

ANALYSIS OF THE PROFITABILITY AND CREDIT ACCESSIBILITY AMONG GARRI PROCESSORS IN EPE, LAGOS STATE, NIGERIA.

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ABSTRACT

This study examined profitability and credit accessibility among garri processors in Epe, Lagos State, Nigeria. It examined the profitability of garri processing enterprise and determined factors militating against credit access by garri processors in Epe. Multi-stage sampling technique was used to select the study area, first stage was the purposive selection of Epe, second stage was the random selection of two communities from each of the three zones in Epe LGA while the third stage involved random selection of 20 garri processors from each community, totalling 120 processors. Ten (10) improperly filled questionnaires reduced the total to 110 Respondents sampled. The data collected were analysed using descriptive statistics, profitability analysis and Logit model. The study revealed that more females (89.1%) than male (10.9%) were garri processors, as many as 68.2% married and 4.5% unmarried Respondents, and average household size of 6. The mean year of experience in garri processing is 16. The average weekly total cost incurred by the Respondents was ₦33,531.39 while total revenue was ₦51,211.82. The Rate of Return on Investment (RRI) of 53% showed an earning of 53% profit on every naira invested. About 68.2% of Respondents did not belong to cooperative society. There was a low probability of credit acquisition to increase the production level of garri in the study area. The problems militating against credit accessibility in the study area include high interest rate, low income, no savings, non-membership in cooperative groups, and lack of information on credit availability. It is recommended that government should subsidize the cost of inputs for garri processors. The local government through Extension agents should embark on enlightenment programmes to educate the processors on modalities for credit accessibility and modern processing methods. There is also need for financial institutions to look into the conditions for obtaining credit by processors.

KEY WORDS: Garri, Garri processors, Credit access, Profitability

INTRODUCTION

Nigeria cassava production is by far the largest in the world and over 70% of this product is consumed locally (Philip, Sanni & Akoroda, 2004). Adebayo, Lamboll and Westby (2009) noted that the high resilience and adaptability of cassava to a wide range of ecological conditions has sustained its production through many generations in sub-Saharan Africa since it was introduced into this region in 16th century. It is

consumed in different traditional dishes varying from country to country and across communities in a country (Adebayo, 2006). In Nigeria, amongst the popular traditional processed cassava products are garri, fufu, starch, cassava flour, tapioca, animal feed and industrial starch. Garri stands out to be the most popularly produced in the country for household consumption. (Adebayo, 2006)

Garri, a processed cassava, occupies a very significant place in the diet of West Africans

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particularly the urban dwellers. It adds value to cassava and aids storage of the crop. Its ease of preparation for household consumption has combined to make it extremely popular among the urban masses (Oyewole & Philip, 2006). It is one of the food items that defy socio-economic class, religious and ethnic boundaries (Nweke & Ejeta, 1999). Cassava roots are peeled, grated, fermented and drained of cyanide and organic acids then toasted in a pan over an open fire to process garri. Nearly all the garri is produced by women, and a lot of rural women spend a great deal of their time producing it using the traditional manual methods (Oyewole & Philip, 2006). The value added and the marketing margin shared by the processors are the major inducements in garri processing.

Credit, as defined by Williams, Ajaro and Ogunniyi (2007), is the trust which allows one party to provide resources to another party where the second party does not reimburse the first party immediately, thereby generating a debt, but instead arranges either to repay or return those resources (or other materials of equal value) at a later date, is one of the mechanisms government uses in promoting cassava production by smallholder farmers in Nigeria through the Agricultural Credit Support and Inputs Subsidy Programme (ACSISP) (Ochu & Achagh-Hyande, 2005). The Agricultural Credit Guarantee Scheme Fund (ACGSF), a policy instrument of the Federal Government of Nigeria on Agricultural Credit was established by Decree Number 20 of 1977 though it started effectively in 1978. The major aim of the Scheme was to provide guarantee on loans granted by banks to farmers for agricultural production and agro-allied processing (Onuselogu, 2014). The inability of the smallholder cassava farmers to obtain credit at subsidized rate has been a serious problem militating against viable approaches to promote worthwhile agricultural-oriented programmes that will enhance cassava production and processing in Nigeria. Credit is a catalyst which drives the machinery of production to optimum performance (Ijere, 1986). The World Bank (1996) opined that credit is necessary for small-scale farmers to increase their agricultural productivity and farm income; however, their access to institutional credit is curtailed. Institutional supply of agricultural credit however remains inadequate; and this continues to impede the transfer of technology and investment into agriculture (Olagunju & Ajiboye, 2010). Osuntogun (1980) holds the view that unless production credit is made available on suitable terms, the majority of the small farmers will be seriously handicapped in adopting profitable technology. Rural credit is a temporary substitute for personal savings, which catalyses the process of agricultural production and productivity. To

boost agricultural production and productivity garri processors have to use improved agricultural technologies.

Access to agricultural credit from formal sources is dependent on meeting some laid down conditions for the protection of the lenders and borrowers (Arene, 1990). The success of credit application depends on the ability to process the credit application forms to the stage of approval and disbursement, evidence of the project, land and ability of the farmer to get acceptable guarantors required by the credit operators. Agricultural productivity and growth are hindered by limited access to credit facilities (Odoemenem & Obinne, 2010). Only few farmers have access to rural credit. However, the adoption of these technologies is relatively expensive and small-scale producers cannot afford to self-finance it. As a result, the use of agricultural technologies is very low. Therefore, enhanced provision of rural credit that would accelerate agricultural production and productivity (Briquette, 1999).

It is interesting to note that credit has been advocated as a poverty alleviation measure (Boomgard, 1989). Limited availability of credit services has undermined rural income activities due to lack of capital for investment and has prevented farmers to adopt improved farming practices. Credit is a necessary input in the various aspects of production operations. In Nigeria, as in most developing countries, lack of credit facilities has been regarded as the major constraint garri processors' face when they try to improve their economic activities and/or living conditions (Agbor, 2004; Binswanger, Khandker & Rosenzweig, 1993). However, even when available, credit is difficult to access by garri processors in the rural area despite the fact that it is an essential input in production. (Federal Ministry of Agriculture and Rural Development, FMARD, 2010). Financial lending institutions in Nigeria often shy away from giving credits to garri processor because of the high cost of administering such loans and the perceived high default rates among processors (Nweke & Onyia, 2001; Ojonugwa & Ikani, 2013). The evidence has also shown that commercial and rural development banks in Nigeria will not normally lend to small scale producers because these producers have little security (asset) to guarantee the loans, have low experience credit management and are unable to prepare feasibility studies or meet the high interest rate (Due & Kurwijila, 1991). Furthermore, small scale producers usually find it difficult to obtain loans from formal lenders due to different reasons including lack of credit experience, credit accessibility and little security to guarantee the loans because of the inability of processors to secure collateral (Somji, 2007).

In Nigeria, like in other parts of Africa, lack of credit severely constrains sustainable agricultural development. Without credit, the millions of cash-starved small-scale producers who dominate the rural landscape are unable to adopt most production-enhancing technologies. Low-return, diversified, subsistence-oriented production practices therefore continue to underpin most rural livelihood strategies (Rweyemamu, Kimaro & Urassa, 2005). However, Tripathi and Chandra (1994) reported that credit had a favourable impact on crop returns, and thus provision of short-term credit is an effective way of increasing farm returns. Different policies and strategies for agricultural sector development have been formulated, so that the agricultural sector contributes fully to the poverty reduction and improvement of the rural livelihoods.

Improving the availability of credit facilities to this sector is one of the incentives that have been proposed for stimulating its growth and the realization of its potential contribution to the economy. Despite this emphasis, the effects of existing institutional problems, especially the lending terms and conditions on access to credit facilities, have not been addressed. In addition, there is no empirical study indicating the potential role of improved lending policies by both formal and informal credit institutions in alleviating problems of access to credit. Knowledge in this area, especially a quantitative analysis of the effects of lending policies on the choice of credit sources by entrepreneurs, is lacking for the rural financial markets of Nigeria. Although informal credit institutions have proved relatively successful in meeting the credit needs of small enterprises in some countries, their limited resources restrict the extent to which they can effectively and sustainably satisfy the credit needs of these entrepreneurs. This is because as micro enterprises expand in size, the characteristics of loans they require become increasingly difficult for informal credit sources to satisfy, yet they still remain too small for the formal lenders.

The general objective of this study is to examine the credit accessibility of garri processors in Epe, Lagos State.

The specific objectives are to:

1. investigate the socioeconomic characteristics of garri processors in Epe,
2. describe the source of credit required for the enterprise.
3. analyse the profitability of garri processing enterprise in the study area.
4. determine the factors that influence the access of garri processors to credit.
5. make necessary policy recommendations.

This information is vital for policy makers in taking

appropriate actions toward facilitating the establishment of comprehensive and sustainable financial institutions for the development of agriculture and rural sectors and also in formulating rural credit policy. Every business where capital is an important part of its operation always require credit such as agriculture sector also need agricultural loans in order to increase the productivity of the sector as well as to bring significant improvement in the welfare and standard of the farming community of the country. These agricultural loans also will help in the development of farmer's individual life standard, which alternatively brings improvements and technological advancement in the production side of the sector. By providing low-income garri producers with sufficient credit, efficient investment decisions can be taken, thus increasing production capacity and profitability (Chloupkova & Bjonskov, 2001).

EMPIRICAL REVIEW

As increased agricultural production is envisaged, there is need to have proportionate improvement in the agro-processing industry (Mhazo *et al.*, 2018). The overall potentials of agro-processing are:

- increase the value of crops of poor farmers and thus yield higher returns;
- expand marketing opportunities;
- improve livelihoods of people;
- extend shelf-life of commodities;
- improve palatability of commodities;
- enhance food security;
- overcome seasonality and perishability constraints; and
- empower women who are often involved in agro-processing (Mhazo *et al.*, 2018).

Nwogu *et al.* (2018) decried the lack of processing industries that can be used to process the large quantity of cassava produced in Nigeria, while some investors wooed to establish cassava processing plants complained about the instability of Nigeria's foreign exchange market. Nigeria is the highest producer of cassava in the world and can generate N15tn annually from cassava alone if it has the required processing facilities for the commodity and use it more for industrial purposes (Nwogu *et al.*, 2018). Nwogu *et al.* (2018) cited Segun Adewumi (President, Nigeria Cassava Growers Association) as suggesting that providing adequate finance for processing is one key way to support agriculture in Nigeria.

Mhazo *et al.* (2018) also affirmed that some factors constraining the ability of small and medium scale agro-based enterprises to effectively manufacture and market processed food products to include:

- on a macro level, many policies implemented by governments have served to hinder the development of small-scale industries (Dawson, 1994; Simalenga, 1996).

- at the firm level, limited access to credit (Chakwera, 1996); limited access to foreign currency (Nazare, 2005); lack of appropriate technologies (McPherson, 1996; Mugova, 1996); lack of technological capability; the unreliable supply of raw materials (Moshia, 1983); lack of management skills (Odufa, 1995); poor product quality control (Jaffee, 1993); and poor markets, amongst other things, have constrained the development of small-scale industries. Credit is explained as when a lender makes a loan with the idea that the borrower will pay back as agreed and that an interest will be paid as price of borrowing the money (Berthold, 1996). Iyanda, Afolami, Obayelu and Ladebo (2014) explained two ways through which access to credit affects household welfare outcomes. First, it alleviates the capital constraints on agricultural households and also reduces the opportunity costs of capital-intensive assets relative to family labour, thus encouraging labour-saving technologies and raising labour productivity. Secondly, access to credit improves household welfare by increasing its risk bearing ability and altering its risk-coping strategy. Feder *et al.* (1990) posit that credit allows farmers to satisfy the cash needs induced by the production cycle which characterize agriculture; land preparation, planting, cultivation, and harvesting are typically done over a period of several months in which very little cash revenue is earned, while expenditure on materials, purchased inputs, and consumption need to be made in cash. Farmers need both ex-ante and ex-post access to capital. Ex-ante capital access is required in order to finance vital production costs such as labour and purchase inputs which needed to be paid ex-ante, that is, prior to the actual realization of production (Carter & Weibe, 1990).

Rweyemamu *et al.* (2005) found that transaction costs are significant determinants of the demand for credit and cause farmers to borrow less. Long disbursement period was also a disincentive to borrowing and farmers with high expenditures tended to borrow more. The same applied to farmers with greater farming experience and those with high income. Okunade (2007) in his study on accessibility of agricultural credit and inputs to women farmers of Isoya Rural Development Project (IRD) came up with the result which implied that people who own landed properties had more access to credit facilities because they were able to fulfil the collateral security demanded before loans were granted. Okunade (2007) reported that a well literate person was able to put the loan into good use and enjoyed maximum

profit on any venture. However, Okunade (2007) and Gockowski and Ndoumbe (2004) reported that these variables had negative relationship with for example age, the higher the age the less access to credit. This means older people may not be granted access to loan because they were no more agile to be able to cope with rigours of farming and hence the loans may be diverted to other uses other than farming business. Farmers who used hired labour were expected to require more capital than those who used family labour. Labour charges were higher especially during periods of peak labour demand, hence needs for credit was important for farmers who used hired labour. On the other hand, Enete *et al.* (2005) and Matshe and Young (2004) found the importance of individual characteristics (such as age, gender and formal education) and household or farm characteristics (e.g. the size of the household farm, productive assets, remittances and the agricultural terms of trade) in influencing the labour market decisions of rural household members. Dallimore and Mgimeti (2003) observed that long distances and high transport cost constrains the rural poor from access to formal financial services mainly located in urban areas. Okurut (2006) listed the other features of the financial product that influence access to credit to include interest rates and collateral requirements. Diagne and Zeller (2001) hold a similar view that, low levels of collateral among the poor to a great extent explained their limited access to financial instruments in the formal banking sector. According to Onogwu and Arene (2007) the low level of income and savings among small holder farmers in Nigeria, impose limitation on the availability of adequate equity capital for financing small-holder agriculture. They further stressed that the remoteness of micro finance institutions to small holder farmers in critical need of credit and the cumbersome lending procedures further affects their accessibility to credit. This hits small holder farmers most as they are being discriminated against by the financial system on the grounds that they are generally risky and unviable, and the transaction costs for small loans are higher than those for large loans (Okoye & Arene, 2005). Vaessen (2001) in a study on accessibility of rural credit in Northern Nicaragua, showed that access to credit is influenced by both lender and household characteristics. Hence at the institutional level, the lender makes decisions based on the target group (men, women or both), the selection criteria of clients, the geographic area of operation, and the features of financial products to be provided to address sustainability concerns, all of which influence credit supply. At the household level, being part of the specific target group or in the target geographical area influences credit access. Empirical analysis of the

study revealed that probability of access is positively and significantly influenced by education level, family size, off-farm activities and access to a network of information/recommendations.

A major source of credit by the rural folks is the cooperative societies. Samian *et al.* (2015) explained that cooperatives have in various forms been helpful in social-economic development of rural areas. Some positive effects that cooperatives have in rural areas include employment creation, increase rural incomes, participation in cooperative management process, access to credit and loans, development of training courses, prevention of migration to cities, improvement of consumption patterns, development of literacy in the rural areas, poverty reduction, sense of cooperation among users and empowerment of individuals' livelihoods (Samian *et al.*, 2015). Central Bank of Nigeria, (CBN) (2015) annual report explained the desire of the Federal Government of Nigeria to accelerate agricultural programme by making agriculture a part of the developmental functions of the Central Bank of Nigeria. In order to improve access to credit for agricultural development, two agricultural credit schemes were evolved by the CBN namely the Agricultural Credit Guarantee Scheme (ACGS) and the Commercial Agriculture Credit Scheme (CACS).

MATERIALS AND METHODS

The study area

This study was carried out in Epe, Lagos State. Epe lies on the north bank of the coastal Lagos Lagoon and has road connections to Ijebu-Ode and Ikorodu. It is a traditional settlement of the Ijebu people (a subgroup of the Yoruba), it was established by the mid-18th century as the chief port (slaves, cloth, agricultural produce) for Ijebu-Ode (17 miles [27 km] north-northwest), the capital of the Ijebu kingdom. Epe occupies 965 square meters comprising of 641 square meters of land mass area and 324 square meters of water body area (Lagos Bureau of Statistics, 2014).

Modern Epe is a peri-urban area (Adedeji & Ademiluyi, 2009). Epe is made up of three zones or Local Council Development Areas (LCDAs) namely Epe, Eredo and Ikosi-Ejirin. Epe is a collecting point for the export of fish, cassava, maize, green vegetables, coconuts, cocoa, palm produce, rubber, and firewood to Lagos. Fishing is the major occupation. The town is served by secondary schools, several hospitals, and a health office.

Sources and methods of data collection

The primary data for this study was obtained from the garri processors in the study area using an interview administered questionnaire.

Sampling procedure

Multi-stage sampling techniques was used to select

the communities and the garri processors. First stage involved the purposive selection of Epe, Lagos State in SW Nigeria. The area was purposively selected among other garri processing states because of the agrarian nature of the area as well as high dominance of garri processors locally and popularly called Ijebu garri. The second stage involved the purposive selection of two communities each from the three zones in Epe which are Ilara, Mojoda, Itoikin, Agbowa, Noforija and Iraye due to the presence of a large number of garri processors; the third stage involved the random selection of twenty garri processors from each community making a total of one hundred and twenty Respondents for the study.

Analytical Techniques

The data collected were analysed using the following techniques:

Descriptive Analysis:

Descriptive statistics which include frequencies, percentages, mean, standard deviation and charts was adopted to describe information on the socio-economic characteristics of the processors, access to credit and sources of loan of the Respondents.

Profitability measures:

Profitability analysis, gross margin and profit, were employed to estimate the costs and returns of garri processing in the study area. The gross margin formula was represented as:

$$G.M = G.I - TVC \dots\dots\dots (i)$$

Where G.M= Gross margin

G. I= Gross income

TVC= Total variable cost

The profitability was also represented symbolically as

$$\pi = TR - TC \dots\dots\dots (ii)$$

Where: π = profit

TR = Total revenue/gross income

TC = Total cost (total fixed cost (TFC) + Total variable cost (TVC))

The Logit Regression Model:

Logit regression model was used to determine factors that influence the access of garri processors to loan.

This model is similar to a linear regression model but it is suited to models where the dependent variable is dichotomous. If Y_i is the random variable (dichotomous), it can then be assumed that Y_i takes on the values 0 or 1, where 0 denotes the non-occurrence of the event in question and 1 denotes the occurrence. If X_1, \dots, X_n are characteristics to be related to occurrence of this outcome, then the logit model specifies that the conditional probability of event (i.e., that $Y = 1$) given the values of X_1, \dots, X_n is as follows:

$$P(Y) = 1/[1 + \exp - (\alpha - \sum \beta_i X_i)] \dots\dots\dots (iii)$$

In order to linearize the right-hand side a logit transformation was applied by taking logarithm of both sides, therefore we have:

Logit $P(Y) = \alpha + \sum \beta_i X_i$(iv)

Where, $Y_i = 1$ if success i.e. respondent has access to credit. and $Y_i = 0$ if failure i.e. if respondent did not have access to credit

α = constant term

X = independent variable

β = logit coefficient for independent variable

the independent variables specified as determinants of access to credit are:

X_1 = sex (1= female, 0= male)

X_2 = age (years)

X_3 = marital status (1= married, 0=otherwise)

X_4 = household size (number)

X_5 = income (₦)

X_6 = educational level

X_7 = processing experience (years)

X_8 = labour used (mandays) per annum

X_9 = membership of co-operative
(1= member, 0 = non-member)

X_{10} = number of extension contacts (1=yes,0=no)

X_{11} = collateral for collecting credit (1 = tendered collateral and 0 otherwise)

RESULTS AND DISCUSSIONS

Socioeconomic characteristics of the Respondents

Table 1 shows that 89.1% of garri processors in the study area were females while 10.9% were male. The dominance of female garri processors in the study area could be attributed to activities involved in garri processing being perceived as female job while the men were more involved in cassava farming (Afolami, Obayelu & Vaughan, 2015). The age distribution of the Respondents revealed that the least percentage of Respondents, 10.9%, were between the ages of 20-

30 years, while the highest percentage of Respondents, 30.0%, were between the age range of 31-40 years and 41-50 years. However, the average age of garri processors in the study area was from 44-45 years. Defining old people as those who are above 60 years and the productive age as defined as those between 20-60 years, the average age of garri processors of between 44-45 years, shows a preponderance of active, and virile work force. Age has great potential for increasing production as well as having a multiplier effects on increased availability of able-bodied labour for primary production, improving household income, ease of adoption of innovations; reduction in the degree of risk-aversion and positive implication to sustainability of enterprises (Oladimeji *et al.*, 2015).

The educational background of the Respondents revealed that 9.1% of the garri processors had no formal education, while 90.9% have various level of educational attainments, which ranged from primary to tertiary education. This level of education shows that most of the Respondents can understand the terms and requirements of accessing credit. Majority of the Respondents (68.2%) were married, while 31.8% were either not married (4.5%), divorced (18.2%) or some widowed (9.1%). This indicates that most of the processors in the study area were responsible. The average household size was 6 people, while 49.1% had a household size of 6-10 people. This implies that the Respondents had access to family labour which can be utilized in the production operations, this will reduce expenditure on cost of labour but may however this may lead on credit fungibility, by using credit for domestic purpose because of the pressure imposed by large household size.

Table 1: Socioeconomic characteristics distribution of Respondents

Variables	Frequency (n=110)	Percentage (%)
Sex(dummy variable)		
Male	12	10.9
Female	98	89.1
Age (continuous variable in years)		
20- 30	12	10.9
31-40	33	30.0
41 – 50	33	30.0
51 – 60	19	17.3
above 60	13	11.8
Educational level (categorical variable)		
None	10	9.1
Primary Education	51	46.4
Secondary Education	40	36.4
Adult/Voc. Education	7	6.4
Tertiary Education	2	1.8
Marital Status (categorical variable)		
Single	5	4.5
Married	75	68.2
Divorced	20	18.2
Widowed	10	9.1
Household size (continuous variable in years)		
1-5	54	49.1
6-10	54	49.1
above10	2	1.8
Mean	6(\pm 4.107)	
Garri processing experience (continuous variable in years)		
1-10	41	37.3
11-20	33	30.0
21-30	25	22.7
31-40	10	9.1
Above 40	1	0.9
Mean	16.21(\pm 11.232)	
Source of labour (categorical variable)		
Family	40	36.4
Hired	41	37.3
Both	29	26.4

Source: Data from field survey, 2017

The result also indicated that many of the Respondents had a processing experience of 1-10 years (37.3%), while 62.7% have over 10 years' experience in garri processing. The mean years of experience in garri processing in the study area was 16 years. This indicates specialization of tasks, leading to improved efficiency and effectiveness of the processors, which is invariably expected to have a positive impact on garri processing. About 36.4% of

the Respondents employed only family labour, 37.3% employed hired labour in the study area while 26.4% employ both family and hired labour.

Distribution of Respondents by occupation

Table 2 shows that although garri processing was the major occupation of 55.5% of the Respondents, 44.5% of the Respondents undertook garri processing as a secondary occupation (55.5%).

Table 2: Distribution of Respondents by occupation

Variable	Frequency (n=110)	Percentage (%)
Primary Occupation		
Garri processing	61	55.5
Trading/Business	23	20.9
Farming	10	9.1
Civil servant	3	2.7
Artisan	13	11.8
Secondary occupation		
None	36	32.7
Garri processing	50	45.5
Trading/Business	10	9.1
Farming	10	9.1
Civil servant	3	2.7
Artisan	1	0.9

Source: Data from field survey, 2017

Mode of operation of Respondents in the study area

Table 3 shows that the common method of garri processing used by the 98.2% of the Respondents was the traditional method while only 1.8% of the processors adopted the modern method. This either shows unwillingness of the Respondents to adopt the commercial improved technology (innovation) and or lack of desire of the Respondents to improve their productivity. The findings also revealed that 43.6% of the Respondents had no cassava farms while the remaining 56.4% had cassava farms. This shows that majority of the garri processors were also farmers, as such the Respondents undertook garri processing either as a way of adding value to their cassava tubers (form utility) and or as a means of storage of their cassava which cannot be stored as tubers. As

high as 87.3% of the Respondents had no contact with the agricultural extension agent while only 12.7% had contact with the extension agent which means that most of the garri processors were not enlightened about the modern equipment and methods of garri processing and sources of credit available to them. This will limit them from benefiting from the government. Most (68.2%) of the Respondents did not belong to any cooperative society and only 31.8% belonged to a cooperative society. This could have a negative effect on credit mobilisation and expansion of the processing operations, according to Chukwudi and Inoni (2002), who opined that members of cooperative societies are able to adopt better techniques of production than non-members because of the greater awareness created and encouragement given to their members.

Table 3: Distribution of Respondents by mode of operation

Variable	Frequency (n=110)	Percentage (%)
Method of Garri Processing		
Modern	2	1.8
Traditional	108	98.2
Ownership of Cassava Farm		
No	48	43.6
Yes	62	56.4
Extension Contact		
No	96	87.3
Yes	14	12.7
Cooperative society membership		
No	75	68.2
Yes	35	31.8

Source: Data from field survey, 2017

Sources of credit

The result of the study as shown in Table 4, revealed that 66.4% of the Respondents had no access to formal credit and only 33.6% had access to formal credit which could have negative impact on credit mobilization and expansion of the processing business. Most (66.4%) of the Respondents did not obtain credit, 14.5% obtained less than ₦50,000, 16.4% obtained between ₦50,000-₦100,000, 0.9% obtained between ₦101,000-₦150,000 while only

1.8% obtained above ₦150,000. The mean value of the credit obtained was ₦21,009.17 as shown in Table 4. About 92.7% of the Respondents did not possess any collateral, while only 4.5% possessed land, 0.9% had buildings and 0.9% had motor vehicle and equipment. The study also shows that 91.8% of the garri processors have never been denied credit because they have never made any request for credit while only 8.2% of the processors have been denied of securing credit.

Table 4: Distribution of Respondents according to credit activities

Variable	Frequency (n=110)	Percentage (%)
Access to loan		
No	73	66.4
Yes	37	33.6
Value of credit obtained (₦)		
None	73	66.4
≤50,000	16	14.5
51,000-100,000	18	16.4
101,000-150,000	1	0.9
>150,000	2	1.8
Mean	21,009.17(±55,057.965)	
Collateral owned		
None	102	92.7
Land	5	4.5
Building	1	0.9
Motor vehicle	1	0.9
Equipment	1	0.9
Have you been denied loan before?		
No	101	91.8
Yes	9	8.2

Source: Data from field survey, 2017

Income of garri processors

Table 5 revealed that the highest weekly income earned from garri processing by 40.0%, of the Respondents was between ₦41,000-₦60,000, 38.2% earned between ₦21,000-₦40,000, 12.7% earned

between ₦61,000-₦80,000, 5.5% earned an income range above ₦80,000 while only 3.6% of the Respondents earned income below ₦20,000. The weekly mean income of the study was ₦49,320.91.

Table 5: Weekly income earned of garri processors (₦/week)

Variable	Frequency (n=110)	Percentage (%)
Income		
≤20,000	4	3.6
21,000-40,000	42	38.2
41,000-60,000	44	40.0
61,000-80,000	14	12.7
>80,000	6	5.5
Mean	49,320.91	

Source: Data from field survey, 2017.

Sources of credit available to the Respondents

The Figure 1, revealed that 54.55% of the garri processors used their own personal savings to finance their business, 24.55% of the garri processors financed their business with cooperative credit, 17.27% of the garri processors obtained the credit

they used to finance their business from cooperative association, 0.9% financed their business with bank credit while 2.7% of the Respondents did not require any sources of credit to finance their business. This shows that many of the processors did not have access to credit facilities.

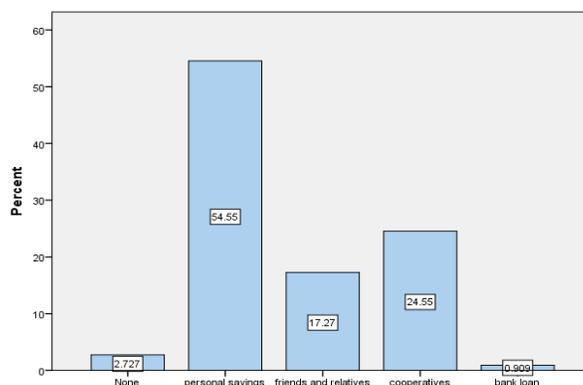


Figure 1: Sources of credit available to the Respondents

Profitability of garri processing

The result in Table 6 revealed that the cost of cassava tubers (65.96%) accounted for the largest percentage of the total cost of processing cassava into garri in the study area. This is followed by labour cost (8.79%). The cost of land, grating and rent constituted 4.53%, 3.12% and 1.37% of the total cost respectively. The low cost of firewood (5.29%) may be due to the fact that most of the Respondents got the firewood freely

from their farms or near-by bushes. The low transportation cost (3.21%) among the Respondents may be due to the fact that most of them sell their garri at the processing points, in open spaces, along the road where stalls were allocated to other foodstuff seller. Only few processors transported the garri to the market and some of them possessed means of transportation such as motor cycle. The total cost incurred by the Respondents per month was

₦33,531.39 while total revenue of ₦51,211.82 was realised thereby returning gross margin of ₦21,544.43 and net returns of ₦17,680.43. The Rate of Return on Investment (RRI) of 53 % indicated that Respondents earned 53% profit on every naira invested. The benefit cost ratio of 1.53 which implies that for every ₦ 1

invested in processing cassava to garri, a return of ₦1.53 and a profit of ₦0.53 were realised. This study confirmed that cassava to garri processing is a profitable and viable enterprise that will generate revenue that can be used by processors in the study area to improve their standard of living.

Table 6: Costs and return to garri processing (₦/Month)

Items	Amount (₦)	%TC
Variable cost		
Cassava tubers(420kg)	22, 118.18	65.96
Labour cost	2,948.64	8.79
Cost of grating	1,045.46	3.12
Transportation cost	1,075.45	3.21
Firewood cost	1,775.00	5.29
Rent	450.11	1.34
Miscellaneous	254.55	0.76
Total Variable Cost (TVC)	29,667.39	88.48
Depreciation on equipment	2,346.00	6.99
Cost of land	1,518.00	4.53
Total Fixed Cost (TFC)	3,864.00	11.52
TC (TFC + TVC)	33,531.39	
Total Revenue (TR)	51,211.82	
Gross Margin (TR - TVC)	21,544.43	
Net Returns (GM - TFC)	17,680.43	
ROR (NR/TC*100)	53%	
BCR (TR/TC)	1.53	

Source: Field Survey, 2017.

Respondents' access to credit

The result of the logit regression as shown in Table 7, revealed that the significant factors influencing the credit accessibility of Respondents were educational level ($p < 0.05$), household size ($p < 0.1$), processing experience ($p < 0.1$), collateral possessed ($p < 0.01$), membership of cooperative society ($p < 0.01$) and extension contact ($p < 0.01$).

Educational level ($p < 0.05$) was significant to credit accessibility. An increase in the educational level increase positively and significantly the processors' credit accessibility. This confirmed Ololade and Olagunju (2013) findings that farmers' access to credit is positively affected by the educational level of the farmer. This implied that processors that are literate have access to credit facilities. This could be because they are more knowledgeable about details of credit acquisition such as the interest rate, terms and conditions of obtaining credit, mode of repayment, etc. Household size was also a positive significant ($p < 0.1$) as a determinant of credit accessibility of the processors. This implies that the Respondents with

larger household size require higher credit. The study further revealed that membership of cooperative society had a negative significant relationship ($p < 0.01$) with credit accessibility of the processors. This implied that Respondents who were members of cooperative association had more access to credit. Processors' access to credit is positively affected by availability of collateral and a unit increase in interest rate leads to the probability of not having access to credit. Processing experience ($p < 0.1$) increased processors' ability to access loan as they were positive and significant. Also, their higher years of processing experience could make them believe that they are experienced and therefore would not want to obtain any credit with high interest rate. The result further revealed that extension services is positively significant ($p < 0.01$), and this implied awareness about financial institutions and access to low interest credit for processors. The Nagelkerke R Square was 0.659 which implies about 66% of the variation in processors' access to credit. The Chi-square of the regression model was significant at 1% alpha level.

Table 7: Logit Regression result on determinants of garri processors accessibility to credit

Variables	β coefficient	Wald	Exp(B)
Sex	1.417	1.486	4.125
Age	-0.059	1.479	0.942
Educational level	0.640**	2.515	1.896
Household size	0.111*	1.960	1.117
Processing experience	0.049*	1.638	1.050
Marital status	-0.249	0.258	0.780
Extension contact	0.009***	0.000	1.009
Cooperative society	4.858***	22.899	128.824
Farm income	0.000	0.124	1.000
Labour	0.358	0.888	1.43
Collateral	1.330***	2.749	3.781
Constant	-2.817**	2.168	0.060
Model Summary			
-2 Log likelihood	Cox & Snell R Square	Nagelkerke Square	R Chi-Square
75.48	0.490	0.659	74.054

Source: Computed from Field Survey, 2017

*significant at 10%, **significant at 5%, ***significant at 1%

Constraints associated with credit accessibility in the study area

There are major constraints militating against the accessibility of credit within the study area as shown in Table 8. These included uncertainty of repayment, lack of security, low income, no savings, non-membership, need to form groups, not aware of such

services, delay in fund disbursement, complicated application procedures, high interest rate, lack of information on credit availability. Most garri processors were discouraged because they earned low income. Low income and high interest rate had greater effects on the accessibility of credit for garri production in the study area compared to other factors.

Table 8: Constraints associated with credit accessibility in the study area

*Constraints	Frequency(n=110)	Percentage(%)
Uncertainty of repayment	8	7.3
Lack of security	11	10.0
Low income	26	23.6
No savings	10	9.1
Non-membership	17	15.5
Need to form groups	12	10.9
Not aware of such services	2	1.8
Delay in fund disbursement	15	13.6
Complicated application procedure	16	14.5
High interest rate	23	20.9
Lack of information on credit availability	3	2.7

*Multiple Responses

Source: Field Survey, 2017

CONCLUSION

This study investigated the profitability and credit accessibility of garri processors in Epe, Lagos State. The study revealed that age, educational level, processing experience, collateral, extension contact and membership of cooperative are the main factors determining processors' access to credit in the study area. Also, low income, non-membership, complicated application procedures, lack of security and high interest rate are the major problem the processors are facing in credit acquisition.

RECOMMENDATIONS

Based on the result of this study the following recommendations are hereby made to enhance accessibility of credit by garri processors in the study area. The positive relationship existing between educational level of processors and credit accessibility shows that improving the level of education and enlightenment will be a positive step towards enhancing the productivity of the processors. Banks should therefore embark on enlightenment programmes that will educate the processors on modalities of accessing credit.

The formation of cooperative groups among processors should be encouraged. Extension officers should educate the farmers on the importance of forming cooperative societies as well as requirements for the proper registration of the societies.

There is need for financial institutions to help look into the conditions for obtaining credit by processors, so that the less privilege among them will be able to benefit from credit disbursement especially in the aspect of high interest rate, no savings and collateral security. To improve credit accessibility interest rate charged garri processors should be reduced to the barest minimal with a flexible repayment plan, to enhance the processors affinity for credit.

Extension agent should visit the processors and create awareness on modern method of processing and using improved equipment for processing the cassava into garri.

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