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The Paramount of Finance and National Development in Nigeria: Emphasis to Niger State Respective

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Abstract: *In order to reduce poverty and inequality and increase economic growth and productivity, the paper examines the importance of financial inclusion and national development in Nigeria, with a focus on Niger State. It does this by assisting individuals and businesses, particularly small and medium-sized enterprises (SMEs), in saving and investing, managing financial risks, and facilitating smooth consumption. This study identifies major supply-side and demand-side obstacles to financial inclusion as well as structural barriers, and it draws attention to Niger's relative behind other WAEMU nations in terms of youth and women's use of formal financial services. In order to assist the nation's development goal, it lays out major targets for Niger to harness the potential of increased financial inclusion. These include initiatives to address inadequate financial literacy, encourage digitization, and address informality.*

Keywords: *Niger State Business Environment, Finance, National Development, Opportunities, Challenges*

1. INTRODUCTION

Overview

It is often known that micro, small, and medium-sized enterprises (MSMEs) have a positive impact on national economies; this is especially the case for Nigeria. The relevance of MSMEs to Nigeria's economy has been acknowledged by policies and relevant regulatory frameworks on several occasions, most recently. For example, according to data from Nigeria's National Bureau of Statistics cited in the National Policy on Micro, Small, and Medium Enterprises (2021–2025 Edition), MSME employment in the nation accounted for approximately 60 million jobs in 2017. This number has probably increased as a result of the government's increased, coordinated attention on MSMEs at all levels of the national, state, and local levels as well as at the governance structures across the continent and region. Consequently, enhancing comprehension of the business climate is crucial for MSMEs in Nigeria, especially the agri-food sector, which is the subject of this discussion. Furthermore, it's critical to concentrate on regional and continental regulatory and policy frameworks that improve the business climate for MSMEs in Nigeria Abalaka,(2022). This article focuses on Niger State; the broader research was restricted to a few states in Nigeria. In the study, focus groups and key informant interviews were used. Ajiteru (2021) deliberately picked 16 stakeholders for Niger State who demonstrated strong and pertinent experience in the subject matter. Participants from the nonprofit organization sector were

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among the public and private sector representatives that were chosen. State Ministries and the Small and Medium Enterprise Development Agency of Nigeria were among the notable organizations that took part in the study of Justice, Commerce, and Agriculture. Farmer associations and the National Association of Small and Medium-Sized Enterprises Sulaiman (2023) were also present.

Historical Context: Unpacking the Business Environment in Niger State

The goal of the MSME policy is to support the development and maintenance of an environment that makes Nigeria's MSMEs competitive both domestically and internationally. Its goal is to draw attention to the availability of financial and non-financial services so that MSMEs can make the biggest possible contributions to the country's wealth, output, and employment development. The phrase "business environment" describes the internal and external factors that might support or impede an organization's efforts to achieve its goals, which may include producing goods and services, maximizing profits, cutting expenses, and satisfying customers,

maximizing shareholder value, creating jobs, and practicing corporate social responsibility (Kotler and Keller, 2012). Located in the country's north-central area, Niger State was established on February 3, 1976, and is one of Nigeria's 36 states. Niger's capital, Minna, is nicknamed as the "Power State" because Kainji, Jebba, and Shiroro, Nigeria's three biggest hydroelectric power plants, are located there. With a landmass of around 86,000 km², it is the largest State in Nigeria, making up 8.6 million hectares, or 9.3%, of the nation's total land area (TENS, 2022). Because of the many prospects in its economic environment, Niger State is special and looks to be a center for entrepreneurial Sulaiman, (2023). Participants in the focus groups emphasized a few of these chances during the conversation. The existence of a sizable pool of untapped human resources, including energetic youth, women, and men with competent bodies, presents a big opportunity for businesses to flourish in Niger State. This pool of labor can convert into inexpensive labor because there is a surplus of labor available relative to the demand. Gwada (2022) reports that Niger State has an unemployment rate of 38.80%, which is higher than the national average Abalaka (2022) due to excess labor.

To facilitate the flow of products and services, Niger has well-developed road networks to its markets. The ESMP (2019) report, which states that the Nigerian government has received funds from the World Bank (WB) and the Agency for French Development (AFD) for the implementation, confirms this of the Niger State's Second Rural Access and

Mobility Project (RAMP-2). RAMP-2 is primarily designed to increase small family farmers' income and competitiveness in rural areas, as well as agricultural productivity and value chain Sulaiman, (2023). Since most of these farmers reside in rural locations, accessibility and mobility play a crucial role in both their agricultural inputs and outputs (products). As part of RAMP-2 works, a total of 20 crucial river crossings throughout various Local Government Areas (LGA) in Niger State have been identified, built, and put into service to improve local farmers' accessibility, particularly during the rainy seasons Ajiteru, (2021). Since practically every settlement in Niger State has many marketplaces, the ESMP (2019) also benefits from being close to the market, which makes doing business in the State more alluring as there's no need to hunt for markets in order to purchase or sell goods. Additionally, it was mentioned in the group discussion that Niger State has a large number of locally made tools and equipment that can lower input costs for business owners. The executive vice-chairman of NASENI reaffirmed this by revealing that NASENI has started the design, production, and reengineering of all processes through SEDI in order to bring about the industrialization, technological advancement, and innovations that are required to address capital flight, unemployment, and poverty in Niger Sulaiman, (2023).

The availability of markets, abundant people resources, and land are Niger State's main advantages. All genders have access to these chances, according to the FGD debate, with men typically making up the larger proportion. Still, in Seldom do men and women have equal possibilities; in all zones, for instance, youth empowerment was set at 40% for women and 60% for men. Eighty percent of women and twenty percent of men were allowed access to rice processing. Additionally, not all local governments had equal access to these opportunities; for some interventions, local governments located closer to the state capital were given preference over those farther away. For instance, people in urban regions have faster access to financing than people in rural areas (Abalaka, 2022). Lastly, the issue of a lack of funding to work with the community to provide things like basic farm equipment was mentioned. Nonetheless, participants thought that if investors contributed to the production of locally fabricated equipment, the cost of the equipment would decrease and become more accessible to residents Sulaiman, (2023).

2. LITERATURE REVIEW

Empirical Literature Review on Sustainable Development Tracking and Financial Inclusion

With varying metrics of financial inclusion and estimating techniques, scholars have over time investigated the relationship between financial inclusion and poverty from cross-national or nation-specific perspectives. For example, in cross-country studies, some academics have examined the impact of financial inclusion on poverty (and income inequality), concentrating on a subset of developing nations in Ajiteru (2021).

An assessment of the relationship between financial inclusion and poverty has also been attempted in Nigeria. While some research was carried out from Abalaka, 2022, other investigations concentrated on the entire nation the viewpoint of local governments in Ekiti, Kebbi, Lagos, Ogun, Ondo, Osun, Oyo, and Minna Sulaiman (2023) as well as the federating units (states). According to their findings, there is a negative correlation between financial inclusion and poverty.

The literature makes it clear that, despite the abundance of studies on the connection between poverty and financial inclusion, scholars have given less consideration to the assessment of this relationship in the state of Niger. Furthermore, the majority of the studies that have already been conducted in Nigeria have either examined the relationship from a macro viewpoint (i.e., in terms of the entire nation) or have concentrated on the states or regions that have the lowest rates of poverty. In light of this, the current study adds to the body of research by specifically analyzing how financial inclusion affects poverty in Niger state.

Niger's Financial Inclusion: Opportunities and Challenges

Financial inclusion can assist people and businesses, especially SMEs, save and invest, calm consumption, and better manage financial risks. It can also enhance economic development and productivity and decrease poverty and inequality. This study identifies major supply-side and demand-side obstacles to financial inclusion as well as structural barriers, and it draws attention to Niger's relative behind other WAEMU nations in terms of youth and women's use of formal financial services. In order to assist the nation's development goal, it lays out critical priorities for Niger to harness the potential of greater financial inclusion. These priorities include addressing low financial literacy, promoting digitization, and addressing informality. Abalaka (2022).

a. Niger must overcome several obstacles to increase inclusivity of its financial system, such as insufficient financial literacy, a mismatch between the requirements of the population and financial services and products, high access and usage costs, the predominance of the informal sector, and infrastructure deficiencies. The primary reasons listed by households for not requesting credit from official financial institutions are as follows: lack the necessary qualifications, (ii) are unable to repay, (iii) there are no banks, (iii) are unsure of how to apply for credit, and (iv) lack the ability to repay. These reasons include supply-side as well as demand-side restraints, which must be lifted by a wide range of stakeholders, including households, businesses, banks, and the government Sulaiman, (2023).
b. Using the services provided by the banking sector is hampered by low financial literacy. Utilization and availability of formal Niger ranks well behind comparable countries in terms of basic general literacy and financial understanding, both of which are necessary for financial services. The adult literacy rate in Nigeria is about 35%, and the percentage for women is considerably lower at 27%. Addressing the shortcomings of the educational system is made more difficult by the rapid population expansion.
c. The population's requirements are not adequately met by financial services and products. The financial services and products available don't seem to be tailored to the unique needs of the sizable rural population, whose primary occupation is still agriculture, which is primarily done informally. Only 0.97 percent of bank credit is allocated to this industry, far less than the 3 percent allotted to the sector in other WAEMU countries. Additionally, service providers are hesitant should adjust to social and cultural norms, since the potential for the growth of Islamic finance appears to have been underutilized Abalaka, (2022).
d. A sizable portion of the populace cannot afford to use banking services. The World Bank predicted that 41.4 percent of Niger's population lived in poverty in 2021. This high percentage combined with the country's comparatively low per capita income is a barrier to the country's efforts to expand financial inclusion Abalaka, 2022.
e. Inadequate broadband and mobile phone networks, in particular, restrict access to new financial products like electronic payments and mobile banking. Because mobile banking doesn't require banks to be physically present, it lowers significant obstacles that prohibit underprivileged populations from accessing and using traditional financial services lowering entrance barriers, providing financial services at a reduced cost, and reaching rural places. The adoption of digital financial services is hampered,

meanwhile, by the nation's inferior access to mobile devices and lack of supporting infrastructure (such as electricity, mobile networks, and internet connections) in comparison to its rivals Sulaiman, (2023).

3. METHODOLOGY

Sample Size and Sampling Method

This study used a cross-sectional field survey research design. Using a questionnaire to evaluate both the independent and dependent variables at the same time, the strategy entails asking households for their responses. The following factors led Sulaiman (2023) to choose a field survey over alternative study designs. First, a field survey is an appropriate tool for gathering a lot of data. Secondly, it offers an efficient method for gathering a sizable sample of the composition group. Third, external validity must be applied to data gathered in the field. Fourthly, it's a tool for gauging people's preferences, attitudes, beliefs, and behaviors—all of which are unobserved variables. Lastly, field surveys yield highly reliable data. Abalaka (2022).

To align with the study's goal, the target population consists of all adults residing in Niger State's 25 local government areas (LGAs). The CBN (2020) estimates that 5,556,247 people live in the state. However, a multistage random sample procedure was employed Sulaiman, (2023) because of the enormous population size and the impossibility of studying every LGA. Grouping the population is one of the techniques used permitting the samples to be selected at random by the researchers at each stage. Because it helps divide the population into smaller groups from which the researchers can select, the strategy is adaptable, economical, and time-efficient Abalaka, (2022).

The state was first divided into the three geopolitical zones of Niger South, Niger East, and Niger North using a multistage random sampling technique. Niger South is made up of eight LGAs, whereas Niger East and Niger North are both made up of nine (9) LGAs. Subsequently, four LGAs were chosen at random from every geopolitical zone. After this process, 12 LGAs with a combined population of 3,237,600 were chosen. The LGAs that were chosen are Bosso, Chanchaga, Shiroro, and Suleja for Niger; Bida, Lavun, Lapai, and Mokwa for Niger South Kontagora, Mariga, Magama, and Mashegu for the Niger North; and East. It is essential to note that the distribution of the population and socioeconomic factors—such as economic activity, culture, industries, religion, etc.—were taken into consideration while choosing the LGAs. Also, 224 towns and villages were chosen at

random and investigated because it is not feasible to take into account every town and village in the chosen LGAs.

The sample size was determined using Slovin's formula (Slovin, 1960) given as:

$$n = \frac{n}{1 + N(e)^2} \qquad (1)$$

where *N* Ecuacion!!! denotes the population size, and *e* represents error tolerance.

The population size (N) for this study is 3,237,600, and the error tolerance/margin of error (e) is 0.04 (or 4 percent). One percent, five percent, and ten percent is the standard margin of error.

However, we chose to use 4% as the margin error because these numbers were either too big or too small to yield the required sample size. This is consistent with the suggestion made by Smith (1991) that researchers select a confidence interval that provides the necessary sample size Sulaiman, (2023).

As a result, the sample size (n) after this process is roughly 624. Given that gender and religion were not taken into consideration, the sample frame chosen is as inclusive as the target population. The adult populations that comprise the sample frame were all chosen at random. In other words, 624 persons were chosen at random to complete the Abalaka, (2022) surveys.

The sample frame is calculated using:

$$lS = \frac{V}{X} \times n \qquad (2)$$

Where V is the population and S is the sample frame of the LGA, where n is the sample size and X is the size of the whole population. Table 1 displays the sample frame of the chosen LGAs within the three geopolitical zones.

Table 1. Sample Frame of Selected LGAs

Zone	LGA	Population	Sample Frame	Total
Niger South	Bida	260,700	50	205
	Lavun	164,400	57	
	Lapai	294,700	32	
	Mokwa	341,200	66	
Niger East	Bosso	208,100	40	216
	Chanchaga	284,000	55	
	Shiroro	331,100	63	
	Suleja	302,200	58	
Niger North	Kontagora	213,500	41	203
	Mariga	280,400	54	
	Magama	302,300	58	
	Mashegu	255,000	50	
Total	12	3,237,600	624	624

Authors' computation using summarize function in Stata 14 based on data collected.

The used questionnaire is made up of several inquiries meant to elicit data from the target audiences Ajiteru, (2021). The questionnaire has an easy-to-use and straightforward design. The questions were broken down into three sections: section A asked questions on the respondents' socioeconomic background; section B focused on financial inclusion and

poverty; and section C examined state-level factors that influence financial inclusion. In order to gain the respondents' assistance, the respondents were informed of the nature and objective of the study, and they were guaranteed anonymity Sulaiman, (2023).

The researchers manually distributed each questionnaire to guarantee precise and timely responses. For further analysis, the gathered data were put together and saved in hard and soft copies. It took about a month to collect all the data. To make sure that everyone understood the questions and could accurately answer them, the researchers went over the questionnaire and spoke with the respondents who required help.

Survey Tools

One of the biggest benefits of using a questionnaire is that it can gather a lot of data quickly and at one location. In order to guarantee a consistent response, the majority of the questions about the socioeconomic of the responses and the questionnaire's closed-ended questions about financial inclusivity. The goal of the study was explained to the respondents, and their anonymity was guaranteed, in an effort to gain their cooperation. Ajiteru (2021) reports that some co-authors personally administered the surveys with the assistance of their research assistants to ensure the accuracy of the data. The co-authors and/or their assistant conducted oral interviews with respondents who had special needs, noting each respondent's response appropriately. Completed questionnaires were forwarded immediately to one of the co-authors who worked remotely for data analysis to find probable outliers and storage in order to facilitate easy collation and ensure the accuracy of the data obtained. This made sure that incomplete surveys were sent back right away for correction Sulaiman, (2023).

This study uses the content validity test in accordance with Smith's (1991) methodology to determine the degree to which the research instrument accurately reflects the underlying construction and its capacity to quantify the purposes for which it is intended. Regardless of the level of material contained in the question construct, the test performs better than others since it can determine the degree to which the research instrument provides adequate coverage of the subject.

The formula, which represents the content validity index of Amins (2005), was accepted.

$$CVI = \frac{NIDV}{TNIQ} \qquad (3)$$

Where TNIQ is the total number of items in the built questionnaire, NIDV is the number of items that have been pronounced valid, and CVI is the content validity index. In order

for a research tool to be determined Reliable, a survey study's CVI must be higher than the minimal CVI of 0.7.

Table 2 summarizes the findings of the content validity test based on the assessments of three knowledgeable experts on the topic being studied. The outcomes show that the CVI score is 0.93 overall. It can be said that the research instrument is genuine as the index is higher than the suggested minimum CVI score of 0.7 for a survey study Abalaka, (2022).

Table 2 Results of Content Validity Test

S/N	Experts	Number of Valid items	Number of items	CVI	Remark
1	Assessor One	31	32	0.97	
2	Assessor Two	30	32	0.94	
3	Assessor Three	28	32	0.88	
Total		89	96	0.93	Acceptable

Authors' computation. *Source:* Authors' computation.

Model Specification and Theoretical Framework

The current study employs Ajiteru's (2021) finance-growth model to establish a connection between financial inclusion and poverty. The fundamental theoretical premise of the finance-growth model is that persistent economic inequality and slow growth, which eventually result in poverty, are significantly influenced by the lack of access to finance. Thus, it has been determined that having access to a secure, convenient, and reasonably priced source of funding is necessary to enhance development performance and, consequently, lessen income inequality and poverty. Ajiteru (2021). This is based on the claim that equal access to opportunities makes it possible for those who are socially and economically marginalized to better integrate into society and actively contribute to its growth shielding themselves against economic shocks Sulaiman, (2023).

Based on the discussion above, a simple functional relationship between poverty and financial inclusion can be summarized as follows:

$$POV_i = f(FI_i) \qquad (4)$$

Where fi_i . Denotes the extent to which th individual is financially included, and pov_i represents the poverty status of th individual defined as:

$$POV_i = \begin{cases} 0 & if\, i \geq \$\,1.9 \\ 1 & if\, i < \$\,1.9 \end{cases}$$

The degree to which people may readily access financial institutions (banks) and credit facilities, as well as having an account with one or more of these institutions, is the conventional way in which the degree of financial inclusion is measured in economics literature. Sulaiman (2023). Access to mobile phone and internet services, as well as

availability of loan facilities from unofficial sources Abalaka, (2022), have recently been given significant weight. Ajiteru (2021).

Evidence suggests that, in addition to financial inclusion, a number of other characteristics, including income level, educational attainment, employment, literacy rate, and social security or transfers, might affect one's level of poverty Sulaiman, (2023). These considerations lead to the following rewriting of the functional connection in Equation (4):

$$POV_i = f(ACCOWN_i, BANK_i, CREDIT_i, INFM_i, PHONE_i, INTERNET_i, Z_i) \quad (5)$$

Where BANK indicates access to banks and other financial institutions, CREDIT is access to credit facilities, INFMi indicates an individual's access to credit facilities from unofficial sources, and ACCOWNi symbolizes both individual's account ownership in a financial institution. According to Abalaka (2022), Zi is the vector of control variables (income level, employment, literacy rate, and access to social security), PHONEi is an individual's access to a mobile phone, and TERNETi is an individual's access to internet services.

In the event that Equation (5) is reformulated explicitly, the model is defined as follows:

$$POV_i = \delta_0 + \delta_1 ACCOWN_i + \delta_2 BANK_i + \delta_3 CREDIT_i + \delta_4 INFM_i + \delta_5 PHONE_i + \delta_6 INTERNET_i + \delta_7 Z_i + \mu_i \quad (6)$$

Where the intercept is denoted by δ0, the regressors' coefficients are δ1 through δ7, and the stochastic disturbance factor with zero mean and constant variance is indicated by μi.

To explore the connection between financial inclusion and poverty, we utilize the logistic regression approach, often known as the logit model. Several factors influence the technique selection. First, the answer variable's dichotomous (binary) nature justifies the application of the approach sulaiman, (2023). In this instance, it might not be acceptable to analyze the relationship using the conventional ordinary least squares (ols) method (gujarati, 2004). Second, the method is not constrained by issues with heteroscedasticity, non-normality of the error term, or dubious r. It is also adaptable and mathematically easier.

Inherent in other linear probability methods ajiteru, (2021). The logit model can be written as:

$$Pr\left(POV = \frac{1}{0}\right) = \delta_0 + \delta_1 ACCOWN_i + \delta_2 BANK_i + \delta_3 CREDIT_i + \delta_4 INFM_i + \delta_4 PHONE_i + \delta_6 INTERNET_i + \delta_7 Z_i + \mu_i \quad (7)$$

where $Pr\left(POV = \frac{1}{0}\right)$ is the probability of being poor, and other identities

The Probit regression model is utilized to assess the association between financial inclusion and poverty in order to determine the consistency and robustness of the estimations produced by the Logit approach. Both the Probit and the Logit models are members of the Generalized Linear Model (GLM) family and have many similarities. However, the connecting function is where the two models diverge most. The Probit model makes use of the Probit function provided by the cumulative normal distribution Sulaiman, (2023), while the Logit model is based on the cumulative Logistic function produced by the inverse of the Logistic distribution. However, data indicates that, in the majority of cases, it is nearly impossible to distinguish between the two Abalaka, (2022).

Here is how the e variables are measured. We use the World Bank's definition of poverty to gauge international poverty line of $1.90 per day; if the respondent spends less than the corresponding amount in Naira ($1.9) per day, the value is 1, and if not, it is 0. The main benefit of using this technique is its worldwide comparability of the extent of (severe) poverty across nations, despite Edward (2006) suggesting that the measure tends to minimize the complexity of poverty Sulaiman, (2023). In addition, the answers to closed-ended questions form the basis of the financial inclusion metrics (ACCOWN, BANK, CREDIT, INFM, PHONE, and INTERNET). Finally, the income range is utilized to calculate an individual's income level (INCL); respondents' highest level of education attained and literacy status are used to calculate their educational qualification (EDU) and literacy rate (LIT); access to social security (SOSEC) is measured by the access of respondents to social safety nets Ajiteru, (2021).

4. RESULTS AND DISCUSSION

Descriptive Statistics

Table 3 summarizes the findings of the computation of descriptive statistics pertaining to the characteristics of the respondents before looking at the relationship between financial inclusion and poverty. The findings show that while 15.71 percent of respondents live in cities, the majority of respondents—84.29 percent of all respondents—live in rural areas. Additionally, men make up more than half of the respondents (331), while women make

up roughly 46.96 percent of the sample (or 293 respondents). Furthermore, a significant portion of the respondents are either married (47.75 percent) or single (28.21 percent), with around two-thirds falling between the 18 to 30-year-old age range.

Furthermore, 367 respondents, or roughly 58.81 percent, can read and write, whereas the remaining respondents report being unable to either write or read. Even with the high percentage of literacy, almost 344 out of the respondents, or 55.13 percent, lack any formal education. Furthermore, 79.49 percent of the respondents, or the majority, are unemployed. Furthermore, the majority of respondents make between US$41 and US$80 per month, roughly one-third make less than US$20, and a small percentage—roughly 1.28 percent—earn more than US$200. Furthermore, just 44.55 percent of the participants received social security benefits from the government, foreign organizations, or religious institutions in the form of money, food, or scholarships Sulaiman, (2023).

Table 3 Descriptive Statistics

Variable	Obs. = 624	Percentage
LOCALITY		
Urban	98	15.71
Rural	526	84.29
GENDER		
Male	331	53.04
Female	293	46.96
AGE		
18 - 30	412	66.03
31 - 50	145	23.2
51 - 60	31	4.96
61 and above	36	5.76
MARITAL STATUS		
Single	176	28.21
Married	298	47.75
Divorced/Separated	134	21.48
Widowed	16	2.56
LITERACY		
Literate	367	58.81
Illiterate	257	41.19
EDUCATIONAL QUALIFICATION		
None	344	55.13
FSLC	47	7.53
Vocational Certificate	1	0.16
Secondary School Certificate	152	24.36
NCE/OND	27	4.33
B.A./B.Sc./HND	50	8.01
Others	3	0.48
EMPLOYMENT STATUS		
Employed	128	20.51
Unemployed	496	79.49
INCOME LEVEL		
Below US$20	205	32.85
US$20 - US$40	281	44.96
US$41 - US$80	99	15.84
US$81 - US$160	24	3.84
US$161 - US$200	7	1.12
Above US$200	8	1.28
SOCIAL SECURITY		
Accessed	278	44.55
Not accessed	346	55.45

Authors' computation using summarize function in Stata 14 based on data collected. Naira/US Dollars exchange rate is 500/$. FSLC denotes the first school leaving certificate, equivalent of the elementary school diploma in the United States Abalaka, (2022).

The consumption expenditure pattern of individuals presented in Figure 1 illustrates that the average daily consumption expenditure of the majority of the respondents (about 33.17 percent – 207 individuals) falls within the US$0.51 – US$0.75 range, while 14.26 percent and 14.90 percent spend between US$1.1 – US$1.90, and above US$1.90 per day, respectively.

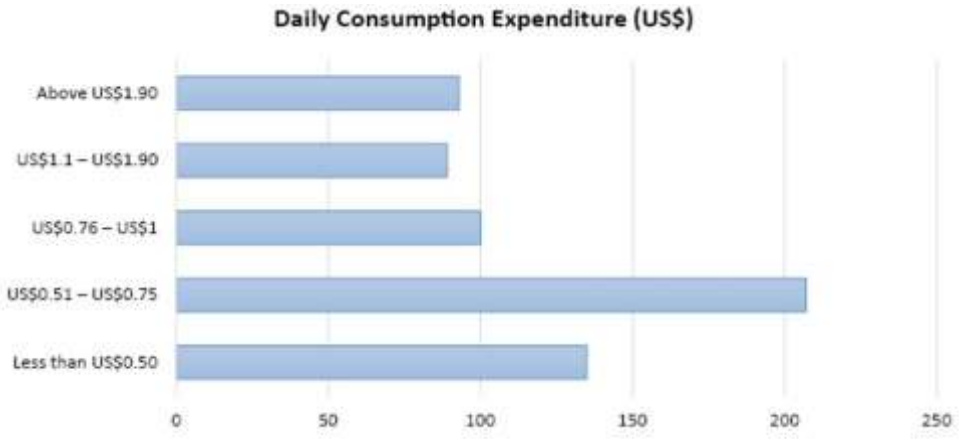

Figure 1
The daily consumption expenditure of the respondents
Note: The exchange rate between Naira and US dollars is NGN399.96/US$. Source: Author computation based on Abalaka, (2022) data collection.

As a result, it is evident that most respondents would be classified as poor under the World Bank's international poverty measure of US$1.90 per day. This indicates that poverty is common in the sample under study, with only approximately 22.92 percent of the sample—or 143 respondents—expending US$1.90 or more per day on average Ajiteru, (2021).

Additionally, Figure 2's presentation of the respondents' financial inclusion characteristics shows that the majority of respondents—or roughly 53.85% of the total population—have an account with at least one financial institution, whether it be a commercial or microfinance bank. Conversely, those who provided accounts say People without an account stated that their lack of trust in financial institutions, distance, the expense of financial services, and the inability to obtain the required documentation are the main reasons they do not have an account with any financial institution. They also stated that opening an account is primarily done to enable them to access credit facilities and their salaries. Furthermore, because banks and other financial institutions are not present in their neighborhood, the majority of respondents (about 83.81 percent) do not have access to them or bank agents Ajiteru, (2021). Although 57.53 percent of the respondents do not have access to financial institutions, they do have credit facilities since they have recently accepted a loan from a financial institution. Furthermore, it was found that

32.05 percent of respondents have access to the internet, although the majority of respondents (526, or 84.29 percent) own a cell phone. While the majority of respondents live in rural areas, just 28.37 percent of them rely on loan facilities from informal sources, meaning that most of them do not use informal savings groups (adashi/esusu/ajo).

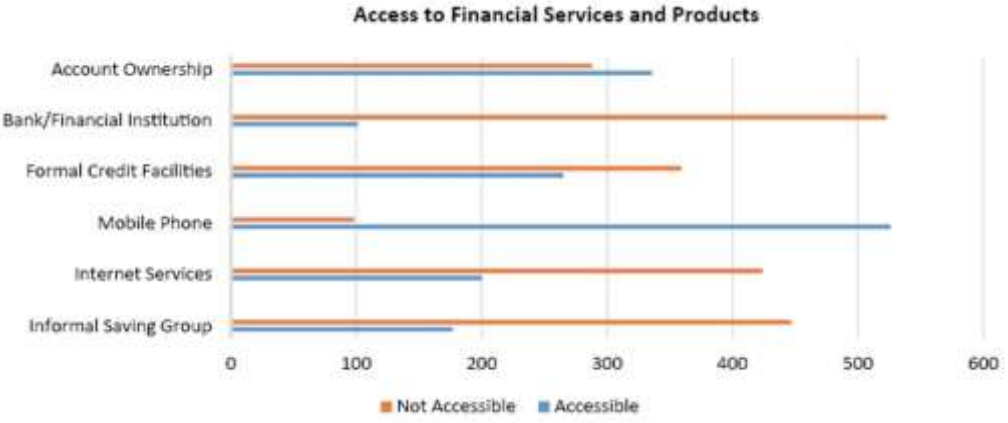

Figure 2

The extent to which respondents have access to financial products and services

Calculation by the authors using data gathered by Abalaka (2022).

Analysis of Correlation

We compute the correlation analysis for the variables in addition to the descriptive statistics. The findings shown in Table 4 demonstrate that there is a weak, yet substantial, negative association between poverty and the components of financial inclusion—account ownership, access to banks and other financial institutions, and availability of credit facilities. Furthermore, there is services, and income level are not significantly associated with poverty.

5. RESULTS OF CORRELATION ANALYSIS

Results of Estimation of the Logit Regression Model

According to Table 5's estimation results from the Logit model, there is a negative correlation between the ownership of an account and the degree of poverty. This correlation is significant at the one percent level and includes access to formal credit facilities, financial institutions, and mobile phones. Ajiteru (2021). The likelihood that someone will open an account with a financial institution will probably change by one unit, which will lower the log of odds of poverty by 2.31. Furthermore, a 1.89 reduction in the log of the odds of poverty is expected for every unit change in the probability that respondents have access to a bank or other financial institution. Furthermore, the likelihood that responders will have access to a credit facility decreases with each unit increase by 3.24 of the likelihood of

poverty. Furthermore, a unit increase in the likelihood that respondents own a cell phone is expected to lower the log of the odds of poverty by 3.56. According to the results, there may be a marginal reduction in poverty by 0.17 percent, 0.12 percent, 0.32 percent, and 0.70 percent, respectively, for those who have more accounts, have access to banks and other financial institutions, have credit facilities, and have access to mobile phones (Abalaka, 2022).

Table 4 Estimation Results of Logit Model

Regressor	Coefficient	Standard Error	Z-statistic	Prob.	dy/dx
Constant	5.135	1.036	4.96***	0.000	-
ACCOWN	-2.311	0.748	-3.09***	0.002	-0.0017
BANK	-1.887	0.702	-2.69***	0.007	-0.0012
CREDIT	-3.245	0.789	-4.11***	0.000	-0.0032
INFM	0.623	0.661	0.94	0.346	0.0003
PHONE	-3.559	0.693	-5.14***	0.000	-0.0069
INTERNET	-0.509	0.663	-0.77	0.443	-0.0002
INCL	-0.001	2.73E-05	-1.83*	0.067	-2.14E-08
EDU	0.346	0.271	1.28	0.202	0.00015
LIT	-3.322	0.999	-3.32***	0.001	-0.0036
EMPL	-3.409	0.735	-4.64***	0.000	-0.0044
SOSEC	-2.557	1.206	-2.12**	0.034	-0.0009
No. of Observations		624			
$LR\chi^2$ (11)		309.07		0.0000	
Pseudo R^2		0.782			

Authors' computation using Logitand mfx functions in Stata 14 based on data collected.
Asterisks (***), (**) and (*) indicate significance at the 1%, 5% and 10% level, respectively.

The findings also show that there is a strong and negative correlation between poverty level and income level, literacy rate, work status, and social security access. A 0.0001 decrease in the log of the probability of poverty occurs for every unit rise in respondents' income. Moreover, a rise in respondents' chance of literacy lowers the log of probabilities of poverty by 3.32. Moreover, a unit increase in the likelihood that a person has a job is probably going to lower the log of the odds of poverty by 3.41. Additionally, for every unit increase in the probability of receiving social security, the log of probabilities of poverty drops by 3.41. Furthermore, the marginal effect studies show that an increase in The poverty level decreases by 0.00000214 percent with an increase in income level; however, the rates of employment, literacy, and social security access all decrease the poverty level by 0.09, 0.44, and 0.36 percent, respectively. Sulaiman (2023) found no significant correlation between poverty level and informal savings sources, educational attainment, or internet access.

Logit Regression Model Diagnostic Test Outcomes

Table 5 reports the findings of the diagnostic testing. The calculated model is free from bias and misspecification error, and it fits the data well, as shown by the outcomes of the Hosmer-Lemeshow goodness-of-fit test and the link test for specification error, together with the related probability values. Furthermore, the LM test statistic for heteroscedasticity and its corresponding probability show that the estimated model is free from the problem of heteroscedasticity Abalaka, (2022).

Table 5 Results of Diagnostic Tests Logit Model

Test	Statistic	Prob.
_hat	6.29	0.000
_hatsq	0.020	0.982
χ^2 HL	0.530	0.999
χ^2 HET	2.80	0.993

Authors' computation using linktest,lfit, Logit, predictandtest functions in Stata 14.

hat and hatsq denote linear predicted value and linear predicted value squared of the linktest. χ2 HET represents heteroscedasticity LM test statistics. χ2 HL is Hosmer-Lemeshow's goodness-of-fit test statistic Ajiteru, (2021).

We additionally examine the existence of linear correlation, if any, between the explanatory factors. The variance inflation factor (VIF) and tolerance tests are frequently used by researchers to assess the presence of severe multicollinearity between variables in a model, even though evidence suggests that this can be determined when the standard errors of the coefficients are very large (inflated) or when the model as a whole is significant but none or most of the coefficients are. A major collinearity issue is indicated by a VIF value of 10 or more and a tolerance value of 0.1 or less. In general, a VIF greater than 4 or a tolerance below 0.25 are cause for concern. Table 7's VIF and tolerance calculations for the variables show that the model is also free from multicollinearity problem. Thus, the results can guide policy formulation Sulaiman, (2023).

Table 6 Results of Multicollinearity Test

Variable	VIF	Tolerance
ACCOWN	1.31	0.7623
BANK	1.26	0.7954
CREDIT	1.20	0.8307
PHONE	1.32	0.7595
INTERNET	1.03	0.9722
INCL	1.05	0.9499
EDU	1.29	0.7781
LIT	1.42	0.7026
EMPL	1.27	0.7853
INFM	1.03	0.9694
SOSEC	1.13	0.8857
Mean VIF	**1.27**	

Authors' computation using collinandtest functions in Stata 14

VIF represents a variance inflation factor, and it represents the degree to which the inflation of the standard error could be caused by collinearity. Tolerance is 1⁄VIF , and it measures the extent of collinearity that a regression analysis can tolerate Abalaka, (2022).

Robustness and Consistency Checks

The Probit model was used, with the findings shown in Table 7, to determine whether the results produced by the Logit estimation technique are reliable and consistent. The findings show that, at the 5 percent significance level, account ownership and having access to a financial institution, credit facility, and mobile phone are inversely connected to poverty. The likelihood of owning an account, having access to a credit facility, having a mobile phone, and having access to a financial institution all decrease the log of the odds of poverty by 1.186, 1.082, 1.740, and 1.898 units, respectively. The level of poverty decreases by 0.032 percent, 0.023 percent, 0.108 percent, and 0.386 percent, in relation to the marginal effect. Additionally, occupation, income level, literacy rate, and social security access all affect the degree of adverse effects of poverty. For every unit increase in income, the probabilities decrease by 0.000027, 1.687, 1.848, and 1.51; the same is true for literacy rate, employment, and social security access. An rise in income level, employment rate, literacy rate, and access to social security reduce poverty by 1.80E-09 percent, 0.105 percent, 0.196 percent, and 0.011 percent, respectively, based on their marginal effects. These findings show a substantial relationship between poverty level and educational attainment, informal savings sources, and access to internet services Abalaka, (2022).

Table 7 Estimation Results of Probit Regression Model

Regressor	Coefficient	Standard Error	Z-Statistic	Prob.	dy/dx
Constant	2.772	0.534	5.20***	0.000	-
ACCOWN	-1.186	0.383	-3.10***	0.002	-0.00032
BANK	-1.082	0.382	-2.84***	0.005	-0.00023
CREDIT	-1.740	0.403	-4.32***	0.000	-0.00108
INFM	0.346	0.347	1.00	0.319	0.00003
PHONE	-1.898	0.352	-5.39***	0.000	-0.00386
INTERNET	-0.310	0.363	-0.85	0.393	-0.00002
INCL	-2.7E-05	1.37E-05	-1.96**	0.050	-1.80E-09
EDU	0.167	0.139	1.20	0.229	0.00001
LIT	-1.687	0.495	-3.41***	0.001	-0.00105
EMPL	-1.848	0.384	-4.81***	0.000	-0.00196
SOSEC	-1.510	0.661	-2.29**	0.022	-0.00011
No. of Observations		624			
LR_{χ}^2		309.03		0.000	
Pseudo R^2		0.7822			

Authors' computation using Logit and mfx functions in Stata 14 based on data collected.

Asterisks (***), (**) and (*) indicate significance at the 1%, 5% and 10% level, respectively.

Results of Diagnostic Tests (Probit Regression Model)

The results of diagnostic tests in Table 8 reveal that the estimated model does not suffer from the problems of misspecification error and heteroscedasticity, and it is well specified Ajiteru, (2021).

Table 8 Results of Diagnostic Tests Probit Regression Model

Test	Statistic	Prob.
_hat	6.65	0.000
_hatsq	0.48	0.633
χ^2 HL	1.020	0.998
χ^2 HET	3.23	0.987

Authors' computation using linktest,lfit, Logit, predictandtest functions in Stata 14. _hat and _hatsq denote linear predicted value and linear predicted value squared of the linktest. χ2 HET represents heteroscedasticity LM test statistics. χ2 HL is Hosmer-Lemeshow's goodness-of-fit test statistic Abalaka, (2022).

It is clear from the published results that the Probit model's estimation results are compatible with those produced by the Logit regression model, especially when it comes to the signs and significance of the coefficients. Thus, it can be said that Sulaiman (2023) produced results that are reliable and consistent.

There are some ramifications for these empirical findings. For example, the findings of earlier research support the negative correlation between the degree of poverty and components of financial inclusion (account ownership, access to banks and other financial institutions, availability of credit facilities, and availability of mobile phones). Ajiteru (2021). Therefore, increasing financial inclusion lowers poverty through enhancing personal welfare, mobilizing savings, assisting in the establishment of small enterprises, which encourages investment, Abalaka, employment and income generation (2022).

Furthermore, the results of earlier research are empirically supported by the decreasing effects of income level, literacy rate, employment, and social security Abalaka, (2022). This research suggests that increased income, employment, and social security eligibility boost savings, consumption, and demand for products and services, all of which contribute to a reduction in the degree of poverty. The fact that a significant portion of job prospects require reading and writing proficiency further emphasizes the detrimental effect of the literacy rate on poverty levels. A high degree of literacy raises people's economic potential and, as a result, reduces poverty.

Concluding remarks and suggestions

This study uses to examine how financial inclusion affects the degree of poverty 624 respondents were randomly selected to provide cross-sectional data from 224 towns and villages spread throughout 12 LGAs in the Nigerian state of Niger. Financial inclusion—which is defined as having a bank account, having access to a financial institution, being able to obtain credit, and having a mobile phone—is significantly and inversely correlated with the state of poverty in Niger. These findings are supported by estimations conducted using both the Logit and Probit regression methods. Furthermore, a number of factors contribute significantly to lowering the status of poverty in Abalaka, including employment, income level, literacy rate, and access to social security (2022).

The study makes the following recommendations in light of these empirical findings. First and foremost, it's critical that the government (via the monetary authority) come up with ways to guarantee that banks and other nonbank to guarantee that people, particularly those who live in rural areas, have access to financial institutions and credit facilities, financial institutions expand their reach and loosen their credit standards. This would significantly improve people's ability to easily obtain financial services and products that were previously unavailable or inaccessible. Secondly, there is an immediate need to implement policies that will improve people's access to cell phones and expand the reach of internet and telecommunications networks, particularly in rural areas. Both improved communication and easier financial transactions will result from this. Third, governments at all levels are urged to foster an atmosphere that encourages business, even though it may be impractical to raise incomes and generate work for everyone in order to decrease poverty prosper. This will increase businesses' ability to create jobs. Fourth, in order to improve the literacy rate, it is recommended that the government invest more money on education (Abalaka, 2022). As a result, people will be better able to find work and make money, which will lower the rate of poverty. Last but not least, it is recommended that local government officials take a proactive approach to ending poverty, as implementing micro-level remedies would be far superior to national macro policy Ajiteru, (2021).

6. CONCLUSION AND RECOMMENDATIONS

Focus groups and roundtable workshops helped to identify Niger State's potential for MSMEs and agri-food businesses to take advantage of Sulaiman (2023). The three main advantages that shone out in Niger State were the availability of markets for produce, abundant human resources, and land access. In the meanwhile, an abundance of Numerous obstacles that kept these businesses from operating effectively were mentioned. The issue of insecurity in various areas of the state is one of the main challenges mentioned. The government's need to tighten and implement food safety regulations was also universally acknowledged, as this is the main issue with the majority of the state's products and could keep them from fully benefiting from the ACFTA Sulaiman, (2023).

REFERENCES

Abalaka, J. N. (2022). The effect of military internal operations in Plateau State, Nigeria: Militating or gravitating insecurity? International Journal of Advanced Research in Social Sciences, Environmental Studies & Technology, 8(1), April 2023. http://internationalpolicybrief.org/journals/international-scientific-research-consortium-journals-2/intl-jrnl-of-advanced-research-in-soc-sci-environmental-studies-tech-vol8-no1-april-2023

Adebayo, K., Babu, S., & Rhoe, V. (2019). Institutional capacity for designing and implementing agricultural and rural development policies and strategies in Nigeria (No. 8). International Food Policy Research Institute (IFPRI).

Ajiteru, S. A. R. (2021). An evaluation of the role of effective communication as a tool in the management of organization in Nigeria: Performance of the public relations in Kogi State. International Journal of Development Strategies in Humanities, Management and Social Sciences, 13(1), January 2023. http://internationalpolicybrief.org/journals/internationalscientific-research-consortium-journals/intl-jrnl-ofdevelopment-strategies-in-humanities-vol13-no1january-2023

Gwada, A. A. (2022). Unemployment in Niger higher than national average. Retrieved from https://dailytrust.com/unemployment-in-niger-higher-than-national-average-ngo

Kotler, P., & Keller, P. (2018). Marketing management (14th ed.). Boston: Prentice Hall.

Laleye, D. (2020). Nigeria: Can agriculture take Niger State to the promised land? Retrieved from https://allafrica.com/stories/201207110925.html#:~:text=With%20a%20land%20mass%20estimated,all%20cash%20and%20food%20crops.

Merem, E. C., Twumasi, Y., Wesley, J., Isokpehi, P., Shenge, M., Fageir, S., ... & Ochai, S. (2017). Analyzing rice production issues in the Niger State area of Nigeria's middle belt. Food and Public Health, 7(1), 7-22.

Mohammed, A. M. (2021). Analyzing Niger State business environment for investment attraction opportunities: The role of government and private investors. FMSS-IBUL Seminar Series.

Sulaiman, T. H. (2023). The impact of social media on voting behaviour in Nigeria: A study of selected voters in Lagos. International Journal of Innovative Research in Education, Technology & Social Strategies, 10(1), April 2023. http://internationalpolicybrief.org/journals/international-scientific-research-consortium-journals-2/intl-jrnl-of-innovative-research-in-edu-tech-social-strategies-vol10-no1-april-2023