Electricity Consumption, Government Expenditure and Sustainable Development in Nigeria: A Co-integration Approach

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ABSTRACT

The government incurs both capital and recurrent expenditures so as to bring about the development of the Nigerian economy. Coupled with this is the fact that electricity power plays an important role in ensuring that aggregate output increases and the welfare of the people is affected positively. This study sets out to examine the long run relationship between electricity consumption, government expenditure and sustainable development in Nigeria employing the Johansen co-integration, vector error correction mechanism and Granger causality estimation techniques. Secondary data were obtained from Central Bank of Nigeria Statistical Bulletin, United Nations Conference on Trade and Development and World Development Indicators from 1980 to 2017. The results obtained from the study showed that government recurrent expenditure, gross fixed capital formation have a positive and significant relationship with gross domestic product per capita (GDPC) in the long run. However, electricity consumption, government capital expenditure and total labour force had a negative but significant effect on GDPC in the long run. Hence, this study recommended that the government and relevant agencies should ensure that projects undertaken are profitable and people oriented. Also, strategies to improve electricity supply, government expenditure on capital and labour productivity should be encouraged.

Keywords: Capital and Recurrent Expenditure, Electricity Consumption, Sustainable Development
JEL Classifications: F61, I15, I25, L92

1. INTRODUCTION

The most important function of government expenditure is to maintain reasonable degree of price level stability and sustain the rate of economic growth that will enhance the economy to achieve full developmental potential and stabilization (Musgrave and Musgrave, 1989). The need for increasing government expenditure could be seen in various theories of public expenditure. The theories of Wagner, Big Push theory, Musgrave theory of increasing government activities, the Keynesian demand side economy and the theory of deficit financing, all underlined the need for government spending to improve economic welfare through the provision of public goods. High levels of government expenditure

are potential ways to increase the level of employment, profitability and investment via multiplier effects on aggregate demand. Thus, government expenditure, even of a recurrent nature, can contribute positively to economic growth and lead to economic development (Chude and Chude, 2013).

In Nigeria, in spite of the huge government expenditure programmes, most of our infrastructural facilities are worn out. The roads are bad, hospitals poorly equipped with the necessary human and physical resources, the schools are in poor conditions and there is inadequate electricity power supply to support and boost the industrial activities in the economy. Many Nigerians have continued to wallow in abject poverty with >50% living on

<US$2/day National Human Development Report, 2015. The worn out infrastructural facilities, especially the bad roads and poor electricity power supply had led to the collapse of many industries and increased the level of unemployment. This is a pointer to the fact that the country has been experiencing redundant growth and growth without development. It also shows that a large percentage of the Nigerian population does not benefit from the expenditures of the government. Hence, the proposed objectives and goals of government expenditure have been largely defeated.

In the Nigerian economy, the relationship between capital expenditure and gross domestic product per capita (GDPC) has not been moving according to what theory says (a positive relationship between capital expenditure and GDPC). In 1986, capital expenditure grew by about 56% while GDPC fell by about 11%. In 2000, capital expenditure fell by about 52% while GDPC grew by about 3% and in 2016, capital expenditure fell by about 23% while GDPC grew by about 5% (Central Bank of Nigeria, 2016). Similarly, government recurrent expenditure has also had negative relationship with GDPC. In 1987, government recurrent expenditure grew by about 103% while GDPC fell by about 13%. Also in 1999, government recurrent expenditure grew by about 152% while GDPC fell by about 2% t and in 2016; government recurrent expenditure grew by about 9% while GDPC fell by about 4% (Central Bank of Nigeria, 2016). In spite of the huge amount of money that the Nigerian government had expended on the power sector, the supply of electricity had been very erratic. From 1999 to 2015, the government spent about $1.6b on the power sector with no noticeable improvement in the megawatts of electricity generated in the country (Central Bank of Nigeria, 2016).

Electricity in its usefulness and applicability is directly needed in industries in the production of output, existing industries in Nigeria complain of inadequate electricity supply to power their machines and technologies to produce physical goods. When there is poor electricity power or in general energy sources, human capacities in the area of physical products remain just ideas crediting Solow model which listed the core components of growth as capital, labour and technological progress under which electricity falls (Matthew et al., 2010; Adeniran, et al., 2018; Osuma et al., 2018; Alege and Osabuohien, 2015; Matthew et al., 2018; Matthew et al., 2018). This study is built on the argument that, as observed in literature and following the study of (Jahan, 2017), globally, approximately 1.2 billion individuals have limited access to electricity, out of these people, about 1 billion of them depend on solid fuel, like wood, coal and charcoal as an alternative source of energy, these alternative sources of energy have caused noxious indoor air pollution for cooking. The United Nations sustainability on energy has three goals for 2030 which are; to attain worldwide admittance to cleaner energy, ensure energy supply adequacy and increment in the proportion of renewable energy in the international energy mix (Matthew et al., 2018; Osabohien et al., 2019).

Sustainable development has been described as the development that meets the needs of the present without compromising the ability of future generations to meet their own needs. In order to boost sustainable development, there has to be a concerted effort by the Nigerian government to channel her expenditure to economic projects that will benefit the people and contribute to increasing the level of aggregate output. Coupled with this is the fact that the government has to increase the generation of electricity power so that industries and individuals can make use of it for productive activities. It is in the light of this that this study examines the long run relationship between of electricity consumption, recurrent and capital expenditure on economic development in Nigeria. The study comprises of five sections; following this introductory section is section two which presents some insights from empirical literature and theoretical framework. Section three focuses on the method engaged in the study; section four discusses the empirical analysis of the results and findings of the study; section five concludes the study by recommending policies that will help turn around the issues associated with electricity consumption, and how to utilize government expenditure efficiently to attain the required development rate in the Nigerian economy.

2. LITERATURE REVIEW AND THEORETİCAL FRAMEWORK

The relationship between government expenditure and economic growth has been a controversial issue as it has led to the development of diverse positions. One position says that more government expenditure spurs economic growth, for example, Darma (2014), Matthew and Olowe (2011), Onakoya and Somole (2013), Aigheyisi (2013) amongst others. Another school of thought believes that excessive government expenditure could be detrimental to economic growth, this can be seen in Loto (2011); Oluwatobi and Ogunrinola (2011), while yet others say that no relationship exists between the variables, for example, Abu and Abdullahi (2010). Researchers over the years have studied the aggregate effect of government expenditure on economic growth, neglecting the contribution of government expenditure to economic development. Kalu et al., (2013); Matthew and Olowe (2011) attempted to address this gap adding to literature on the relationship between government expenditure and economic growth in Nigeria, but in their study, economic development was proxied by real gross domestic product instead of GDPC which is a better measurement of economic development making their analysis misleading, drawing from the fact that economic development is more encompassing than economic growth.

Wu et al., (2010) examined the causal relationship between government expenditure and economic growth, they used panel data set that comprised of 182 countries covering the period from 1950 to 2004, and their results strongly supports both Wagner's law and the hypothesis that government spending favours economic growth irrespective of how government size and economic growth are measured. This study was a cross-country based analysis and thus produces mixed results which give justification to country specific study because of peculiarities. In all of these it made it difficult in having general consensus as to the exact relationship between both investigating macro-economic variables, especially in emerging economies such as Nigeria. According to Liu et al., (2008), they examined the causal relationship government expenditure and economic growth in the United States of America, for the period of

1947-2002. The causality results showed that while total government expenditure causes an increase in GDP, the latter does not cause an increase in government expenditure. The study concluded that since government expenditure grows the U.S. economy.

Akpan (2005) examined the relationship between government expenditure and economic growth using a disaggregated approach. The components of government expenditure considered in his analysis were capital, recurrent, administrative, economic service, social and community service as well as transfers. The result of the study showed that there is no significant relationship between economic growth and most components of government expenditure in Nigeria. Olugbenga and Owoeye (2007) in their study examined the relationship between government expenditure and economic growth for a group of 30 OECD countries from 1970 to 2005, using regression analysis. The result of the study showed the existence of a long-run relationship between government expenditure and economic growth. The study also showed a unidirectional causality from government expenditure to growth for 16 out of the 30 countries, this agrees with the Keynesian hypothesis. On the other hand, it showed that causality ran from economic growth to government expenditure in 10 out of the countries, which is in line with the Wagner's law.

Kalu et al., (2013), in their study investigated the influence of government expenditure on administration, economic services, social and community services and total recurrent expenditure on economic growth of Nigeria. The study employed Johansen cointegration technique, and their empirical finding showed a long-run relationship between government expenditure and real GDP. Similarly, Loto (2011) examined the impact of sectoral expenditure on economic growth in Nigeria between 1980 and 2000 using the Johansen co-integration and error correction mechanism (ECM). The study found out that government expenditure on agriculture and education impact negatively on economic growth, though the impact of expenditure on education is observed to be insignificant. According to the central limit theorem, there is a high probability of this result will be spurious due to insufficiency of data to ascertain the appropriate result that is desired. According to Ogundipe and Oluwatobi (2014), they examined the effect of government expenditure on the growth rate in Nigeria using the Johansen co-integration analysis with data spanning from 1970 to 2009. The result of the study showed that the components of total government expenditure (except spending on education and health) had a negative effect on economic growth.

According to Jumbe (2004), he employed the Johansen cointegration and the ECM in examining whether a long run relationship exists between GDP and electricity variables in the Malawian economy between 1970 and 1999. The result from this study revealed that there is a causal and direct relationship existing between electricity consumption and economic growth. He concluded that when the consumption of electricity increases, there will also be a boost in the level of economic growth in Malawi in the long run. Similarly, Odhiambo (2009); Adeola and Aziakpono (2017) carried out a study to investigate how the usage of electricity power will translate to the growth of the South African economy. The method of the trivariate causality was employed, and findings from the study revealed that there is a two-way causality between the usage of electricity power

and South Africa's economic growth. In line with that, Akinlo (2009) examined the relationship between electricity power usage and the productivity in real GDP in Nigeria. The result of the study found out that there is a long-run relationship existing between the two afore-mentioned variables, this means that electricity consumption brings about economic growth.

To the best of the knowledge of the authors, there has not been any study that focused on the impact of electricity consumption and government expenditure on sustainable development in Nigeria, which this study focuses on. Therefore, this study is contributing to knowledge in the area of investigating how electricity consumption and government expenditure can help bring about sustainable development in the Nigerian economy.

Theoretically, this study is premised on the Keynesian theory of growth. Keynes regards public expenditure as an exogenous factor that can generate sustainable development instead of an endogenous phenomenon. From the Keynesian analysis, government expenditure contributes positively to sustainable development. Hence, an increase in government expenditure is likely to lead to an increase in employment, profitability and output through multiplier effects on aggregate demand. This study draws from the "neoclassical" growth theory as modeled by Robert Solow (1956) and is augmented by the Keynesian theory of government intervention by J.M. Keynes. The neoclassical growth model examines the impact of infrastructure on growth while the Keynesian theory captures the impact of government expenditure on growth. The Keynesian theory states that an increase in government expenditure leads to an increase in aggregate demand, which in turn leads to sustainable development.

3. METHODOLOGY

As earlier stated, the theoretical basis of this study is based on the Keynesian theory of growth. The Keynesian model states that expansion of government expenditure accelerates sustainable development On the basis of the theoretical framework and using the Cobb-Douglas production function the model for this study is adapted from the work of Matthew et al., 2018. The model is specified as:

$$GDPC = f\ (GCEXP, GREXP, LAB, GFCF, ELECT) \quad (1)$$

Where: f is a functional relationship, GDPC is GDPC, GCEXP is Government capital expenditure, GREXP is Government recurrent expenditure, LAB is the total labour force, GFCF is Gross fixed capital formation, ELECT is Electricity Consumption. The model can also be can also be specified in a Cobb-Douglas production function in its explicit form as;

$$GDPC= \beta_0.GCEXP\beta_1.GREXP\beta_2.LAB\beta_3.GFCF\beta_4.ELECT\beta_5\mu \quad (2)$$

Where μ represents the stochastic disturbance term.

The model in equation (2) is in its non-linear form, thus, cannot be estimated. It therefore has to be linearized to enable estimation. Putting the equation in an econometric (linear) form, we have:

$$GDPCt= \beta_0 + \beta_1 GCEXPt + \beta_2 GREXPt + \beta_3 LABt$$
$$+ \beta_4 GFCFt + \beta_5 ELECTt \; \mu t \qquad (3)$$

Taking the natural logarithm of both sides of equation (3) and assuming linearity among the variables gives:

$$LnGDPCt = \beta_0 + \beta_1 LnGCEXPt + \beta_2 LnGREXPt + \beta_3 LnLABt$$
$$+ \beta_4 LnGFCFt + \beta_5 LnELECTt + \mathcal{E}t \qquad (4)$$

The variables in equation (4) are described in Table 1.

3.1. Technique of Estimation

The technique of estimation that is employed in this study is the co-integration test developed by Johansen in 1987. A major objective of this study is to examine a long run relationship between electricity consumption, government expenditure and sustainable development. In order to achieve this objective, the study carried out the Augmented Dickey-Fuller (ADF) tests (the unit root tests) to test for the stationarity of time series data. This is because a major prerequisite for co-integration estimation technique is that all variables be integrated by the same order. The unit root test is used to test the order of integration of the variables in the model. The next step is to use the ECM to assess the speed of adjustment from short run equilibrium to a long run equilibrium state. The need to carry out ECM arises due to disturbances known as shocks that cause errors in the model. Finally, the study carried out the Granger causality test to show the casual relationship between the dependent and explanatory variables. It indicates the direction in which causality flows. According to Gujarati (2012), from a Granger causality test, the results can either be unidirectional, bilateral or independent of each other. This study aims to find out the direction of causality between sustainable development and government expenditure.

4. RESULTS AND DISCUSSION

This section presents the results and the discussion of the results. Table 2 presents the summary of the unit root test results for the series in level and in first difference forms. The result of the ADF shows that apart from LNELECT which was stationary at 10% level of significance at level form, all other variables were integrated of order 1, since the absolute value of ADF statistics exceeded the critical value only at first difference at 5% level of significance. The Philips Perron test indicated that LNELECT was stationary at level, all other variable were stationary at first difference, though LNGCEXP was at 10% level of significance.

The co-integration results presented in Table 3 is based on the trace test request the null hypothesis of no co-integration among variables to be rejected. The rejection of the null hypothesis is as a result of the fact that there is at most two cointegrating equation among the variables at 5% level of statistical significance. Similarly, the co-integration test result based on the maximal Eigen value also confirmed that there is one co-integrating equations

Table 1: Variables, data sources and measurement

Variables	Definition	Source	Measurement (In Naira or Percent)
GDPC at constant local currency	The total value of all the goods and services produced by a country in a particular year, divided by the number of people living in the country	CBN, Statistical Bulletin	Number (Naira)
Government Capital Expenditure (GCEXP)	This refers to spending on assets. That is the purchase of items that will last and be used over time in the provision of good or service by the government	CBN, Statistical Bulletin	Number (billions of Naira)
Government Recurrent Expenditure (GREXP)	This refers to expenditure of the government on the purchase of goods and services for current use, wages and salaries, and overheads	CBN, Statistical Bulletin	Number (billions of Naira)
Gross Fixed Capital Formation (GFCF)	This refers to the net increase in physical assets (investment minus disposals) within a specific period of time. It excludes the consumption depreciation of fixed capital and land purchases. It is a component of expenditure approach in calculating GDP	CBN, Statistical Bulletin	Number (billions of Naira)
LAB	This refers to the group of working population within the age of 16-64 in the economy currently Employed.	UNCTAD	Number (thousands)
Electricity consumption	Electric power consumption refers to the power consumed by a household, it is expressed in kWh per capita	WDI	Percentage

Source: Authors' Compilation, 2018. GDP: Gross domestic product, CBN: Central Bank of Nigeria, LAB: Total Labour Force, WDI: World Development Indicators, UNCTAD: United Nations Conference on Trade and Development

Table 2: Summary of ADF and PP unit root test results

Variables	ADF Results		PP Results		Order of integration
	Level	First Diff.	Level	First Diff.	
LNGDPC	0.173968	−4.345949*	−0.068224	−4.333050*	I(1)
LNGCEXP	−1.274337	−5.833533*	−1.261863	−5.866302**	I(1)
LNGREXP	0.1739680	−4.345948*	−1.367033	−7.872909*	I(1)
LNGFCF	0.627853	4.592080*	0.558842	−4.580635*	I(1)
LNLAB	1.347061	−4.517973*	1.198993	−4.533751*	I(1)
LNELECT	2.834488**	-	−2.890097*	-	I(0)

Source: Computed by Authors' using E-views 10, 2018. * and ** indicate significant at 5% and 10% significance levels respectively. ADF: Augmented Dickey-Fuller

at 5% level of significance. Given that there is existence of co-integration among the variables, it is important to state that there might be disequilibrium in the short-run.

To correct for this possible disequilibrium, the ECM is employed and the results are presented in Table 4. The normalized co-integration result is written in its implicit form, hence to make it explicit; it is rewritten by changing the signs as follows:

$$LNGDPC = -17.30058LNELECT - 1.3346LNGCEXP \\ + 5.91084LNGFCF + 3.4739LNGREXP \\ - 68.6067LNLAB$$

The normalized co-integrating coefficient of LNELECT is inelastic at −17.30058<1 meaning that a percent change in LNELECT will bring about a 17.3% decrease in LNGDPC on average ceteris paribus. This indicates that there is a negative relationship between electricity consumption and economic development. This does not comply with theoretical expectations because of poor electricity supply in Nigeria. The normalized co-integrating coefficient of LNGCEXP is inelastic at −1.334645<1 meaning that a percent change in LNGCEXP will bring about 1.34% decrease in LNGDPC. This indicates that there is a negative relationship between capital expenditure and LNGDPC. This also does not comply with theoretical expectations as an increase in capital expenditure should encourage sustainable development.

The normalized co-integrating coefficient of LNGCFC is elastic at 5.910840>1 meaning that percent change in LNGCFC will bring about 5.9% increases in LNGDPC on average ceteris paribus. This indicates that there is a positive relationship between gross capital formation and sustainable development. The normalized co-integrating coefficient of LNGREXP is elastic at 3.473931>1 meaning that a percent change in LNGREXP will bring about a 3.473% increase in LNGDPC on average ceteris paribus. This indicates that there is a positive relationship between government recurrent expenditure and sustainable development. The normalized co-integrating coefficient of LNLAB is inelastic at −68.60673<1 meaning that a percent change in LNLAB will bring about 68.6% decrease in LNGDPC. This indicates that there is a negative relationship between labour force and economic development. This is in not in line with theoretical expectations, specifically the Solow growth model, as an increase in labour will lead to an increase in output and thereafter make development possible.

Table 5 revealed that the coefficient of the study's error correction model is negative at −0.408186 which satisfies the condition of error correction in the model. At −0.448031, it implies that about 44% of the errors occurring in present periods are corrected in subsequent periods, indicating convergence in the model. With the absolute value of the T-statistic >2 (2), that is, 4.77257>2, it indicates that the speed of adjustment of these errors in the current period to be corrected in the long run equilibrium is fast, causing a convergence. The coefficient of determination (R^2) shows that about 96.4% of the total variation in GDPC is explained by the independent variables in the model. The adjusted (R^2) which penalizes the unnecessary variables also indicate that about 95.5% of the total variation in GDPC is explained in the model. the calculated F statistics (101.7482) is greater than the tabulated. Hence, the overall regression is statistically significant at 5% level of significance.

Table 3: Johansen co-integration rank test result

H0	H1	Eigen Value	λ max test	λ max (0.95)	Trace test	Trace (0.95)
r=0	r=1	0.685713	39.35330	40.07757	109.2468**	95.75366
r≤1	r=2	0.550383	27.17818	33.87687	69.89347**	69.81889
r≤2	r=3	0.444362	19.97972	27.58434	42.71529	47.85613
r≤3	r=4	0.398236	17.26826	21.13162	22.73557	29.79707
r≤4	r=5	0.145010	15.326637**	14.26460	5.467308	15.49471
r≤5	r=5	0.004129	0.140671	3.841466	0.140671	3.841466

Source: Authors' Computations using E-views 10, 2018. **denotes rejection of hypothesis at 5% level of significance. Max-Eigen value test indicates 1 co-integrating equations at 5% level

Table 4: Normalized co-integration coefficients

LNGDPC	LNELECT	LNGCEXP	LNGCFC	LNGREXP	LNLAB
1.000000	−17.30058	−1.334645	5.910840	3.473931	−68.60673
	(4.73774)	(0.67788)	(0.82062)	(1.12904)	(11.8892)

Source: Authors' Computation from E-views 10, 2018. Normalized co-integrating coefficients (standard error in parentheses). T-Statistic in brackets

Table 5: Vector error correction model

Error correction	LNGDPC	LNELECT	LNGCEXP	LNGFCF	LNGREXP	LNLAB
CointEq1	−0.448031	0.116243	−0.032664	0.034785	0.041431	−0.242829
	(0.19864)	(0.17083)	(0.02450)	(0.04648)	(0.04247)	(0.55104)
	[4.77257]	[0.68046]	[−1.33304]	[0.74838]	[0.97563]	[−0.44067]
R-squared	0.964781		Adj. R-squared		0.955299	
Sum sq. resid.	0.089629		S.E. equation		0.058713	
F-statistic	101.7482		Log likelihood		52.70958	
Akaike AIC	−2.629976		Schwarz SC		−2.270832	
Mean dependent	12.39561		S.D. dependent		0.277701	

Source: Authors' Computation from E-views 10, 2018

Table 6: Causality test results

Variables	Direction of causality	D_{max}	Optimal Lag	F-Stat	P value	Evaluation of hypothesis
GDPC and ELECT	GDPC→ELECT	1	7	1.13652	0.3348	Unilateral causality
	ELECT→GDPC			4.24503	0.0242	
GDPC and GCEXP	GDPC→GCEXP	1	7	4.34871	0.0223	Bilateral causality
	GCEXP→GDPC			4.36485	0.0220	
GDPC and GCFC	GDPC→GCFC	1	9	0.20730	0.8140	Unilateral causality
	GCFC→GDPC			3.97830	0.0297	
GDPC and GREXP	GDPC→GREXP	1	9	2.53043	0.0971	Unilateral causality
	GREXP→GDPC			5.02156	0.0134	
GDPC and LAB	GDPC→LAB	1	9	0.56632	0.5738	Unilateral causality
	LAB→GDPC			3.98529	0.0296	

D_{max} is maximum order of integration. The lags section is done using Hannan-Quinn Information Criteria test at 5% level and the coefficient matrices of the last d_{max} lagged vectors in the model are ignored. The error term entering the causality test are uncorrelated, result are available with the authors. GCEXP: Government capital expenditure; GCFC: Gross capital formation, ELECT: Electricity consumption, GREXP: Government recurrent expenditure, LAB: Total labour force. GDPC: Gross domestic product per capita.
Source: Authors' Computations using E-views 10, 2018

The result of the causality test is presented in Table 6. The causality result suggests bidirectional causation between GDPC and government capital expenditure (GCEXP). The result also revealed that gross capital formation (GCFC), electricity consumption (ELECT), government recurrent expenditure (GREXP) and total labour force (LAB) causes GDPC while GDPC does not cause them.

5. CONCLUSION AND RECOMMENDATIONS

This study examined the relationship between electricity consumption, government expenditure, sustainable development in Nigeria using the Johansen co-integration econometric technique based on the Cobb-Douglas growth model for the period between 1980 and 2017. The study conducted a unit root test to ascertain the stationarity status of the data series; the series were found to be stationary at first difference, except electricity consumption that is stationary at level. The study found a co-integrating relationship among all the variables in the model. The vector ECM also reveals the possibility of long run convergence with high speed of error correction. The result showed that electricity consumption has a significant impact on sustainable development. In line with the result, there is unidirectional causation between sustainable development and electricity consumption; this work is in line with the finding of Adeola and Aziakpono (2017). The analysis revealed that as we go into the future, sustainable development responds to electricity consumption and government expenditure in Nigeria. Therefore, this call for the need to reinforce the efficiency rate of energy generating agencies by making sure that worn-out equipment and other useful tools are periodically replaced in order to reduce power outages experienced regularly in Nigeria.

Based on the findings of this study the following recommendations are made; first, the result revealed that gross capital formation, electricity consumption, government recurrent expenditure and total labour force bring about sustainable development, so the government is advised to invest in viable economic activities that will bring about an increase in employment opportunities for the populace and subsequently improve on the welfare of the citizens. Second, the government should also improve on the provision of electricity as most of the production activities that take place within the Nigerian economy make use of electricity, if the electricity generated is increased, it will help create employment and boost aggregate output which will in turn bring about sustainable development. Third, although the result of the study showed that a negative relationship exists between government expenditure and sustainable development which violates the positive relationship between government expenditure and sustainable development that theory postulates. This can be due to the high corruption level in Nigeria where public funds meant to be used for developmental projects are diverted to private hands. Therefore, the government should ensure that proper accountability measures are put in place to curb the mis-management of funds meant for development projects. Finally, the government should also encourage people to engage in productive activities by giving them the necessary encouragements in form of soft loans and the provision of infrastructural facilities such as electricity, good roads, pipe borne water amongst others.

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