

# Determinant of Financial Literacy on Financial Inclusion of Agripreneurs in Ikwerre LGA Rivers State, Nigeria

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## ABSTRACT

The study examined the determinants of financial literacy on financial inclusion of agripreneurs in Ikwerre LGA Rivers State, Nigeria the specific objectives were to describe the socioeconomic characteristics of agripreneurs, assess the level of financial literacy of agripreneurs, and determine the relationship between financial literacy and financial inclusion of agripreneurs in the study area. A two-stage sampling technique was used in the selection of ninety (90) agripreneurs. Data were analyzed using descriptive statistics and binary logistic regression model. The result showed that 47.6% and 52.4% of male and female respectively were financially included, with mean age of 34 years and household size of six (6) among financially included. The result of binary logistic regression Results shows that financial planning and financial behaviour were statistically significant at 1% respectively. The study recommends that Government and policy makers should maximize efforts towards promotion of increasing the levels of financial literacy especially in rural areas through financial education programmes, financial literacy should be part of agricultural extension teaching programmes, and financial institutions should increase the level of awareness on their financial products and services.

**Keywords:** Agripreneur, Financial literacy, Financial inclusion, Financial knowledge

## INTRODUCTION

Agriculture is the bedrock of economic growth and development among nations of the world. Thus, most nations all over the world make it a priority by developing and exploiting this sector for the feeding and earning of revenue for development purposes (Yilson *et.al*, 2021). Agricultural sector accounts for a relatively small share of the global economy however remains pivotal to the livelihoods of many people. In 2012 the world population was estimated to be 7.1 billion people, however, about 1.3 billion (19 percent) were estimated to directly engaged in farming, but agriculture represented just 2.8 percent of overall income (World Bank 2012). However, in today's middle- and low-income countries, where most of the world's farmers are to be found, agriculture accounts for a much greater share of national income and employment. For instance, agriculture provides food and nutrition to a population estimated at 190 to 200 million and creates employment opportunities through forward and backward linkages to support 70 to 75 percent of the Nigerian working population. This implies that agriculture and the economy are synonymous; one cannot modernize the economy without stating it with agriculture.

Agriculture all over the world is going through a phase of transition. In this changing scenario, agriculture is taking new shape and expanding its scope beyond the limits of mere crop cultivation and animal husbandry for livelihood of rural population. Activities like diversification, value addition, precision farming, high-technology agriculture, agripreneurship, global marketing, organic farming, financial inclusion among others are gradually getting due attention of people involved on redefining agriculture (Ahmed *et al.*, 2011). The individuals who undertake business activities within the agricultural value chain are agricultural entrepreneurs otherwise called agripreneurs. Overtime, agripreneurs have initiated and accelerated transformative agricultural changes that have risen productivity to a level of reducing real food prices, yet boosting rural incomes and creating jobs, and making financial profit from performing the activity or activities in any stage(s) of the agricultural value chain (Ajekwe and Ibiameke, 2020).

There are many elements necessary to support the development of entrepreneurial actions in agriculture. Among others, the access to sources of financing in an efficient manner is essential (Anton and Bostan, 2017). According to Cassar (2004) the ability to access the necessary external funding is a catalyst for agricultural entrepreneurship. The ability to access different sources of funding depends on additional factors. On the supply side, being able to raise funds in efficient markets, or borrowing money from efficient intermediaries and banks, in particular, represents basic conditions for collecting money in convenient conditions. The demand side is instead interpreted as a given element. In other words, the ability of the whole economic system to obtain the necessary financing is often considered a given element, related to the structure of the country's economic and financial system. These aspects have an influence on the risk, and therefore on the pricing, of each transaction, but not in the access to the various financing alternatives. In this framework, the understanding of the agripreneur is crucial (Yang *et al.*, 2018). Financial literacy plays a central role in the relationship between agripreneur, financial markets and intermediaries, and potential lenders in general. Financial literacy is a resource that allows the relationship between market agents to improve, as it mitigates the information asymmetry between lenders and borrowers (Hussain *et al.*, 2018). In other words, financial literacy does not have to be considered just an incentive factor; it is an essential element for developing a sustainable agripreneurship.

Agribusinesses face challenges in taking certain financial decisions and making informed judgments regarding financial services that impact on their financial activities. Making such decisions requires financial literacy. Financial literacy is the set of skills and knowledge that allows an individual to take appropriate financial decisions (Norman, 2010). Financial inclusion is of great significance in a developing country like Nigeria particularly in Ikwerre Local Government Area (LGA) in Rivers State where infrastructural facilities are not available and economic activities are unpredictable. Financial and societal uncertainties indicate volatility in income that can have an unfavourable reaction on the financial stability of any economy. Without financial literacy, financial inclusion is baseless because stakeholders cannot understand the benefits/risks associated with the service (Grohmann, Klühs, and Menkhoff, 2018). Financial literacy and poor financial management skills was identified as a limiting factor entrepreneurship growth among youths in Africa (Fatoki, 2014). Financial Literacy is viewed as a critical element for encouraging financial inclusion, consumer protection and ultimately, financial solidness and capability.

In Nigeria, it is reported that majority of the populace including the literates are financially illiterates. Specifically, about 64% of the adult population is financially excluded. That means they do not possess the skills to manage banking transactions and take advantage of a broad range of financial products and services such as payments systems, savings, credit facilities, insurance and pension to improve their well-being (Berger, 2012).

The recognition that financial literacy, in complementarity with financial inclusion and consumer protection is a fundamental pillar in the pursuit of entrepreneurial growth and financial stability is the principal motivation for the increase interest and attention in financial literacy globally. In Nigeria, the large number

of adults who are financial excluded is an additional impetus for the pursuance of financial literacy policy. Among the reasons for these disturbing statistics are the lack of financial literacy in the curriculum of all levels of our educational systems, lack of knowledge of the service providers and service provided as well as the stringent conditionality's for accessing the services where they are available (CBN, 2015)

Since the recent mandatory introduction of monetary policies in Nigeria aimed at boosting financial inclusion (CBN 2015), it has become imperative to study how financial literacy and inclusion boost agricultural entrepreneurial growth in particularly in Ikwerre LGA Rivers State Nigeria. Financial inclusion and literacy are inseparable factors that help to comprehend the requirements and advantages of the items and administrations offered by the formal financial institutions. However, very little emphasis has been given to both factors by scholars in the past and with much lesser effort made towards attaining the relationship between them, hence this research aimed to examine the effect of financial literacy on financial inclusion of agripreneurs in Ikwerre LGA of Rivers State, Nigeria to fill this knowledge gap. The specific objectives of this research are to:

1. describe the socio-economic characteristics of agripreneurs in the study area;
2. assess the level of financial literacy of agripreneurs in the study area; and
3. determine the relationship between financial literacy and financial inclusion of agripreneurs in the study area.

## RESEARCH METHODOLOGY

The study was carried out in Ikwerre Local Government Area of Rivers State, Nigeria. The Local Government Area lies between Latitude 4°65 North and longitude 5° to 7°12 East (National Population Census, 2006) and covers 530 sq mi (1,380 km<sup>2</sup>) in Rivers State (Nnodim and Raji, 2020). The study area is made up of twelve (12) communities namely, Isiokpo, Elele, Omerelu, Apani, Ubima, Omuanwa, Omagwa, Omademe, Ipo, Ozuaha, Igwuruta, and Aluu. Ikwerre Local Government Area has boundaries with Imo State in the North, Emohua Local Government Area in the West and Etche Local Government Area in the East and Obio/Akpor Local Government Area in the South. The LGA is rich with natural resources, and it is endowed with productive agricultural land, forest, fresh and saline water bodies, and oil and gas deposits. The major food crops grown include cassava, maize, yam, cocoyam, and vegetables among others. Dominant perennial crops grown in the area are oil palm, plantain, banana, coconut, African pear, raffia palm, orange, pawpaw among others. The diverse nature of agricultural production in the area allows for significant level of agribusiness activities all year round in the LGA (Nlerum, 2013).

Two-stage sampling procedure was used to select the respondents. The first stage was a purposive selection of three communities based on a high concentration of agro-related economic activities and the presence of banking institutions. The second stage was a purposive selection of fourteen (14) agripreneurs from each community who are formally financially included and sixteen (16) agripreneurs who are not formally financially included. This yielded forty-two (42) agripreneurs who are formally financially included and forty-eight (48) who are not formally financially included in the study, making a total of ninety (90) agripreneurs for the study. Primary data were collected using questionnaire. Two sets of questionnaires were designed; the first set is for those who are formally financially included, and the second set was for those who are not formally financially included. The questionnaire was designed to capture the socio-economic characteristics, financial literacy and financial inclusion of agripreneurs in the study area. Data collected were analyzed using descriptive statistics and inferential statistics. Objective one and two was analyzed using descriptive statistics and objective three was achieved using binary logistic regression model. The data collected supported the assumptions binary logistic regression which stated that the

dependent variable to be measured should be on dichotomous scale, and the independent variables can be either **continuous or categorical**.

### Model Specification

Let  $P_j$  denote the probability that the  $j$ -th agripreneur is formally financially included. It's known that  $P_j$  is a variable, and its distribution depends on the vector of predictors  $X$ , so that:

$$P_j(X) = \frac{e^{\alpha + \beta X}}{1 + e^{\alpha + \beta X}} \quad (1)$$

The logit regression function to be estimated is then written as:

$$\ln \left\{ \frac{P_j}{(1 - P_j)} \right\} = \alpha + \sum I\beta_i X_{ij} \quad (2)$$

The logit variable  $\ln\{P_j/(1-P_j)\}$  is the natural log of the odds in favour of an agripreneur being formally financially included. The coefficient estimates of  $\beta$  gives the change in the log-odds (logarithm of relative probabilities) of the outcome—here = 1—, for a one unit increase in the independent variable, holding all other independent variables constant. Logit regressions are estimated using Maximum Likelihood (ML) rather than OLS. ML calculates coefficient estimates that maximize the likelihood of the sample data set being observed.

The binary logit regression model to be estimated is specified as follows:

$$c_{ij} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + u \quad (3)$$

Where;

$C_{ij}$ , = 1 if an agripreneur is formally financially included, and 0 otherwise (dummy).

$X_1$  = Financial Planning

$X_2$  = Financial Knowledge

$X_3$  = Financial Behaviour

$X_4$  = Awareness of Financial Products

$u$  = Error term

$\beta_0$  = Intercept

$\beta_1, \beta_2, \beta_3, \beta_4$  = Regression coefficients

## RESULTS AND DISCUSSION

The socio-economic characteristics of agripreneurs are presented in Table 1 below.

Table 1: Socio-economic Characteristics of Agripreneurs

| Variables                                  | Financially included |              | Not financially included |              |
|--|----------------------|--------------|--------------------------|--------------|
|  | Frequency            | Percentage   | Frequency                | Percentage   |
| <b>Gender</b>                              |                      |              |                          |              |
| Male                                       | 20                   | 47.6         | 21                       | 43.7         |
| Female                                     | 22                   | 52.4         | 27                       | 56.3         |
| <b>Age (in years)</b>                      |                      |              |                          |              |
| <29  | 13                   | 31.0         | 7                        | 14.6         |
| 30 – 39                                    | 20                   | 47.6         | 12                       | 25.0         |
| 40 – 49                                    | 9                    | 21.4         | 19                       | 39.6         |
| 50 – 59                                    |                      |              | 9                        | 18.7         |
| >60  |                      |              | 1                        | 2.1          |
| Mean                                       |                      | 34           |                          | 41           |
| <b>Household size (in number)</b>          |                      |              |                          |              |
| 1 – 3                                      | 2                    | 4.8          | 6                        | 12.5         |
| 4 – 6                                      | 27                   | 64.2         | 19                       | 39.6         |
| 7 – 9                                      | 8                    | 19.1         | 21                       | 43.7         |
| 10 – 12                                    | 4                    | 9.5          | 1                        | 2.1          |
| >13  | 1                    | 2.4          | 1                        | 2.1          |
| Mean                                       |                      | 6            |                          | 6            |
| <b>Educational level</b>                   |                      |              |                          |              |
| No formal                                  | 3                    | 7.1          | 6                        | 12.5         |
| Primary                                    | 5                    | 11.9         | 10                       | 20.8         |
| Secondary                                  | 10                   | 23.8         | 22                       | 45.9         |
| Tertiary                                   | 24                   | 57.2         | 10                       | 20.8         |
| <b>Agribusiness experience (in years)</b>  |                      |              |                          |              |
| 1 – 10                                     | 35                   | 83.3         | 30                       | 62.5         |
| 11 – 20                                    | 7                    | 16.7         | 14                       | 29.2         |
| 21 – 30                                    |                      |              | 3                        | 6.2          |
| 31 – 40                                    |                      |              | 1                        | 2.1          |
| Mean                                       |                      | 7            |                          | 9            |
| <b>Income level (₹, 000,000 per annum)</b> |                      |              |                          |              |
| <1   | 10                   | 23.8         | 2                        | 4.2          |
| 1, – 10,                                   | 32                   | 76.2         | 42                       | 87.5         |
| >10,                                       |                      |              | 4                        | 8.3          |
| Mean                                       |                      | 3,395,893.00 |                          | 1,324,921.00 |

| Membership of cooperative |    |       |    |       |
|---------------------------|----|-------|----|-------|
| No                        | 30 | 71.4  | 34 | 70.8  |
| Yes                       | 12 | 28.6  | 14 | 29.2  |
| Total                     | 42 | 100.0 | 48 | 100.0 |

Source: Field Survey, 2023

The results of the demographic and socio-economic characteristics of agripreneurs in the study area is presented in Table 1. The demographic and socio-economic variables considered include gender, age, household size, educational level, agribusiness experience, income level, and cooperative membership for both agripreneurs who are financially included and agripreneurs who are not financially included in the study area. The result showed that about 52.4% of the financially included agripreneurs were of the female gender while 47.6% were male, while for those not financially included 43.7% and 56.3% were of the male and female genders respectively. This result shows that there were more female agripreneurs in the study area. This supports the findings of Ugwuja and Onwachu (2019) who reported that there were more female farmers in their study.

Table 1 also revealed that about 47.6% of the financially included agripreneurs were aged between 30-39 years, 31% were under 30 years, while 21.4% were between 40-49 years. There were no financially included agripreneurs above 49 years and the mean age of financially included agripreneurs was 34 years. This result indicates that the financially included agripreneurs in the study area of the youthful age. For agripreneurs in the study area who are not financially included and as depicted in Table 1, about 39.6% were aged between 41-50 years, which when combined with an average age of 41 years and the presence of individuals above 60 years (2.1%) depicts that agripreneurs not financially included were of a more advanced age group. More so, Table 1 reveals an average household size of 6 persons for both agripreneurs who are financial included and agripreneurs who are not financially included in the study area.

Education is an important socio-economic factor that influence agripreneurs decision making because of its influence on their awareness, perception and adoption of innovations that can bring about increase in productivity. The results in Table 1 revealed that for those financially included 7.1% of agripreneurs in the study area had no formal education while 92.9% had one form of education or the other; about 11.9% had primary education, 23.8% had secondary education and 57.1% had tertiary education. Whereas for those not financially included, 12.5% had no formal education, 20.8% had primary education, 45.9% had secondary education and 20.8% had tertiary education. This result showed that majority of both the financially agripreneurs (92.9%) and agripreneurs not financially included (87.5%) in the study area had one form of formal education or the other implying that there is potential for increased agribusiness activity since education will enable agripreneurs to have access to information on new agricultural innovation which can be adopted to enhance their productivity.

The distribution of agripreneurs by their agribusiness experience in Table 1 revealed that for financially included, with 83.3% of agripreneurs had 1-10 years of agribusiness experience, 16.7% had 11-20 years and none had agribusiness experience above 20 years. For agripreneurs not financially included, 62.5% had 1-10 years of agribusiness experience, 29.2% had 11-20 years, 6.2% had 21-30 years of agribusiness experience, while only 2.1% had agribusiness experience of 31-40 years. This result shows that although majority of both classes (financially included and not financially included) of agripreneurs are new in the career of agribusiness, agripreneurs who are not financially included are slightly more experienced than their counterparts in the study area.

It was also observed as depicted in Table 1 that financially included agripreneurs had higher income levels (an average annual income of ₦ 3,395,983.00) than agripreneurs who were not financially included



(an average annual income of ₱1,324,921.00).

Conclusively majority both financially included agripreneurs (71.4%) and agripreneurs not financially included (70.8%) did not participate in any cooperative association. The result indicates low membership of cooperatives by a significant proportion of agripreneurs in the area, which implies that agripreneurs had less access to resources and information that would improve their agribusiness practices.

Financial inclusion level of agripreneurs in the study area is presented in Table 2.

**Table 2: Level of Financial Inclusion of Agripreneurs in the Study Area**

| Variables   | Financially included |            | Not financially included |            |
|---|----------------------|------------|--------------------------|------------|
|   | Frequency            | Percentage | Frequency                | Percentage |
| <b>Financial Planning</b>   |                      |            |                          |            |
| The agripreneur responsible for day-to-day decision about money in the agribusiness | 37                   | 88.1       | 40                       | 83.3       |
| Prepares firm budget  | 32                   | 76.2       | 16                       | 33.3       |
| Checks if his income covers living cost   | 33                   | 78.6       | 26                       | 54.2       |
| Mean  | 34                   | 81         | 27.3                     | 56.9       |
| <b>Financial Knowledge</b>  |                      |            |                          |            |
| How to allocate money to various inputs   | 32                   | 76.2       | 23                       | 47.9       |
| How to calculate interest rate  | 40                   | 95.2       | 32                       | 66.7       |
| Investment with high return will be at high risk                                    | 30                   | 71.4       | 24                       | 50         |
| Meaning of inflation  | 40                   | 95.2       | 44                       | 8.3        |
| How to reduce risk in investment  | 29                   | 69.1       | 21                       | 64.6       |
| Mean  | 34.2                 | 81.4       | 63                       | 60.0       |
| <b>Financial Behaviour</b>  |                      |            |                          |            |
| Agripreneurs that have savings  | 41                   | 97.6       | 37                       | 77.0       |
| Agripreneurs that make regular investments  | 21                   | 50.0       | 11                       | 45.8       |
| Good management/utility of additional income  | 10                   | 23.8       | 10                       | 20.8       |
| Mean  | 24                   | 57.1       | 19.3                     | 40.2       |
| <b>Awareness of Financial Products ranging from 1-9 products</b>                    |                      |            |                          |            |
| Agripreneurs that identified 1-3  | 16                   | 38.1       | 48                       | 100        |
| Agripreneurs that identified 4-6  | 23                   | 54.8       |                          |            |
| Agripreneurs that identified 7-9  | 26                   | 61.9       |                          |            |
| Mean  | 21.7                 | 51.7       | 16                       | 33.3       |

Source: Field Survey, 2023

Results in Table 2 shows that in financial planning, both the financially included and not financially included agripreneurs had relatively high levels of financial literacy with mean scores of 81% and 56.9% respectively. However, the financially included agripreneurs proved to be more financially literate in terms of financial planning as 88.1% of them were responsible for day-to-day decision about money in their firms, 76.2% of them engaged in budgeting for their expenditures, and 78.6% of them regularly checked if their

income would cover living costs. This did not consistent with the finding of Ravikumar, *et al* (2013) who reported that Agripreneurs in Madurai, India had low awareness of financial planning.

Table 2 also depicts that for financially included and not financially included agripreneurs respectively, 76.2% and 47.9% of the respondents understand how to allocate money to firm inputs, 95.2% and 66.7% know how to calculate interest rate, 71.4% and 50% know that high risks accompany high rewards, with 69.1% and 64.6% sentient of how to reduce risks of such investments. 95.2% and 83% understand the meaning of inflation which culminates into mean scores of 81.4% and 60% which indicate that agripreneurs in the study area are knowledgeable enough for making decisions regarding their firms. This does not agree with the work of Ugwuja and Onwuachu (2020), which indicated that most poultry firm owners in Anambra State, Nigeria were not financially literate in terms of financial knowledge in farm management, but it supports the work of Lusardi & Mitchell (2014) who reported that financial knowledge is an important factor for financial literacy.

Table 2 also depicts that regarding financial behavior of agripreneurs who are not financially included, while 77% have got savings, only 45.8% are able to make regular investments, and only 20.8% have planned good management/utility in eventuality of receiving additional income. The mean score of 40.2% suggests that the financial behavior of this class agripreneurs in the study area is below par.

Contrastingly agripreneurs who are financially included in the study area fare better in terms of financial behavior with a mean score of 57.1% stemming from the fact that 97.6% of them have got savings, 50% of them make regular investments, and 23.8% have planned good management/utility in eventuality of receiving additional income.

The agripreneurs were asked to state whether they are aware of any of an array of financial products ranging from one to nine. For the financially included (as depicted in Table 2), it was discovered that majority (61.9%) were knowledgeable about 6 – 9 of the listed financial products which implies high level financial literacy in terms of awareness of financial products. On the contrary, agripreneurs in the study area who are not financially included were only (100%) knowledgeable about 1 – 3 of the financial products listed thus implying very low level of financial literacy in terms of awareness of financial products.

**Table 3: Binary Logistic Regression Determinant of Financial Literacy on Financial Inclusion of Agripreneurs in Study Area**

| Variables                 | Coeff.   | S.E.  | Wald  | Df | P-values | Exp(B) |
|---------------------------|----------|-------|-------|----|----------|--------|
| Financial planning        | 0.523*** | 0.501 | 1.093 | 1  | 0.006    | 1.688  |
| Financial knowledge       | -0.317   | 0.452 | 0.492 | 1  | 0.483    | 0.728  |
| Financial behaviour       | 0.436*** | 0.336 | 1.687 | 1  | 0.001    | 0.647  |
| Awareness of fin. product | 0.567    | 0.669 | 0.718 | 1  | 0.397    | 1.763  |
| Constant                  | 0.774    | 0.972 | 0.633 | 1  | 0.426    | 2.168  |
| Omnibus Chi-square        | 3.568    |       |       |    |          |        |
| Nagelkerke R-square       | 0.052    |       |       |    |          |        |
| Cox & Snell R-square      | 0.039    |       |       |    |          |        |

Source: Field Survey, 2023

A binary logistic regression was used to determine the effect of financial literacy on financial inclusion of agripreneurs in Ikwerre LGA, Rivers State, Nigeria, as shown in Table 3. The dependent variable Financial Inclusion was defined as follows: Financially Included = 1, Not Financially Included = 0. The model is



statistically significant, indicating that the explanatory variables estimated reliably distinguished agripreneurs who are financially included from those who are not (Chi-square = 3.568, P = 0.000). The Nagelkerke R-square value of 0.052 indicates that the combined effects of all the independent variables in the model explained 52.0 percent of the variation in financial institution.

Two of the four explanatory variables examined in the model were statistically significant in terms of financial inclusion; these variables were financial planning and financial behavior. The coefficient of financial planning is positive and statistically significant at 1%. This implies that agripreneurs with high level of financial planning are more likely to be financially included the coefficient of financial behaviour is also positive and statistically significant at 1% level of probability which also implies that agripreneurs with higher level of financial literacy in terms of financial behavior are more likely to be financially included. This corroborates the findings of Grohmann, Klühs & Menkhoff (2018). Financial knowledge and awareness of financial products were not significant.

## CONCLUSION

This study examined the effect of financial literacy on financial inclusion among agripreneurs in Ikwerre Local Government Area, Rivers State, Nigeria. The findings revealed that agripreneurs, both financially included and excluded, demonstrated varying levels of financial literacy, with those financially included exhibiting higher literacy levels. The results indicated that financial planning and financial behavior were significant determinants of financial inclusion, emphasizing the importance of these aspects in enhancing the financial inclusion of agripreneurs. The following are recommended.

1. Education was mirrored as a major driver for financial literacy and financial inclusion of agripreneurs in the study area, therefore Government and policy makers should maximize efforts being made towards its promotion especially in rural areas and to attain increased levels of financial literacy through financial education programmes.
2. Financial literacy should also be part of agricultural extension teaching programmes that will be used to reach out to the rural farmers. This would reduce the effect of lack of formal education on the ability of such rural farmers to run profitable agribusiness firms.
3. Financial institutions should increase the level of awareness on their financial products and services through television and radio stations, social media, and bank application development. This would serve to bolster the tally of agripreneurs with access.

## REFERENCES

1. Ahmed, T., Hasan, S. & Haneef, R. (2011). Entrepreneurial characteristics of the agripreneurs under the Scheme of Agriclinics & Agri-buisness Centres. *Journal of Community Mobilization and Sustainable Development*, 6(2), 145-149.
2. Ajekwe, C.C. & Ibiameke, A. (2020). Entrepreneurship through Agriculture in Nigeria. *Business and Management Research*, 9(1), 35-42.
3. Anton, S.G. & Bostan, I. (2017). The role of access to finance in explaining cross-national variation in entrepreneurial activity: A panel data approach. *Sustainability*, 9(11), 1947.
4. Berger, R. (2012). The digital transformation of industry. *(The study commissioned by the Federation of German Industries (BDI), Munich. www.rolandberger.com/publications/publication\_pdf/roland\_berger\_digital\_transformation\_of\_industry\_20150315.Pdf)*.
5. Cassar, G. (2004). The financing of business start-ups. *Journal of business venturing*, 19(2), 261-283.
6. Central Bank of Nigeria. (2015). Central Bank of Nigeria National Financial Literacy Framework.
7. Fatoki, O. (2014). The financial literacy of micro entrepreneurs in South Africa. *Journal of social sciences*, 40(2), 151-158.

8. Grohmann, A., Klühs, T. & Menkhoff, L. (2018). Does financial literacy improve financial inclusion? Cross country evidence. *World Development*, 111, 84-96.
9. Hussain, J., Salia, S. & Karim, A. (2018). Is knowledge that powerful? Financial literacy and access to finance: An analysis of enterprises in the UK. *Journal of Small Business and Enterprise Development*.
10. Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5-44. <https://doi.org/10.1257/jel.52.1.5>
11. Nlerum, F.E. (2013). Effect of national open apprenticeship scheme on youth employment in Ikwerre Local Government Area of Rivers State, Nigeria. *Journal of Agriculture and Social Research*, 13(1), 56-62.
12. Nnodim, A.U. & Raji, W.I. (2020). Assessment of agricultural technology adoption behaviour among crop farmers in Ikwerre Local Government Rivers State. *Asian Research Journal of Agriculture*, 12 (2), 16-26. <https://doi.org/10.9734/arja/2020/v12i230079>
13. Norman, A.S. (2010). Importance of financial education in making informed decision on spending. *Journal of economics and International Finance*, 2(10), 199-207.
14. Ravikumar,R., Sivakumar,S.D., Jawaharial, M., Palanichamy, D.V. & Sureshkumar, D. (2013) Assessment of farm financial literacy among Jasmine growers in India. *Developing country studies*, 3 (13), 67 -70.
15. Ugwuja, V.C. & Onwuachu, O.E. (2020). Assessment of farm financial literacy levels among poultry farmers in Anambra State, Nigeria. *Nigerian Agricultural Policy Research Journal (NAPReJ)*, 7(2237-2021-1449), 43-48.
16. World Bank. Development Research Group. Finance, & Private Sector Development Team. (2012). *The Little Data Book on Financial Inclusion 2012*. World Bank Publications.
17. Yang, S., Ishtiaq, M. & Anwar, M. (2018). Enterprise risk management practices and firm performance, the mediating role of competitive advantage and the moderating role of financial literacy. *Journal of Risk and Financial Management*, 11(3), 35.
18. Yilson, E. E., Adikaba, I. A., Ngukwarai I.D., Dom, O. Y & Lopwus, D. M (2021) Agriculture And Economic Growth In Nigeria, *Arts and Social Science Research*, 11 : 258-277.