**Journal of Community & Communication Research**
**ISSN: 2635-3318**
Volume 6, Number 2, December 2021
Accessible at: https://jccr.sccdr.org.ng

# ANALYSIS OF CREDIT ACQUISITION AMONG RICE-BASED SMALL SCALE FAMERS IN EBONYI STATE, NIGERIA

**Ubokudom I. A., Onwumere J. C., Ene H. C., Okeke R. C. and Jonathan S. A.**
Department of Agribusiness and Management, Michael Okpara University of Agriculture, Umudike, Abia State, Nigeria
Correspondence Email: ubokudomitohowo@gmail.com

**ABSTRACT**

*This study analyzed the factors affecting credit acquisition among rice-based Small and Medium Enterprises (SMEs) in Ebonyi State, Nigeria. The specific objectives were to; examine the socio-economic characteristic of Rice Based SMEs in the study area; determine the source and volume of credit acquired by Rice-Based SMEs; andanalyze the factors affecting credit acquisition among Rice-Based SMEs. Descriptive and inferential statistical analysis were used accordingly. Objectives one and two were analyzed using descriptive statistics such as percentage, frequency, pie chart; while objective three was analyzed using ordinary least square regression. A greater population of the respondents were male, with 53% of the population indicating that they were married. Less than half (45%) of the population had 6-10 years of experience, with a household size of 1-3 persons. The $R^2$ value of 0.734 implied that 73.4% changes in the amount of credit acquired by the rice based SMEs was accounted for by changes in the independent variables included in the model while the remaining 26.6% was accounted for by error. The result further showed that education, farm size and repayment period of the credit positively influenced the acquisition of credit by the Rice-Based SMEs, all at 1% level of significance; while household size, credit source and interest rate negatively influenced credit acquisition at 5, 10 and 5% levels of significance respectively. It was recommended that; Agricultural lending institutions should be strengthened while appropriate measures should be insured and sufficient fund be provided with minimal and bearable formalities, for the encouragement, motivation and improvement in Rise production. Government and other stakeholders' efforts should be directed towards policies and programmes that will further enhance those factors that increase farmers' decision to use agricultural credit. Financial institutions or credit sources should be strategically positioned to be easily accessible to farmers whiles reducing the cumbersome of processing credit among farmers who are less educated and have little or no collateral.*

***Keywords: Credit acquisition, Rice-Based SME's***

## INTRODUCTION

Rice is one of the unique and stable food crop that can be grown virtually in every part of the country as it requires a wide range of temperature between $20^0$c and $38^0$c (Ajah, Igiri and Ekpenyong 2017). The daily demand for rice in Nigeria is increasing on a faster rate than in other African countries since the mid 1970's (FAO, 2001 in Ajah *et al* 2017), hence, rice is an essential commodity (food) in Nigeria. One of the major challenges of Agriculture as well as

Small and Medium Enterprises (SMEs) in Nigeria, is on how to raise adequate funds to enable them operate more effectively and efficiently and contribute to food availability and poverty reduction (Memba, 2011; Ololade and Olagunju, 2013). Financing is necessary to help the Rice-based SMEs start up and expand their operations, package new investment, and invest in new staff or production facilities. Some Rice-based SMEs often run into problems, because they find it much harder to obtain financing from banks, capital markets or other suppliers of credit. The pivotal role played by the SMEs in the national economies of countries around the world (Karadag, 2016; Muller, Gagliardi, Caliandro, Bohn & Klitou; 2014), has made it necessary to ensure that the study of the financial capacities and accessibilities of these enterprises is being put to consideration.

Apart from contributing to employment level, SMEs are also leading in provision of consumer and industrial goods (Rahim, Musliar, Nixia, &Letty, 2018). In Nigeria, SMEs are estimated to contribute 10% of the employment level in Nigeria well below that of the UK 54%; USA 50.3%; Bangladesh 80%; India 80%; Belgium 66.6%; South Africa 60%; Malaysia 57.7%, Ireland 66.5% and China 58.8% (Iloh and Chioke, 2015). Rice-Based SMEs could be considered as key drivers in improving food security and economic growth, while acting as sources of supply for sustainable performance and growth in the coming future (Bhuiyan *et al.,* 2016).

Rice is produced through various stages ranging from the provision of production facilities on farm activities and post-harvest to market to final consumers. All these activities create business opportunities especially farmers and SMEs as the main actors. Saleh and Ndubisi (2006) noted that some of the challenges facing the Rice-Based SMEs are low assess to finance, lack of management, technology, labour skills, market limitation and competition, and low turnover profit. These points to the fact that the Rice-Based SMEs are also facing similar challenges like other SMEs. Without proper finance, these SMEs can neither expand to meet the demands of the local market, nor compete globally nor even acquire technology or meet their fixed and working capital requirements (Wanjohi and Mugure, 2008), therefore access to finance is highly pertinent.

This study analyzed the factors affecting credit acquisition among rice-based SMEs in Ebonyi state, Nigeria. The specific objectives were as follows;

i. examine the socio-economic characteristic of rice Based SMEs in the study area
ii. determine the source and volume of credit acquired by Rice based SMEs
iii. analyze the factors affecting credit acquisition among Rice-based SMEs

## METHODOLOGY

### *The Study Area*

The study area is Ebonyi State, which is located in South-East Nigeria. The state lies in the humid tropical agro-ecological zone of Nigeria within Longitudes 70 30'E and 80 30'E and Latitudes 50 40'N and 6045'N (Okereke, 2012). It has a land area of 5,935 km2 with a projected population of 2,253,140 persons in 2016 using a growth rate of 3.5% (National Population Commission, 2016). The State is delineated into three agricultural zones; namely Ebonyi North (Abakaliki Area), Ebonyi Central (Ikwo Area) and Ebonyi South (Afikpo Area). There are thirteen Local Government Areas (LGAs) in the state. Ebonyi is primarily an agriculture producing region. It has a luxuriant vegetation of tropical rainforest, a leading producer of rice, yams, potatoes, maize, beans, and cassava. Ebonyi also has several solid mineral resources (crude oil and natural gas) and huge salt deposit at the Okposi and Uburu Salt Lakes.

*Population and Sampling Procedure*

A multi-stage sampling procedure was adopted in the selection of respondents, composed of rice-based SMEs. The rice-based SMEs were purposively sampled for this study. In the first stage, four Local Government Areas (LGAs) namely; Ikwo (Ebonyi Central), Izzi (Ebonyi North), Afikpo South and Ohaozara (Ebonyi South) were purposively selected based on the dominance of rice farming in the LGA's and their representation of the three agricultural zones. From each selected LGAs, three communities were purposively selected for the same reason to give a total of twelve communities. The numbers of registered rice farmers' in the communities were obtained from Ebonyi state Agricultural Development Programme. The registered rice farmers in the communities formed the population of the study, which is 765 rice farmers.

A proportionate sampling technique was used to select farmers from the population to give a sample size of 180 respondents. Descriptive and inferential statistical analyses were used accordingly. Objectives 1 and 2 were analyzed using descriptive statistics such as percentage, frequency; pie chart, while objective 3 was analyzed using ordinary least square regression.

## RESULTS AND DISCUSSIONS

*Socioeconomic characteristics of the respondents*

The result shows that the respondents' age was fairly distributed. However, respondents within the ages 50 and 59 showed the highest proportion (32%). This was followed by ages 40-49 (21%) and 60-69 (20%) indicating that the majority of the respondents were still young, vibrant, enterprising and in their active stage. This is further verified by their mean age of 46 years. These entrepreneurs are expected to be risk-takers; highly innovative, motivated and efficient.

The gender distribution of the respondents in the study area suggests that majority (56%) of the respondents in the study area are males; thus males dominated the rice business in the study area. This implies that rice farming is usually done by men considering the tedious nature of the business.

The result shows that a large proportion of the respondents (53%) were married while 13% were divorced. Marriage plays a vital role in the involvement of entrepreneurs in business. Since they are interested in meeting the food and welfare needs of the various families, they take the work very serious. This further entails that a relationship exists between marital status and involvement in rice business; for example, the spouses of the operators may be as well involved in the business thus offering necessary assistance to the owner for enhanced performance. Such assistance involves the provision of useful advice and labour supply to the processing activities since the business is usually family-owned.

The processors' experience distribution was highest (45%) between 6-10 years and followed by 1-5 years. This result implies that the rice farmers were relatively experienced. Experience plays an important role in improving the efficiency of entrepreneurs through allocation and utilization of resources since they can understand the intricacies of the business better. Experience reduces loss and shocks and as such, experienced processors are better positioned to adopt and implement improved technologies than their inexperienced counterparts. A mean experience of 18 years implies that the respondents are well experienced and could take well-informed and planned decisions.

**Table 1: Frequency distribution of the processors**

| Age | Frequency | Percentage |
|---|---|---|
| 20-29 | 25 | 14 |
| 30-39 | 23 | 13 |
| 40-49 | 38 | 21 |
| 50-59 | 58 | 32 |
| 60-69 | 36 | 20 |
| **Total** | **180** | **100** |
| **Mean age** | **46 years** | |
| **Sex** | | |
| Female | 80 | 44 |
| Male | 100 | 56 |
| **Total** | **180** | **100** |
| **Marital status** | | |
| Single | 29 | 16 |
| Married | 95 | 53 |
| Widowed | 33 | 18 |
| Divorced | 23 | 13 |
| Total | **180** | **100** |
| **Farming experience** | | |
| 1-5 | 40 | 22 |
| 6-10 | 80 | 45 |
| 11-15 | 20 | 11 |
| 16-20 | 22 | 12 |
| 21-25 | 18 | 10 |
| **Total** | **180** | **100** |
| **Mean** | **18years** | |
| **Household size** | | |
| **1-3** | 68 | 38 |
| **4-6** | 70 | 39 |
| **7-9** | 42 | 23 |
| **Total** | **180** | **100** |
| **Mean** | **5** | |
| **Level of education** | | |
| No formal education | 22 | 12 |
| Primary school | 26 | 14 |
| Secondary school | 2 | 41 |
| Tertiary education | 36 | 20 |
| Post tertiary education | 24 | 13 |
| **Total** | **180** | **100** |
| **Cooperative membership** | | |
| Yes | 126 | 70 |
| No | 54 | 30 |
| **Total** | **180** | **100** |

Source: Field survey, 2019

The result shows that the entrepreneurs with household sizes 4-6 ranked the highest (39%) and closely followed by 1-3 (38%). The lowest was size 7-9 with 23%. This means that the respondents had a moderate family size of about 5 persons per household on the average. The household size and structure of a family is a major determinant of a lot of important indices such as per capita income, consumption, and welfare and food security. It affects rice farming efficiency through the supply of labour at no cost especially where a majority of the household members are not dependents (aged and children). It is therefore expected that these farmers be

efficient due to the possible reduced cost on hired labour substituted by family labour. The result shows that a very large proportion (41%) of the respondents had secondary school education while about 12% had no form of education. On the average, about 74% of the respondents would be said to be literate if going by the minimum attendance of secondary education. They could read and write and as well would be open to modern innovations, adjust favorably to harsh demand and supply forces while making normal profits.

The result shows that a very large part of the rice entrepreneurs (70%) were cooperative members while 30% of them were not. Membership of cooperative society is a strong requirement by commercial financial institutions to advance loans to the members. Government and NGOs program aimed at supporting farmers also advocate group formations (in terms of cooperatives). Cooperatives also benefit their members in so many ways such as giving of credits at very low interest rates, selling of farm inputs at reduced costs as well as providing vital information on current and trendy practices. Thus, membership of cooperatives is very beneficial for improved profitability.

***Source and Volume of Credit Acquired by Rice Based SMEs***

The result showed that the respondents patronized a number of credit sources. However, 78% of the rice entrepreneurs which became the highest received credit from friends and families. The least patronized is microfinance banks (25%). Different sources of capital were identified in the study with different levels of patronage of each source. Cooperatives had the highest level of credit releases, signifying that cooperative societies in the study area were viable and active and could advance loans to their members which would have led to the level of patronage. Bank loans received the lowest level of patronage. This could be due to the high cost of credit advancement (interest rate) charged by the banks which discourages farmers from patronizing their loans. On the amount acquired from these sources, about 98,000 were received from cooperative members which is the highest while the lowest was 40,000 from age group. The findings of this study therefore imply that while a very large proportion went for credit from friends and families (due to the zero interest rate), others went to microfinance banks and received more credit.

**Table 2: Frequency distribution of respondents by source and volume of credit**

| | F/R | PML | C/T | AG | DB | MFC | CS |
|---|---|---|---|---|---|---|---|
| Freq. | 140 (78) | 100 (55) | 78 (43) | 98 (54) | 50 (28) | 45 (25) | 110 (61) |
| Mean | 45,000 | 52,000 | 70,000 | 40,000 | 48,000 | 65,000 | 98,000 |

**Source: Field survey, 2019*** (FR = Friend/relatives, PML = Private money lenders; C/T = Credit/thrifts; AG = Age grade; DB = Development bank; MFC = Microfinance bank; CS = Cooperative society)

***Factors Affecting the Credit Acquisition of Rice-Based SMEs***

To examine the factors affecting the acquisition of credit by rice based SMEs in the study area, the multiple regression model was used. The exponential form was selected having satisfied the conditions of high $R^2$, statistically significant F-ratio, and highest number of significant variables as they conform to *a priori* expectations. The $R^2$ value of 0.734 implied that 73.4% changes in the amount of credit acquired by the rice based SMEs was accounted for by changes in the independent variables included in the model while the remaining 26.6% was accounted for by error.

**Table 3: OLS estimates of factors affecting credit acquisition among Rice-based SMEs**

| Variables | Linear | Exponential (+) | Semi-log | Double-log |
|---|---|---|---|---|
| Constant | -160.000 | 9.720 | -0.876 | 3.166 |
| | (-0.394) | (17.080)*** | (-0.969) | (5.124)*** |
| Education | -70.685 | 0.142 | -0.480 | 0.046 |
| | (-2.091)** | (2.990)*** | (-2.609)** | (0.362) |
| Farm size | -72.780 | 0.295 | -0.495 | 0.285 |
| | (-1.740)* | (5.033)*** | (-4.541)*** | (3.816)*** |
| Household size | 15.985 | -0.101 | 0.078 | -0.572 |
| | (0.550) | (-2.480)** | (0.377) | (-4.069)*** |
| Farming experience | 3.421 | 0.026 | -0.096 | -0.362 |
| | (0.101) | (0.546) | (-0.721) | (-3.984)*** |
| Labour | 0.001 | 0.191 | -0.104 | -0.015 |
| | (0.952) | (1.021) | (-1.185) | (-0.257) |
| Credit source | 96.364 | -0.291 | -0.048 | -0.484 |
| | (0.803) | (-1.728)* | (-0.440) | (-6.503)*** |
| Repayment period | 48.825 | 0.053 | 0.332 | 0.108 |
| | (6.767)*** | (5.207)*** | (2.290)** | (1.089) |
| Collateral | 296.000 | -0.177 | 0.441 | -0.088 |
| | (1.281) | (-0.547) | (2.005)** | (-0.588) |
| Interest rate | 0.000 | -5.890 | 0.408 | 0.942 |
| | (0.593) | (-2.274)** | (9.217)*** | (31.156)*** |
| Income | -0.002 | 0.000 | -0.172 | 0.105 |
| | (-1.116) | (2.468)** | (-2.771)** | (2.478)** |
| F-ratio | 9.900 | 52.040 | 16.880 | 333.93 |
| Adj. $R^2$ | 0.309 | 0.720 | 0.470 | 0.949 |
| $R^2$ | 0.344 | 0.734 | 0.500 | 0.952 |

Source: Field data, 2019. ***, ** and * are significant at 1%, 5% and 10% respectively.

The result further showed that education, farm size and repayment period of the credit positively influenced the acquisition of credit by the rice based SMEs, all at 1% level of significance while household size, credit source and interest rate negatively influenced credit acquisition at 5, 10 and 5% levels of significance respectively.

## CONCLUSION AND RECOMMENDATIONS

The credit system in the study area is still yet to be fully maximized for optimum production and growth in the rice sub-sector. This follows from the findings where majority of the rice-based SMEs used capital from friends and relations with minimal patronage from formal credit institutions despite receiving more funds from microfinance banks. Both growth of the firms and credit acquisition were predicted by farm size, education, age of the farmers, farming experience and repayment period. With respect to this it is recommended that;

1. Agricultural lending institutions should be strengthened while appropriate measures should be insured and sufficient fund to be provided with minimal and bearable formalities, for the encouragement, motivation and improvement in rise production.
2. Government and other stakeholders' efforts should be directed towards policies and programmes that will further enhance those factors that increase farmers' decision to use agricultural credit.
3. Financial institutions or credit sources should be strategically positioned to be easily accessible to farmers while reducing the cumbersome processing for credit among farmers who are less educated, with little or no collateral.

**REFERENCES**


Ajah E. A., Igiri J. A.and Ekpenyong H. B. (2017). Determinants of Access to Credit among Rice Farmers in Bias LOCAL Government Area of Cross River State, Nigeria

Bhuiyan, A.B., Said, J., Ismail, M.D., Jani, M.F.M., & Gun, D.Y. (2016). The Innovation Drives, Strategies and Performance of Food Processing SMEs in Malaysia. *Malaysian Journal of Social Space,* 12: 154-166.

Chidiebere-Mark, N., Ohajianya, D., Obasi, P. &Onyeagocha, S. (2019). Profitability of rice production in different production systems in Ebonyi State, Nigeria. *De Gruyter Open Agriculture*, 4, 237-246.

Ebonyi State Agricultural Development Programme (EBADEP, 2005). Annual report. Abakaliki, Ebonyi State.

Iloh, J. &Chioke, N. (2015). Commercial Bank Credit Availability to Small and Medium Scale Enterprises (SMEs) in Nigeria. 3rd International Conference on Business, Law and Corporate Social Responsibility (ICBLCSR'15), Bali (Indonesia).

Karadag, H. (2016). The Role of SMEs and Entrepreneurship on Economic Growth in Emerging Economies within the Post-Crisis Era: An Analysis from Turkey. *Journal of Small Business and Entrepreneurship Development,* Vol. 4, No. 1, pp. 22-31. 0ISSN: 2333-6374(Print), 2333-6382

Memba, F.S. (2011). The Impact of Venture Capital Finance on Performance of Small and Medium Enterprises in Kenya. A thesis Submitted in Fulfillment for the Degree of Doctor of Philosophy in Entrepreneurship in the Jomo Kenyatta University of Agriculture and Technology. Kenya.

Muller, P., Gagliardi, D., Caliandro, C., Bohn, N. U. &Klitou, D. (2014). *Final Report-July 2014.* OECD

Okereke C.O. (2012). Challenges of Risk Management among Smallholder Farmers in Ebonyi State, Nigeria: Implications for National Food Security. *International Journal of Agric. Economics and Rural Development,* 5 (1), 20.

Ololade, R. A. and Olagunju F. I. (2013). Determinants of Access to Credit among Rural Farmers in Oyo state, Nigeria. Global journal of scinse frontier Research 8(2):1-7

Rahim, D., Musliar, K., Nixia, A. T. & Letty, F. (2018). Rice Industry and SMEs Development in South Sulawesi. *Research Journal of Applied Sciences,* 13: 76-82.

Saleh, A.S. & Ndubuisi, N.O. (2006). SME Development in Malaysia: Domestic and Global Challenges. Working Paper No. 06-03, Department of Economics, University of Wollongong, Australia.

Wanjohi, A.M. &Mugure, A. (2008). Factors affecting the growth of MSEs in rural areas of Kenya: A case of ICT firms in Kiserian Township, Kajiado District of Kenya.