

MARKETING ANALYSIS OF GARRI PROCESSING IN YEWA NORTH LOCAL GOVERNMENT AREA, OGUN STATE

Ezekiel Olaoluwa Akerele

Abstract

This study was conducted to examine the marketing analysis of garri processing in Yewa North Local Government Area, Ogun State. A purposive sampling technique was used to select the sample size of 105 respondents using structure questionnaires to elicit the require information from the respondents. Data analysis was carried out using descriptive statistics like frequencies and percentages to describe the socio-economic characteristics of the respondents and problem encountered by garri processors, while budgetary analysis was used to estimate the cost and returns of garri processing and to identify factors that influence garri processing respectively. The result revealed that the business is common among women and 42 percent of the respondents have formal education. The budgetary analysis result revealed that garri processing was found to be highly profitable at an average net profit of ₦145,378.92 and gross margin ₦154,474.15 per annum. The major problem encountered by the processors is inadequate capital; therefore, efforts should be made by cooperatives and other lending agencies to provide loan for the local processors in order enhance their processing performance.

Introduction

Garri is the most popular form in which cassava (*Manihot esculenta*) is consumed by several million of people in Africa continent, especially in the West Africa sub-region (Ofuya and Akpoti; 1988; Ogiehor, 2002), and it is a staple food in Nigeria, Ghana, Benin and Togo. Its either eaten in the household as a refreshing light meal when soaked in cold water and eaten with coconut, banana, smoked fish or peanut or as a major meal when made into thick paste called “Eba” and eaten with various types of African soups which make it the most popular diet amongst the rich and the poor, with acceptability cutting across the various socio-economic and multi-ethnic groups in Africa (Ogiehor, 2002, Ogiehor and Ikenebomeh, 2004).

Garri processing methods vary from one locality to another, resulting in products of non-uniform quality. Post process handling practices such as spreading on the floor, display in open bowls in the market and sales point and use of various packaging materials to haul finished products from rural to urban areas may cause worse contamination.

Garri processed from cassava is one of major staple food crops in the tropical world and is the most important single staple food in Southern Nigeria. Garri processed from cassava could be consumed in different way and forms, the simple process to be using to make garri can be adapted to other commodities as

women play a critical role in producing garri, they also plays some other roles in marketing, processing of foods etc. The processing of garri from cassava provides job opportunities for mostly women who sell the finished product as garri in rural and urban markets.

Garri is the most popular and form in which cassava is consumed in Nigeria. Traditionally, garri is prepared from cassava roots by fermenting peeled and mashed cassava pulp in jute bags for a period of about 3 days. This is followed by light roasting in shallow metal vats placed on open fire, after sieving to remove coarse particles.

Nowadays, the production of garri involves the traditional semi mechanized and the integrated accelerated methods of processing. However, the traditional method has gained wide acceptance and is indeed the most popular amongst households. The yellow garri is prepared by mixing the mashed cassava pulp with palm oil may be added during roasting. Otherwise, cassava mash roasted without the addition of palm oil constitutes the white garri flour.

Several authors have reported the toxicity of cassava products with respect to HCN content (Mantgomery, 1969, Coursey, 1973, Maduagwu and Adewale, 1981 and Almazan, 1986, Omoike and Adediran, (1991) observed that the number of processing steps involved in the production of cassava foods influenced the level of residual cyanide in the products. The mashing of cassava roots and subsequent dewatering encourage the leading out of cyanogen.

Admittedly, the integrated accelerated method of processing results in the detoxification of cassava (Ngoddy, 1989). However, all the known methods of production of garri flour do not completely remove the cyanide. It is therefore necessary to estimate levels of residual cyanide in garri so as to know what quantities consumers ingest.

The marketing and distribution has been affected by official neglect of the staple food market because policy makers have not considered it a serious bottleneck to the economic development of the nation. Emphasis had been on the export crop sector and export of agricultural by-products. Invariably, the availability of marketing facilities for garri such as storage, communication of official prices and other market information on garri are affected. The consequence of this neglect or the marketing of garri and the food sub-sector has led to rising costs. Middlemen are often responsible for the high prices of garri in Ogun-State.

Therefore, the major objective of the study is to conduct a marketing analysis of garri processing while, the specific objectives are to assess the cost and return structure of garri processing and to examine the constraints encountered in garri processing in the study area.

Materials and Methods

Area of Study and Methods of Data Collection

The study was conducted in Yewa North Local Government Area of Ogun State. Both primary and secondary data were employed for this study. Primary data were collected through the use of structured questionnaires and interview, while secondary data were gathered from extensive literature review of past studies relevant to this research work such as Journals, Bulletins and Statistical reports.

Sampling Procedure

Purposive sampling technique was used in this study to select the sample size. Five villages were purposively selected and 21 respondents from each of the selected villages were administered questionnaires upon, making a total of 105 respondents, information collected bothering on socio-economic characteristics, labour requirement, capital requirement, cost production, standard unit of measurement of output as well as consumption level of garri.

Methods of Data Analysis

Descriptive statistics and budgetary analysis were used to analyze data collected. This involved the use of frequency and percentages tables to explain some qualitative data and also to interpret results obtained from other methods of analysis employed.

Budgetary Analysis Model

A budget is an estimate of the financial outcome or profitability of a plan. The basic data needed for preparing a budget are termed “input-output” data by farm economists. This refers to physical quantities of each resource that shows the relationship between input and output.

Gross Margin

The gross margin (GM) for an enterprise was taken as the different between the total value of production (total revenues) and the total variable cost of production. This was used to determine the cost and structure of garri processing in the business. On the other hand, Profit (π) was obtained by deducting the total cost from the total revenue.

$$G.M = TR - TVC$$

Or more explicitly,

$$G.M = \sum P_i Q_i - \sum P_j X_{ij}$$

Where Q_i = Quantity of output i

P_i = Price of output i (Naira)

P_j = Price of variable input (Naira)

X_{ij} = Quantity of input j used in the production of output i.

π = TR – TC

Where: π = Profit

TR = Total revenue

TC = Total cost

Cost refers to the value of the inputs used in production. Cost can be classified as Fixed and Variable Cost.

Variable Costs: It includes costs of raw materials, services labour, energy, transportation etc.

Fixed Costs: It refers to overhead costs i.e. cost that exist irrespective of the level of production. It exists only in the short run, physically assets do not vary with quantity of output produced. Fixed cost is the cost of physical assets like buildings, vehicles, machineries and equipment.

Results and Discussion

Table 1: Socio-Economic Characteristics of the Respondents

Variables	Frequency	Percentage
Age (years)		
31 – 40	21	20.0
41 – 50	39	37.1
51 – 60	39	37.1
60 above	6	5.7
Sex		
Female	105	100.0
Household Size		
Below 5	12	11.4
6 – 10	88	83.8
11 – 15	5	4.8
Business Experience (years)		
2	2	1.9
6 – 10	12	11.4
11 – 15	24	22.9
16 – 20	67	63.8
Above 20		
Marital Status		
Single	4	3.8
Married	86	81.9
Divorced	10	9.5
Widowed	4	3.8
Separated	1	1.0

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Educational Level		
No Schooling	63	60.0
Primary Education	37	35.2
Secondary Education	4	3.8
Post-Secondary Education	1	1.0
Religion		
Christian	60	57.1
Muslim	45	42.9
Membership of Association		
Yes	24	22.9
No	81	77.1
Sources of Fund		
Personal Savings	73	69.5
Friends & Family	30	28.6
Cooperative Loans	1	1.0
Grant from Association	1	1.0
Sources of Labour		
Family Labour	42	40.0
Friend labour	16	15.2
Hired labour	38	36.2
Family &Hired labour	9	8.6
Time of Production		
1 – 2 days	54	51.4
3 – 4	37	35.2
6 days	11	10.2
Everyday	3	2.9
Selling Points		
Farm Gate	2	1.9
Market	78	74.3
Village	25	23.8
TOTAL	105	100

Source: Field Survey, 2009

The results on Table 1 showed that 74.2 percent of the processors were mostly between the range of 41–60 years category indicating that the processors are mostly adult and well-experienced, because adult processors are capable of tedious tasks involved in garri processing, which young people may not effectively handled. All of the garri processors were females, implies that garri processing is a female dominated activity. It is an activity that is suited to women because of the traditional method of operation. 83.8 percent of the respondents have been 6 – 10 members in their household. This implies that family labour

would be available to assist in marketing of garri processing thereby reducing the cost of hired labour.

To judge the skill of the garri processors, it was found that 63.8 percent of the respondents have above 20 years experience, which implies that most of the processors had been in the business of garri processing for very long time and have acquired appreciable skill and experience which enhanced their productivity level. It was revealed that 81.9 percent of the processors are married. The high percentage of married processors suggests the need to invest so as to generate income for sustenance of children and dependants. Also, 60 percent of the respondents have no formal education, while 40 percent have formal education; it indicates that the business is dominated by illiterate people. This affects their understanding of information, which invariably would affect the rate of adoption and innovation and new techniques in processing. There is need of adult education in the study areas for improvement in practices

Most of the processors 57.1 percent were Christians while others are Muslims. The respondents are affiliated with one religion or the other, which implies that there is no religious discrimination in their involvement in garri processing activities. Only 22.9 percent of the processors belong to social association indicating that there is low level of social participation, and hence low entrepreneur capital among processors due to unparticipatory group dynamic effects. The capital source of fund shows that 69.5 percent of the processors raised their initial capital from personal savings, 28.6 percent from friends and family, even though funds owned was the major source, the capital may be use in sufficient for any meaningful production. Family labour actively involved in garri processing because the business is going through the traditional method which trends to reduce the labour or work force of the business. It also serves as an advantage for all the processors in reducing the cost of processing. It was also found that majority (51.4 percent) of the respondents normally produce 1 – 2 days; this indicates that most of the processors can only produce within two or more days because of the scarcity of cassava tubers.

Moreover, 74.3 percent respondents have their major selling point of the products in the markets, while fewer processors have their selling points on the farm gate indicating that customers patronize them more in the market than farm gate though the prices may be higher.

Results of Budgetary Analysis

The total variable cost of garri processing in the study area account for 74.07 percent of the total production cost and the results are presented in Table 2. The higher percentage of the variable cost usually allows for flexibility. The processors will be able to adjust processing easily since garri processing takes place in dynamic environment, this will lead to increase output and output and consequently increase in profit.

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Fixed Cost incurred were observed rather low to the total cost because most of the processors had purchased the fixed assets at very low prices, compared to their present values as a result of inflation. Fixed Cost was obtained by depreciation of fixed assets like land, machinery and equipment using the Straight Line Method of calculating depreciation.

Revenue is obtained by multiplying the quantity produced (Q_i) by the unit price of the output (P_i). For the garri processing, total revenue from garri which sell for an average price of ₦100 per Congo and ₦1,400 per bag respectively. The average quantities of garri produced were 10,393 bags and 43,970 Congos respectively. From the Table 2, the total revenue outweighed the total cost, and this shows a positive net return of about ₦15.2 million. It can be concluded therefore, that garri processing and marketing is highly profitable in the study area.

Table 2: Estimates of the Budgetary Analysis for Garri Processing of the respondents (N = 105)

Cost Items	Unit of Operation	All respondents
<u>Fixed Cost</u>	₦	₦
Depreciation (Land, Machinery & Equipment)	9,095.23	955,000
Total Fixed Cost (TFC)	9,095.23	955,000
<u>Variable Cost</u>	₦	₦
Cassava	19,199.04	2,015,900
Energy	124.45	13,068
Lease/Purchase Cost	829.21	87,067.39
Wages	767.04	80,540
Others (transportation, maintenance & repairs cost)	5,056.08	530,889
Total Variable Cost (TVC)	25,975.85	2,727,465
Total Cost (TC)	35,071.09	3,682,465
Total Revenue (PQ)	180,450	18,947,250
Total Variable Cost	25,975.85	27,227,465
Gross Margin (GM = TR - TVC)	154,474.15	16,219,785
Net Profit (NI = GM - TFC)	145,378.92	15,264,785

Source: Computed from Survey Data, 2009.

Constraints Encountered by the Garri Processors

Garri Processing and Marketing problems in Table 3 showed that 18 percent of the problem encountered by garri processors is inadequate capital. As regard transportation, most of their roads are bad so they find it difficult to get

vehicles from farm to the processing area. Weather and seasonal variation is another major problem that affects them mostly in the raining season, as their roads would be marshy and slippery, which prevent them from going into interior farms to convey the harvested cassava out of the farms.

Table 3: Problems Encountered by the Garri Processors

Problems Encountered	Frequency	Percentage	Cumulative Percentage
Weather	1	1.0	1.0
Seasonal variation	4	3.8	4.8
Transportation and Weather	8	7.6	12.4
Transportation & Cash	6	5.7	18.1
Transportation & Seasonal variation	13	12.4	30.5
Weather and Cash	8	7.6	38.1
Inadequate Capital	19	18.1	56.2
Cash and Seasonal variation	5	4.8	61.0
Transportation, Weather and Cash	7	6.7	67.6
Transportation, Weather & Seasonal variation	10	9.5	77.1
Transportation, Cash and Seasonal variation	2	1.9	79.0
Cash, Seasonal- variation and Weather	11	10.5	89.5
Transportation, Weather, Seasonal Var. and Cash	11	10.5	1
			0
			0
			0
			.
			0
Total	105	100.0	

Source: Field Survey, 2009

Conclusion

Garri produced from cassava is one of the major staple food crops in the tropical world and the most important single staple in Southern Nigeria. The processing of garri from cassava provides job opportunities for mostly women in rural and urban community. It is commonly observed that agricultural processing industries particularly garri processing have not been performing up to standard. This is why marketing analysis of garri processing was considered. The total cost of operation is ₦3,682,465, the cost of cassava accounted for ₦2,015,900 of this total cost while total revenue is ₦18,947,250 and the calculated net profit is ₦15,264,785. This implies that garri marketers make high profit in the study area. The gross margin was found to be positive with a gross margin of ₦16,219,785 and profit of ₦15,264,785. In the course of this research, quite a number of problems militating against effective performance of the processors were identified. These problems include: Weather, Transportation, Cash and Seasonal variation.

This study has been able to show that garri marketing in the study area is a profitable one and that if resources are efficiently utilized could bring about the much need boost in garri processing which will eventually accelerate the economic development of the study area.

Recommendations

On the basis of this study and in other to create an efficient market for the proceed garri in the study area. The following recommendations are made to government and other agencies concerned.

- (i) Special emphasis should be laid on provision of modern equipment to facilitate this business in this area of study.
- (ii) Marketers should be encouraged to have cooperative association that will cater for their needs.
- (iii) There is high cost of transportation and inadequate capital affecting the business and this invariably affects the unit cost of garri produced; this will be a lucrative and profitable business for investors if the government sees to these problems and if there is a mechanism for price control.
- (iv) Finally the authority of each government should provide some basic infrastructures needed to enhance efficient marketing like borehole, good roads. e.t.c.

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