The Determinants of the correlates of Poverty among households in sokoto state-Nigeria: Evidence from Binary Logistic Model

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Abstract

Nigeria is one of the endowed countries in Africa in terms of availability of resource, it has vast amount of arable land for agricultural production, therefore, given the numerous economic potentials of this country, if properly harness, the poverty level in the country will have been a history. However, the recent Multidimensional poverty survey (MDIPS, 2022) indicates that poverty is still extremely high in the country, and Sokoto state topped the ladder. Against this background, this paper investigates the determinants of the correlates of poverty in the state. For a sample of 698 respondents, descriptive statistics in form of frequencies and percentages and binary logistic model was employed for the inferential analysis. The result on the aggregate poverty lines and poverty indices measured on the basis of international poverty standard (dollar equivalent) for the state reveals that, 86% of the total respondents were relatively poor, and 56% of the respondents were absolutely poor. The Logistic Regression result indicates a statistically significant negative relationship between accesses to health care services, food security, access to education, and access to clean drinking water; others are access to good sanitation, access good housing, availability of asset, and employment status to poverty for both absolute and relative poverty. This express that, all these variables reduces the likelihood of household falling into poverty, it therefore, recommended that, the government at all level should develop workable policies/programmes that support the provision of more employment opportunities, qualitative education, and affordable health care services and clean drinking water, which will support human capital development in the state and country at large. To made food available and affordable (food security), it is suggested that, government most provide the most needed security against arm banditry and cattle rustling in and around the state for farmers to go to farms and also made farm inputs such as fertilizer, insecticide, pesticide and credits facilities accessible and affordable to farmers.

Keywords: Multidimensional Poverty, Household, Binary Logistic Regression, Sokoto state, Nigeria

Introduction

Poverty in the midst of plenty is one of the greatest challenges facing humanity today (World Bank, 2018) and this problem poses severe obstacle to inclusive economic growth and achieving sustainable national development in developing countries, most especially, in sub-Saharan Africa and Nigeria in particular. One of the most pathetic character of the Nigerian nation is that majority of her citizens are living in a state of destitution while the remaining relatively insignificant minorities are living in affluence (Osinubi, 2013). This imbalance economic relationship does not reflect the availability of resource endowment; rather it may be a product of classical greed, injustice and selfishness, which is beyond the explanation of any economic theory.

According to International Monetary Fund – IMF (2018) Nigeria is one of the endowed countries in Africa in terms of availability of resource. The country is said to be the leading producer of crude oil in Africa (Organization of the Petroleum Exporting Countries – OPEC, 2020), it has the second largest deposit of bitumen in the world (Federal Ministry of Mines and Steel Development, 2018) and it have deposit of many other resources in commercial quantity such as gold, lime stone, iron ore etc all are critical to economic growth and development. Moreover, the country has vast amount of arable land for agricultural production such as maize, groundnut and cotton in the North and cocoa, rubber and palm kernel in the south (OPHI, 2018). Given the numerous economic potentials of this country, if properly harness, the poverty level in the country will have been a history

To address some of these economic challenges, several poverty alleviation policies have been developed by successive governments in Nigeria. Some of the programmes are: Structural Adjustment Programme (SAP), Better Life for Rural Women (BLRW), National Directorate of Employment (NDE), Directorate for Food and Rural Infrastructure (DIFRI), National Poverty Eradication Programme (NAPEP), Family Economic Advancement Programme (FEAP), Family Support Programme, National Economic Empowerment Development Strategy (NEEDS), and most recently, Social Investment Programmes (SIP) such as the Home Grown Feeding Programme (Adewuyi & Dada, 2019). Unfortunately, most of these programmes have not effectively addressed the protracted problem of poverty in Nigeria.

Statement of Research Problem

International Journal of Law, Politics & Humanities Research
Published by Cambridge Research and Publications

Vol. 6 No. 6
December, 2024.

According to the recent Multidimensional poverty Index (MPI, 2022) North-west geo-political zone had the highest poverty index as the poorest zone in Nigeria with about 45.49 million people facing more than one deprivation in the zone. Similarly, Sokoto state was rated to have the highest multidimensional poverty in Nigeria with about 5.8 million poor people among its population of 6.4 million people. It is against this background that this study, seek to examine the determinants of the correlates of poverty among household in Sokoto state using Binary Logistic Model in order to bridge the research gap by providing fresh and the current facts and figures on poverty in the state using robust sample which will assist in the execution of relevant policies and programs of alleviating poverty in the state and the country at large.

The objectives of the Research are:

1. To examine the major determinants of poverty among urban and rural households in sokoto state

2. To provide current facts and figures on the proportion of absolute and relative poor households based on international standard in the state

3. To offer a workable recommendations that will assist in the design and execution of relevant policies and programs of alleviating poverty in the state

Review of related Literature

Conceptual clarification

The Central Bank of Nigeria (CBN) (1999) views poverty as a state where an individual is not able to cater adequately for his or her basic needs of food, clothing and shelter; is unable to meet social and economic obligations; lacks gainful employment, skills, assets and self-esteem; and has limited access to social and economic Infrastructure such as education, health, portable water, and sanitation; and consequently, has limited chance of advancing his or her welfare to the limit of his or her capabilities.

World Bank (2000) defined poverty using many indices. One of such definitions is that poverty is "the lack of what is necessary for material well-being especially food, but also housing, land, and other assets. In other words, poverty is the lack of multiple resources that leads to hunger and physical deprivation." There is also the non-material dimension to poverty, which is manifested in incapacities to participate fully in the political and socio cultural activities of one's community.

Theoretical Framework

The Asset Based Theory provides the theoretical underpinning this study, the theory seeks to explain the relationship between physical capital and welfare status of a particular household. Poverty is most frequently measured and analysed in terms of income flows, or the stream of consumption expenditures financed by these income flows. Therefore, information on the physical asset of household that generate income and consumption

flows can be used to know much about who the poor are, why they are poor etc (Carter, 2000).

While according to Attanasio & Szekely (1999) physical capital is the monetary value of any form of asset, money holdings, property and capital stock used for production. This type of capital therefore, can play different roles, in that it can be used to buffer temporary shocks, for the generation of income and can be accumulated for long term objectives such as financing consumption after retirement.

The authors further stressed that, the ownership of or access to any of these assets implies that an individual or household has the potential capacity to generate income at some point in time, which may definitely reduce his chances of being in poverty. But the income that is expected to be generated depends on the use of the assets. For instance, physical capital becomes income only when the dividend or return generated by asset is made liquid.

The asset based approach, thus, open the door to a much richer understanding of the nature of poverty and how and why it is changing over time (Carter, 2000). For instance, Carter & May (2001) estimate that more than half of the observed transitions out of poverty in South Africa over the 1993 to 1998 period are structural, as 60% of the households who made the transitions had initial physical capital assets that strongly predicted well-being in excess of the standard poverty line.

Empirical Literature

Salami, Babatunde, Ayinde & Adeoti (2017) utilized Foster-Greer-Thorbecke (FGT) class of decomposable poverty and logistics regression analysis to determine the poverty among local rice processors in Kwara State, Nigeria, The result of the descriptive statistics show that majority (97.5%) of the rice processors are female and substantial number (83.33%) of the rice processors do not have other source of income apart from rice processing. The result of the FGT class of decomposable poverty showed that poverty is more intense or severe in households with small household size. The results of the logit regression showed that gender (female), educational status, income and household size were significant poverty determinants in the study area. Higher educational status, larger income and larger household size are poverty reducing while increase in gender (female) is poverty enhancing

For a sample, of 227 groundnut farming households, Duniya & Rekwot (2014) utilized Foster-Greer-Thorbecke's (FGT) Weighted Poverty Index and Tobit regression model and examined the Determinants of Poverty among Groundnut Farming Households in Jigawa State, Nigeria , The results of the (FGT) Weighted Poverty Index showed that the poverty headcount, poverty gap and poverty severity of poor groundnut farming households were 42%, 46% and 77% respectively using an estimated poverty line of 46,320.53. The factors that significantly influenced the poverty intensity of groundnut farming households in the study area were found to be age of household head which was negative and significant at

10%, marital status of household head was negative and significant at 1%, education was negative and significant at 5% and membership of cooperative was negative and significant at 5%

Olabode , Akintoye & Kazeem (2015) uses annual data between 1990-2010 and employs Dynamic Ordinary Least Square (DOLS) method to examine what determines poverty level in Nigeria. The findings show negative relationship between political right in levels and poverty, but positive relationship was found when political right was differenced. This result was not statistically significant. Political terror was found to reduce poverty with statistically significant result in levels when per capita real income was used for poverty, and became positively related with poverty when differenced. The result was statistically significant. It further, found that civil liberty was positively related to poverty, but the result was not statistically significant. Democracy was noted for reducing poverty with statistically significant result, while the increase in population and poverty were positively related with statistically significant result.

Sulaimon, M. D (2020) utilized the 2016 cross-sectional data to evaluates the determinants of multidimensional poverty in Nigeria using analysis of variance (ANOVA), Tukey's test and ordinary least squares (OLS). The ANOVA results show significant variations in multidimensional poverty between geopolitical regions. The Tukey's test reveals significant variations in multidimensional poverty between regions in the south and the north and most sub-regions in the north. There are no significant variations in multidimensional poverty between sub-regions in the south. After controlling for capital expenditure, the OLS results show that labour force and fertility rate have significant effects on multidimensional poverty with the latter exhibiting positive relationship.

Michael, Tashikalma, Maurice & Tafida (2019) generated data using a multistage cluster sampling technique and analysed it using multidimensional Poverty Analytical Tool (MPAT) and a binary logistic regression. The results reveal that household size, age and marital status negatively influenced MPI while gender, educational status, livelihood activities, farm size, livestock ownership, remittance, membership of group and access to credit positively influenced multidimensional poverty in rural Adamawa State, Nigeria.

Adepoju (2018) using Markov Model of Poverty Transition examined the poverty in Nigeria, the results indicate that educational status, household size, number of assets owned and ownership of land influenced transient poverty while marital status, household size, land ownership and number of assets owned influenced chronic poverty among rural households in Nigeria. The study also reveals that education and assets dimensions contributed to the highest rural poverty.

Conclusion

The above empirical review indicates that, many studies were concluded on poverty in Nigeria using different techniques, however gap still exist, because most of these studies

were conducted at macro level that assesses Nigeria as a whole, with many state level analysis that concentrates mostly on the southern part of the country. This suggest scanty studies on sokoto state which was rated the most poorest state in Nigeria according to the recent multidimensional poverty survey in Nigeria (MDPIS, 2022) hence the desire and motivation for current study on sokoto state

Methodology

Study Area

Sokoto state is located in the extreme North western part of Nigeria between longitude 4° 8' and 4° 54' East and latitude 12°0' and 13°58' North. The state falls within the Sudan savannah zone, which is suitable for crop and arable production. The climate is tropical continental and is dominated by two opposing air masses – tropical continental and tropical maritime. Much of the rain in Sokoto state falls between June and September in the Northern part, April, and October in the other parts. The annual rainfall is between 500 mm in the North and 1300 mm to the South (Mamman *et al.,* 2000). The population is predominantly Muslim, with the Hausa and Fulani ethnic groups accounting for more than 90% of the population. Economic activities are dominated by farming and animal husbandry in the rural areas, and commerce and paid employment in the urban centres. The state has three senatorial districts, with 23 Local Government Areas (LGAs).

Method of Data Collection

The research used of primary source of data. The data was collected from both the rural and urban household in the study area using structured questionnaires in form of interview scheduled. The information on socio-economic and demographic characteristics of respondents was collected, similarly information on their access to Health care services; Education; Water supply; good sanitation; food security etc. was also collected

Sample size and Sampling Technique

Multi stage sampling technique was adopted in the selection of respondents. The first stage involved purposive sampling of four Local Government Areas (LGAs) in each of the three senatorial district based on the intensity of poverty according to MPI 2022, giving a total of 12 LGAs, the local government selected are: Goronyo, Wurno, Rabah, and Isa LGAs in Sokoto East, While Tureta, Bodinga. Shagari and Kebbe in Sokoto South, Similarly, Wamakko, Silame, Binji and Tangaza in sokoto North senatorial district respectively however, the second stage involved a random selection of 60 household heads in each of the 12 Local Government Areas selected arriving at a total of 720 respondents.

Method of Analysis

Both descriptive and inferential method of analysis was used. Descriptive statistics inform of frequencies and percentages were used to analyse the socio-economic and demographic

International Journal of Law, Politics & Humanities Research
Published by Cambridge Research and Publications

Vol. 6 No. 6
December, 2024.

characteristics of the respondents. However, since concrete generalization may not be possible using only descriptive results, in order to examine the probability of the household's economic welfare falling above or below the poverty line as a result of the influence of some factors, Logistic Regression Model was used since the dependent variable (poor or non-poor) is a dichotomous. First multicollinearity test was conducted using Tolerance value and Variance Inflation Factor (VIF), to avoid the possibility of high correlation among the independent variables, followed by heteroscedasticity test which was conducted to find out if the variances of the model are not equal.

A poverty line is defined as a predetermined, or well – defined standard of income or value of consumption, which is deemed to represent the minimum required for a productive and active life or even survival (Okumadewa, 2009). In this study, the International poverty line (dollar equivalent) was utilized. This poverty line was developed by World Bank in order to permit cross-country comparisons and aggregation. In this regard, the World Bank has been estimating international poverty lines since 1990. The World Bank approach has followed Rowntree's (1901) approach in estimating the global poverty lines which are inevitably somewhat arbitrary, \$ 1 a day, referred to as lower (absolute) poverty line and \$ 2 a day, referred to as upper (relative) poverty line (World Bank, 2010). In this analysis, the 2024 World Bank Purchasing Power Parity for Nigeria 1,600 Naira to a Dollar has been adopted. One dollar equivalent a day referred as absolute poverty and two dollar equivalent referred as relative poverty. Therefore, any household whose consumption expenditure is less than \$1 (₦1,600) per day is considered to be absolutely poor. Similarly, a household whose consumption expenditure is less than \$2 (₦3,200) per day is considered to be relatively poor using daily household per capita expenditure

Model Specification

The Model which investigates the correlates of poverty is the binary logistic model in which the dependent variable is dichotomous (poor/non poor), mathematically it is as follows:

$$Y_i X_i \beta + \mu_i \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots 1$$

Where: Y_i = dependent variable that measures poverty (i.e. a dummy variable taking the value of 1 if household is above poverty line 0 otherwise).

X_i = Vector of explanatory variables

μ_i = Stochastic error term

β = is the vector of parameters to be estimated.

Following Alderman and Garcia, (1993) and Gaiha (1998), and assuming that the cumulative distribution of the error term is logistic, a logistic model will further be defined as:

$S_i = 1$ if $y_i > Z$, and $S_i = 0$ *if* otherwise………………………………………2

Where: S_i = household poverty

y_i = household per capita consumption expenditure

Z = poverty line

Results and Discussions

This section provides a preliminary analysis in descriptive form which consists of frequencies and percentages of socio-economic variables captured.

Table 1: Socio-Economics Characteristics of Respondents in Sokoto State

Variables	Frequency	Percentage (%)
Age of respondent		
20-30	*164*	*23.5*
31-40	*198*	*28*
41-50	*169*	*24.3*
51-60	*134*	*19.2*
61-70	*33*	*5*
Total	*698*	*100*
Gender of respondent		
Male	531	76
Female	167	24
Total	698	100
Marital status		
Married	*528*	*75.7*
Not-married	*126*	*18*
Divorce	*44*	*6.3*
Total	*698*	*100*
Household size		
0-5	308	44.1
6-10	226	32.5
11-15	100	14.3
16 and above	64	9.1
Total	698	100
Level of Education		
Non-formal	*242*	*34.7*
Primary	*150*	*21.5*

Secondary	*200*	*28.7*
Tertiary	*106*	*15.1*
Total	*698*	*100*

Source: Author's computation from field survey, 2024

The socio-economic characteristic of respondents in Sokoto state, which is the summation of all results from the three senatorial districts, is presented in Table 1. The respondent's distribution by age indicates that 23.5% of the respondents were between the ages of 20-30; similarly, 28% are between 31-40 years of age, and 24.3% and 19.2% are between the ages 41-50 and 51-60 respectively. This suggested that, majority of the respondents are in economically active population age bracket, that with full support from the government, are capable of engaging in any meaningful formal or informal business activity that contribute in alleviate their poverty and move the nation forward. However, the distribution of respondents by gender indicates that 76% of the respondents were male, while only about 24% were females. This indicates that, majority of the respondent in the study area were male. This result is expected in Sokoto state because of the religion and culture of the people which gave more dominance to male folk. Furthermore, the marital status of the respondents indicates that 75.7% of the total respondents were married; while 18% were not married and 6.3% was divorce. This finding indicates that overwhelming majority of the respondents in the study area were married people. Similarly, the household size which is the number of persons living together in one compound as a family, contributing to the total income of the house and eats from same pot, the result disclosed that, 44.1%, 32.5%, 14.3% of the respondents had a household size of from 0-5, 11-15, 11-15 members respectively. This indicates that majority of the respondents in the study area had a fairly large family size; this is probably as a result of demand for more children that contribute to the family total farm labour and also large family is source proud in Hausa/Fulani culture. However, educational level of respondent indicates that, 34.7% have not attended western education, they had only Quranic education, with 21.5%, 28.7% and 15.7% have primary, secondary and tertiary education respectively This indicates that, majority of the respondent are literate either formal western or Quranic education.

Logistic Regression Model on the Determinant of Poverty

The inferential measurement of the correlates of poverty has been done using binary logistic model. First we undertook the diagnostics test of multicollinearity using Tolerance value and Variance Inflation Factor (VIF), in order to avoid the possibility of high correlation among the independent variables (Pallant, 2004), then followed by the heteroscedasticity test which was conducted to find out if the variances are not equal, so as to know the best model to apply.

Multicollinearity Test

The multicollinearity test was conducted using Tolerance value and Variance Inflation Factor (VIF). The collinearity test was conducted to avoid the possibility of high correlation among the independent variables included in the model. Tolerance Value ranges from 0 to 1, where lower value is associated with high multicollinearity (Garba, 2006). However, a VIF value below 10 indicates absence of serious multicollinearity problem (DeCoster, 2006).

Table 2: Tolerance Values and Variance Inflation Factor for the Model

Equation:	Daily Per capita Expenditure	
	Tolerance value	Variance Inflation Factor (VIF)
Natural log of daily per capita Consumption expenditure	*0.835*	*1.86*
Access to Health care services	*0.890*	*9.46*
Food Security	*0.861*	*9.34*
Access to Education	*0.716*	*5.08*
Access to clean drinking water	*0.786*	*7.15*
Access to good Sanitation	*0.737*	*7.89*
Access to good housing	*0.836*	*6.17*
Availability of assets	*0.984*	*5.23*
Employment status	*0.794*	*18.11*
Security shocks	*0.268*	*6.82*

Source: Author's computation from field survey 2024, using IBM SPSS Statistical software.

The results of diagnostics test as presented in Table 2 indicate that, all the independent variables with the exception of employment status have VIF value below 10. Similarly, all the explanatory variables have tolerance value closer to one, with exception of security and shocks. These variables indicating evidence of multicollinearity could not temper with the authenticity of the results.

Table 3: Glejser Lagrange Multiplier Test for Heteroscedasticity

Model	LM Test/Chi2 Value	Remarks
Natural log of daily per capita Consumption Expenditure	*339.6342*	*The test statistics indicates that, the result is not significant, therefore, null hypothesis is accepted and concluded that, there is no heteroscedasticity,*

Source: Author's computation from field survey 2024, using IBM SPSS Statistical software

Heteroscedasticity Test

The result for heteroscedasticity test was conducted to find out if the variances are not equal, this wills gives chance to know the best model to apply, it is presented in table 3. The test run was not significant, and the null hypothesis which states that; there is no heteroscedasticity is accepted in the test run, indicating there no heteroscedasticity problem. Therefore, in its absence, Binary Logistic Model has been applied.

Table 4: Poverty Indices on the basis of International standard for three senatorial district of sokoto

Senatorial district	Sokoto East	Sokoto North	Sokoto South
Per capita index			
Relative Poverty Line	3,200.00	3,200.00	3,200.00
Headcount index	0.89	0.86	0.84
Poverty Gap index	0.42	0.39	0.34
Squared Poverty Gap Index	0.27	0.26	0.24
Absolute Poverty Line	1,600.00	1,600.00	1,600.00
Headcount index	0.63	0.59	0.48
Poverty Gap index	0.43	0.42	0.37
Squared Poverty Gap Index	0.24	0.22	0.19

Source: Author's computation from field survey 2024, using IBM SPSS Statistical software

The result on the aggregate poverty lines and poverty indices measured on the basis of international poverty standard (dollar equivalent) for the three senatorial districts is presented in Table 4. According to international standard, the relative poverty line on the basis of per capita scale stood at ₦3,200.00, (equivalent to $2) while the absolute poverty line using international standard stood at ₦1,600.00 (equivalent to $1)

Therefore, based on international standard, a household with daily per capita consumption expenditure below ₦3,200.00 was considered as relatively poor on the basis of per capita scale. Similarly, a household whose daily per capita consumption expenditure was below ₦1,600.00 was considered as absolutely poor on the basis of per capita scale. From this measure, it is clear therefore that 89% and 86% and 84% of the respondents in sokoto East, North and South senatorial district were relatively poor on the basis of per capita scale. Similarly, 63% and 59% and 48% of the total respondents in the three senatorial zones were absolutely poor on the basis of per capita scale.

However, the aggregate poverty lines and poverty indices measured on the basis of international poverty standard (dollar equivalent) for all the respondents in the state are presented in Table 5. The results disclosed that, 86% of the total respondents in the state were relatively poor; however, 56% of the total respondents were absolutely poor.

Table 5: Consumption Expenditure, Poverty Line and Indices on the basis of International Poverty Standard for Sokoto State

Equivalent scale of poverty measure	Mean per capita daily consumption expenditure	Poverty line	Aggregate poverty indices		
			Headcount	poverty Gap	Squared poverty Gap
Per capita scale Relative poverty	420.78	3,200	0.86	0.39	0.32
Absolute poverty		1,600	0.56	0.41	0.22

Source: Author's computation from field survey 2024, using IBM SPSS Statistical software

Binary Logistic Regression Result

In order to examine the probability of the household's economic welfare falling above or below the poverty line as a result of the influence of some factors, logistic regression model has been used since the dependent variable (poor or non-poor) is a categorical variable.

The Logistic Regression result is presented in table 6. It indicates a statistically significant negative relationship between accesses to health care services to poverty for both absolute and relative poverty in sokoto state. This suggests that, the household access to health care service reduces the likelihood of a household falling into poverty in the study area.

Similarly, the result further disclosed that, food security, access to education, and access to clean drinking water; others are access good sanitation, access good housing, availability of asset, employment status and security shocks all displayed a statistically significant negative relationship with poverty. This express that, all these variables reduces the likelihood of household falling into poverty for both absolute and relative poverty except for the availability of asset which is not significant under relative poverty

Table 6: Binary Logistic Regression Results of the correlates of Poverty in Sokoto

Dependent variable: 1 poor, 0 rich on the basis of per capita income		
Independent variables		
	Absolute poverty	Relative Poverty
Access to Health care services	82.7418 (-6.17)**	803.9865 (6.19)**
Food Security	3.8531 (7.46)*	3.6178 (3.86)*
Access to Education	27.6042	567.1555

	(-0.61)**	(-1.19)*
Access to clean drinking water	7.1235	5.6813
	(1.89)**	(2.06)*
Access to good Sanitation	-1.08658	-0.05954
	(-1.94)*	(-2.01)*
Access to good housing	8.08672	12.8443
	(7.97)**	(5.93)***
Availability of assets	8.0329	6..6436
	(3.53)**	(1..02)
Employment status	626.833	101.508
	(3.16)*	(3.29)***
Security shocks	243.917	-71.5105
	(8.28)**	(-2.95)*
Wald chi2	618.57	613.86
Prob>chi2	0.0000	0.0000
PseudoR2	0.1864	0.2250

Source: Author's computation from field survey 2024, using IBM SPSS Statistical software

Note: Z values are in parenthesis. Significant at (*** 1%) (** 5%) (*10%)

Conclusion and Recommendations

From the foregone discussion, the result concluded that, based on international standard , 86% of the total respondents in Sokoto state were relatively poor; and 56% of the total respondents were absolutely poor. However, the logit result concluded that, food security, access to education, and access to clean drinking water; others are access good sanitation, access good housing, availability of asset, employment status and security shocks all displayed a statistically significant negative relationship with poverty, which disclosed that, all these variables reduces the likelihood of household falling into poverty

The state government should key into some strategic national programmes with success story such as the National Home-Grown School Feeding Programme that aims to both improve the health and educational outcomes of primary school students, and contribute to stimulating local agricultural production and the empowerment of women and N-Power, a scheme under the National Social Investments Programme of the Federal Government geared towards job creation, poverty alleviation and empowerment initiatives through volunteering services for young people.

The government at all level should develop many other programmes that support the provision of more employment opportunities, qualitative education, and health care services and clean drinking water, which will support human capital development.

To made food available and affordable, it is suggested that, government most provide the most needed security against arm banditry and cattle rustling in and around the state for

farmers to go to farms and also made farm inputs such as fertilizer, insecticide, pesticide and credits facilities accessible and affordable. This will assist in mass production of food for local consumption and export and consequently food security for the state.

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