality and Their Determinant. *Journal of Food Quality*, 17(1), 1-15.
- Morris, R. E, Okuduwor, A. A and Ozigbu, J. C. (2022). Comparative Study on Profitability of Garri Production and Marketing in Khana Local Government Area, Rivers State, Nigeria. *International Journal of Economics and Financial Management*, 7(1), 22-32.
- Nwajei, E. I, Mohammed, B. T, Abdulquadri, A.F, Achem, B. A. and Daramola, R.B. (2017). Factors Affecting Income of Garri Marketers in Imo State. *American-Eurasian Journal of Agriculture & Environ. Science*, 17 (3): 239-244.
- Obekpa, N. B, Okechalu, S. O, Adeogun, T. T. A, Oni, B. O, Essien, J. E, Adedapo, J. O, Maikano, S, Ademola, T. O, Emmanuel, I. B and Olukotun, O. (2022). Marketing analysis of garri among wholesalers in three selected markets in Kaduna metropolis, Kaduna state, Nigeria. *Australian Journal of Science and Technology*, 6(2), 125-130.
- Okechalu, S. O., Adeogun, T. T. A, Emmanuel, J. O, Oni, B. O, Adedapo, J. O, Ademola, T. O, Obekpa, N. B, Omodona, S. and Olukotun, O. (2022). Analysis of garri retailing in selected markets in Kaduna metropolis, Kaduna state, Nigeria. *Australian Journal of Science and Technology*, 6(3), 157-162.
- Okpara, M. N., Chukwu, L. O and Ugwu, C. A. (2024). Analysis of marketing efficiency and profitability of cassava products in Abia State, Nigeria. *Nigerian Agricultural Journal*, 55(1), 88–96.
- Oluwatusin, F. M. (2017). Economic Analysis of Gari Marketing in Osun State Nigeria. *Researcher*, 9(5), 29-34.
- Onwukwe, F. C and Udokure, U. J. (2021). Gender analysis of garri marketing among rural women in Ikwuano Local Government Area, Abia State. *African Journal of Agricultural Economics and Rural Development*, 7(3), 115–122.
- Onwukwe, F. O and Udokure, U. J. (2024). Analysis of enterprise combination and net profit of garri marketers in Ikwuano Local Government Area, Abia State, Nigeria. *AKSU Journal of Agricultural Economics, Extension and Rural Development*, 7(3), 96-104.



