



Micro-Scale Enterprises and Poverty Reduction in Makurdi Local Government Area of Benue State

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Abstract: This study investigated the impact of micro-scale enterprises on poverty reduction in Makurdi Local Government Area of Benue State, Nigeria. The study adopted a stratified sampling procedure in which a total of 247 sample size was drawn from a population of 3325. Data were collected with the use of a structured questionnaire, analyzed with the use of logistic regression. It was found that micro-scale enterprises contribute significantly to poverty reduction in Benue State. Specifically, it was found that operating a micro-scale business and having access to medical facilities reduce the probability of being poor by 2.19 and 2.16, respectively, while more income from micro-scale businesses reduces the probability of being poor by about 0.002. The study, therefore, recommended, among other things that strategies targeted at promoting the growth of micro-scale businesses such as ensuring a steady supply of power, reduction of levies, promotion of consumption of locally made goods, provision of zero or low-interest loans required for a start-up or expansion of micro-scale businesses as well as providing medical facilities (given that health is wealth) should be developed and promoted by the government, groups and concerned individuals to harness the potential of micro-scale enterprises in the state fully.

Keywords: Poverty, poverty reduction, micro-scale enterprises, Nigeria, basic needs

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INTRODUCTION

Poverty is a multi-facet phenomenon that has no consensus definition. [Aku, Ibrahim, and Bulus \(1997\)](#) described it as the inability of individuals to meet their basic needs of food, clothing and shelter. The situation is more worrisome when juxtaposed against material progress recorded in other societies. In economics, however, poverty is defined mainly in terms of money or income/consumption. This definition in terms of money is the one to which most reference is made usually because of its measurability. Accordingly, the [World Bank \(2010b\)](#) defined poverty as a condition where people earn below a specified minimum level of income, that is, an imaginary poverty line. It is seen as extreme poverty if people live below \$1.5 a day and moderate if below \$2 ([World Bank, 2010b](#)). In other words, one may be regarded as being poor if he is unable to afford an adequate diet and other minimal necessities on the basis of the \$1.5 (or \$2.00) per day classification. Poverty has been and is still a global issue ([Purwanto. & Purba, 2017](#)). On this account, countries have continued to seek and evolve ways to deal with the problems of people who fall into the

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category of those called the poor. While the number of poor people in some developed nations has reduced, research has shown that in Sub-Saharan Africa, Nigeria inclusive, the number of people considered poor has increased even though results may reflect reduction in percentages.

The [World Bank \(2014\)](#) estimated that 40% of the people in Sub Saharan Africa (SSA) lived on less than one dollar per day and that 50% of these people were from five East African countries and Nigeria. The level of poverty in Nigeria today is quite disturbing as it has assumed an alarming proportion. Major indicators revealed by the [World Bank \(2014\)](#) showed that as at 2014, Nigerias Human Development Index (HDI) stood at 0.525 with about 70% of the population vegetating under the urban poverty line of \$1.5 per day. In the same vein, Nigerias National Bureau of Statistics reported that unemployment rate was about 14.2% in the first quarter of 2016, adult literacy level 59.6%, and life expectancy at birth stood at 53.03 years in 2015 ([BBC News, 2016](#)).

It is important to note that these figures may be underestimated as they do not seem to reflect the reality on ground. Unemployment rate is much higher with Nigerian universities producing graduates in hundreds of thousands annually without a corresponding increase in job opportunities for them. The insufficient nutritional intake that many Nigerians grapple with, the increasing difficulty in accessing basic health care, communal clashes, religious crisis as well as the HIV/AIDS and pandemic corona virus scourge which plague the society makes the 54 years life expectancy an overestimation. According to [Abdullahi \(2009\)](#), both the quantitative and qualitative measurement attests to the growing incidence and depth of poverty in the country.

In this connection, the federal and state governments have devised several means to deal with the problem of poverty by introducing a number of poverty reduction programmes such as the Directorate for Food, Roads and Rural Infrastructure (DFRRI) established in 1986, National Directorate for Employment (NDE) in 1986, Better Life Programme (BLP) in 1987, the Peoples Bank of Nigeria (PBN) in 1989, Community Banks (CB) in 1990, the Family Support Programme (FSP) in 1994, the Family Economic Advancement Programme (FEAP) in 1997, the National Poverty Eradication Programme (NAPEP) in 2001, National Economic Empowerment and Development Strategy (NEEDS) at federal level, State Economic Empowerment and Development Strategy (SEEDS) and Local Economic Empowerment and Development Strategy (LEEDS) at state and local government areas respectively in 2003, Subsidy Re-investment and Empowerment Programme in 2012.

Specifically, Benue State has been devising measures to curb the rising rate of unemployment by promoting self-employment through a series of entrepreneurship trainings (such as skills acquisition, training on business development and management and so on at the North-Central Entrepreneurship Development Centre, Makurdi) organised for its citizenry ([Akiri, Ijuo, & Apochi, 2016](#)). The state has also been promoting cooperative societies in a bid to birth micro businesses, earn income and reduce the level of poverty.

In this direction, a lot of people have become self-employed through various micro-scale businesses they operate. However, despite the efforts of the government, the level of poverty seems to be rising as more youths are unemployed and the general economic situation of the state remains weak. Again, the question that remains unanswered is the extent to which these micro-scale businesses have contributed to reducing poverty among the people which have not been adequately investigated. Most of the studies conducted on poverty reduction were either carried out in locations that are alien to the location of the present one with their inherent institutional and structural differences ([Benhabib, Ziani, Bettahar, & Maliki, 2007](#); [Oba & Onuoha, 2013](#)), aggregated businesses-micro, small, medium scale businesses ([Akiri et al., 2016](#)), a mere poverty programme assessment without employing relevant quantitative approach of analysis ([Chukwu, 2011](#); [Nathanael, 2012](#)) or investigate poverty with a different explanatory variable ([Ijuo, Akiri, & Migap, 2016](#)) which further created a gap for this study. It is against this backdrop that the researchers investigated the place of micro-scale enterprises in alleviating poverty in Makurdi LGA of Benue State.

In this regard, the study provides vital information on the dimensions of poverty in the study area, and the need for the government to embark on more viable programs that will promote the growth of micro-scale enterprises as a way of combating the menace-poverty. Equally, theoretically, the study helps to link the theory of individual deficiencies and the theory of poverty caused by cultural belief systems that support sub-cultures of poverty with the human capital theory in addressing the problems of poverty in the state; establishing that sound mindset, hard work, sound cultural beliefs system that promotes creativity and pursuit for better life as well as general investment in human capital have the potentials to liberate one from poverty. Similarly, the study will serve as a source of reference and as well, a stimulant to other researchers (teachers, students, administrators, educators, policy makers, etc.) to conduct more research on this vast field of micro-scale businesses and poverty reduction.

The remainder of the paper is organised as review of related literature, the methodology, results and discussion, and the conclusion of the study with future research direction.

LITERATURE REVIEW

Conceptual Clarifications: Poverty, Poverty Reduction and Micro-Scale Businesses

Poverty has no universal definition, given that it is a multidimensional concept. To this end, we consider a few views on the concept thus. The [World Bank \(2010b\)](#) defined poverty as pronounced deprivation in well-being. [Haughton and Khandker \(2009\)](#) describe it as a state of lack of key capabilities which may be income or education, or poor health, or insecurity or low self-confidence or a sense of powerlessness, or the absence of rights such as freedom of speech. [Doki \(2012\)](#) conceptualized poverty in two perspective; income and non-income. She put income poverty as a situation where a household takes in less than one US dollar per day and non-income as when people may have some money, yet live a low quality.

[World Bank \(2010a\)](#) redefined the income poverty benchmark (poverty line) from US\$1 a day to US\$1.9 a day. Thus if an individual or households income and expenditure lies below this average income, he/she is considered to be poor. This study adopts the [World Bank \(2016\)](#) view of poverty as it will enable us to measure it. Thus if income/expenditure of an individual is below US\$1.9 a day, the person will be classified as poor, otherwise non-poor, and the non-income view of [Doki \(2012\)](#) to capture such qualitative variables as access to affordable social and physical services (schooling, healthcare, medicines, safe water, good sanitation, good transportation) in accessing the impact of micro-scale enterprises on poverty reduction.

[Gary \(2013\)](#) sees poverty reduction as all formal activities geared towards lowering the rate and prevalence of poverty in a country. Micro-Scale Enterprises also regarded as small scale enterprises defies a universal conceptualization. They are viewed based on the industry in which they operate as well as the personalities and aspirations of the people who overseas their activities. In Nigeria, it is particularly based on capital base of the business which ought to be review from time to time since the value of money may not always be stabled due to high inflationary tendency in the country.

[Bank of Industry \(2018\)](#) defined it as business entities, whose total employees is not greater than ten, total assets is less than five million naira, annual turnover does not exceed twenty million naira, and the total loanable amount does not exceed ten million naira. The definition of micro-scale business in Nigeria as contain in the National Policy on Micro, Small and Medium Enterprises produced by the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) in 2007, which looks at micro-scale business as business entity that employs less than five employees with capital base not more than 5 million is adopted in this study. This is because employment-based classification is easier to identify and tends to be a relatively more stable definition, given that inflationary pressures may compromise the asset-based definition.

Theoretical Review

This work is situated within two theories; individual deficiencies theory and the human capital development theory. The individual deficiency theory is based on the ideas and works of [Le Blanc \(2002\)](#), [Goldsmith and Blakely \(1992\)](#) which averred that the root cause of poverty is an individuals deficiency. This theory is a large and multifaceted set of explanations that focus on the individual as responsible for his/her poverty situation. In contributing to this thinking, [Bradshaw \(2005\)](#) blames individuals in poverty for their own problems and argues that with harder work and better choices, the poor could have avoided/remedy their problem. On the hand, the theory of human capital development which was made popular by the work of [Ravallion \(1996\)](#) which contended that investments in health, education and skills of citizens are more productive than investments in machinery, other infrastructure and vehicles. It asserted that human capital investments shape income distribution in an economy and illuminate unexplained variations in incomes earned by different individuals in different regions and sub- groups within any society.

By way of linking these theories, if individuals develop sound mindset and are hardworking and if there exist adequate investment in human capital, there will be high tendency to liberate people from poverty.

Empirical Review

[Benhabib et al. \(2007\)](#) analyzed poverty dynamics in Algeria, using logit probit and fuzzy set on 500 households in Wilaya, Tlemcen of Algeria. It was found out that the probability of being poor increases with the number of persons in a household at both rural and urban areas. Specifically, it was found out that schooling of children and living in precarious

dwelling increases poverty in rural areas than in urban areas. This study is alien to the location of the present one and hence did not address the peculiarities of Makurdi LGA. Akiri et al. (2016) conducted a study to find out the place of self-employment on poverty reduction in Benue State. Data for the study were collected via the administration of questionnaire, and analysed using logistic regression model. The study found that self-employment significantly helped in reducing poverty in the state, and however, that, its impact has not translated into the desired living standards that will suggest the generalization that the people are living above the poverty line. The study aggregated business owners (micro and macro) and therefore gives credence to this study as it is specifically centred on micro-scale businesses. Similarly, while using logistic regression, Ijuo et al. (2016) investigated the place of entrepreneurship training and self-employment in the diversification of the Nigerian economy in Benue State and found out that entrepreneurship training and self-employment have significant positive impact on economic diversification, but however, that the poor spread of entrepreneurship training centres and programmes in the state has limited its potential. The study did not consider micro-scale business with reference to poverty reduction and therefore made relevant, this study.

Zhaoe, Li, and Riskin (1999), employing the logit test to poor and non-poor households, conducted a study on poverty and ownership of productive assets in rural China. The variables used in the model were productive fixed assets, financial assets, housing, other assets and debt. The results showed that a large difference in asset holdings between the poor and non-poor households exists. This study was carried out in a developed nation, whose institutions and structures are totally different from that of Makurdi LGA in which this study is situated.

Also, Tersoo (2013) evaluated the impact of National Poverty Eradication Programme (NAPEP) on its beneficiaries in Benue State. The explanatory- survey method was utilized for the collection of data through questionnaire administered on one hundred and nine (109) respondents selected from beneficiaries and key officials of NAPEP in six (6) LGAs of the State. It was found out that NAPEP have not made significant impact in improving the lives of beneficiaries in the state. This study was simply an assessment of a poverty programme, hence created a gap.

Using descriptive statistics of tables and simple percentages to analyse whether the participation of the poor in poverty reduction programme of National Economic Empowerment and Development Strategy (NEEDS) reduced level of poverty or not with focus on the training of women/youths in selected areas of skills in Suleja Local Government Area of Lagos State, Chukwu (2011) found that the programme has positive impact on the welfare of the people, but was short-lived at the shift of regime from the government that initiated the programme to a new one. The study was hinge on poverty reduction programme assessment, and the methodology employed made relevant, this study.

Oba and Onuoha (2013) x-rayed how Small and Medium Scale Enterprise (SMEs) reduces poverty in Nigeria, between 2001 and 2011. Using simple linear regression model on secondary data of employment rate (dependent variable), ratio of SMEs to gross domestic product, ratio of agricultural output to gross domestic product, and the ratio of manufacturing output to gross domestic product as explanatory variables, it was found out that statistically, SMEs income (in terms of what they contributed to GDP) are significant in explaining the level of employment and hence poverty reduction. The location and methodology of study created a gap for this study.

Using a qualitative research method in form of an in-depth interview with a selected Micro, Small and medium enterprises (MSMEs) managers, a government official from Small and medium enterprise development agency of Nigeria (SMEDAN) and also a credit officer of Microfinance Bank to investigate the role of micro, small and medium enterprises to the economic development of Nigeria in Damaturu metropolis, Yobe State, Nathanael (2012) found that micro and medium enterprises are useful engine that promote economic development of a nation by providing employment and self-reliance for the people. This study is subjective to others empirical studies as it did not carry out any quantitative analysis, hence a gap for this study.

Also, Kowo, Adenuga, and Sabitu (2019) conducted a study to assess the role of SMEs development on poverty alleviation on a sample of 142 companies registered with SMEDAN in Lagos State, Nigeria using Analysis of Variance (ANOVA), correlation efficient and regression analysis and found out that SME development positively affects poverty alleviation via employment creation. The methodology employed here made relevant the current study.

In another study, Ijuo, Iortyom, and Vehe (2020) measured the extent, depth and severity of poverty among micro-scale business owners in Makurdi metropolis using simple percentages, tables and Foster-Greck-Torbeck (FGT) test approach and found out that 65% of the people is poor, and 28% of the poor households are living far below the poverty line while 14% of the poor are extremely poor. The study also found out that the sum of N42,900.48, N1,201,213.44 and N15,658,675.2 would be required to bring out these poor individuals out of extreme poverty and up to the poverty line on daily, monthly and annual basis respectively. This study, though carried out in the same location,

but only centered on FGT estimates without capturing the impact analysis which the present work covered. Close relatedly, [Nursini \(2020\)](#) found out that MSMEs statistically affect poverty reduction in Indonesia both directly and indirectly through labor absorption. The study employed FGT tests to show that MSEs not only reduced the percentage of poor people but also the Poverty Gap and Severity Index in Indonesia. The location and methodology of study adopted, created gap for this study.

[Cervantes-Godoy and Dowbre \(2010\)](#) examined the economic importance of agriculture for poverty reduction by looking at the shared characteristics of twenty-five developing countries. The countries were compared using indicators of their macroeconomic characteristics and agricultural economic characteristics. It was found from the study that while economic growth generally was an important contributor to poverty reduction, the sector mix of growth mattered substantially, with growth in agricultural incomes being especially important. Apart from the fact that the study is panel one, it did not capture micro-scale businesses which this study is centred on.

In South Johannesburg, [Onyango \(2010\)](#) used descriptive and qualitative assessment approach to investigate Urban and Peri-Urban agriculture as a poverty alleviation strategy among low income households involved in orange farming and found out that participation in urban Peri-urban farming impact significantly on poverty conditions and improve livelihoods of the people. The period, location and the explanatory variable variation of this study created a gap.

RESEARCH METHODOLOGY

This research was conducted in Makurdi LGA of Benue state. Makurdi is the administrative headquarters of the Benue State. It shares boundaries with Guma local government in the North, Gwer in the West, Tarka in the east and Doma LGA of Nassarawa State in the North-East (see Fig. 1). The local government area is divided into two major blocks by River Benue and hence the North and South banks respectively. The population of Makurdi is estimated at 405,500 persons ([BBC News, 2016](#)). It is made up of three major tribes, Tiv, Idoma and Igede. Other tribes include Ufia, Etulo, Agatu, Hausa, Igbo, Jukun, among others. Several micro and medium scale enterprises are operated across the study area. It has eleven (11) council wards which include Agan, Northbank 1, North bank II, Central Mission, Baa, Fiidi, Modern Market, Wadata/Ankpa, Wailomayo, Adaka and Mbalagh ([Hilakaan & Ogwuche, 2014](#)). Of these council wards, seven which are more cosmopolitan were chosen to represent the rest. There are three thousand three hundred and twenty-five (3325) micro businesses in the study area. The choice of Makurdi Local Government for this study is necessitated by the researchers believe that Makurdi is the state capital and would yield a better sample representation for the population of study.

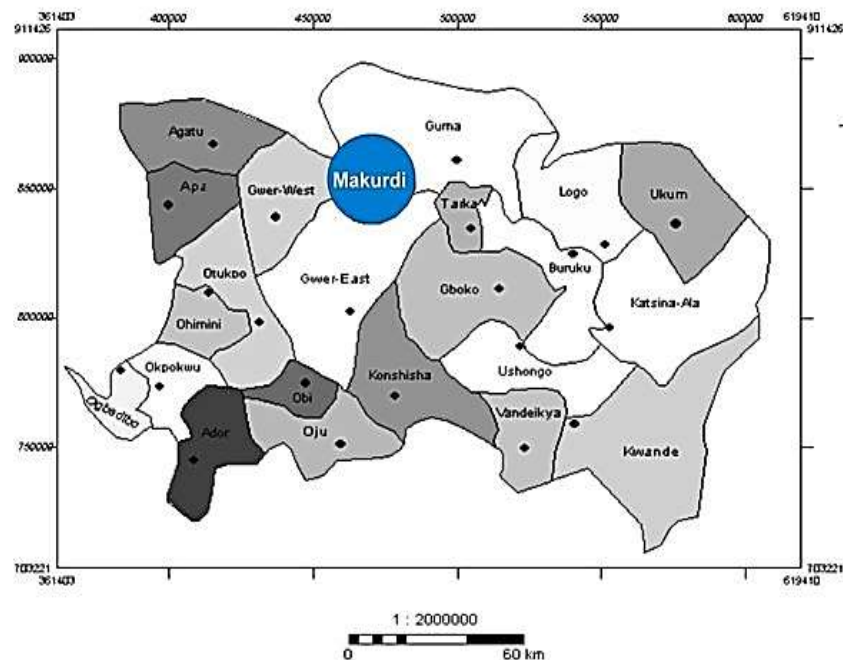


Figure 1 Location of Study Map (blue colour)

The study employed a survey research approach. This approach was chosen because it enabled us to obtain data from large samples of population. Similarly, it is inclusive in the type and number of variables that can be studied and are relatively easy for making generalization (Oba & Onuoha, 2013). Thus the instrument of data collection (questionnaire) containing 35 items was developed by the researcher and vetted by a professional in the area of study. The study adopted a stratified sampling method of data collection. In this sense, the researcher employed Yamane’s formula in the first stage to determine the total sample size for the study, and the Kumar’s technique to determine the sample size per stratum (each council ward/community) in the second stage. Accordingly, these are presented in Table 1 and Table 2.

Table 1 Average Mean Scores of the Students Agreement of the Encouragement of Their Schools in the Development of Creativity by Grade

C-Wards	Wadata Ankpa	North Bank	Wailomayo/High Level	Clerk	Fiidi	Agan	Mbalagh	Total
No of Micro-Scale Business	572	433	706	478	346	405	385	3325

Using Yamane’s technique whose formula is stated as follows:

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

Where n = sample size, N = population size, e = level of error= 5% (0.05), and 1 = a theoretical constant. Hence,

$$n = \frac{3325}{1 + 3325(0.05)^2}$$

$$n = \frac{3325}{9.3125} = 247$$

The calculation of stratum allocation using Kumar’s technique is summarised in Table 2. The technique states thus:

$$nh = \frac{n \times NH}{N}$$

Where nh = Stratum allocation, n = sample size, NH = stratum population, and N = Total population of study.

Table 2 Average Mean Scores of the Students Agreement of the Encouragement of Their Schools in the Development of Creativity by Grade

Council Ward	No. SMEs	Stratum Allocation	Sample Size Per Ward
Wadata/Ankpa	572	572*247/3325	42
North Bank	433	433*247/3325	32
Wailomayo/High Level	706	706*247/3325	52
Clerk Ward	478	478*247/3325	36
Fiidi	346	346*247/3325	26
Agan	405	405*247/3325	30
Mbalagh	385	385*247/3325	29
Total	3325		247

Thus a sample of two hundred and forty-seven (247) micro-scale enterprises (self-employees/traders/entrepreneurs) which is statistically considered to be a sufficient representation of the population of study was used for the research.

Model Specification

The general form of the logistic regression model estimated is;

$$\ln\left(\frac{P_i}{1-P_i}\right) = Z = \alpha + U_i$$

Where Z denotes qualitative variable, poor/non-poor;

X_i represents the feature vector(s) of a respondent;

U_i error term.

\ln = natural log of the dichotomous variable

$(P - i / (1 - P_i))$ = odds ratio

$\beta \sum_{i=0}^n X_i$ = summation of the variables with their corresponding parameters β to be estimated.

The model is stated as

$$POVS = f(MSE) \quad (1)$$

But,

$$MSE = f(INC, IMSP) \quad (2)$$

And INC is disaggregated into INC1 and INC2. Then,

$$POVS = f(INC1, INC2, IMSP) \quad (3)$$

And as indices for assessing poverty, LER, SW, TF, AH, HT, SAGS, NMPD are included in the model. Hence,

$$POVS = f(INC1, INCS2, LER3, SW4, TF5, AH6, HT7, SAGS8, NMPD9, IMSP) \quad (4)$$

Explicitly, the model is stated as;

$$POVS = \beta_0 + \beta_1 INC1 + \beta_2 INCS2 + \beta_3 LER3 + \beta_4 SW4 + \beta_5 TF5 + \beta_6 AH6 + \beta_7 HT7 + \beta_8 SAGS8 + \beta_9 NMPD9 + \beta_{10} IMSP10 + U$$

Where, POVS is dependent variable (poverty status), calculated as;

$$POVS = \frac{(\text{Average Annual Income of a household from microscale business owner(s)})}{(\text{Total Number of Days in a year (365days)})} \quad (5)$$

If the result is less than 1.9 dollars or its naira equivalent, it means the household is poor in which case we assign 1, and if the result is 1.9 dollars and above naira equivalent, it means the Note: 1.9 dollars naira equivalent will be assumed to be (N684). That is, \$1:N360

INC1 = household income from micro-scale business (nominal value)

INCS2 = households income from other sources (nominal value)

LER3 = Level of education of the respondent (1 if a respondent attain at least secondary school education, 0 if otherwise)

SW4 = source of water (1 if a household have access to at least borehole water, 0 if otherwise)

TF5 = Toilet facility (1 if have access to at least pit toilet, 0 if otherwise)

AH6 = Access to improved Health/medical services (1 if a respondent visits clinic, specialist and general hospital, 0 if otherwise)

HT7 = House Type (1 if zinc roof and cemented walls/floor, 0 if otherwise)

SAGS8 = School Age children Going to School (1 if no school age child going to school, 0 if otherwise)

NMPD9 = Number of Meals taken Per Day (1 if three times meal a day, 0 if otherwise)

IMSP10 = Impact of micro-scale enterprises on poverty reduction (1 if micro-scale enterprises have positive impact on poverty reduction, 0 if otherwise)

β_0 = Intercept of the model

$\beta_1 - \beta_{10}$ = Parameters U = the error term.

The a priori expectations about the coefficients of the variables are that $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7$ and β_{10} should be negative reflecting an inverse relationship between benefiting from micro-scale business and the poverty status because they should reduce poverty, while β_8 and β_9 are expected to have positive sign because they have the potential to increase spending and reduce living standards. Put in another way β_8 and β_9 being positive explains that there are more mouths (expenses) to be catered for by the household head (micro-scale businesses owners) and therefore may have adverse effect on his/her personal welfare.

RESULTS AND DISCUSSION

Data Presentation and Interpretation

Table 3 Average Mean Scores of the Students Agreement of the Encouragement of Their Schools in the Development of Creativity by Grade

Council Ward	No. of Questionnaire Distributed	No. of Questionnaire Retrieved
Wadata/Ankpa	42	40
North Bank	32	26
Wailomayo/ High-Level	52	49
Clerk Ward	36	33
Fiidi	26	24
Agan	30	26
Mbalagh	29	26
Total	247	224

Table 3 showed that 224 questionnaire (representing 90.7%) of the total of 247 administered were retrieved/valid. While 23, representing 9.3% of the questionnaires were invalid either because there were not properly filled or not returned. This result shows that the questionnaires administered were adequately retrieved.

Logistic Regression Results

The results logistic regression results are presented in Table 4.

Table 4 Average Mean Scores of the Students Agreement of the Encouragement of Their Schools in the Development of Creativity by Grade

Variables	Coefficient	SE	Sig	Exp (B)
Constant	32.677	15.433	.034	1.554E14
INC1	-.002	.001	.031	.998
LER3	1.895	4.822	.694	6.653
SW4	4.129	7.865	.036	62.143
TF5	-1.991	4.488	.657	.137
AH6	-2.165	7.698	.779	.115
HT7	5.148	15.234	.735	172.133
SAGS8	1.271	7.365	.863	3.564
NMPD9	2.793	4.381	.524	16.323
IMSP10	-2.195	3.335	.015	.111

The results from the regression which shows the whole performance of the model are also explained. From the beginning Block 0 classification, the classification accuracy of the dependent variable within the samples variability is 65.6% correct; Wald statistic of 21.128 shows that the outcomes, poor and non poor are statistically different from

each other, meaning that the number of people who are either poor or non poor within our sampling variability are not equal. The omnibus tests of the model coefficients test the hypothesis of whether there is at least some predictive capacity in the regression equation. The model was a good fit since the chi square value which is high (282.456) is statistically significant. More so, the 2 Log likelihood which indicates the predictive capacity of the model is 5.828a, rating the models performance to be relatively high. The R^2 (Nagelkerke R^2) is 0.920 (i.e., 92%) while the Cox and Snell R^2 give 0.707 (i.e., 70.7%) and are good indicators, showing that the explanatory power of the model is high. The dependent variable in the Block 1 classification increased from 98.7% to 99.1%, implying that the models the classification accuracy has been increased by about 4% points.

From these results, the coefficients of household income from micro-scale business (INC1), access to healthy Toilet Facility (TF5), Access to improved Health/medical services (AH6), School Age children going to School (SAGS8) and Impact of micro-scale enterprises on poverty reduction (IMSP10) have signs in line with a priori expectation. Whereas the level of education of the respondent (LER3), source of water (SW4), house type (HT7), and Number of Meals taken Per Day (NMPD9) didnt. Comparing the s with their standard errors, the coefficients of household income from micro-scale business, source of water, and impact of micro-scale enterprises on poverty reduction are statistically significant while the rest (Level of education of the respondent, Toilet facility, Access to improved Health/medical services, House Type, School Age children Going to School, and Number of Meals taken Per Day) are not.

The coefficient of household income from micro-scale business is -0.002, which can be interpreted to mean that more income from viable micro-scale business enterprise reduces the probability of being poor by about 0.002. Again, from the odds ratio, it can be seen that earning more income by engaging in micro-scale businesses will make a person 0.998 times less likely to be poor. Equally, the unstandardised beta coefficient of impact of micro-scale enterprises on poverty reduction (-2.195) shows that running micro-scale enterprise will reduce poverty level by 2.2. The odds ratio affirms this to show that, running a micro-scale enterprise will make a person 0.111 times less likely to be poor.

Examining the coefficients of rest variables in the model, the coefficient (1.895) of Level of Education (LER), carrying a positive sign can be explained that more educational qualifications would likely make a household to become poorer. Increase in educational qualification is expected to reduce the level of poverty. However, it is the reverse as seen in this study. This may not be unconnected with the fact that Nigerian education system does not equip people with practical skills and prepares them to be self-dependent, but to be dependent on white cola jobs which in most cases does not even exist. Thus increasing the number of the unemployed graduates, and increasing the level of poverty in the state. The unstandardised beta weight carrying a positive sign on source of water (4.129) means that, low access to water increases the poverty level of the people. The odds ratio shows that the poor source of water will make people 62.1 times likely to be poorer. The sign of beta weight on toilet facility (-1.991) been negative shows that access to good toilet facility reduces the level of poverty of people. The odds ratio indicates that having access to good toilet facility will make a household 0.137 times less likely to be poor. This may be true because access to good toilet facility will save people from contacting certain diseases and guarantee healthy living thereby bettering their living standards.

Similarly, the beta weight of access to improved health/medical services (-2.165) been negative explains that access to good health facility reduces the level of poverty of people. Of course, as popularly alluded, health is wealth. The odds ratio confirms it that access to good health facility will make the household 0.115 less likely to be poor. The positive signs of the unstandardised beta coefficients of House Type and School Age children going to School show that poor house type and having school age individual going to school increases the poverty level of the people. The odds ratio on them indicates that poor house type and school age going to school (dependants) will make an individual 172.133 and 3.564 respectively more likely to be poorer. The positive sign on beta coefficient of Number of Meals taken Per Day confirms that poor feeding is likely to increase the household poverty level. The odds ratio on it (Number of Meals taken Per Day) buttresses that poor feeding will make a household 16.323 times more likely to be poor.

To specifically note, when income required for providing better living conditions are available (feeding on balanced diet, having access to quality health services, water and education, living in better and bigger houses with more rooms, etc), poverty is likely to be reduced. Owning micro-scale business is a way of acquiring income for livelihood. However, incomes are not an end in themselves. In other words, until an income is sufficient to provide the basic goods, a person is still poor. Yet, evidence from this sample show that micro-scale businesses significantly reduce the likelihood of being poor. Thus micro-scale businesses contribute significantly to poverty reduction in Benue State. The findings of this study are consistent with the findings of [Chukwu \(2011\)](#); [Oba and Onuoha \(2013\)](#); [Akiri et al. \(2016\)](#).

CONCLUSION AND IMPLICATIONS

On the final note, evidence from this sample shows that micro-scale businesses contribute significantly to poverty reduction in Benue State. Specifically, it was found that operating a micro-scale business, earning more income from micro-scale businesses and having access to medical services reduce the probability of being poor. On the basis of these findings, the study therefore recommends that strategies targeted at promoting the growth of micro-scale businesses such as ensuring steady supply of power, reduction of levies, promotion of consumption of locally made goods, provision of zero or low interest loans required for a start up or expansion of micro-scale businesses as well as providing medical facilities (given that health is wealth) should be developed and promoted by government, groups and concerned individuals in order to fully harness the potential of micro-scale enterprises in the state.

LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

It is common knowledge that no research is entirely perfect. The dearth of information, and records on the operations of micro-scale business enterprises led to making some assumptions which may have affected the ability to cover a larger number of micro-scale business owners in the area of study. Consequent on this fact, it is suggested that further research be carried out on this topic to have a larger coverage. The study should also capture poverty decomposition base on the type of and specific location of business within the area of study as that will enable specific targeted policy option on the poor and extremely poor.

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