integrity Research Journals

Journal of Agricultural Science and Practice
Volume 11(3), pages 91-99, August 2026
Article Number: E1A81EA13
ISSN: 2536-7072
https://doi.org/10.31248/JASP2026.585
https://integrityresjournals.org/journal/JASP

Full Length Research

Cost-benefit analysis of garri processing and marketing in Benue State, Nigeria

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Received Date: 15 June 2026 | Accepted Date: 17 July 2026 | Published Date: 30 August 2026

ABSTRACT: A study was conducted on the cost-benefit analysis of garri processing and marketing in Benue State, Nigeria. The specific objectives were to describe the socio-economic characteristics of garri processors and marketers; determine the profitability of garri processors and marketers, and examine the marketing efficiency of respondents in the study area. A multistage sampling technique was used to select respondents, and primary data from 318 garri processors and 231 garri marketers were collected through structured questionnaires. Analytical tools included descriptive statistics, net income models, and Shepherd's marketing efficiency index. Findings from the study, observed from the socioeconomic profiling, revealed that the majority of the respondents were aged 36-45 years (34.89%), female-dominated (58.83%), married (52.38%), and secondary school educated (48.63%), with a mean household size of 5.3 persons and 8.6 years of enterprise experience. Crucially, institutional support was low, as only 38.25% belong to cooperatives and a mere 7.47% accessed credit. The economic evaluations established that both enterprises are highly profitable with result of the gross margin of ₦48,674.74, net return of ₦46,281.88 benefit cost ratio of 1.93, and rate of return on investment of 93.50% recorded for processors, while marketing margin of ₦8,675.85, net return of ₦429,456.48, rate of return on investment of 1794%, benefit cost ratio of 18.94 for marketers. The overall marketing efficiency index was 17.94, structurally driven by the fact that 82.52% of marketers bypass intermediaries to source directly from processors. However, economies of scale significantly favoured wholesalers with a marketing efficiency of 18.30 over retailers with a marketing efficiency of 12.74. The major institutional constraints identified included high transportation costs, poor access to formal finance and inadequate processing infrastructure. The study concludes that despite the high profitability and structural efficiency of the garri networks, the value chain remains sub-optimised. Optimising the allocative efficiency of this high-yielding value chain requires urgent policy interventions targeted at expanding formal agricultural credit lines, upgrading rural feeder roads, and transitioning to mechanised processing methods.

Keywords: Cost-benefit, efficiency, marketing, processing.

INTRODUCTION

Cassava (*Manihot esculenta* Crantz) remains and stands out as one of Nigeria's most significant root crops cultivated extensively across different states, particularly Benue State. Once regarded primarily as a subsistence food for rural households and livestock, cassava has evolved into a high-demand commodity across Africa and beyond. Nigeria is globally acknowledged as the leading producer of cassava, accounting for approximately 21% of total world output and 31% of Africa's production (FAOSTAT, 2024). Current estimates show that Nigeria produces over 66.6 million metric tons of cassava annually, marking a 6% increase from 2023 levels (AKADEMIYA2063). This expansion underscores cassava's growing importance in both domestic consumption and industrial use. Within Nigeria, cassava alone represents nearly 45% of agricultural GDP, primarily through household consumption, although industrial-scale processing remains limited. Benue State is particularly noteworthy, producing over 9 million metric tonnes of fresh cassava roots annually, equivalent to about 15% of

national output (NAERLS, FAMS, 2024). Cassava is also the most important root crop and one of the most consumed foods in Nigeria (Apeh *et al*., 2023). More than 80% of Nigerians in rural areas consume cassava daily, often in the form of garri, akpu, fufu, or boiled roots. Compared to rice and maize, cassava provides 40% more carbohydrate than rice and 25% more than maize, making it the cheapest and most accessible calorie source for humans and animals alike (Omoluabi and Ibitoye, 2024). Its resilience-thriving on marginal land with minimal inputs and high drought tolerance- reinforces its role in national food security. Beyond nutrition, cassava is a critical income generator. It supports producers, processors, transporters and marketers, while serving as raw materials for industries such as bakery, textiles, papers, plywood, pharmaceutical, and confectionery (Nigeria Cassava Investment Accelerator NCIA, 2025 research). The Federal Government has recently repositioned cassava as a 7 dollars investment opportunity, emphasizing mechanization, private investment and research-driven productivity. Despite being the world's largest cassava producers, Nigeria currently captures only 2% of the 183 billion-dollar global cassava processing market, highlighting untapped potential in derivatives like starch, sweetener, high-quality cassava flour (HQCF), and bioethanol according to the Nigeria Cassava Investment Accelerators (NCIA). Among cassava products, garri remains the most widely consumed and commercially viable, thanks to its storability (2-3 years), affordability, and high demand across Nigeria and other African countries. Processing cassava into garri not only reduces post-harvest losses but also creates employment opportunities, enhances rural livelihoods and strengthens food security. Study confirms that garri processing is a low-cost, rural-based enterprise with significant economic returns, making it one of Nigeria's most important agro-processing activities (Omoluabi and Ibitoye, 2024). Given these dynamics, cassava is no longer just a subsistence crop but a strategic industrial and food security asset. Its expanding role in Nigeria's agricultural transformation makes the study of garri processing and marketing particularly relevant for understanding economic performance and value chain development. This study aims to examine the cost-benefit analysis of garri processing and marketing in Benue State. While the specific objectives were to describe the socioeconomic characteristics of garri processors and marketer, determine the profitability of garri processors and marketers, and examine the marketing efficiency of the respondents in the study area.

METHODOLOGY

The study was conducted in Benue State, Nigeria. Benue State was established in 1976 and is located in the North-central geopolitical zone of Nigeria (the Middle Belt). It comprises 23 Local Government Areas (LGAs), divided into three agricultural/political zones (Zones A, B, and C). Geographically, the state is situated between latitudes 6.5 degrees north and 8.5 degrees north of the Equator, and longitudes 7.4 degrees east and 10.0 degrees east of the Prime Meridian. Benue is bordered by Nasarawa State to the north, Taraba to the east, Kogi to the west, and Enugu, Ebonyi and Cross River States to the south. It also shares an international boundary with the Republic of Cameroon to the southeast. The state encompasses an expansive territory with a total landmass of 34,059 square kilometres (13,150.25 square miles), ranking 11th out of Nigeria's 36 states in terms of geographical size. The population of the state was estimated 6,725,200 persons (NBS, 2024). This population density forms a substantial domestic labour force and a consumer market for processed root-crop derivatives. Benue State experiences a Tropical Savannah Climate (Aw) characterised by two distinct seasons. The wet/rainy season spans from April to October, delivering an annual rainfall range between 1,000mm and 2,000 mm, which provides optimal moisture availability for tuber development. The dry season runs from November to March (ACReSAL, 2026). Temperature fluctuates between 23 degrees Celsius and 37 degrees Celsius. Peak heat occurs during March and April in the year (Climate Data, 2026). The geological formations are characterised by alluvial plains and a sandy-loam basement complex. This sandy-loam soil type is loose and well-drained, preventing root rot while allowing uninhibited horizontal expansion of underground storage roots. Due to its fertile soil ecology, Benue State functions as Nigeria's premier root-crop hub. The dominant crops cultivated include cassava, yam, and sweet potatoes, alongside staple grains.

Sampling techniques

The study used a multi-stage sampling technique for garri processors and marketers in the study area. The first stage was a purposive selection of three local government areas due to their dominance in the Benue Garri trade. The second stage involves purposeful selection of three (3) communities each from the three LGAs selected, owing to the high preponderance of cassava farmers, garri processors/marketers and local and regional garri markets in the area. The third stage involves obtaining a list of garri processors and marketers from registered garri processors and garri marketers' associations in the study area. A sample size of 318 and 231respondents was obtained from the sample frame of 1,815 and 575 of processors and marketers using a sample size calculator as shown in Table 1.

$$n = n0 / (1 + (n0 - 1)/N)$$

Where: $n0 = (z^2 \times p (1 - p)) / e^2$, z is the z-score for confidence level (1.96 for 95%), p is estimated proportion (0.5), e is margin of error (0.05 for 5%), N is sample frame, n is adjusted sample size.

Table 1. Sample procedure and size for garri processors and marketer.

LGA	Villages	Sample Frame processors	Sample Size (processors)	Sample Frame marketers	Sample Size marketers)
Otukpo	Ogoli	242	42	73	29
	Ogobia	263	46	78	31
	Adoka	230	40	70	28
	Onyagede	400	70	120	48
Ohimini	Idekpa	160	28	38	15
	Anwule	96	17	24	10
	Ugbokolo	216	38	86	35
Okpokwu	Eke	114	20	46	19
	Okpoga	94	17	40	16
Total		1,815	318	575	231

Source: Field survey, 2025.

Data collection and analysis

Primary data was used to achieve the stated objective of the study. Primary data of garri processors and marketers were collected from the 2026 field survey through the use of structured questionnaires by trained enumerators. Descriptive statistics were used to describe the socioeconomic characteristics of garri respondents; gross margin analysis was used to the determine profitability of garri processors and marketers; and Shepherd's Marketing Efficiency Index was used to examine the marketing efficiency in the study area.

Descriptive statistics

Descriptive statistics such as frequency, percentage, and mean were used to describe the socioeconomic characteristics of garri processors and marketers.

Gross margin

Profitability of garri processors and marketers (Wholesale and Retailers) was analysed using gross margin analysis, net returns, rate of return on investment, benefit-cost ratio, and marketing margin.

GM= TR-TVC

NR= GM- TFC

RRI= NR/TC X100

BCR= TR/TC

Where: GM =gross margin, NR = Net Return, RRI = Rate of Return on Investment, BCR = Benefit Cost Ratio, TR = total revenue (includes the quantity of garri produced in basin (bag) multiplied by the price per unit of garri in (₦), TVC = total variable cost (cost of cassava tuber(bag) + cost of peeling +cost grating+ transportation + firewood + palm oil), TFC = total fixed cost (frying pan +basin +bags + tarpaulin + knives).

BCR > 1 - The business is viable; BCR = 1 - Break-even point; BCR < 1 - The business is not viable.

Shepherd marketing efficiency index

The marketing efficiency (ME) of garri was computed using the Shepherd's Marketing Efficiency Index model as:

ME = TR-TC/ TC x 100

Where: ME = marketing efficiency, TR is total revenue from the sale of garri (quantity sold multiplied by price per unit in naira), TC (total cost) = TVC (total variable cost) + TFC (total fixed cost

TVC = Garri bought + loading and offloading + transportation.

TFC = Storage +rent/stall fees

TMC= TVC + TFC

ME = 100 market is perfectly efficient because the price increment is just enough to cover the cost of the commodity.

Whereas ME > 100 indicates excess profit, while ME < 100 is an indication of inefficiency.

RESULT AND DISCUSSION

The socio-economic characteristics of garri processors and marketers in the study area are presented in Tables 2

Table 2. Quantitative socioeconomic characteristics of garri processors and marketers.

Variable	Frequency	Percentage (%)	Min	max	Mean
Age (years)					
18–25	40	7.29			
26–35	144	26.23			
36–45	191	34.79	18	65	40.7
46–55	116	21.13			
56–65	58	10.56			
Household size					
1–3	171	31.15			
4–6	223	40.62			
7–9	123	22.40	1	12	5.1
6–10	212	38.62			
10–12	32	5.83			
Years of experience					
< 1	11	2.00			
1–5	144	26.23	0.6	15	8.2
6–10	212	38.61			
11–15	182	33.15			
Total	**549**	**100.00**			

Source: Field Survey, 2026.

and 3. These are quantitative (age, household size, years of experience) and qualitative (gender, marital status, educational level, occupation type, cooperative membership, and access to credit) socioeconomic characteristics.

The age distribution of respondents is presented in Table 2. The result shows that the majority of respondents (34.79%) were in the age bracket of 36–45 years, followed by those aged 26–35 years (26.23%), 46–55 years (21.13%), 56 years and above (10.57%), and 18–25 years (7.29%). The mean age of respondents was approximately 40.7 years, indicating that garri processing and marketing in the study area is predominantly carried out by persons in their productive and economically active years. This finding is consistent with the works of Adesope *et al*. (2020), who reported that the majority of respondents in cassava-garri-related enterprises were within the economically active age bracket. The predominance of this age group suggests that the enterprise is not an exclusively elderly occupation; therefore, the respondents are more likely to adopt modern garri processing technologies, which bodes well for its growth and continuity. The result revealed that the majority of the respondents (40.62%) had household sizes of 4–6 persons, followed by 31.15% with 1–3 persons, 22.41% with 7–9 persons, and 5.83% with 10 persons and above. The mean household size was 5.7 persons. A moderate household size is advantageous in this type of enterprise as it implies the availability of family labour for processing and marketing activities, thereby reducing the cost of hired labor. This finding corroborates that of Anagah *et al*. (2020), who found that most garri processors in Ebonyi State had household sizes that enabled them to use family labour effectively. The result further shows that the majority (38.43%) of respondents had 6–10 years of experience in garri processing and marketing, followed by those with more than 10 years of experience (32.97%), 1–5 years (26.05%), and less than 1 year (2.00%). The mean years of experience were 8.2 years. The high level of experience among respondents implies accumulated knowledge of the production process, market dynamics, and consumer preferences, which may positively impact profitability and marketing efficiency. This is consistent with the finding of Isitor *et al*. (2019), who noted that experience positively and significantly influenced the marketing efficiency of garri traders in Kwara State.

The gender distribution of respondents as presented in Table 3 indicates that females constituted the majority (58.83%) of garri processors and marketers in the study area, while males accounted for 41.17%. The dominance of females in this enterprise aligns with the traditional role of women in food processing and marketing in sub-Saharan Africa. This finding is consistent with that of Ibitunde *et al*. (2021), who found that women were predominantly involved in cassava processing activities in Ogun State. It underscores the need for gender-responsive policies that promote access to finance and technology for women engaged in garri processing. Table 3 also showed that the majority (52.28%) of respondents were married, followed by singles (29.69%), widowed (9.11%) , and divorced (8.93%). The high proportion of

Table 3. Qualitative socioeconomic characteristics of garri processors and marketers.

Variable	Frequency	Percentage (%)
Gender		
Male	226	41.17
Female	323	58.83
Marital Status		
Single	163	29.69
Married	287	52.28
Divorced	49	8.93
Widowed	50	9.11
Educational Level		
No formal education	91	16.58
Primary	87	15.85
Secondary	267	48.63
Tertiary	97	17.67
Occupation		
Full-time garri processor	208	37.89
Part-time garri processor	93	16.94
Marketer	246	44.81
Others	2	0.36
Cooperative Membership		
Yes	210	38.25
No	332	60.47
Access to Credit		
Yes	41	7.47
No	447	81.42
Total	**549**	**100.00**

Source: Field Survey, 2026.

married respondents suggest that most processors and marketers have access to spousal support in terms of labour and financial assistance, which may positively influence the scale and continuity of the enterprise. This finding is in agreement with Samuel *et al*. (2020), who observed that marital status was a significant determinant of participation in garri processing enterprises. The educational distribution reveals that the majority (48.63%) of respondents had secondary education, 17.67% had tertiary education, 16.58% had no formal education, and 15.85% had primary education. The dominance of secondary-educated respondents suggests moderate human capital endowment in the sector. Formal education has been shown to enhance the adoption of improved processing methods and management practices. Adesope *et al*. (2020) similarly observed that most garri producers in Oyo State had formal education, which contributed to higher production efficiency.

The occupational distribution in Table 3 indicates that marketers constituted the largest group (44.81%) of respondents, followed by full-time garri processors (37.89%), part-time processors (16.94%), and others (0.36%). The significant proportion engaged in full-time processing indicates that garri processing is a major livelihood activity for a substantial number of respondents in the

The cost and returns analysis for garri processors is presented in Table 4. The result reveals the various cost items incurred per processing cycle. The cost of cassava was the single largest variable cost component, accounting for an estimated 73.91% of total variable costs at an average of ₦34,824.85 per processing cycle. This was followed by palm oil (13.65%), cost of firewood (5.31%), grating and dewatering (1.91%), transportation of cassava (1.96%), peeling and washing (0.44%), frying and sieving (0.52%), transportation of garri to market (1.15%), and cleaning (1.15%). The total variable cost (TVC) per cycle averaged ₦47,115.71, while tota l fixed costs (TFC)

Table 4. Cost and returns analysis for garri processors (per processing cycle).

Cost/Return Item	Average (₦/cycle)	% of TVC
A. Variable Costs		
Cost of cassava per bag(kg)	34,824.00	73.91
Cost of palm oil	6,433.33	13.65
Firewood	2,500.00	5.31
Transport of cassava to processing Centre	925.50	1.96
Peeling and washing	205.63	0.44
Grating and dewatering	901.82	1.91
Frying and sieving	246.29	0.52
Transport of garri to market	539.57	1.15
Cleaning cost	539.57	1.15
Total Variable Cost (TVC)	47,115.71	**100.00**
B. Fixed Costs		
Frying pan, basins, bags, knives, sifter, turning sticks/spoon, tarpaulin (depreciation)	2,392.86	—
Total Fixed Cost (TFC)	2,392.86	—
Total Cost (TC = TVC + TFC)	49,508.57	—
C. Revenue		
Average quantity produced (basins/cycle)	10.5	—
Average selling price per basin (₦)	9,122.90	—
Total Revenue (TR)	95,790.45	—
D. Profitability Measures		
Gross Margin (GM = TR – TVC)	48,674.74	—
Net Return (NR = GM – TFC)	46,281.88	—
Rate of Return on Investment (RRI = NR/TC × 100)	93.50%	—
Benefit–Cost Ratio (BCR = TR/TC)	1.93	—

Source: Field Survey, 2026.

amounted to ₦2,392.86 per cycle, bringing the total cost (TC) to approximately ₦49,508.57 per processing cycle.

The average total revenue (TR) realised per processing cycle was ₦95,790.46, derived from an average output of 10.5 basins sold at an average price of ₦9,281.88 per basin. The gross margin (GM) was computed as ₦48,674.74, while the net return (NR) was ₦46,922.86 per cycle. The Rate of Return on Investment (RRI) stood at 93.50%, indicating that for every ₦100 invested in garri processing, a profit of ₦93.50 was realised. The benefit–cost ratio (BCR) was 1.93, implying that for every naira invested, a return of ₦1.93 was realised. Since BCR > 1, garri processing is economically viable and profitable in the study area. This result corroborates the findings of Ani *et al*. (2019), who established the profitability of cassava processing in Otukpo, Benue State, and Abasilim *et al*. (2018), who confirmed a BCR of 1.53 for garri processors in Lagos State.

Table 5 presents the cost and returns analysis for garri marketers (wholesalers and retailers) in the study area. The dominant variable cost was the purchase cost of garri (81.44% of TVC), averaging ₦19,379.50 per bag, followed by transportation costs (13.18% at ₦3,135.78) and loading/offloading wages (3.41% at ₦812.56). Total variable cost averaged ₦23,796.07 per cycle, with fixed costs (stall rent) of ₦137.69, giving a total cost of ₦23,933.76 per cycle.

Retail marketers realised an average revenue of ₦167,248.77 while wholesalers realised ₦461,856.86. The average marketing margin per bag was ₦8,957.57. Net return was ₦429,456.48 per cycle, with a rate of return on investment of 1794% and a benefit–cost ratio of 18.94. This indicates that garri marketing is highly profitable; for every ₦1 invested in the marketing process, a return of ₦18.94 is realised. These findings are corroborated by RRI of 1,794%, which underscores the massive profitability of garri marketing in the study area. Such high returns are characteristic of the staple food market in Nigeria, where demand is inelastic. The result is comparable to that of Aturamu *et al*. (2021), who reported a return on investment of 2.37 for garri producers in Ondo State; Agboola *et al*. (2021), who confirmed the profitability of the garri

Table 5. Cost and returns analysis for garri marketers (per marketing cycle).

Cost/Return Item	Average (₦/cycle)	% of TVC
A. Variable Costs		
Purchase cost of garri per bag	19,379.50	81.44
Transportation cost	3,135.78	13.18
Loading and offloading wages	812.56	3.41
Market levies/taxes	155.73	0.65
Market fees (space/permits)	112.50	0.47
Bags (containers)	200.00	0.84
Total Variable Cost (TVC)	23,796.07	100.00
B. Fixed Costs		
Rent/stall fee	137.69	—
Total Fixed Cost (TFC)	137.69	—
Total Cost (TC = TVC + TFC)	23,933.76	—
C. Revenue and Profitability		
Average quantity of bags sold (bags)	16	—
Average selling price per bag (₦)	28,336.89	—
Average selling price per basin (₦)	14,532.35	—
Retail Revenue (₦)	167,248.77	—
Total Revenue (TR = Qty × Price) (₦)	453,390.24	—
Marketing Margin per bag (MM = Sp – Pp)	8,957.39	—
Gross Margin (GM = TR – TVC)	429,594.17	—
Net Return (NR = GM – TFC)	429,456.48	—
Rate of Return on Investment (RRI)	1794 %	—
Benefit–Cost Ratio (BCR = TR/TC)	18.94	—
Marketing Efficiency (ME)	17.94	

Source: Field Survey, 2026.

Table 6. Marketing efficiency and marketing margin of garri marketers.

Marketer Category	MM	TR (₦)	TC (₦)	ME
Retailers	4,502.35	167,248.77	12,171.93	12.74
Wholesalers	8,957.39	461,856.86	23,933.76	18.30
Overall Average		314,552.82	18,052.85	16.42

Source: Field Survey, 2026. ME = (TR – TC)/TC × 100.

enterprise in Ogun State; and Oladeji *et al* (2023), who found that cassava derivative marketing offers one of the highest RRI in the Nigerian Agro-sector due to low barriers to entry and high turnover rates.

The marketing efficiency (ME) and marketing margin results are presented in Table 6. The overall marketing efficiency index was 17.94, with retailers recording 12.74 and wholesalers recording 18.30. In economic terms, a marketing efficiency index greater than 1.0 indicates an efficient market, where the value of services provided by the marketer exceeds the cost of providing those services, implying an exceptionally efficient marketing system. The higher efficiency recorded by wholesalers (18.30) compared to retailers (12.74) is a reflection of economies of scale and the selling in smaller, fragmented quantities, recurrent and repetitive daily costs incurred by retailers. The marketing margin per basin and per bag averaged ₦4,502.35 and ₦8,957.39, respectively. These results confirm that the garri marketing system in the study area is efficient, enabling traders to earn reasonable margins while providing value-adding marketing services to consumers. This corroborates the findings of Isitor *et al*. (2019), who established efficient garri marketing in Kwara State, and Aye *et al* (2020), who observed that wholesale marketing efficiency in Benue State consistently outperforms retail efficiency due to reduced unit marketing

costs and streamlined sourcing from rural processing clusters.

Conclusion

This study provides an empirical evaluation of the garri value chain within Benue State, establishing that both the processing and marketing nodes are exceptionally lucrative and operationally efficient agribusiness ventures. The demographic profile reveals an experienced, literate and heavily female-dominated (58.83%) workforce, with a plurality of actors in their prime productive ages of 36-45 years (34.89%). The financial performance indicators strongly validate the economic viability of the enterprise. Smallholder processing operations yield a robust GM of ₦48,674.74, an NR of ₦46,281.88, a BCR of 1.93, and an RRI of 93.50% per processing cycle. These metrics prove that for every naira invested in processing cassava roots, a net yield of approximately 94 kobo is generated. Simultaneously, the marketing node functions at an extraordinary level of economic performance. Marketers record an MM of ₦8,675.85 per bag, an NR of ₦429,456.48, an operational BCR of 18.94 and an RRI of1,794%. This high profitability is structurally driven by the fact that 82.52% of marketers bypass multi-tiered intermediary layers to source inventory directly from primary factory-gate processors, effectively eliminating transaction frictions and double-marginalisation fees. Furthermore, the aggregate ME index of 17.94 confirms that the distribution system is highly optimised. However, a stark structural disparity exists within the marketing nodes: wholesalers achieve a significantly higher efficiency index (18.39) than retailers (12.74), reflecting the massive economies of scale enjoyed by bulk handlers. Despite these positive economic outcomes, the entire value chain operates far below its allocative potential. It remains severely constrained by institutional deficits, most notably a critical lack of formal credit penetration (7.4%) and low cooperative integration (38.35%). These financial gaps force actors to rely on low-capacity, artisanal technologies and manually intensive distribution methods.

Recommendations

Based on the empirical cost-benefit parameters and structural disparities identified in this study, the following policy recommendations are made:

1. The Benue State Ministry of Agriculture should introduce and subsidise modernised processing machinery, given the high RRI of 93.50%.
2. The CBN, Bank of Agriculture, and development finance institutions should design flexible, low-interest credit lines tailored to garri value chain actors to address the severe credit deficits.
3. Agricultural extension agents should launch coordinated mobilisation campaigns to organise processors and retailers into commodity-specific cooperative societies.
4. Local and State governments should prioritise the rehabilitation of rural feeder roads linking processing clusters to central urban hubs to safeguard and improve the high ME of 17.94.
5. Local trade unions and NGOs should provide retailers with training in modern inventory management, record-keeping, and group marketing to bridge the efficiency gap between wholesalers with an ME of 18.30 and retailers with an ME of 12.74.

CONFLICT OF INTEREST

The authors declare that they have no conflict of interest.

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