THE PRIMARY LINK IN THE KEYNESIAN TRANSMISSION MECHANISM IN NIGERIA: AN EMPIRICAL INVESTIGATION.

BY

Andohol Jerome Ph.D Department of Economics Benue State University, Makurdi Email Address: torsaa2002@yahoo.com

ABSTRACT

Keynesians theoretical postulations have availed that interest rate which is the primary channel in the Transmission mechanism of Money supply on the stability of prices in the economy has been immersed in economic discourse. This relationship which is indirect and negative has been the discourse amongst economist and it is inconclusive. This study seeks to complement literature in this area given evidence for Nigeria between 1975-2011. The use of Vector Error Correction Model (VECM) within the framework of Vector Auto Regression (VAR) methodology was adopted for analysis. Variables such as Inflationary Rate (INF), Total Liquidity of Money(M_2) proxied as total quantity of money supplied(MS), the Minimum Rediscount Rate(MRR) proxied as interest Rate, where sourced from Central Bank of Nigeria Bulletin and used as data set for analysis. The study revealed a negative and unidirectional long- run equilibrium relationship between interest rate and money supply, with the interest rate serving as the signal to variations in money supply. It was also noted that money supply is not a major determinant of interest rate as substantiated by the insignificant values of the t-statistics and the low R^2 value of 37% variations explained by the model specified and 63% variations not captured by the model. Worthy to note also is that the short run relationship between money supply and interest Rate alternated between negative and positive relationships. Reasons for such behaivour reveal the combination of the Keynesian -effect and the expectation factor effect. Against this background, it is recommended that government should apply caution in the use of these two important tools of monetary policy to achieve price stability, as well as the need to consider other factors to augment the efficacy of the use of these tools. It is also worthy to note that the continuous use of interest rate as the key driver of the quantum of money to be supplied by monetary authorities, is a signal in the right direction.

Keywords: Money Supply, Interest Rate, Vector Auto Regression

1. INTRODUCTION

Economists overtime have been bedeviled with the problem of precipitating positive movements along axis that will lead to the reduction of gaps seen as disequilibrium in the economy. The Keynesians, though agreed that the effect of money supply towards precipitating changes in the real sector is limited, especially against the background of the economic scenario as witnessed in the great depressions of the 1930s, when the Supremacy of money's argument by the Classicals that "money

and only money matters" was seen as a negation towards the evolvement of economic growth. This thinking engendered the concept of the liquidity trap as posited by Keynes that people are unwilling to place funds in loanable terms due to low interest rate, instead they prefer to hold money in liquid form.

It was in the light of this argument, that the Keynesian which has metamorphosed into the Fiscalist school of thought posited that, interest rates as a primary link will be affected by money supply first which will in turn affect investment, and consumption decisions, that will transcend to the real sector of the economy. This thought as countered by the Classicals opined that money supply is directly proportional to prices as elaborated by the quantity theory of money.

Studies such as Ajayi(1974), Iyoha(1969), Saidu(2007) Odedokun(1996), Ebiringa(2012) relating interest rates to money supply in Nigeria, though limited in scope and fraught with methodological problems, are inconclusive. Most of such studies use nominal interest rates as against ex-ante real interest rates, which in theory affect savings and investment decisions. Of particular importance is the quality of data used in the studies, as most of these studies do not examine the issues of the macro statistics properties of the data. The syllogistic reasoning here is that there is the problem of spurious regressions, when non-stationary series are used in regression analysis.

The main objective of this paper is to empirically investigate the effect of money supply on the primary link in the Keynesian transmission mechanism using time series data of 1975-2011 taking hindsight of the quality of data used, since past studies had likely produced spurious regressions. The strength of this relationship which also forms the fulcrum of our analysis is the specific objective of the study.

Reliance was made on secondary sources of data which was mainly generated from Central Bank of Nigeria's publications, Federal office of Statistics as well as other published works.

The rest of the paper is organized as follows; section2 examines the review of literature, theoretical and conceptual issues; section 3 deals with data presentation, model specification, empirical examinations and discussions; finally section 4 concludes the paper.

2.0 CONCEPTUAL, THEORETICAL AND EMPIRICAL REVIEW

2.1 **Conceptual issues**

This paper has adopted the 1994 series of the CBN briefs definition of money supply. Money stock refers to the total value of the total stock of money in the economy and this consists of currency (notes and coins) and deposits with the commercial and merchant banks. There are two variants of money supply in Nigeria, namely:

- M_1 = is the narrow measure of money supply which includes currency in circulation with the non-bank i.e. Public and demand deposits (current account) at the commercial banks.
- M_2 = is the broad measure of money supply and includes M_1 and savings and time deposits (quasi-money) at the commercial and merchant banks. M_2 measures total liquidity in the economy.

From the foregoing, the variant of money supply used in this work is synonymous to the M_2 since it measures the total money supply in the economy at certain periods.

A review of the money supply policy and the interest rate policy in Nigeria is discussed within the framework of the period before the 1986 Structural Adjustment Program (SAP) reforms and the Post 1986 SAP reform periods, which relied on the dynamics of the market.

Adewuyi (2000) while writing on the absorptive capacity and macroeconomic policy in Nigeria reviewed that in the area of monetary policy, money supply grew from 25.79% in the pre-reform period to 31.2% in the post reform period. The expansionary monetary policy coupled with the rapid growth of government expenditure aggravated the rate of inflation. He further stated that the observed increase in money supply growth cannot be unconnected with the monetization of foreign exchange receipts, capital inflow and the liberalization of the financial sector.

2.2 Determinants of Money Supply

The general assumption as ascribed by Anyanwu (1993) is that nominal money supply is exogenously determined, that is, the monetary authority or the Central Bank supplies it. But he asserts that the real money supply is endogenously determined since the price level variation cannot be fixed. In other words, money supply is determined by the central bank behaviour, the behaviour of the non-bank public and the behaviour of the commercial banks.

Specifically, he posits that, money supply is influenced by the factors depicted by the following equation:

Ms	=	<u>1 + C</u>	R	(1)
		$rd + r_{t} + t + e$		

Where	e Ms	= Money Supply
С	=	is the desired currency ratio determined by the non-bank
		Public. If the non-bank public increases its demand for currency, money supply with increase.
rd	=	Is the reserve requirement percentage against demand
		Deposits and is set by the central bank. If the reserve requirement is high, money supply will be low.
rt	=	is the reserve requirement percentage against commercial bank time deposits and is also set by the central bank. If this percentage is high – money supply
e	=	is the desired excess reserve ratio, determined by the commercial banking system. If commercial bank demand for excess reserves increases, money
t	=	supply increases. is the desired time deposit ratio which is determined by the non-bank public. If the non-bank public increases its demand for time deposits, money supply increases
R	=	is the quantity of total reserves supplied to the commercial banking system by central bank. If the total reserves supplied by the Central Bank are high money supply will be high

Others are;

- r = is the interest rates. There exist a positive relationship between money supply and interest rates. When interest rates are high, money supply is also high.
- rb = The Bank rate typifies the rate at which commercial bank borrow from the central bank or discount bills. When this rate rises then money supply falls.

2.3 Interest Rate

Interest rates are quite many and are often referred to as the interest rate structure. Interest rates differ from bank to bank in Nigeria due largely to their been deregulated. Each bank has interest rates for its ordinary saver, fixed depositor, as well as a price-lending rate offered to its first class customers and a maximum lending rate charged to its other customers. There is also an inter-bank rate, which applies to very short-term loan transactions among the banks themselves.

The rediscount rate is the minimum rate at which the CBN is prepared to lend to the commercial and merchant banks either in the form of rediscounting or direct loans.

The use of the minimum rediscount rate (MRR) is adopted for this work, premised on the argument that, the adoption of the indirect mechanism requires that interest rate policy will become the most important instrument of monetary management, aimed at regulating the cost of credit from deposit money of banks, as the MRR becomes the nominal anchor of all money market interest rates.

Adewuyi (2000) assertions on interest rate policy availed that before 1986 the Central Bank of Nigeria (CBN) with a view to encouraging savings and investment, and hence economic growth regulated the structure and levels of interest rates. This regulated interest rates regime was characterized by the demand for credit exceeding the savings rate, government borrowing being financed by the CBN and the negative real interest rates. The real deposit and real lending rates were -12.28 and -8.66% in the period of 1975-85. This was as a result of the prevalent nominal interest rates which could not keep pace with inflation rates.

With the adoption of the Structural Adjustment Program (SAP) in 1986, there was a policy shift from a regulated regime of setting various interest rates to a market determined interest rate regime. Following this, interest rates were 'guided-deregulated' and the minimum rates on savings and time deposits were at 12 and 11% respectively in 1987. The maximum lending rate was also raised from 13% to 15% while the Minimum Rediscounting Rate (MRR) was equilibrated at 11%. In August 1987, monetary authorities completely deregulated the interest rates by removing the minimum interest rates on savings deposits and the maximum lending rates. This action further raised the MRR from 11% to 15%.

Despite the complaints from producers and pressure from the Manufacturing Association of Nigeria (MAN), which saw the CBN reduce the MRR from 15 to 12.75% in December 1987, market forces still accounted for the rise in MRR to18.5% and this led to the high lending rate.

Given this scenario, the spread between the lending and the deposit rates continued to widen. It increased from 4.11% in the period 1975-1985 to 7.33% in the period 1986-1993, despite the moral suasion by the CBN against such trend. The reason was as a result of the combined effects of high inflation rate due to continuous devaluation and continuous depreciation of the naira. This trend continued unabated in the period 1994-97 and when it became obvious that government efforts at controlling the interest rates spread were inadequate, the government decided to fix the minimum lending rate at 21% without tampering with the rate on deposits. In order to complement this policy, the MRR was reduced from 18.5 to 15.5%. Since the inflation rate increased astronomically over this period, the real interest rates also recorded larger negative growth values from -21.2% in the Pre reform period to -29.4% in the Post reform period, while the interest rate spread also maintained an upward trend by increasing from 7.33% in previous period to 8.23% in the Post reform period.

Sanusi (2000) assets that, the objective of varying the interest rate is to alter the demand for and supply of financial assets in the direction that is consistent with the overall objectives of monetary policy including output growth and inflation. That is, a change in monetary policy stance initiated by a change of the MRR is initially transmitted to the nominal short-term interest rates, which feeds into the real interest rates and finally affects the consumption and investment decisions of economic agents. While these transactions are going on in the financial sector, the effect of the change is being transmitted to the real sector through its effect on aggregate demand and changes in the price level. Therefore, through changes in interest rates, the effect of monetary policy can be readily transmitted to the larger economy. Literature has substantiated a number of factors affecting interest rate to include monetary policy orientation (i.e. liberal or control regime); Financial structure (i.e. its development level, banking sector concentration, banking size, the degree of openness of the financial market); asymmetric information; menu cost; size of the informal market. This reasons are well documented in Sanusi(2000), Chizea(2001), Nnanna(2002), Ebiringa(2012) who cited works of Gambacorta(2008), Aydin(2007), Hofmann(2006), Hulsewig et al (2009), De Bondt(2005), Burgstaller(2003), Baugnet et al(2009), Chionis and Leon(2006), Kaketsis and Sarantis(2006). It is worthy to note that factors affecting interest rate vary across, as well as within country, based on the ever changing financial environment. These variations provide necessary background for the evolvement of a monetary policy as revealed by Kwapol and Scharter(2009).

2.4 Theoretical Framework

John Maynard Keynes in 1936 made one of the most important criticisms of the validity of the assumptions underlying the quantity theory of money. He used his Liquidity Preference Theory to propose a more complex theoretical framework for analyzing aggregate economic relationships. Anyanwu (1993) reviews on this highlighted that to Keynes, money is held to finance expenditures, other than transactions and precautionary events. That is money is held for purposes other than as a medium of exchange but also for speculative reasons, which depends on the 'liquidity preference' of asset holder rather than on his expenditures. In essence, the amount of money held in speculative balances depends on the anticipated direction and magnitude of prospective changes in market interest rates. Thus, if individuals believe that market interest rates are likely to increase in the future, they have an incentive to hold their wealth in the form of liquid assets in order to avoid the capital losses on long-term assets that would accompany the expected increase in interest rates. Those who hold money because they expect the return on money balances to exceed the yield on alternative assets, are said to exhibit liquidity preferences. Keynes was of the view that more individuals expect a future increase in market interest rates when the current level of interest rates is low than when the current level of interest rates is high. Therefore, liquidity preferences and the speculative demand for money are opined to be inversely related, to the current level of interest rates. Liquidity preference as seen here is the degree of risk aversion and the expected yield on alternative financial assets.

Keynes thus expanded upon the Classical quantity theory by introducing the interest rate as a major determinant of the demand for money, made explicit through his analysis of speculative motive. Empirical studies have shown that the response of the demand for money to the rate of interest is stable and inverse, but also that the response is relatively inelastic (except in the Keynesian liquidity trap' where it is infinitely interest-elastic at low-level interest rates)

The other extreme case of the demand for money in Keynes terms called **the liquidity Trap** avails that the speculative segment becomes infinitely elastic when the rate of interest assumes the lower value of its 'normal' range. Keynes reasoned that the interest rate might be so low during a period of severe unemployment that it would be impossible to lower it further through an increase in the money supply.

2.5 Empirical Literature

An empirical review of literature on the subject matter has revealed studies like Lastrapes and Selgin (1995) while studying money supply shocks and its effects on interest rate given the USA economy,

found out via cointegration techniques that a permanent money supply shock generates a temporary fall in interest rate.

Gbenedio, Ayadi, Okpala and Amon(1999) applying cointegration techniques to investigate the long run equilibrium relationship between Money supply variability and interest rate spread in Nigeria between 1985-1992, discovered that subsequent to the introduction of SAP, there existed no long run equilibrium relationship between these variables, however further investigation revealed evidence for the Pairwise Granger Causality test that support Friedman's Hypothesis that money growth variability impact on the term structure of interest rates. They concluded that these results have implications for developing economies especially those that share similar characteristics with Nigeria.

Lynch and Ewing(1995) using a group of developing countries as sample data and the cointegration methodology for analysis did submit that money growth variability has a positive relationship with spread between short and long term interest.

The results of Monnet and Weber (2001) on their work on Money and interest rates, are no different, while using the regression analysis to determine the correlation coefficients of the variables amongst the sample of 31 countries for the period 1961-1998, they availed that a positive relationship exist, but it is higher for the group of developing countries as against the developed economies.

A study by the West Africa Monetary Agency (WAMA) for countries under the umbrella of Economic Community for West African Countries (ECOWAS) while using correlation analysis found out conflicting results, which stated positive relationship for UEMOA Countries (i.e. Benni, Burkina-Fasso, Cote 'd' ivoire, Guinea-Bissau, Togo, Senegal, Mali, Niger), Gambia, Ghana, Guinea and Cape Verde; and negative relationship for Nigeria, Sierra Leone; with no relationship for Liberia, since the traditional instruments of Monetary policy such as Open Market Operations and Interest rate policy are not being operated. The study recommended for effective functioning of the financial market to support the maintenance of equilibrium interest rates which will assist in avoiding the prevalence of low interest rate.

Blejer(1978) while writing on money and the nominal interest rate in an inflationary economy like Argentina and using the VAR methodology, revealed that the changes in money supply are expected to affect the nominal rate of interest in opposite directions. That is the liquidity and credit effect tend to depress the rate of interest, while higher inflationary expectations work in the opposite direction. Theoretical studies suggest that although liquidity and credit effects initially dominate, the dominance effect is eventually eroded by the expectation effect. These results are confirmed in countries with mild inflation as against those obtained for a highly inflationary country like Argentina, which indicates that the expectation effect is dominant and that any change in the rate of monetary disequilibrium was fully transmitted to the nominal interest rate.

Huizinga and Leiderman (1985) works on interest rates, money supply announcements and monetary base announcements for USA via econometric techniques, found out unexpected increases in the announced monetary base and money supply did have a significant positive effect on interest rates during the period 1979-1982.

Engel and Frankel (1984) adopted the combination of Calgan- type Money Demand Equation and the Dorbush's Money Supply Equation to develop an ARIMA model to study why interest rates react to money announcements in USA for the period 1977-1982. They revealed that when money supply grows more rapidly than had been expected, the market assumes that the Federal Reserve will reverse the error in the future. The expectation of future tightening causes the interest rate to rise and the exchange rate to fall. The positive correlation of money announcements and interest rate changes rationalizes the flexible price model that unanticipated money growth raises expected future interest rate and expected inflation.

Case and Fair (1999) developed a money market model for the USA economy to investigate the transmission effect of money supply. It findings were consistent with the Keynesian preposition that

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an increasing money supply at equilibrium causes a decrease of the interest rate because more money is supplied than needed since households tend to deposit their exceeding money at the bank, trying to benefit from the high interest rate of interest bearing bonds. Following this increasing supply of money, pressure is put upon the interest rate, which drops to the equilibrium level. As interest rate is the price of borrowed funds, it causes capital to be available at cheaper conditions. Mankiw and Taylor (2006) also substantiate this finding in stating that interest rate decreases causes the demand for loanable funds to be higher.

In a study by Jimoh (1990) on the demand for money and the channels of monetary shocks transmission in Nigeria while reviewing the demand for money literature in Nigeria, which have been variously examined before 1990 by Tomori (1972), Teriba (1974) Ajayi (1974), and Ojo (1974) Odama (1974) made a major conclusion that the demand for money in Nigeria was interest rate insensitive, irrespective of which definition of money and interest rate that was employed. This was not difficult to explain deducing from the underdeveloped nature of the Nigeria money and financial markets. These writers however arrived at certain conclusions that the transaction component of money demand could still be sensitive to interest rate once there are some assets which are interest-bearing, that are not classified as money, virtually risk less and close to money.

In using the two-stage least squares approach in his study, Jimoh (1990) demonstrated that if the demand for money in Nigeria was at any time insensitive to interest rate changes, that situation no longer holds true today. This further suggested that there exists substitution between money and other financial assets in the portfolios of wealth holders in Nigeria, though the level of significance in terms of substitutability of money and other financial assets (in particular) variables like consumption and investment functions was quite low. This implied that it would be safe to interpret the presence of a significant inflation rate variable in the demand function of money, implying that wealth holders suffer some form of money illusion.

The foregoing has policy implications for the government as for effective monetary policy to be attained; both the interest rate and the level of money supply are adjusted in such a manner that ensures that one reinforces the other. That is, for an expansionary monetary policy of increase in money supply, there should be a corresponding reduction in the administered interest rate; this will pave way for substitution of other financial assets, for money.

3.0 Methodology Issues and Empirical Evidence

This study used secondary data, which were obtained from the 2011 Central Bank of Nigeria's (CBN) Statistical Bulletin. Readjustment procedure was done by deflating the nominal values of MRR and MS with inflation to obtain the real values, thereafter logarithms were taken on these real values for ease of computation and interpretation in elasticities. Operationally the study employed the econometric method of simple regression analysis as the main tool to ascertain and estimate the relationship between money supply and interest rates, using the e-views 7 computer software.

	INF (%)	MRR (%)	MS(N,m)
Mean	20.47568	11.47297	1833676.
Median	13.90000	12.75000	198479.2
Maximum	72.80000	18.50000	12023983
Minimum	5.400000	1.000000	10896.00
Std. Dev.	16.58656	5.306748	3447850.
Skewness	1.534849	0.283890	2.084931
Kurtosis	4.623175	2.996572	5.954228
Jarque-Bera	18.58902	0.497012	40.26094
Probability	0.000092	0.779965	0.000000
Sum	757.6000	424.5000	67846011
Sum Sq. Dev.	9904.108	1013.817	4.28E+14
Observations	37	37	37

 Table 1: Table Showing 1975-2011 Summary Computations of the Relevant Variables used in the Study.

Source: Researcher's Computation from Appendix 1 using e-views 7

A cursory look at the 37 observations on table 1 above has revealed that between 1975 to 2011 the inflationary rate (used as a deflator in the study), Minimum Rediscount Rate and Money Supply has averaged about 20.5%, 11.5% and N1,833,676, 000 and the maximum values of inflationary rate, Minimum Rediscount Rate and Money Supply recorded in 1995, (1989&1990) and 2011 of 72.8%, 18.5% and N12,023,983,000 respectively, with their corresponding minimum values of 5.4%, 1% and N10,896,000 been captured in 1986,1975 and 1975 respectively. The deviation of inflationary rate, Minimum Rediscount Rate and Money Supply, from the expected showed 16.6%, 5.3% and N3, 447,850,000 respectively. However the inflationary rate, Minimum Rediscount Rate and Money Supply that would have been considered ideal for stability of prices was estimated at 13.9%, 12.8% and N198, 479,200.

It is worthy to note that the total units of inflationary rate, Minimum Rediscount Rate and Money supply over the time of study was computed at (757.6) (424.5) percentage units and N67, 846,011,000 respectively.

The Jarque- Bera test of normality of the inflationary rate, Minimum Rediscount Rate and Money Supply series revealed slight bias, high bias and no bias respectively as reported by the low and high probability values, as well as low and high skewness (i.e. distribution of the series along its mean) and Kurtosis (i.e. the peakness and flatness of a normal curve) Statistics as the case might be. A trend analysis of the 37 observations on the variables of interest in this work is revealed on Fig.1 below;



Source: Researcher's Computation from Appendix 1 using e-views 7

A look at Fig 1 above shows that money supply has consistently grown given an average growth rate of less than 5% to 8%. This has led to a corresponding growth in interest rate that has hovered around 2%, while noting that the spread between growth in money supply and interest rate has increased consistently from about 3% to 6%. The growth rate of inflation is also at about 1.5%.

3.1 Choice of Variables and tools of analysis

The analytical framework was modeled using Vector Auto Regression (VAR) methodology of the Ordinary Least Squares regression.

- (a) The regression equation formatted after the Dickey-Fuller (DF) class of unit root test for stationarity will be used to ascertain the stationarity of the variables used in the Time series. This is done to test the stationarity of the time property of the series. That is to determine whether shocks in a system could cause oscillatory changes in the variables so considered to persist indefinitely or whether the effects of such shocks tend to cause these variables to oscillate to zero as time passes.
- (b) The test for co-integration is done i.e. to ascertain whether a long run relationship exist between the variables understudy. The Johansen and Juselius (1990) cointegration procedure will be adopted.
- (c) The test for the direction of causation between the variables will also be modeled using the Granger Causality Format.
- (d) The rate of interest will be regressed on the broad money supply (M2) within the period 1975-2011. This is premised on trying to evaluate the strength and the relationship between the variables money supply and interest rates, which Keynes said, was a weak relationship and is an inversely related phenomenon. The model will be structured using the Engle and Granger (1987) general format of the Vector Error Correction Model (VECM) so that short-run dynamics could be captured by the error correction mechanism, which tends to correct the disequilibrium error. This short run dynamics preposition serve as detections of short run disequilibrium error whenever they exist and provide information on how long it would take to correct them.

3.2 Apriori Decision

It is expected that the money supply has an inverse relationship with interest rates. That is increases in money supply would lead to a fall in interest rate.

3.3 Model specification

The explicit forms of the models to be analyzed are;

(i) Unit Root Test

- (a) $\Delta MRR = \alpha + (\beta 1)MRR_{t-1} + U$ (2)
- (b) $\Delta MS = \alpha + (\beta 1)MS_{t-1} + U$ (3)

Where; ΔMRR = the first differenced of Minimum rate of rediscount

MRR_{t-1} = the one year lagged estimate of Minimum rate of rediscount

 ΔMS = the first differenced of money supply

 MS_{t-1} = the one year lagged value of money supply.

 α = the autonomous estimate.

 $(\beta-1)=\phi$ = parameter of the independent variable.

 ε_t or U= disturbance term at time t

Here the null hypothesis is that Ho: $\beta=0$. This implies the non-stationarity of the series.

The alternative hypothesis is that H1: $\beta \neq 0$ or $\Phi < 0$. This implies that the series is stationary.

Note: That the test involve testing the negativity of $\Phi \Box$ in the OLS regression, with the t-ratio given as Φ/SE_{β} ; SE_{β} given to be the standard error of β . The t-calculated statistics are compared with the Dickey-Fuller t-simulated tables computed at $\beta=0$ to serve as decision rule.

(ii) **Cointegration Test**

Co-integration tests are conducted by using the reduced rank procedure developed by Johansen (1988) and Johansen and Juselius (1990). Johansen method detects a number of cointegrating vectors in non-stationary time series. It allows for hypothesis testing regarding the elements of co-integration vectors and loading matrix. Johansen procedure is used to determine the rank r or the number of co-integrating vectors, which identifies the existence of the long-run relationship.

The cointegrating equation is of the form:

 $MRR_{t} = \forall + \triangle MS_{t} + \varepsilon_{t}....(4)$

Where)MRR_t, \triangle MS_t, and ε _t are as earlier defined.

(iii) Causality Test

The test for Granger causality is performed by estimating

equations of the following bi-variate form.

$$\Delta MRR_{t} = \alpha_{0} + \sum_{i=1}^{m} \beta \sum_{i=0}^{1,i} + \sum_{i=0}^{m} \beta \Delta MS_{t-1} + \delta ECM_{t-1} + \varepsilon_{t} \quad (5)$$

$$\Delta MS_{t} = \beta_{0} + \sum_{i=1}^{m} \alpha \sum_{i=0}^{1,i} + \sum_{i=0}^{m} \alpha \Delta MRR_{t-1} + \gamma ECM_{t-1} + \mu_{t} \quad (6)$$

Note: Where ε_t and μ_t are white noise disturbance items (normally and independently distributed), m are the number of lags necessary to induce white noise in the residual, and ECM_{t-1} is the error correction term from the long run relationship. MS_t is said to Granger-cause MRR_t if one or more $\alpha_{2,1}$ (i = 1,...m) and δ are statistically different from zero. Similarly, MRR_t is said to Granger-cause MS_t if one or more $\beta_{2,i}$ (i=1,...m) and γ are statistically different from zero. A feedback or bi-directional causality is said to exist if at least $\alpha_{2,i}$ and $\beta_{2,0}$ are statistically significance of the t-statistic of the lagged error correction term or the significance of F-statistics of the sum of lags on each right hand side variable.

The Vector Error Correction Model (iv)

The model specified to investigate the phenomenon in this study is stated below;

MRR = f(MS)(7)

$$MRR = \alpha + b_1 MRR_{t-1} + b_2 MS \square \square b_3 \Delta MRR_{t-1} + b_4 \Delta MS_{t-1} + \lambda U_{t-1} + \varepsilon$$
(8)

Where; Error Correction Term (ECT) = λU_{t-1} = this captures the short term dynamics, while the other variables are as earlier defined.

3.4 The Results and their Discussions

Table 2 below reveal results of the unit root test of all the variables used for the work.

Null Hypothesis: RMRR			
Exogenous: Constant			
Lag Length: 0 (Automatic	·		
		t-Statistic	Prob.*
Augmented Dickey-Fuller	test statistic	-4.431625	0.0012
Test critical values:	1% level	-3.626784	
	5% level	-2.945842	
	10% level	-2.611531	
*MacKinnon (1996) one-	sided p-values.	·	
Null Hypothesic: D(DMS) has a unit root		
Every Constant) has a unit 100t		
Exogenous: Constant			
Lag Length: 1 (Automatic	c - based on SIC, maxlag=2)		
		t-Statistic	Prob.*
Augmented Dickey-Fuller	• test statistic	-6.379519	0.0000
Test critical values:	1% level	-3.639407	
	5% level	-2.951125	
	10% level	-2.614300	
*MacKinnon (1996) one-	sided p-values.	· · ·	

Table 2: Results for Unit Root Test for Stationarity.

Source: Researcher's Computation using e-views 7

Table 2 above reflects the Stationarity of the time series used in this work, which are tested for Unit Root using Dickey-Fuller statistics. This to a large extent minimizes the spuriousness of results. The negativity sufficiency of the t- calculated further buttress our argument of stationarity, which is achieved at levels or integrated at order zero {i.e. I (0)} for the MRR series and at first difference {i.e. I(1)} or integrated at order one for the MS series.

Table 3 below shows the results of the long run cointegration test between money supply and interest rate in Nigeria between 1975 to 2011.

Table 3: Cointegration Results between Money Supply and Intere	t rate
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Sample (adjusted): 1976 2011				
Included observations: 36 afte	er adjustments			
Trend assumption: Linear det	erministic trend			
Series: RMRR RMS				
Lags interval (in first differen	ces):			
Unrestricted Cointegration Ra	ank Test (Trace)		<u> </u>	
Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.537137	28.79175	15.49471	0.0003
At most 1	0.029017	1.060051	3.841466	0.3032
Trace test indicates 1 cointeg * denotes rejection of the hyp	grating eqn(s) at the 0.05 level			
**MacKinnon-Haug-Micheli	is (1999) p-values			
Unrestricted Cointegration Ra	ank Test (Maximum Figenvalu	e)		
		.,		
Hypothesized		Max-Eigen	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.537137	27.73170	14.26460	0.0002
At most 1	0.029017	1.060051	3.841466	0.3032
Max-eigenvalue test indicate	s 1 cointegrating eqn(s) at the	0.05 level		
* denotes rejection of the hyp	pothesis at the 0.05 level			
**MacKinnon-Haug-Micheli	is (1999) p-values			

Source: Researcher's Computation using e-views 7

Results on table 3 show that there exist a long run relationship between money supply and interest rate, since the Max-eigenvalue and the Trace tests at 5% level of significance indicate the existence of one cointegrating equation. That is when there exists any shock which causes these variables to oscillate apart in the short run, there is the tendency for them to return to equilibrium in the long-run.

Pairwise Granger Causality Tests					
Sample: 1975 2011					
Lags: 2					
Null Hypothesis:		Obs	F-Statistic	Prob.	
RMS does not Granger Cause RMRR		35	0.38112	0.6864	
RMRR does not Granger Cause RMS	I.		4.20513	0.0246	

Source: Researcher's Computation using e-views 7

Table 4 above shows there exist a unidirectional causal relationship between interest rate to money supply given that the F-calculated at 5% level of significance falls in the acceptance region, which necessitate the acceptance of the alternative hypothesis and the rejection of the null hypothesis as stated above in table 4. This means that the minimum rate of rediscount serve as an indicator to movements in money supply flows.

M odel Relationship	Variable	Coefficient	Std Error	t-Stats	
Long Run relationship	RMRR(-1)				
	С	-1.66			
	RMS(-1)	-0.03	0.1	-0.32	
Short Run Relationship	С	0.04	0.07	0.52	
L.	D(RMRR(-1))	0.69	0.46	1.51	
	D(RMRR(-2))	-0.32	0.34	-0.94	
	D(RMS(-1))	-0.54	0.47	-1.15	
	D(RMS(-2))	0.26	0.41	0.63	
	ecm	-0.6	0.21	-2.83	
$R^2 = 0.37$; F-statistics= 3.3; AIC= -1.02; S.E Eqn= 0.3					

Table 5: Results of the Long- run Model and Its accompanying Short run Dynamics

Source: Researcher's Computation using e-views 7

Table 5 above has reported the long run relationship and its accompanying short run relationship. In the long-run relationship, which has met the a priori shows a negative relationship between Money supply and the minimum rediscount rate with the degree of impact captured at 0.03%. This means a 1% positive change in money supply will lead to about a 0.03% decline in interest rate. However, the t-statistics of -0.32 falls within the acceptance region, as such accepting the null hypothesis that money supply does not significantly affect the fluctuations in Minimum rediscount rate. This is collaborated with the low correlation coefficient (R^2) of about 37% with other factors not captured in the model accounting for the remaining 63%.

In the short run disequilibrium relationship, the immediate response of interest rate or minimum rediscount rate to its own preceding first and second year lag values shows inelastic positive and negative relationship respectively. The interest rate inelastic values of 0.7% and -0.32% as indicated in the short-run disequilibrium model are not statistically significant, which means the first and second year lag values of interest rate are not strong enough in explaining variations in interest rate. This explanation is no different from the effect that the short run first and second year lag values of money supply have on the interest rate, which are negative (0.54%) and positive (0.26%) respectively.

The F=Statistics of 3.3 shows that the model is statistically significant, that means the model is good enough in providing information about variations in interest rate been explained by variations in money supply. In simple terms, the explanatory power of the model is strong. The low value of the standard error of 0.3 has further substantiated this claim.

The Akaike information Criteria or AIC reveals the maximum number of lags in use for the model as well as ensures the elimination of autocorrelation or non-serial independence of the disturbance term. The -1.02 value in this case shows the lowest value, which the AIC has attained to reduce to the barest minimum or eliminate autocorrelation.

The error correction model (ECM) has an adjustment parameter or coefficient of -0.6 which signifies that about 60% of the disequilibrium in the preceding period is compensated for or corrected in the current period. In this case the time period within which the variables studied can equilibrate in an event of a shock is about two and half years.

4.0 Conclusion

This study tries to estimate the relationship between interest rates or minimum rate of rediscount and money supply. Unit root test for stationarity was done to check the time property of the variables used in this work, which were I(1) so as to avoid spuriousness of results. Test for cointegration is done to check whether the variables have a long term relationship. The parameter of the error term as well as the time for equilibration between the variables whenever distortions exist was estimated for the model specified.

It was discovered that a long run and inelastic negative relationship of 0.03% exist between the interest rates and money supply, suggesting a weak relationship. This is reinforced by the estimated low R-square of 37% variations in money supply been responsible for variations in interest rates, with the remaining 63% explained by other factors not specified in the model. A one- way causation exists from interest rate to money supply as revealed in the Granger Pairwise Causality Test. These results are not far fetched from empirical works associated with Monnet and Weber(2001)Sanusi(2000) Gbenedio et al(1999).

However, in the short- run dynamics, the lag values of D(RMRR (-1)), D(RMS(-2)) have conflicting relationships that do not agree with the study's a priori expectation of negative relationship. This can be attributed to the expectation factor, Blejer(1978),Engel and Frankel(1984) suggests that when businessmen suspect that money is to be injected into the system, which is likely going to cause inflation that has the propensity to decimate their profits, they are likely to review their interest rates upward to cover for the shortfall in profits, causing an upward concomitant movement with money supply.

The ECM revealed that if their exist any shock in the system this variables would random walk to equilibrium in two and half years.

Based on the results above it is recommended that financial managers in Nigeria should be cautious in applying these two important tools of monetary policy. That is other factors need to be considered to enable effective use of these monetary policy tools for policy implementation in Nigeria. It is also worthy to note that the continuous use of interest rate as the key driver of the quantum of money to be supplied by monetary authorities, is a policy in the right direction.

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Appendix 1: DATA SHOWIN	NG SOME SELECTED
ECONOMIC INDICATORS	USED IN THE WORK

Year	MS(Nm)	MRR(%)	INF(%)
1975	10,896.00	1	33.9
1976	11,286.00	3.5	21.2
1977	13,878.00	4	15.4
1978	14,001.00	5	16.6
1979	14,278.00	5	11.8
1980	14,397.00	6	9.9
1981	16,161.70	6	20.9
1982	18,093.60	8	7.7
1983	20,879.10	8	23.2
1984	23,370.00	10	39.3
1985	26,277.60	10	5.5
1986	27,389.80	10	5.4
1987	33,667.40	12.75	10.2
1988	45,446.90	12.75	38.3
1989	47,055.00	18.5	40.9
1990	68,662.50	18.5	7.5
1991	87,499.80	14.5	13
1992	129,085.50	17.5	44.5
1993	198,479.20	26	57.2
1994	266,944.90	13.5	57
1995	318,763.50	13.5	72.8
1996	370,333.50	13.5	29.3
1997	429,731.30	13.5	10.7
1998	525,637.80	14.31	7.9
1999	699,733.70	18	6.6
2000	1,036,079.50	13.5	6.9
2001	1,315,869.10	14.31	18.9
2002	1,599,494.60	19	12.9
2003	1,985,191.80	15.75	14
2004	2,263,587.90	15	15
2005	2,814,846.10	13	17.9
2006	4,027,901.70	12.25	8.2
2007	5,832,488.50	8.75	5.4
2008	9,208,462.60	9.81	11.6
2009	10,780,627.10	7.44	12.5
2010	11,525,530.30	6.13	13.7
2011	12,023,983.40	6.25	13.9

Source: From Various Years of CBN Statistical Bulletins

An Assessment of the Effect of LEEMP on Poverty Reduction in Logo Local Government Area of Benue State

AHEMEN, M¹. BAKKIHS, D. T¹. AND APEH, S. A² 1. Department of Economics, Benue State University Makurdi, Nigeria.

2. Department of Economics, University of Mkar, Mkar Nigeria.

ABSTRACT

The study assessed the effect of Local Empowerment and Environmental Management Project (LEEMP) on poverty reduction in Logo Local Government Area of Benue State. Data for the study were obtained through well-structured questionnaires. Data generated were analyzed using descriptive statistics, t-test and logistic regression analysis. Results from the study shows that there was a reduction in the distance to safe water, increase in school enrollment and improved access to health facilities after LEEMP's intervention. The estimated logistic regression equation showed that while access to safe water and household size increases the log likelihood of being poor, incomes from non-farm sources, educational level of household, access to health facilities, and access to educational facilities reduce the log-likelihood of being poor. It was recommended that safe drinking water should be provided in the Local Government Area more teachers and health workers should be recruited.

Keywords: Poverty, LEEMP, Logo LGA.

Introduction

Poverty is a global problem of mankind, which undermines human dignity. It is a condition of living that affects billions of people around the world and limits their freedom and longevity, despite the general trend of global economic expansion, liberalized markets and increased trade (Omonona, 2001). In Nigeria, poverty is widespread and pronounced even though the country is richly blessed with abundant human and natural resources. As noted by World Bank (1996), this is actually a paradox of experiencing poverty in the mist of plenty.

In Logo Local Government Area (LGA) of Benue State, popularly acclaimed the Food Basket of the Nation, about 70% of the land mass is rural where the same per cent of the population who are primitively farmers live, hunger and starvation are the order of the day and the state is among the poorest in the country (Yuwa, 2004). The National Bureau of Statistics (2012) confirmed this state of poverty as Benue State poverty incidence in 2010 stood at 73.1 per cent; this figure was higher than the National average which was 69.0 in 2010.

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In recent years, poverty reduction has attracted the attention of various government organizations as well as non-governmental organization all over the world. Eradicating poverty is regarded as the most important goal of human endeavor. In her effort towards eradicating poverty to achieve the Millennium Development Goal (MDG) by the year 2015, the Federal Government of Nigeria sought and obtained assistance from International Development Association (IDA) of the World Bank towards the implementation of a 5-year Local Empowerment and Environmental Management Project (LEEMP). It was launched on the 26th July, 2004 in Benue by the Benue State Government with expected results to assist benefiting communities in participating states to have planned, co-financed and implementable environmentally sustainable and socially inclusive multi-sectoral micro-projects.

The LEEMP which implementation lasted for five (5) years came to an end in Benue State in 2009. Within the period of five years, the LEEMP was expected to have achieved its predetermined objectives and made some impact on the socio-economic lives of the people in Benue State. Given the poverty situation in the State, and the bottom-top approach to poverty reduction adopted by LEEMP for the past 5 years, the question now is, has there been any improvement in the socio-economic status of the people in Benue State? In other words, have the activities of LEEMP any impact on the poverty situation of the Benue people? It is in line with these that this work has assessed the effect of LEEMP on poverty reduction in Logo LGA of Benue State.

In view of the above, the study was broadly designed to assess the effects of LEEMP in alleviating poverty in Logo Local Government Area of Benue State, specifically to assess the extent to which the project has enhanced the communities' access to health, education, safe water and improvement in income. This paper is divided into five sections. After this introductory section is section two which is the literature review, the methodology is presented in section three; section four presents the results and discussions while conclusion and recommendations are made in section five.

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Conceptual and Theoretical Review

There are many definitions of poverty in the literature. There is no universally agreed definition of poverty. Poverty is complex and multidimensional and has various perceptions. It is experienced differently by men and women and can differ according to geographical area, social group, and political or economic context.

Many people consider poverty as simply a lack of income. Others extend the concept to lack of education and health facilities. However, as highlighted in 2000 World Development report, Nobel prize winner Amartya Sen in World Bank (2002)emphasize a much broader approach, that poverty is also;

- i. Lack of voice; people need awareness to express their needs or obtain redress.
- ii. Lack of empowerment; people need the resources and authority to take charge of programme meant for their benefit.
- iii. Lack of good governance; people are worse off when officials are corrupt, unresponsive to the local demands, and unaccountable.

Sen in this light sees local empowerment as a form of poverty reduction in its own right, quite independent of its income effect. LEEMP as a local empowerment project hoped to improve the lives of the beneficiaries in Logo LGA of Benue State.

The theory adopted for this paper is the cumulative and cyclical theory of poverty by Myrdal (1957). This theory presupposes that poverty is a serious problem which has a lot of causes leading to a cascade of negative consequences. The theory shows how multiple problems cumulate to cause poverty and the solution to these problems needs to be equally complex and from a multifaceted approach.

Poverty in Logo LGA of Benue State is no exception; therefore, there is need to address these problems from different angles which are through the provision of income generating assets, education and skills, provision of safe surrounding and access to health care, so that the circle of poverty can be broken. This is the major thrust of the cumulative and cyclical theory of poverty. Thus, the study asses how LEEMP has used these different approaches, in trying to tackle the problem of poverty in Logo LGA of Benue State

A Review of Poverty Reduction Programmes in Nigeria

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The major programme that the government launched in the 1970's to eradicate poverty was Operation Feed the Nation (OFN), in 1976. During the second republic, in 1980 Operation Feed the Nation was dropped and replaced with Green Revolution; this had a twin objective of curtailing food importation while boosting crop and fibre production. As reported by Maduagu (2001), when the programme ended in 1983, \aleph 2 billion tax payers' money was expended on the programme. In 1986 the Directorate of Food, Roads and Rural Infrastructure (DFRRI) was created for rural development. This was meant to provide feeder road, portable water and toilet facilities for the rural dwellers, the project gulfed \aleph 1.9 billion, it ended in 1993 Maduagu (2001).

The military regime of 1993 created Family Support Programme (FSP), this programme was expected to serve as a model for African countries in their efforts in tackling poverty problems, Maduagu (2001) reported that by the time the programme ended in 1998, it had gulfed over \$10 billion. The Family Economic Advancement Programme (FEAP) started in 1997 as an offshoot of FSP and was aimed at improving the standard of living of low income people. The programme received a budgetary allocation of \$4.1 billion in 1997 and \$3.3 billion in 1998, it did not start implementation until June 1998 with the disbursement of \$250 million to the successful applicants, it ended in 1998 (Ijaiya, 2002).

In the third republic, the Poverty Alleviation Programme (PAP) was launched in 1999. According to Ajegi (2002), the government earmarked the sum of \$10 billion for its Poverty Alleviation Programme and it was envisaged that the amount would be used to create 200,000 jobs nationwide with beneficiaries earning \$3000 monthly for twelve months, the programme failed to address the real issues involved in poverty and at the end, \$10 billion disappeared for a programme not executed. The National Poverty Eradication Programme (NAPEP) was also introduced in 2001; an important objective of NAPEP was to help eradicate extreme poverty by the year 2010, in line with the United Nations Millennium Development Goal (MDG) of reducing the proportion of people living in poverty by half in the year 2015. The National Coordinator of NAPEP, asserted that in the life of the National Poverty Eradication Programme from 2001 till date, the agency has received a total of \$1.8 billion. This average about \$1.5 billion per year (Emejor, 2009).

Evaluation of Poverty Reduction Strategies in Nigeria

The programmes that have been highlighted and reviewed are in no way exhaustive of the poverty reduction strategies attempted or implemented in this country, Billions of Naira have

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been used in various efforts to reduce poverty but the poverty level in the country has been on the increase. Records indicate that the poverty level rose steadily from 28.1 per cent in 1980 to 34.1per cent in 1992. It then rose to 69.2 per cent in 1997, and reduced to 54.4 per cent in 2004. The population growth rates have meant a steady increase in the number of the poor from 39 million in 1992 to 69 million in 2004 (National Planning Commission 2006). According to the National Bureau of Statistics (2008), poverty level in Nigeria increased to 67.6percent, 69.9 percent and 70.6 percent in 2005, 2006 and 2007 respectively, giving an increase in the number of the poor to 97 million, 108 million and 113 million in 2005, 2006 and 2007 respectively.

In assessing the effectiveness of these programmes, it has been observed that those who captured the benefits of the initiatives were not the poor; they were the rich and the powerful. Ajegi (2002) opined that political interference is the major impediment to poverty alleviation under the current civilian administration, that the programmes instead of being executed with the aim of benefiting the real victims of poverty were seen as avenues for rewarding political allies. He stated further that the inability of government to adequately mobilize the victims of poverty ensure their full participation in the identification and design of the programmes as well as guaranteeing their sustainability have all contributed to the failure of poverty alleviation programmes. Instead of a bottom-up approach, the programmesare designed from the top and handed down on the poor. As Maduagu (2001) puts it;

government claims to know and understand what poverty is, who the poor are and what they need in order to alleviate their poverty. The Abuja big men cannot possibly understand what it is to be poor, only the poor man understands poverty and it is only the poor that knows how their poverty could be alleviated.

Of great policy importance then are shifts from the way the past programmes were initiated and implemented so as to ensure that citizens actively participate in formulating and implementing projects of which they are supposed to be beneficiaries.

Empirical Review

Chaudhry (2003) conducted a study on an empirical analysis of the determinants of rural poverty in Pakistan: A case study of Buhawalpur District with special reference to Cholistan. The study made use of primary data and an econometric analysis. The logistic regression results indicated that Household size, Dependency ratio, and Households made houses by mud and straw are variables that were positively and significantly correlated with the probability of being poor while variables such as educational attainment of household, Household has a latrine in his house, participation rate, Age of Household head, Household visits to health center, Household has access to drinking water by pump and landholdings are negatively and significantly correlated with the probability of being poor.

In analyzing the impact of socioeconomic and demographic characteristics of households on poverty, Chaudhry et al, (2009) using primary data collected in the village of BettiNala in Tehsil Jatoi district, Muzaffargarh in Southern Punjab used two distinct approaches: (i) a poverty profile, and (ii) an econometric approach in their empirical analysis. Findings revealed that Size of the household, Dependency ratio, household head is female, household head in non-farm worker and household residence had odd ratios more than 1 which confirmed their positive relation with the probability of being poor. On the contrary, the variables Household education level, Female-male ratio, Household head's literacy rate, Participation rate, Age of the household head, Household visits to health center, Household head is farmer, Household head in agricultural laborer (-0.44), Household's land holding (-0.69), Population of livestock per household, and Household's physical assets all had odds ratios lower than 1, which means that the variables were negatively correlated with the probability of being poor. The Study concluded that efforts should be made to improve Socio-economic factors in general and demographic factors in particular to alleviate rural poverty in remote areas of Pakistan, while land should be allotted to landless households.

Hashmi and Sial (2008) in a related manner carried out a study on Trends and Determinants of Rural Poverty using a Logistic Regression Analysis of Selected Districts of Punjab. Data was analyzed using binary logistic model and head count measure. The household data set used in the analysis was made up of 14 rounds of the International Food Policy Research Institute (IFPRI) sample from 1986/87 to 1990/91, together with a sub-sample of panel data households included in the 2001/02 Pakistan Rural Household Survey (PRHS). The results showed that the chance of a household tripping to poverty increased due to increase in

household size and dependency ratio, while, education, value of livestock, remittances and farming decreased the likelihood of being poor.

Another study in this line is that conducted by Yusuf et al (2008) on the Assessment of Poverty among Urban Farmers in Ibadan Metropolis to examine the poverty status of urban farm households. Data generated were analyzed using descriptive statistics, poverty indices and logistics regression analysis. Findings revealed that households engaged in crop farming had the highest poverty level (50%), while mixed farming households had poverty level of 37% and livestock, 17%. The estimated logistic regression equation showed that crop farming activity engaged in and household size increase the odd ratio of being poor while age of urban farmers, educational status, years of experience in farming and livestock farming decrease the odd ratio of being poor. The study concluded that mixed farming and livestock farming are antidotes to reducing poverty among urban farmers.

Methodology

The study was conducted in Logo Local Government Area of Benue State. Logo Local Government Area was selected because it was one of the initial pilot Local Government Areas that benefited from LEEMP's activities in 2005.

To carry out the study, primary data was sourced with the use of questionnaires, interviews and observations from 5 LEEMP communities in the Local Government. These communities were selected purposely being the beneficiaries of the LEEMP's project. They are Nenzev, Ukemberagya/Tswarev, Yonov(wende), Abeda-Ugondozua, and Azege/Anyibe, In each community; Twenty (20) households were randomly selected, making a total of one hundred (100) households selected from the study area. The analytical tools used were descriptive statistics, t-test analysis and the logic regression model. The logic regression model was used to examine the impact of LEEMP on the poverty status of beneficiaries. This approach is in line with Chaudhry et al, (2009); Hashmi and Sial (2008); Yusuf et al (2008); and Chaudhry (2003).

The implicit form of the model is:

 $\ln(P/1-P) = Z = \alpha + \beta X + u$

Thus the model is explicitly expressed as:

 $Z = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + u$

Where:

Z = Poverty Status (poor = 1, if household earns less than US\$1.5 per day (Naira equivalent) on-poor = 0, if household earns more than US\$1.5 per day (Naira equivalent)

 $\alpha = constant$

 $\beta_i = (\text{where } i = 1, 2, 3, 4, 5) = \text{parameters to be estimated}$

- X_1 = Household size (number of people living in a household)
- X_2 = Income from non-farming activities (in naira)
- X_3 = Access to safe drinking water (1 if household access drinking

Water by tap, borehole or protected well, 0 if otherwise)

- X_4 = Educational status of household (the total number of years all members of the household spent in a formal educational institution.)
- X_5 = Access to educational facilities (the number of household members attending a formal educational institution from 2005 to date)
- X_6 = Access to health facilities (1 if household member visits health center in community, 0 if otherwise)

U = error term

A priori expectations

The X_1 coefficient is expected to have a positive sign, while X_2, X_3, X_4, X_5 and X_6 coefficients are expected to have a negative signs.

Results and Discussions

Change in Distance to safe Water

The analysis in Table 1 established a level of success of the project on the socio-economic life of the beneficiaries. On distance to safe water before and after LEEMP intervention, the mean difference (0.050) and t ratio (2.039) is positive, indicating that distance to safe water before LEEMP intervention was more than the distance after LEEMP intervention. The t value is found to be significant at 5% level. The implication is that the respondents do not need to travel long distances to source for water and as such, save time and energy for other activities.

Change in Access to Education

According to Table 1, there was a significant difference (t=-3.531) between the respondents access to education before and after LEEMP intervention. In the result, the mean difference (-90.80) and *t* ratio (-3.531) is negative, indicating that school enrollment after LEEMP intervention was more than school enrollment before LEEMP intervention. The *t* value is found to be significant at 5% level. The implication is that more children will be trained in schools; high educational attainment may imply a greater set of employment opportunities and specifically in the rural context, a better awareness of the full potentials of new agricultural technologies and associated agricultural practices.

Change in Access to Health

Table 1 also presents result on access to health facilities before and after LEEMP intervention. In the result, the mean difference (-455.733) and t ratio (-2.265) is negative, indicating that attendance to health clinic after LEEMP intervention was more than attendance to health clinic before LEEMP intervention. The t value is found to be significant (0.040) at 5% level. The implication is that with more people attending health clinic especially women attending anti-natal clinics, there will be reduction in deaths, since they will be receiving medical care during child births. Also immunizations from these clinics will reduce childhood killer diseases.

Impact of LEEMP on the Poverty Status of Beneficiaries

Table 2 presents the logit regression result. This was used to measure the impact of LEEMP on poverty status of beneficiaries. The result indicate that the coefficient of household size is positive and in line with *a priori* expectation. This means that an increase in household size increases the probability of being poor. This agrees with Hashmi and Sial (2008), who also recorded a positive coefficient and reported that likelihood event of being poor were more if a household had large number of the member (household size). However, the effect is insignificant (0.968). This may be because family size has tremendous advantage of guaranteeing labour availability. This result agrees with Chaudhry (2003) who reported that squaring the household size implies that the probability of being poor will reduce.

As expected, income derived from non-farming activities is capable of reducing the probability of being poor, given the negative sign (-0.015), of the variable's coefficient and it

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is significant (0.002) at 1% level. This is possible because as respondents' spend more time on other income earning activities provided by LEEMP like agro-processing mills, livestock farm and speed boats, the income gotten from these activities will improve their poverty status. This is in line with *a priori* expectations, thus income derived from these activities is capable of reducing the probability of being poor.

Access to safe drinking water has a positive sign (1.771), and is significant (0.004) at 5% level. This means that this variable significantly increases the probability of being poor. This is not in line with *a priori* expectation. This may be due to the poor water situation in Logo LGA. This underscores the need for more effort to be geared towards the provision of portable water in the rural areas.

The household educational level has a negative coefficient (-0.035) in line with *a priori* expectation. This is more so because as family members' gets higher education, the tendency for them to engage in white-collar job is very high; hence, they may therefore get additional income even if they are still engaging in farming. So, for additional years spent in gaining formal education, the probability of being poor decreases. This increase in household education level is significant (.053) at 10% level. This result is in line with Onoja and Unaeze(2009) who found that as community members get higher education, the tendency to boost their income increases. The result of this study also agrees with the findings of Chaudhry et al, (2009) who reported that the more an individual is educated, the greater the potential to exploit resources and technology and avoid poverty. The finding conforms to Hashmi and Sial (2008), that education is a vital factor which reduces the chances of being poor.

The number of household members attending a formal educational institution from 2005 to date also has a negative sign (-0.031) in line with *a priori* expectation. Which means that the number of people attending school since 2005 to date have the possibility of reducing the probability of being poor. Although this is not significant (0.743) this may be due to the fact that these children are still young and mostly in primary schools.

Finally, access to health facilities also has a negative sign (-4.823), this is also significant at1% level. This means that an increase in availability of health facility leads to more people visiting these facilities for treatment, immunization, anti-natal and post-natal care, and this leads to the reduction in the probability of being poor. This conforms to *a priori* expectation. This finding agrees with the findings of Chaudhry (2003) who also reported a negative value

and reported that a healthy and typical household in the rural areas may enhance his income through hiring out his labour wage. The finding also conforms to the findings of Chaudhry et al, (2009).

Conclusion

The LEEMP has been implemented in the state for the past 5 years and based on the assessment of this analysis it has recorded success so far especially in the provision of educational facilities, health facilities and income from other sources other than farming whose income is seasonal in nature. These have boosted the socio-economic characteristic of the beneficiaries' of LEEMP in Logo LGA. This finding implies that poverty in the study area could be reduced given the success achieved in these areas. While access to safe water and household size increases the log likelihood of being poor, incomes from non-farm sources, educational status of household, access to health and access to education reduces the log-likelihood of being poor.

Recommendations

Based on the findings of this study, the following recommendations are made:

- i. Efforts should be made towards the provision of safe drinking water especially in the rural areas, this is because most communities in Benue State are still obtaining their drinking water from streams and ponds, provision of safe drinking water is one sure way of reducing poverty in these rural communities.
- ii. More teachers should be employed by the Government and deployed to the schools where new educational facilities are constructed since there has been increase in enrollment of children in such schools.
- iii. Similarly, health workers should be employed into those health centers provided by LEEMP in other to carter for the increase in attendance to clinics in these areas.
- iv. Creation of job opportunities in these communities is very vital to the development of these rural areas, this is because as more people are enrolling into schools, there is tendency for more graduates and school leavers to be turned out, therefore creating jobs for them will be a means of creating incomes and reducing the vicious circle of poverty in these rural areas.
- v. Finally, Government in her effort to reduce poverty in Nigeria and in Benue State in particular should embrace the Community Driven Development approach to poverty

reduction in all her poverty reduction programmes, since it is only through this bottom-up approach that poverty will be reduced in Nigeria.

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Variable	Mean	Mean Difference	Standard deviation	t-ratio	Sig. (2- (tailed)	
Distance to						
Water sourc	e					
2004	1.34					
2009	1.29	0.050	0.219	2.039**	0.045	
Attendance	to					
Health clinic	2					
2004	284.73					
2009	740.40	-455.74	779.15	-2.265**	0.040	
School						
Enrollment						
2004	216.00					
2009	306.80	-90.80	57.51	-3.531**	0.024	

Table 1: T-test result on Changes in Socio-economic variables before and after LEEMP Intervention

* t-ratio is significant at 1% level; **t-ratio is significant at 5% level

Variables	Coefficients	Standar Error	d S	Sig. (2-tailed)
Constant	-6.131	1	.821	0.001
Household	0.004	0.0	092	0.968
Size				
Income from	- 0.015*	C	0.000	0.002
Non-farm				
Access to	1.771	0.611	0.00)4
Safe water				
Educational	-0.035	0.018	0.0	53
Level of				
household				
No of children	-0.031	0.094	0.74	13
Attending sch.2005				
To date				
Access to health	-4.823	1.128	0.0	00
Facilities				

Table 2: Logit Regression result for the Impact of LEEMP on the Poverty Status of Beneficiaries

* Significant at 1% level; ** Significant at 5% level

Log likelihood ratio = 67.2; Nagelkerke $R^2 = 70\%$

Chi-square statistic 105.161; Significance of chi-square = 0.000

AN ASSESSMENT OF MICROFINANCE BANKS AND POVERTY REDUCTION IN OTUKPO LGA OF BENUE STATE

Iorver, Paul Tyotom MD/CEO, Gboko Microfinance Bank, Gboko iorver@yahoo.com

Gisaor, Vincent Iorja Department of Economics, Federal University Wukari gisaorvincent@gmail.com

ABSTRACT

The study was carried out to assess the impact of Microfinance Banks (MFBs) on Poverty Reduction in Otukpo Local Government Area. 200 questionnaires were administered to both beneficiaries and non – beneficiaries of MFBs in Otukpo using stratified random sampling for beneficiaries and purposive sampling for non – beneficiaries. Using the adult equivalence scale and dollar per day measure of poverty, there was high incidence of poverty in both categories. The Logistic regression result shows that two of the variables- age and monthly savings were both positive for all the categories while household size, educational status and marital status were negative for both categories. The T-Test of difference in real household consumption expenditure gives an insignificant mean difference of -116.1300 at 1% confidence level hence the Ho was accepted. Recommendations made include increase in minimum capital base, employment of competent management, re-location to the rural economy, constant training workshops and continuous monitoring by the CBN to enhance the performance of the programme.

1 Introduction

Microfinance Bank (MFB) has evolved as an inclusive economic development approach intended to benefit especially the low-income and particularly those in the rural areas where poverty appears to be entrenched and is deep rooted. This approach is intended first to alleviate poverty in the short-run and eradicate it to a large extent in the long-run as provided for in the Millennium Development Goals and Vision 2020-20 documents in Nigeria.

Having noticed that a robust economic development cannot be achieved without putting in place a well-focused programme to finance microenterprises on a sustainable basis and reduce poverty by creating wealth for the less privileged in the economy and by increasing their access to credit and other financial services, the government over the years initiated series of micro/rural programmes targeted at the poor with over- riding objective of making these services available continuously which included: Directorate of Food, Roads and Rural Infrastructure (DFRRI), Better Life for Rural Women, Family Support Programme, Family Economic Advancement Programme (FEAP), National Directorate of Employment (NDE), National Poverty Eradication Programme (NAPEP), People's Bank, Community Bank and now the Microfinance Bank (Akinboyo, 2007).

Specifically, the microfinance policy recognized the existing informal institutions and brought them under the supervisory purview of Central Bank of Nigeria (CBN)/Nigeria Deposit Insurance Company (NDIC) to amongst others enhance monetary stability, expand the financial infrastructure to meet the financials requirement of Small and Medium Enterprises (SMEs), create a vibrant microfinance sub-sector that would adequately integrate it into the mainstream of the economic system for the purpose of stimulating economic growth and development, harmonize operating standards, promote appropriate regulation, supervision and adoption of best practices. Thus, in exercise of powers conferred on CBN by the provisions of Section 28, sub-section (1) (b) of the CBN Act 24 of 1991 (as amended) and in pursuance of the provisions of Section 56-60 (a) of the Bank and Other Financial Institutions Act (BOFIA) 25 of 1991 (as amended) the CBN in 2005 established a microfinance policy, regulatory and supervisory framework for Nigeria MFBs and allowed establishment and operation of the banks by public-private ownership (CBN, 2005, NDIC, 2007).

The operations of MFBs in Nigeria and particularly in Otukpo LGA of Benue State has since grown phenomenally in the recent past, driven largely by expanding informal sector activities and the reluctance of conventional banks to fund the emerging micro enterprises. There is however the fear that the number of beneficiaries of MFBs operators is an insignificant proportion of over 60 million people that are in need of microfinance services (Anyanwu, 2004). Even where they are operated like the 5 (five) found in Otukpo LGA of Benue state, the practice and result appears never in consonance with the propounded theories. There is thus, a palpable fear in the midst of so many identified short comings in the operations for the present rural development intervention effort in MFBs that achieving its obligations at the target population is still a mirage.

The extent to which the MFBs have reduced poverty in Otukpo LGA and the country at large is yet to be ascertained as more than 57% of Nigerians are still living below the poverty line (UNDP, 2007). Several posers come to mind at this juncture: will there be another agony of yet a defunct scheme? Can MFBs create job opportunities? Redistribute income? And cause provision of basic human needs by creating financial independence for targeted population? It is at least 6 years that the law for the bank was made and it has witnessed ups and downs and people are asking these questions. This work is set out to clear such controversy by going to assess the impact of MFBs on poverty reduction in Benue State using Otukpo LGA as a test case.

The major objective of this study therefore, is to critically and empirically assess the impact of MFBs on poverty reduction in Otukpo LGA of Benue State. The specific objectives of the study are to: (i) examine the level of poverty among the beneficiaries of MFBs in Otukpo LGA of Benue State. (ii) Investigate other activities of MFBs in Otukpo Local Government Area. (iii) Find out the problems faced by both the operators and beneficiaries of MFBs and suggest solutions based on findings. The Null Hypothesis is; **HO**: Microfinance Banks have no significant impact on poverty reduction in Otukpo LGA.

The study is divided into five sections. The foregoing is the introductory section, followed by theoretical issues and literature review, methodology, data analysis and recommendations.

2. Theoretical Issues and Literature Review

Theory of Financial Dualism

Developed by Professor Myint in 1971, refers to the co – existence of different interest rates between the organized and unorganized money markets in the LDCs. The traditional financial sector is characterized by money-lenders, landlords, shopkeepers, traders, or a combination of some of them in the names Esusu, Adashi etc. There is a real shortage of savings in the traditional sector thereby making it possible for the operators to monopolize the available savings and also skyrocket the interest rate (Jhingan, 2006).

The modern sector is efficient with enough savings but with stringent borrowing conditionality in the form of collateral securities which the poor cannot afford. The MFBs is set out to integrate the former into the latter thereby reducing the wide income disparity and poverty.

The Vicious Circle of Poverty

Poverty is seen in different perspectives namely; the vicious circle of poverty approach, the basic need approach, the income approach etc. But for the purpose of this work, only the first two are relevant and would be discussed. The vicious circle of poverty approach is one of the most widely known theories that is based on the notion that lack of capital is the key factor preventing growth and

development. It is a theory explaining economic stagnation of every low levels of per capita output. At the time it was propounded in the early 1950s, the model seemed to be an accurate description of the conditions in many countries including Nigeria. Since then however, most developing countries have achieved higher per capita GNP and improvements in other socio-economic indicators, and there is nothing in the vicious circle model to indicate why this growth and development have occurred. Nurske (1960) as quoted by Ogiji (2004) puts the theory simply thus;

"It implies a circular constellation of forces tending to act and react upon one another in such a way as to keep a poor country in a state of poverty". For instance, a poor man may not have enough to eat; being underfed, his health may be weak; being physically weak; his working capacity is low, which means that he will not have enough to eat; and so on. A situation of this sort relating to a country as a whole can be summed up in the proposition "a country is poor because it is poor".

The basic circle stems from the fact that in Least Developed countries (LDCs), total productivity is low due to deficiency of capital, market imperfections, economic backwardness and underdevelopment.

However, the Basic Needs Approach argues that economic development should be seen in terms of income progress towards reducing the incidence of poverty, unemployment and income inequalities. Poverty is defined under the Basic Needs Approach not in terms of income but rather as the lack of good nutrition, good welfare. The basic need approach emphasizes the need for development to provide the necessities and defined it to include adequate food for shelter, education, and greater employment opportunities. The lack of all these basic necessities is both a symptom and a cause of absolute poverty. The advent of MFBs is to make the necessary finance available thereby improving the level of productivity and employment creation hence improvement in the levels of welfare and general standard of living. This is very consistent with the objective of this study as the ultimate aim is that of increasing capital formation, employment creation, poverty reduction and economic growth and development.

Microfinance Banks as a Strategy for Poverty Reduction in Nigeria

Financial services could enable the poor to leverage their initiative, accelerating the process of building incomes, assets and economic security. Nonetheless, deposit mobilizing banks seldom serve the down-market to satisfy the low-income families. There are observations in certain quarters that reason of high interest rates and other terms of lending are not necessary reason why the conventional banks refuse to serve the low-income families. The lack of access to financial services of the formal financial institutions is attributable to practical difficulties arising from the discrepancy between the mode of operation followed by the banks viz-a-vis the economic characteristics and the financial needs of low-income house-holds. Johnson, and Rogaly, (1996) chronicle some of those difficulties as the requirement of the conventional banks or their services beneficiaries to have stable source of income to ensure that principal and interest of every exposure return back after lending, a large number of small loans for the poor, absence of collateral with clear title, high information monitoring costs, high rate of migration and mobility amongst the rural dwellers, unskilled staff, time taking process, pressure for high repayments, lack of financials sector prudential norms, wrong selection of activities and beneficiaries, lack of policy, regulatory and supervisory framework for MFBs, credit alone cannot alleviate poverty.

Successful experience in India has shown that microfinance services when provided timely and responsively at market rates, the poor repay their loans and make use of the proceeds to increase their assets and income. This is so because their only alternative is to resort to informal markets-Community banks. NGOs and grass root savings and credit group at interest much higher than market rates. This has made a potent case for microfinance banks to the extent that they become financially viable, self-sustaining, and integral to the communities in which they operate with the potential to attract more resources and expand services to clients. However, Barry (1995) lamented that only about 2% of the world's roughly 500 million small entrepreneurs are estimated to enjoy microfinance
services. They opined however that with the rising needs for MFBs, their services must reach a certain level before their financial operations becomes self-sustaining-the scale problem need to be resolved to enable it serve a vast majority of potential market. The question then is how MFBs services characterized in short term can be sustained as an integral part of the financial sector and how their services can be further expanded using effective principles, standards and modalities.

Otero and Rhyme (1994) opined that capacity to meet high standards by MFBs that provide financial intermediation is a necessary condition for its sustainability: ability to achieve excellent repayments and provide access to clients, cut down of costs of administration- via simplified and decentralization of loan application, approval and collection processes, broaden resource base by mobilizing savings, accessing capital markets, loan funds and effective institutional development support. The resource base can make large. Scale lending operations possible and help provide client-friendly savings facilities for the poor.

Christen and Braithwaite (1994) add that convenience of location, positive real rate of return, liquidity, and security of savings should not also be forgotten as necessary ingredients of successful mobilization of deposits. Consequently, they further enthused, moderate prudential regulations become necessary to ensure solvency and financial soundness of the bank to protect the depositors. This will require the banks to maintain a minimum capital base as well as a stringent capital adequacy rate (capital: risk assets) as a shield for the uncollaterized exposure. An enabling legal and regulatory framework will encourage the development of a range of banks operating as recognized financial intermediaries subject to simple supervisory and reporting requirements. Usuary laws should also be repelled to enable the MFBs set meaningful interest rate that will cover their cost of operations.

Another way of sustainability of MFBs is strengthening of linkages with their sector counterparts. This will help them develop mutually beneficial partnership base on comparative strength of each of them: MFBs have comparative advantage in terms of small transaction costs because of their adaptability and flexibility of operations and are better equipped to deal with credit assessment of the poor while conventional banks have access to broader resource-base and high leverage through deposit mobilization (Ghate 1992). They therefore advocated a joint venture or refinancing of facilities where the conventional banks provide funds as equity for MFBs to extend savings and loans to the poor as they now have additional resources and incentive to exercise greater discipline in their management. This then lead us to the strategic, institutional and financial connectivity issues of MFBs to unravel for the purpose of its sustainability: is there clearly defined foundation building locks such as organizing principles, gender preferences and operational imperatives, any methodological issues, is there a prevailing paradigm of clearly visible pattern, where should it be located, what will be its contextual interconnections, who lead it and who should be its beneficiaries, how should be its beneficiaries, how should communities be involved and what are the political issues to be considered if there are government policy issues?

3. Methodology

The study was conducted in Otukpo Local Government Area of Benue State covered by 5 MFBs namely; Apa MFB (Otukpo), Otukpo MFB (Otukpo), Pillar MFB (Otukpo), Ugboju MFB (Otukpo) and YAF MFB (Otukpo). The LGA has an estimated population 266,411 out of which the male and female population is 136,612 and 129,799 respectively (NPC, 2007). About 70% of the population is rural base, though the tendency for high migration from rural to headquarter is high since the development in the rural settings is at very slow speed. The MFBs currently has about 2,800 customers carrying out various medium scale businesses in the town. The research considered only 200 customers and 200 non – beneficiaries of MFBs were also considered to make a comparism between beneficiaries and non- beneficiaries. A stratified random sampling procedure was used in the selection of the customer beneficiaries for the study. The selection of the non-beneficiaries was purposively done.

The primary data was collected through structured questionnaires, which was administered to customers of the banks in the study area. Secondary data relevant to the study was sourced from relevant publications. The simple descriptive statistics used were tables while the inferential statistics

involved were dollar per day measure of poverty, the adult equivalent scale, popular p-alpha class of poverty measure and a Logistic regression analysis. The P-Alpha class of poverty measure was used to determine the incidence, the depth and severity of poverty in study area (Foster, 1984). The measure relates to different dimension of the incidence of poverty; $P_0 P_1 \& P_2$ defines as:

 P_{0} = Head count/incidence: This counts the number of people with expenditure below the poverty line.

P1 =Depth of poverty: This is the percentage of expenditure/income required to bring each individual below the poverty line up to the poverty line.

 P_2 =Severity of Poverty: This is indicated by giving longer weight to the extremely (core) poor. It is achieved by squaring the gap between their expenditure/income and the poverty line to increase its weigh in the overall poverty measure.

A logistic regression model was used. The model uses socio-economic variables of the respondents to determine the factors influencing poverty (Remarkrishma and Demeke, 2002).

Thus, the model is explicitly expressed as:

Z1 $= \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \beta_6 x_6 + \mu$

Where: Z1=Poverty status of households, βο =Constant term, B_s (1-6) is vector of parameters to be estimated, X_1 =Age of households, X_2 =Household size, X_3 =Educational status of the respondents (No formal education = 0 primary education = 6 Post primary = 12; and tertiary institution=16), X4=Child dependency ratio (Ration of 0-14 years to Household size), X5=Average monthly savings of the respondents, X_6 =Marital status of the respondents (married = 1 single = 0. Note: Divorce, windows and widowers are also single people), $\mu = \text{error term}$

On a priori expectation: This refers to the expected behaviour of the independent variables on the dependent variable. Thus, we have: $X_1 > 0$; $X_2 < 0$; $X_3 < 0$; $X_4 < 0$; $X_5 > 0$; $X_6 > 0$ or $X_6 < 0$

4. Data Analysis

Measurement of Poverty incidence, depth and severity was done and the result is presented in table 4.1 below:

Winning Consumption expenditure of ite isostor per Maure per Minian (i overty Line)							
MFBs	Number of	Poverty incidence	Depth of Poverty	Severity of Poverty			
	poor people	(Po)	(P ₁)	(P ₂)			
Beneficiaries of	104	53.45	0.5351	0.6324			
MFBs							
Non-	150	55.20	0.4530	0.5462			
Beneficiaries of							
MFBs							

Table 4.1: Poverty incidence, depth and severity among the households in Otukpo L.G.A using Minimum Consumption expenditure of N54.969.00 per Adult per Annum (Poverty Line)

Source: Field Survey by the Authors, 2012

In estimating the incidences of poverty in Otukpo LGA comprising both the beneficiaries and non-beneficiaries of MFBs, household consumption expenditure and their household size was adopted using the adult equivalent scale formula. A minimum consumption expenditure threshold of N54,969.00 per adult per annum was used to separate the poor from the non-poor (an equivalent of N150.6 naira per day). From this, the P-alpha class of poverty measure was used in calculating the incidence Po, the depth (P_1) and the severity of poverty (P_2) in Otukpo was derived and presented in table 1 above.

The result revealed that there was high incidence of poverty in both beneficiaries of MFBs (53.45%) and non-beneficiaries (55.20%). This result is in line with the findings of the World Bank (1996) that rural areas of Nigeria accounted for 66% of incidence of poverty, 72% of the depth of poverty and 69% of extreme poverty. Detailed analysis also revealed that the beneficiaries had deeper poverty depth of 0.5351% than the non beneficiaries who had 0.4530%. From this result, we can establish that the beneficiaries were still very poor even after benefitting from MFBs than their nonbeneficiaries counterparts.

Variables	Beneficiaries Coefficient (B) and Wald (T-	Non-Beneficiaries Coefficient (B)
	Test)	and Wald (T-Test)
Age	0.006	0.014
	(0.039)*	(0.341)
HS	-0.126	-0.083
	(2.271)	(1.214)
EDU	-0.062	-0.002
	(0.959)	(0.001)*
CDR	-0.113	0.408
	(0.031)*	(1.473)
AVMS	0.000	0.000
	(0.071)*	(0.457)
MS	-0.007	-0.004
	(32.910)	26.186
Constant	371.879	224.988
	(33.071)	(26.357)

 Table 4.2: Summary of Regression Analysis for Determinants of Poverty Status of Beneficiaries and Non – Beneficiaries of MFBs.

Source: Data Analysis by the Authors, 2012

Values in parenthesis represent t-Test at 5% level of significance.

The result of the regression analysis revealed that two of the variables regressed namely age (0.006 and 0.014) and average monthly savings (0.000 and 0.000) were both positive for beneficiaries and non-beneficiaries of MFBs as shown in parenthesis of table 4. 2 above.

The result also shows that three of the exogenous variables regressed namely household size (-0.126 and -0.083), educational status (-0.062 and -0.002) and marital status (-0.007 and -0.004) were negative for both beneficiaries and non- beneficiaries respectively. Child dependency ratio was however found to be negative (-0.113) for beneficiaries but positive (0.0408) for non-beneficiaries of MFBs.

The positive values of the coefficient of variables for both beneficiaries and non-beneficiaries shows that a higher value tend to increase the probability of better welfare and the negative values tend to increase the poverty of the people. The coefficient for educational status has depicted a unique result contrary to a priori expectation for both beneficiaries and non-beneficiaries. It was theoretically expected that the higher the level of education, the better the standard of living. This result may however support the school of thought which says education without a good job is poverty in the worst form. Since there is high level of unemployment in the country, this result is totally accepted.

The result also shows that the positive values of the estimates for age and average monthly savings for both beneficiaries and non-beneficiaries of MFBs were all significant at 5% confidence level. This simply implies that, increase in age and monthly savings would increase the welfare of the respondents and vice–versa. The negative values for the coefficients of household size and marital status also does not conflict the a priori expectation.

Table	4.3: 1	Γ-Test	of	Differen	ce i	n Real	Household	Consumption	Expenditure	of	Beneficiaries
and N	on-Be	neficia	ries	s of MF	3s in	Otuk	po LGA				

MFBs	No of	Mean (#)	Standard	Mean	D.F	Т	Sig.
	Respondents		Deviation	Difference			
Beneficiaries	200	566.86	6859.630				
				-116.1300	265	-221	0.825
Non	200	568.02	2838.285				
Beneficiaries							

Source: Data Analysis by the Authors, 2012

Table 4.3 shows that 200 beneficiaries of MFBs had a mean real household consumption expenditure of #56,686 per annum while the 200 non- beneficiaries of MFBs had #56,802 per annum. This gives an insignificant mean difference of -116.1300 naira at 1% confidence level.

This shows clearly that beneficiaries of MFBs had less real household consumption expenditure than the non-beneficiaries. This may be attributable to the fact that MFBs due to series of challenges facing the programme in Nigeria, are yet to perform to the expectations of the people hence cannot effectively reduce poverty in the country except if the policy is reviewed.

Decision of Hypothesis: Based on the insignificant value of the t-Test of difference in the real household consumption expenditure of beneficiaries and non – beneficiaries of MFBs in the study area, the null hypothesis is accepted. The acceptance of the hull hypothesis entails that microfinance banks have not yet impacted positively on the lives of beneficiaries in Otukpo LGA as anticipated hence the need to properly review the programme in line with the global best practices.

5. Recommendations

Based on the findings of this study, the following recommendations are made:

- There are too many dependents in most of the households' sampled hence the need to control population explosion in the area.
- Majority of the respondents sampled were not aware of the existence and importance of microfinance banks hence awareness should be increased.
- The beneficiaries of MFBs are still very poor hence minimum capital base has to substantially increase to cope with the current exorbitant cost of doing business in Nigeria.
- Training workshop on financial management should be organized for management and officials of MFBs to enhance their performance especially in the area of marketing.
- There should be continuous monitoring of the programme and constant reviews of some operations in line with the best global practices.

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The Legislature and the Budget Process in Nigeria's Fourth Republic:

The Benue State Experience, 1999-2007

By:

Patrick Ukase, Ph.D Department of History and International Studies, Kogi State University, Anyigba patrickukase@yahoo.com; 07035842604

Abstract

This essay critically examines budget process as undertaken by the legislature in Nigeria generally and Benue State in particular in the fourth republic, precisely from 1999-2007. Using the performance of various budgets within this period as a basis for analysis, this essay reveals that these budgets performed dismally, especially the capital expenditure and this had far- reaching implications for the development of the state. Juxtaposing capital and recurrent expenditures profiles for these respective years, the essay contends that the inability of the capital budget to perform was a clear indication that the government was unable to deliver in virtually all sectors of the economy, especially in the provision of infrastructures in the rural and urban areas. Granted that the budget is initiated by the executive, the essay argues that the legislature is to share in the blame for this failure because of its constitutional responsibility, not only in examining and approving budgets, but also in over-sighting and ensuring that same is implemented according to laid down specifications. This essay strongly asserts that the ends of the current democratization process are not likely to be met unless the legislature takes its duties and responsibilities as provided in the constitution more seriously.

Keywords: Legislature, Budget, Constitution, Appropriation, Oversight

Introduction

A novel aspect of Nigeria's presidential system of government is the unquantified powers it vests in the legislature over Appropriation and the supervision of public funds generally. The intention of the framers of the 1999 constitution must have been borne out of the need to afford legislators, who are the peoples representatives, the ample opportunity to make adequate inputs into areas of need before it (that is the legislature) allows its passage into law. It is for this obvious reason that the legislature is described as the epitome of presidential democracy and as "a watchdog of public funds" Guobadia (2000: 47). In this capacity, the legislature exercises its power to audit public finances, as well as the power of investigation into the affairs of government departments or officers in order to scrutinize the use of such funds. The constitutional functions of the legislature with regards to public funds include among others: (i) pre and post-appropriation control (ii) authourisation of expenditure from the Consolidated Revenue Fund (Sections 81, 82, 121 and 122 of the 1999 Nigerian Constitution as amended); (iii) its role in the auditing of Public Accounts (See section 85(2) and (5) and 125(5) of the 1999 Constitution as amended); (iv) investigation into all monies appropriated by it (See section 88 subsections 1 & 2 and 128 subsections 1 & 2 of the 1999 Constitution as amended).

In this connection, apart from passing Appropriation Bills into law, the Legislature still has the herculean task of tracking the implementation of such budget through its relevant Committees with a view to ensuring that projects captured in the budget are not only executed, but executed according to laid down procedures and to specification. What is of particular interest to us in this analysis is the role the Benue State legislature played under the 1999 Constitution as amended with respect to Appropriation Laws passed in the Fourth Republic from 2002 to 2007. The Appropriation Law unarguably forms the basis of executive plans for the running of government within a fiscal year, and because of the centrality of the legislature in the entire process, so much is expected from this institution.

We shall try to interrogate the following issues: To what extent was the Benue State Legislature able to track budgets, especially after passage? What were the outcomes of budgets passed in the State within the period under review? To what extent has these budgets impacted on the people in the State? For the purpose of addressing these issues, this paper is basically subdivided into five sections. Following the introduction, section two examines the 1999 Nigerian Constitution as amended and the budget process, while section three and four would x-ray the practical application of the constitution in the implementation of the budget by the Benue State Legislature. Section five is for recommendations and conclusion.

Conceptual Clarifications

The Legislature

The word legislature is a derivative of a Latin word "Legis" which means law. Therefore, a Legislature could be defined as elected representatives of people that have the constitutional responsibility to make laws (Ukase, 2012: 51 and Kusamotu, 2001: 8). It is also defined as a body of persons invested with the powers of law- making within a given society (Ukase, 2010:3). Despite the definitions highlighted above, the Legislature still faces complex definitional problems. This is because it has been recognized that, it is not only the Legislature that has at least the formal and exclusive powers to enact laws. It is in recognition of this position that Mazey (1979:3) defined the Legislature thus:

I think of a Legislature as a predominantly elected body of people that act collegially and that has at least, the formal but not necessarily the exclusive powers to enact laws binding on all members of a specific geo-political entity.

This definition debunks the supremacy or exclusiveness of the law making functions to the legislature alone. This submission is anchored on the premise that some laws enacted by the legislature are in truly professional sense, delegated. Unarguably, however, the legislatures played dominant part in the law-making process, but that role is rapidly changing today. In fact, laws are made more and more by agencies and institutions that are not part of the legislature; hence the legislature's dominance in the law making process is fast declining in some democracies. In this study, the legislature is conceptualized as body of persons in a country or a state vested with the powers to make, alter and repeal laws in the realm of representation and the site of sovereignty (Egwu, 2005: 20).

Budget Process

The budget process or budget cycle according to Wehner is a loop of budgeting activity that follows a timeline that can be separated into four different stages namely: Drafting, Legislative approval, Implementation and Audit and evaluation (cited in Andohol, 2012: 87). However, Akpa (2008: 58-87) sees the budget process as a loop of budgeting activities consisting of six phases to include policy review and analysis, strategy development and planning, budget preparation, budget execution, budget tracking and monitoring, and lastly reporting and Audit. In this paper, we are basically concerned with the extent to which the legislature was able to audit and evaluate the budget after its approval to meet the ends of governance.

The 1999 Constitution and the Budget Process

The Appropriation Law is the bedrock upon which the activities of the executive branch are founded. The Appropriation Law is, therefore, a very critical document in the democratic process because the document contains the gamut of the plans of government for its citizens within a fiscal year. In this connection, citizen's hopes and aspirations are directly tied to the success of a budget circle. As Onyekpere (2012: 5) puts it:

Budgets are instruments of implementing government policies, especially economic and social policies. These policies impact on the lives of the people, in particular and the growth and performance of public and private sector organizations in general. Budgets therefore provide a roadmap directing economic planning by sub-groups and individuals in the economy.

To make the budget process more participatory, the 1999 Constitution as amended provides that Appropriation Bills must be considered by the legislature and same passed into law before money can be withdrawn from the relevant funds to run the government (Section 59, 121 and 122 of the 1999 Constitution as amended). It is pertinent to point out that because of its peculiar nature, *Money Bills* have special treatment under the present constitution. The 1999 Constitution provides clear insights as to the mode of exercising Federal and State Legislative power over *Money Bills*. For instance, with respect to States, the 1999 Constitution states that:

All revenues or other moneys raised or received by a State (not revenues or other moneys payable under this constitution or any law of a House of Assembly into any other public fund of the State established for specific purpose) shall be paid into and from one Consolidated Revenue Fund of the State (Section 120 (1) of the 1999 Constitution as amended).

The same Constitution further stipulates that:

No moneys shall be withdrawn from any public fund of the State, other than the Consolidated Revenue Fund of the State, unless the issue of those moneys has been authourised by a law of the House of Assembly of a State (Section 120 (3) of the 1999 Constitution as amended).

In addition, section 120 (4) states further that:

No money shall be withdrawn from the Consolidated Revenue Fund of the State or any other public fund of the State except in a manner prescribed by the House of Assembly (Section 120 (4) of the 1999 constitution as amended).

Under the 1999 Constitution, the State legislature must approve the budget before the commencement of a financial year; only then can the executive branch proceed to spend same. The legislature possesses the basic power over the disbursement of public funds. It also has the powers to determine the mode and amount of taxes to be levied, and in most cases, all public funds can only be spent by way of its constitutionally enacted Appropriation or Supplementary Law. Generally, the 1999 constitution as amended frowns at the expenditure of public funds of the State without specific authourisation from the States or Federal legislature as the case may be. Let us, therefore, proceed to the next segment of this analysis to interrogate the extent to which the Benue State legislature was able to keep faith with its constitutionally ascribed function of not just passing Appropriation Laws, but also ensuring that the Laws are implemented as passed

The Legislature and the Budget Process, 1999-2003

Apart from law-making, the legislature also serves as watchdogs, checkmating executive excesses and guaranteeing separation of powers. Oversight powers simply means that government ministries, agencies and parastatals are carrying out their responsibilities and policies as promulgated through the budget and other legislations (Ukase, 2010: 3). The performance of oversight functions is very critical in the assessment of the performance of the legislature, especially in the implementation of budgets. The power of the State legislature to conduct oversight is clearly encapsulated in sections 128 and 129 of the 1999 Constitution as amended. The legislature, therefore, has the constitutional responsibility and duty to review and approve the budget and review the performance of the Executive branch. In the next segment of this essay, we shall critically examine the extent to which the Benue State legislature was able to effectively track the implementation of the budgets it passed from 1999 to 2007.

It is extremely difficult to quantify the oversight functions performed by the legislature within the period under review. Therefore, we shall only examine the legislature in the context of its performance of oversight functions, especially as it affects the tracking and implementation of budgets in Benue State. From 1999-2003, the legislature considered four budgets and one Supplementary Appropriation Bill. It was, however, not possible to assess information on the performance of the State budgets for year 2000 and 2001 and the Supplementary Appropriation Law of 1999. Our analysis for the first four years of the administration is, therefore, limited to year 2002 and 2003. However, the outcome of our analysis within this period will give a clear picture of the entire process in the first four years of the return of democratic governance in Benue State.

A cursory look at the budget performance from 2002 to 2003 shows that, apart from the recurrent expenditure, which performed at least at a hundred percent, the capital expenditure performed dismally throughout the life of that administration (Ukase, 2010: 34-35 and Benue State House of Assembly: Report of the House Standing Committee on Finance and Appropriation on the 2002 and 2003 Budget Performance). First, the failure of the capital votes was a clear indication that the legislature had failed in its watchdog responsibility, since it has the constitutional responsibility of propelling the performance of the Executive inherent in its power to check and balance the former. Secondly, the failure tended to suggest that the government of the day failed to address the teething challenges confronting the State, since the yearly capital expenditures are aimed at solving the basic needs of the people. The rationalization for the failure in the performance of these budgets were initially tied to the problems and ills inherited from the military, which made it difficult for the incoming administration to kick-start the developmental process with the desired speed. Be that as it may, it was expected that by the close of that administration in 2003, things must have at least taken shape. Unfortunately, this was not so. A critical look at some aspects of the year 2002 and 2003 budget performance reveals the extent of the failures.

For instance, the half-year performance of the State capital estimates was put at only 10.91% as revealed in table 2. As we have shown in table 1, a breakdown of sectoral performance shows that critical sectors like agriculture received a total allocation of less than 10%, while industry received no allocation at all. Similarly, education, health and water supply received only 17.70%, 7.62% and 16.60% respectively as it total allocation as at mid of 2002 as captured in table 1. In the same vein, the budget performance as it affects overhead costs for ministries, departments and parastatal performed poorly, and was put at 21.84% only as shown in table 2. Comparatively, the personnel costs for ministries, parastatals and departments all performed above 100 % as shown in table 2.

SECTOR	APP. ESTIMATES	ACTUAL EXP.	PERCENTAGE					
	2002	2002	OF TOTAL					
	Ν	Ν	ALLOCATION					
Economic Sector	15,165,887,000	927,089,878.78	33.30					
Social Sector	5,024,373,000	1,208,224,621.14	43.39					
Environmental Sector	3,549,833,000	473,510,695.85	17.01					
Administrative Sector	1,773,653.000	175,616,123.03	6.31					
TOTAL	25,513,746,000	2,784,441,318.81	10.91					

 TABLE 1: HALF-YEAR BUDGET PERFORMANCE REPORT FOR YEAR 2002

SOURCE: Committee on Finance and Appropriation (FAC) Report, Benue State House of Assembly, 2002.

Table 2: Overall Summary of	Budget Performance	for Year 200	2
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Subject	App.Estimates 2002	Actual Exp. 2002	Percentage of Total Allocation
	n	n	
Personnel Costs for Ministries and Depts.	5,954,810,970	5,972,351,709.21	100.29
Overhead Costs for Parastatals.	64,900,000	14,175,938.18	21.84
Personnel Costs for parastatals.	3,951,312,900	4,203,209,946,75	106.38
Capital Expenditure (Half Year)	25,513,746,000	2,784,441,318.81	10.91

Source: Committee on Finance and Appropriation Report, Benue State House of Assembly, 2002

The situation was not in any way different in the 2003 budget as the performance for capital expenditure showed that there was marginal improvement as compared to that of the previous year. Yet, the half-year performance for capital expenditure for 2003 was only 21.07% as shown in Table 4 below. However, the 2003 recurrent expenditure still performed well, as its performance was put at 86.58% as shown in table 3. What does all this portend for the performance of the legislature? The implication of these for our analysis is that, the government of the day functioned merely to pay salaries. Beyond the payment of salaries, the government failed in its duties in all the other sectors as we have already captured in tables 1 and 4.

Subject	app.est. 2002 N	Half year target 2002	Actuals as at Jan-june, 2003 N	Percentage of total allocation
		Ν		
Personnel Costs	6,761,569,040	3,380,784,520	3,359,831,727,56	99.38
Overhead Costs	2,955,906,730	1,477,953,365	865,742,045.13	58.58
C.R.F.C	2,680,224,800	1,290,112,400	1,353,251,251.70	104.89
Stabilization	147,161,000	294,322,000	-	-
Total	12,544,861,570	6,443,172,285	5,578,825,024.39	86.58

Tuble et Hun Teur Recultententententer Duuget I enternace Report, 2000	Table 3: Half	Year Recurrent	expenditure Bu	udget Performace	Report , 2003
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Source: Committee on Finance and Appropriation Report, Benue State House of Assembly, 2003

Tuble is fight four Dudget i chormance hepoit (Supran Expenditure) for four 2000	Table 4:	Half-Year	Budget	Performance	Report	(Capital Ex	(xpenditure)	for `	Year	2003
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Sector	App. Estimates 2002 N	Half Year Target 2002 N	Actual Exp. N	Percentage of Total Allocation
Economic Sector Social Sector	15,748,213,213,000	7,874,106,500	1,097,575,141.33	13.94
Environmental Sector	4,682,484,000	2,341,242,000	1,062,419,641.56	45.38
Administrative Sector	4,440,133,000	2,220,066,500	724,019,754.79	32.61
	2,762,362,000	1,381,181,000	27,360,313.11	1.98
TOTAL	27,633,192,00	13,816,596,000	2,911,374,850.79	21.07

Source: Benue State House of Assembly Committee on Finance and Appropriation Report, 2003

The Budget Situation from, 2003-2007

The situation did not change from 2003 to 2007. A critical look at the budget performance from 2003 to 2007 shows that, whereas the recurrent expenditure performed excellently, sometimes achieving a percentage rate exceeding 100% as was the case from 2002 to 2003, the capital votes performed dismally (See the 2004, 2005, 2006 and 2007 Benue State Budgets). Various reasons have been adduced for this failure. First, the State Government embarked on "ambitious" budget extrapolations without recourse to genuine or available sources of income. It, therefore, predicted its development goals on false assumptions. Secondly, the government completely failed to prioritize as evident in the abysmal performance of capital projects and cases of abandoned projects; as such entangled the administration in the crisis or confusion of what to do or what not to do; what to develop and what not to develop? In this connection, it ended up achieving minimally, especially in the face of slim income.

Thirdly, the level of corruption, ineptitude, inefficiency, waste, and general maladministration which has became a bane of the Nigeria polity based on the CPI (Corruption Perception Index) which has average score of 2.4 from 10 as measured by Transparency International, further complicated the problem for the administration.

We need to note that some of the issues highlighted above would have been addressed if only the legislature was able to live up to its duties and responsibilities. For instance, why did the legislature approve deficit budgets for the State even when it was not sure of the cash backing or how these funds would be raised? Why did the legislature failed to help the Executive branch prioritize on projects even when it had the opportunity to do so when considering Appropriation Bills? Again, why was the legislature unable to check the magnitude of corruption in the system even when there are constitutional instruments or devices it could invoke or recourse to? Arising from this background, it is impossible to extricate or exonerate the legislature from the inherent weaknesses and systemic collapse within the period under review.

For example, a critical look at the budget performance for 2004 revealed that the State Government aimed at generating the sum of N30,972,227,840 and spending a total amount of N36,116,941,640, leaving a deficit of N5,144,713,800. Out of this amount, a total of N19, 000, 570, 00 was approved as receipts from recurrent revenue sources. As at August 31st, 2004, a total of N13, 308,649,964.31 or 105.07% of the target sum of N12, 667,046,666.66 for the period was realized (See the Report of the Finance and Appropriation Committee, Benue State House of Assembly on the 2004 Budget). The same could not be said for capital receipts within the period under review, which stood at N11, 972,227.640. However, only the sum of N4, 325,956,322.97 or 54.19% was receipted. The government itself admitted failure when it stated that it recorded an impressive showing on federal sources but a modest performance was achieved on internal sources. According to the Budgetary Office, "we had aimed high but failed to put in place necessary logistics in place to make collecting agencies brace up for more action" (Contained in the 2005 Budget Report of the Finance and Appropriation Committee, Benue State House of Assembly).

With respect to the recurrent expenditure performance, the Government approved the sum of N16,339,063,740 in the 2004 budget for recurrent expenses, as at August 31^{st} , 2004, the sum of N10,062,935,863.88 or 92.38% of the targeted sum of N10,892,710,493.33 for the period was achieved as we have revealed in Table 5.

Expenditure Components	Approved Estimates	August Target	Actual Expenditure	% Performance
	2004			
Personnel Costs	7,180,761,190	4,787,174,126.67	4,480,518,090	93%
Overhead Costs	3,704,986,420	2,469,990,946.67	1,672,231,529	67%
CRFC	5,298,997,100	3,532,664,733.33	3,910,186,245	110.69%
Stabilization Fund	154,319,030	102,879,353.33	-	-
TOTAL	16,339,063,740	10,892,709,160.00	10,062,935,863.88	92.38%

TABLE 5:Recurrent	<i>expenditure</i>	Performance	for 2004
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Source: Report of Finance and Appropriation Committee, BNHOA, 2005.

While the trend in expenditure on recurrent votes for the period appears impressive, the major source of worry was that a few agencies were already heading towards over expenditure and thereby overshooting their recurrent expenditures. For instance, out of the N3, 532, 664,733.33 expected in August 2004 for the Consolidated Revenue Fund Charges (CRFC), the fund received and spent N3, 910,186,245.

Whereas, the recurrent expenditure appeared good, the same could not be said of the capital votes. For instance, out of the N20, 437, 490,900 approved in the 2004 budget for capital expenses, only the sum of N5, 009,578,257.38 or 38.05% was realized as at August of that same year as we have revealed in Table 6. The failure of the deficit budget actually manifested in the lack of performance of the capital votes. The net effect is that once the statutory demands of the recurrent expenditure items were met, the state lacked adequate funds to execute the capital needs which are very vital for the improvement of the living standards of the people. Giving this lackluster performance, it was obvious that the prospect for the development of various infrastructures in the State was being inhibited.

Sector	Approved Estimates 2004	August Target N	Actual Expenditure	% Performance
Economic	10,308,053,210	6,872,035,473	3,085,618,904.14	44.90
Social	3,411,786,690	2,274,524,460	1,658,347,573.83	72.91
Environment	3,955,289,00	2,636,859,333	211,503,098.56	8.02
Administrative	2,762,362,000	1,381,181,000	54,108,680.85	3.92
TOTAL	20,437,490,900	13,164,600,267	5,009,578,257.38	38.05%

	Table 6:	Capital	Expenditure	Performance	2004
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Source: Report of Finance and Appropriation Committee, BNHOA, 2004.

In 2005, the State Government approved a budget package of N47, 315,767,940 with a deficit of N5, 237,507,610. As at June ending, the sum of N14,187,315,002.77 or 67.44% of the target sum of N21,039,130,165 for the period was realized (Report of the Finance and Appropriation Committee on the 2005 Budget). The targeted recurrent expenditure for the period under review stood at N9, 212,276,470. As at June ending, the sum of N9, 532,157,734.31 or 103.48% of the targeted sum was expended as we have shown in Table 7.

Expenditure Components	Approved Estimates 2005	August Target N	Actual Expenditure	% Performance
Personnel Costs	7,575,398,970	3,787,699,485	3,580,060,243,00	94.52
Overhead Costs	3,823,081,950	1,911,540,975	2,379,651,829.51	124.49
CRFC	6,860,202,100	3,430,101,250	3,572,445,661.80	104.15
Stabilization Fund	165,869,920	82,934,960	-	-
Total	18,424,552,940	9,212,276.470	9,532,157,734.31	103.47

 TABLE 7:
 Recurrent Expenditure Performance 2005

Source: Report of Finance and Appropriation Committee, BNHOA, 2005.

Once again, the information provided above did indicate that the recurrent expenditure for 2005 (that is, from January to June) performed excellently, achieving more than hundred percent. For example, the expected target for overhead costs and CRFC had been exceeded by June 2005 as we have already shown in Table 7.

However, for capital expenditure, the Government had targeted to realize N14, 445,607,500 between January to June, 2005, and expend same on various capital projects across the State. As at June, only N3, 014,749,979.09 or 20% of the targeted sum was realized as we have shown in table 8. As was the case in 2004, the performance of capital expenditure revealed that the situation in 2005 was worse when compared to 2004.

Table 8:	Capital	expenditure	Performance	2005
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Sector	Approved Estimates 2005	August Target N	Actual Expenditure	% Performance
Economic	14,779,300,000	7,389,650,000	1,330,059,231.19	18.00
Social	8,648,500,000	4,324,250,000	1,411,953,899.96	32.65
Environment	3,031,415,000	1,515,707,500	198,743,790.00	13.11
Administrative	2,432,000,000	1,216,000,000	73,993,057.94	6.08
TOTAL	28,891,215,000	14,445,607,500	3,014,749,979.09	20.87

Source: Report of Finance and Appropriation Committee, BNHOA, 2005.

In 2006, the Government targeted revenue of N38, 512,420,850 from all sources (See the 2006 Benue State Appropriation Law). As at June 2006, the State Government projected a half-year target of N19, 256,210,425 but actually received and expended the sum of N18, 560,164,831.70 (that is 96.39%). The sum of N18, 120, 186, 690 was approved for recurrent expenses in 2006. As at June ending, the sum of N9, 601, 521.69 or 105.98% of the projected sum of N9, 060,093,345.00 for the period was realized (See the 2006 Benue State Appropriation Law). Details of the recurrent expenditure by components are captured in table 9:

Sector	Approved Estimates 2005	August Target N	Actual Expenditure	% Performance
Personnel Costs	7,537,699,380	3,768,849,690	3,706,175,039.60	98.34
Overhead Costs	4,287,386,460	2,143,693,230	1,973,520,142.09	92.06
CRFC	5,827,307,100	2,913,653,550	3,921,826,340.35	134.60
Stabilization Fund	467,793,750	233,896,875	-	-
TOTAL	18,120,186,690	9,060,093,345	9,601,521,521.61	105.98

Table 9:Recurrent expenditure Performance 2006

Source: Report of Finance and Appropriation Committee, BNHOA, 2006.

Consistent with previous budgets, the half-year performance for 2006 budget revealed an excellent performance. However, the CRFC was over spent. In trying to rationalize for this, the Government reinstated its avowed commitment not to transfer debts to the incoming administration in 2007, and in keeping faith with this stated policy, the Government was doing its best to clear all bank loans it had incurred over the years (The 2006 Benue State Budget). The expended amount of N3, 921,826,340.35, which exceeded the targeted sum of N2, 913,663,550, therefore, went to the following expenditure items:

Table 10: Details of Government's Over-Expenditure

i	Deductions at source from the Federation Account on loans taken during the last civilian administration	N827, 199,558.62
Ii	Payments of local Bank loans	N2, 631,530,289.26
Iii	Payment of counterpart funds to BNARDA and FIRS Loans	N13,023,038.05
Iv	Pensions	N364, 195,917.87
V	Gratuities	N68, 810,951.00
Vi	Public Officers Salaries	N17, 066,585.60
	Total	3,921,826,340.4

Source: Report of Finance and Appropriation Committee, BNHOA, 2006.

While one is not disputing these claims, the Government ought to have recognized this fact in the planning of the 2006 budget. For the Government to have made a policy pronouncement and not integrate same into the budget, thereby spending what it did not propose to spend in the budget calls to question the sincerity of the administration. Besides, those who are charged with the responsibility of over-sighting the executive (that is the legislature), made no efforts to investigate these claims, but instead, accepted hook-line and sinker what was submitted to it by the executive.

With respect to capital allocation, the Government proposed to spend N29, 256,175,110 on its projects in the 2006 budget. Between January-June ending, the sum of N5, 065,673,407.42 or 34.63% of the targeted sum of N14, 628,087,555.00 was expended on capital projects. A summary of expenditure by sector is captured in Table 11 below:

Sector	Approved Estimates 2006	August Target N	Actual Expenditure	% Performance
Economic	14,227,993,130	7,113,996,565	1,620,723,290.68	22.78
Social	9,049,057,000	4,524,528,500	2,692,390,491.95	59.51
Environment	2,843,428,000	1,421,714,000	460,859,624.76	32.42
Administrative	3,135,696,980	1,567,848,490	291,700,000.00	18.61
TOTAL	29,256,175,110	14,628,087,555	5,065,673,407.39	34.63

 Table 11:
 Capital Expenditure Performance, 2006

Source: Report of Finance and Appropriation Committee, BNHOA, 2006

The half-year performance for 2006 budget showed, as usual, a dismal performance in the capital allocation. By 2006 when the second term of Governor George Akume's administration was gradually winding up, the failure of the capital expenditure was a clear warning signal that the outgoing administration was going to leave behind a lot of unfinished projects. It is interesting to note that some of the capital projects were continually rolled over since 2000 when the administration first came on stream; and at the close of 2006, there were no visible indications that the administration was committed to completing same. It is also important to emphasize that from the assessment so far, and as it shall later reveal in the half-year performance of the 2007 budget, no Appropriation Bill approved by the legislature and assented to by the executive performed up to 50% since the inception of the administration in 1999 as it has been captured in table 13.

In 2007, the outgoing administration targeted revenue base of N41.4 billion and realized N31.4 billion (deficit budget), which represents 76% of the targeted revenue. A breakdown of the performance shows that the recurrent expenditure performed at 105% as against the performance of the capital expenditure put at 48.6% as shown in table 12. The total expenditure performance was put at 75.9%. From the performance of the 2007 budget, there was an extra-budgetary spending on the recurrent votes as had occurred in previous budgets.

Table 12: Recurrent/Capital	Expenditure	Performance,	2007
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Details	Budget	Actual	% Performance
Recurrent Exp	21.822,000,000.00	23,111,000,000.00	105.9
Capital Exp	24,070,000,000.00	11,707,000,000.00	48.6
Total	45,892,000,000.00	34,813,000,000.00	75.9

Source: Report of FAC, 2008.

As already stated, the 2007 budget was a deficit one, and the deficit approved stood at N4. 56 billon. The deficit shot up to N6.038 billion, signifying an increase of about N2, 000,000,000.00 billion, which represents 45% increment. One of the reasons advanced for this was the unforeseen exigencies involved in the process of handing and taking over governance, which supposedly increased administrative expenses (Benue State of Nigeria: Governor Gabriel Suswam's 2008 Budget Speech). This explanation further indicts the out-going government, clearly depicting the lack of planning in the entire governance process. What mechanism did the government use in planning the 2007 budget? Why did it fail to perceive some of these exigencies? The deficit which was increased from N4.56 billion to N6.038 billion signifying an increment of about 45% was totally unacceptable, especially in the face of the socio-economic challenges confronting the people. The truth of the matter is that, it thus appeared as if the outgoing government embarked on reckless spending, using the transition programme as an excuse.

Year	% Performance
2004	38.05
2005	20.87
2006	34.63
2007	48.6

 Table 13:
 Half-Year Capital Performance, 2004 - 2007

Source: Information obtained from the 2004 – 2007 Budget Performance Reports.

From the above assessment of the budget within the period under review, it is clear that the executive branch of government completely failed in its promises of implementing policies that would impact on the lives of the people of the state. First, the failure of these budgets ultimately meant that the government was unable to kick start the performance of both the public and private sectors, and by extension, the economy of the state. Second, the failure of the capital expenditure meant the government left behind so many unfinished projects. Where and how do we hold the legislature responsible for some of these failures, especially in the pre and post-budget process? A novel aspect of the presidential system of government is the enormous powers it has granted to the legislature over appropriation and supervision of public funds. However, from our analysis, and from the dismal performance of successive budgets (capital), the legislature actually abdicated its responsibilities. Therefore, the Benue legislature must necessarily share in the failure of the administration from 1999 to 2007. The 1999 Constitution has provided enough catalyst to the legislature to propel the executive towards effective service delivery, and if it failed in that process, it should not attempt to absolve itself from the blame (See section 128 and 129 of the 1999 Constitution). The legislature failed completely to ask fundamental questions it ought to have asked the Executive branch in the discharge of its oversight functions. Ukase (2010: 34) puts it more articulately:

Beyond the passage of these bills, the legislature lacked the mechanism, the techniques and the capacity to be able to track the implementation of each of these budget laws before the consideration and final passage of the next one...... Governments exist to protect the lives, property and happiness of the people and the ability to successfully do this is tied to the State or Federal budgets, as the case may be. The inability of the legislature to monitor these budgets and ensure that they were fully implemented was the greatest undoing of the Benue State legislature within this period.

It has been asserted that the Peoples Democratic Party (PDP) dominated legislature was underpinned by parochialism and self-centeredness and this, tied to the nature and character of the extremely partisan politics of the day, contributed to the failure of the legislature in the performance of its oversight functions. Other problems equally inhibited the legislature from the performance of their oversight functions. For instance, on number of occasions, line ministries were reluctant to release information concerning their ministries that would assist Committees in the performance of their oversight responsibilities (This complaint is contained in respective FAC reports from 2003 to 2007). Most Commissioners and Permanent Secretaries felt that legislators would use such information to blackmail them. Others perceived oversight as an attempt by the legislature to extort money from them. Some of these fears were not unfounded because, to some legislators, oversight was as good as completed after 'brown envelopes' had been given to them (Ukase, 2010: 34). **Conclusion**

All we have attempted to do is to critically x-ray the budget process in Nigeria with particular emphasis on Benue State from 1999-2007. We have shown that within the period under review, the budget performed very dismally, especially the capital expenditure and this had serious implications for the development of the state. For instance, the inability of the capital budget to perform was a clear indication that the government was unable to deliver on the provision of infrastructures in the rural and urban areas. For instance, most roads were in a state of disrepair, health infrastructure collapsed and government-owned education institutions were in shambles. Similarly, despite its closeness to a major river (that is the River Benue), the state capital, Makurdi and its neighbouring Local Government Areas lacked portable drinking water, due to the inability of the government to complete the expansion of the Greater Makurdi Water Works, which it commenced soon after inauguration. Similarly, Benue State prides itself as the Food Basket of the Nation, it completely failed to kick-start the growth of the agricultural sector due largely to the inability of all the budgets passed within the period under review to perform. From the sectoral allocations to the agricultural sector, which in the final analysis failed to perform, the government was only playing to the gallery with respect to its mouthed committed to transform the sector, which remains the mainstay of the people of the state. Regrettably, the legislature is to share in most of these failures, since it has the constitutional responsibility to ensure that it does not only scrutinize and pass the budget estimates brought before her by the executive, but it also has the constitutional responsibility (oversight duties) to ensure that these budgets were fully implemented. If the legislature failed in this regards, this calls to question the quality of its representation.

The ends of the current democratization process are not likely to be met unless the legislature takes its duties and responsibilities as provided in the constitution more seriously. A marked difference between military rule and democratic rule is the establishment of parliaments to check the excesses of the executive branch and in the process safeguard the interest of the electorate. No democracy is worth it onions without a viable legislature. Granted that the legislature is the weakest link in the making of public policy in Nigeria and the reasons for these are not far-fetched. First, is the ideological nature of its historical institutionalization; two, its institutional underdevelopment and bastardization by military praetorianism, and three, its peripherality in the political economy of resource control and distribution within the power matrix of the State. In this connection, all hands must be on deck to ensure the institutionality of the legislature. A sure way of achieving this is by ensuring that the right people with the right attitude and mentality are elected to serve this bourgeoning institution.

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AN ASSESSMENT OF THE NATIONAL POVERTY ERADICATION PROGRAMME : EVIDENCE FROM BENUE STATE.

BY

DOKI, NAOMI ONYEJE, PhD DEPARTMENT OF ECONOMICS, BENUE STATE UNIVERSITY, MAKURDI

Abstract

Public policy is expected to produce results that impact positively on the people. When this is not so, the correct thing to be done is to reassess the policy in all its facets in order to achieve the objectives of the policy. This paper assesses one of government's policy aimed at poverty reduction and reveals the inefficiency of the scheme as implemented. The paper is situated within the Keynesian theory which advocates the working of government to restore imbalances in the economy. It employed a questionnaire survey research design on beneficiaries. The data was analysed using descriptive statistical tools, a correlation matrix and a logistic regression to test the hypothesis that benefitting from NAPEP does not reduce the probability of being poor. The results showed among other things that, benefitting from NAPEP makes an individual 0.04 times less likely to be poor, and this is a very minimal contribution and a pointer to the ineffectiveness of the policy. The structure and modus operandi of NAPEP contribute largely to the ineffectiveness of the policy. The study recommends deliberateness in pursuing policy or else the expected results will continue to elude us.

1.0 Introduction

When the government embarks upon a policy which encompasses a system of courses of actions, regulatory measures, laws and funding priorities, it is making a statement about advancing the goals and objectives which it seeks to achieve. Public policy is usually set to address problems in areas of defence, national security, education, health, poverty and others. Public policy strives to advance the collective well-being; social, political and economic of a society.

According to Hall (2000), public policy may be distributive, regulatory or redistributive. Distributive policies allocate benefits to specific target groups or individuals while dividing the cost among the recipients e.g., government spending on highways and education. Regulatory policies establish legal guidelines and limits on the actions of individuals, agencies, corporations and society as a whole. Redistributive policies shift the allocation of resources among members of a society. Examples are medicare and social security.

Since independence, successive governments in Nigeria have embarked on several policy drives with the aim of improving major socio-economic indicators- literacy, unemployment, income inequality and human resource development, among others. With the Millennium Development Goals (MDGs) serving as a map for economic policy formulation, even more effort and resources are being channelled to poverty alleviation in both urban and rural areas in the country with increasing intensity as targets are set for the year 2015. The point is that the pursuit of better living conditions for a majority of Nigerians is an obligation the country owes its people and these MDGs have reiterated that in very clear terms. Thinking through these goals and the different programmes we have seen the Nigerian government introduce, and maybe experienced at different points and places in the country, they seem to have these objectives on their minds.

In Nigeria however, the experience has been a recurring disconnect between policy formulation and implementation as a result, the results of even brilliant policies have continually eluded us. The way that government does its business in Nigeria is clouded by insincerity and corruption. If we focus on programmes and policies aimed at poverty reduction via employment creation and financial empowerment in Nigeria the roll would include, the National Directorate of Employment (NDE) established since 1986, Better Life programme in 1987, the Family Economic Advancement programme (FEAP) in 1997, the Poverty Alleviation Programme (PAP) in 1999, National Poverty Eradication Programme (NAPEP) in 2001 and most recently the Subsidy Removal Empowerment Programme (SURE-P) in 2012.

No doubt these policies have had a lot of resources committed to them over the years. In spite of these efforts, unemployment rate is at an all-time high of 23.9% in 2012 as against 21.1% in 2011, 19.7% in 2010, 11.8%, 5.8% and 5.3% in 2009, 2008 and 2007 respectively with a forecast for 2013 at 24.27% (NBS 2012). The rate of poverty is also not encouraging with about 60.9% of Nigerians living below the poverty line as at 2010, 54.7% in 2004 as against 60% in 2000, 34.1% in 1992. (NBS 2012). The status quo is a result of the interaction a myriad of factors which may be difficult to examine in their entirety. This paper assesses one of the policies already executed at an advanced stage; the National Poverty Eradication Programme (NAPEP) for effectiveness and to examine some of the pitfalls of public policy, if any, with the view to providing a basis for improvement on future practice. The objectives of this paper therefore are to examine the projects of NAPEP, to assess the effectiveness of NAPEP on its beneficiaries and examine the limitations of NAPEP, if any.

2.0 Theoretical Framework

The Keynesian theory postulated by Keynes (1936) spearheaded a revolution in economic thinking questioning and overturning the classical economists' doctrine that the market would restore itself to full equilibrium after temporary shocks. Keynes advocated government intervention during times of economic turmoil. He believed that it was up to the government to bridge the gap between

the economy's potential and its actual output during financial crisis even if it meant taking on debt. The argument is that during a downturn, we have a lot of idle resources, unemployed labour and underutilization of productive capacities. In Keynes view, when main pillars of the economy are failing; consumer spending, investment and net exports, the only pillar that is left to support the economy is the government. While debates continue about enacting Keynesian theory as policy, the truth is that Keynes highlighted a truth about how economies work that is as relevant today, as it was during the Great Depression. The Nigerian economy today is characterised by symptoms of turmoil which Keynes highlighted in the 19th century and the onus lies with the government to ensure basic life sustenance of its people. This is the spirit behind the National Poverty Eradication Programme which began in 2001.

3.0 Public Policy in Perspective

The first stage of policy formulation is Agenda Setting; where a lot of people are talking about the problem or issue but nothing is done. These talks are attempts at transforming an issue into policy. The second and third stages are Formulation and Adoption and these are the stages where the legislation is drafted to back up the issue and adoption is when it is accepted as a legal matter for the state to pursue in earnest. Fourthly is the implementation stage and last but not the least is the Evaluation and feedback stage. It is at this stage that policy makers may find that costs of the policy have outweighed the estimates, some realities may have been overlooked or some groups are forgotten in the course of formulation and implementation. It is at this stage that the worth of the policy is known. These evaluations may show that a policy has worked well or it could call for a reassessment of the problem and may require that the process be started all over again.

In the words of W. Michael as cited on Wikipedia "public policy is for the greater good", it follows therefore that government has to ensure that its policies are beneficial to its people. This can only happen when formulation and implementation are in sync. That is to say that while good evidence and due process are fundamental to good public policy, they do not guarantee results. Good policy is a result of Good politics and Bad rules produce Bad outcomes

The Institute for Government (2013) says that it undertook a major study into how policy is made in America. Using archival documents, their research identified the need to make the policy process more resilient to the pressures of the real world and also suggested that the government needed to find new ways of tackling systemic problems that policy makers face.

The American Civil Service watch admits that the quality of public policy advice is not always consistent or designed with implementation in mind. There must be a clear focus on designing policies that can be implemented in practice, drawing on a wider range of views and expertise. Policy makers must have the skills they need to do their jobs.

Jacobs (1992) uses archival evidence from American and British cabinets and argues that the development in both countries suggests that public opinion has a recoil effect with policy. This means that public opinion is like a strand test of the effectiveness of policy and should be taken seriously.

4.0 National Poverty Eradication Programme (NAPEP)

The National Poverty Eradication Programme (NAPEP) was established in 2001 primarily to coordinate and monitor all poverty eradication activities in the country. It also has the secondary mandate of carrying out intervention programmes and projects where identifiable gaps exist. To deliver on these mandates, NAPEP has over the years developed and implemented schemes and programmes targeted at the eradication of absolute poverty while also monitoring and coordinating the poverty reduction efforts of other government ministries, departments and agencies. NAPEP has developed and nurtured a 'partnership' philosophy to deliver on its mandate. This philosophy is today the bedrock of all its programmes and schemes. This involves networking with a broad range of stakeholders aimed at mobilizing resources to complement budgetary provision for the eradication of

absolute poverty in the country. This has led to the leveraging of financial resources from state and local governments, and the organized private sector for poverty reduction. Beyond financial resources, NAPEP networks with government and non-governmental organizations to harmonise poverty reduction activities of various stakeholders to bring about synergy in the efforts to eradicate poverty. The underlying objective of these partnerships is to engender mass economic participation at the grassroots through the provision of seed capital in the form of micro credit and training in order to catalyse the "sell-buy" process in rural poor communities and in some cases infrastructural facilities across Nigeria. Hence "partnerships that work" is an excerpt of the working collaborative efforts of NAPEP in the fight against poverty.

Because enormous resources had been committed by governments at different levels and by other stakeholders towards the improvement of the well- being of Nigerians since the colonial days without commensurate results, in 1999, the Administration of President Olusegun Obasanjo made poverty reduction the focal point of every government policy and Programme and gave birth to what is known today as NAPEP. The states took a cue from the Federal Government and replicated poverty reduction schemes and Programmes aimed at improving the well- being of the people.

The main assumption of NAPEP, simply put, is that more than half of the population of Nigeria are still unable to satisfy their needs owing to lack of income or opportunity to generate income and a lack of the means to change their situation largely due to:

- 1. inadequate access to employment opportunities;
- 2. inadequate physical assets such as land and capital and minimal access to credit by the under privileged even on a small scale; and
- 3. low endowment of human capital, natural resources and technological knowhow.

NAPEP, therefore, has the responsibility of ensuring that the wide range of poverty eradication activities are planned to tackle income poverty and these are coordinated in order to ensure policy continuity and sustainability of programmes.

4.1 Collaboration with Government and its Agencies

Apart from the collaboration with non-governmental stakeholders, the partnership philosophy of NAPEP has also been expressed through the collaboration with Ministries, Departments and Agencies (MDAs) at the three tiers of government. At the federal level NAPEP is collaborating with eighteen core poverty eradication ministries, agencies, non-governmental organizations and other stakeholders, via the National Coordination Committee (NCC) structure which is the coordinating organ for the efforts at the federal level. These agencies include the Central Bank of Nigeria (CBN), National Directorate of Employment (NDE) and Small and Medium Enterprise Development Agency of Nigeria (SMEDAN). NAPEP has struck a perfect partnership with the second tier of government through the instrumentality of the State Coordination Committee (SCC) and the State Poverty Eradication Committee (SPEC). Through these structures, the poverty reduction activities of the state government and the MDAs in the state are fully captured and properly documented. The beauty of this arrangement is the involvement of the top echelon of the state executive in the activities of the committees, particularly the SPEC. This has rubbed off positively on the partnership.

The prominent partnership platform at the third tier is the Local Government Monitoring Committee (LGMC), through which NAPEP interacts with the grassroots. Through this structure, relevant data on poverty eradication activities at the grassroots are gathered for presentation to the SCC, while intervention programmes are identified for joint implementation with relevant stakeholders. In addition to this, NAPEP embarks on Community Economic Sensitization Scheme (COMMESS) with the active collaboration of the Local Government Area Chairmen to mobilize, educate and sensitise the poor on options to create wealth.

While the overall mandate is the same for every state of the federation, a look at the national working documents and the state reports examined reveal that the actual programmes executed at different times may differ from state to state depending on how the needs are perceived by the committees and the funds that are allocated accordingly. It is on the basis of this that we will examine the programmes that NAPEP has embarked upon in Benue State since its inception in 2001. So far a total of ten (10) different programmes have been embarked upon by NAPEP in the state. We shall take a closer look at them in the order in which they were embarked upon.

i. Mandatory Attachment Programme (MAP)

MAP was designed in 2001 for graduates of tertiary institutions who were unemployed. These unemployed graduates were assigned to different tasks either in different ministries, schools (to teach) or some trade and they were given a monthly allowance of N 10,000 each. Under MAP, a total of 1,447 University and Polytechnic graduates from all the 23 local governments in Benue State benefited. It lasted for a brief period of two years. This programme was not sustained because of the huge financial implication. These resources were not yielding any return and so could not be sustained. It has since been scrapped.

ii. Capacity Acquisition Programme (CAP)

CAP was also in place in 2001. It was a programme under the Youth Empowerment Scheme (YES). It was targeted at 'school leavers'– graduates from primary and post-primary schools who were unemployed. Two groups of people were the major stakeholders for CAP; they were the trainers and trainees. The school leavers were attached to experts at different trades depending on their areas of interest. The experts that contributed to CAP in Benue State included hair dressers, barbers, caterers, electricians, welders, carpenters and tailors. The trainees were given monthly allowance of N 3,000 while they learnt the trade while the trainers were paid N 4,500 per trainee per month. The training lasted between six months and one year. Upon completion of training in Benue State, sewing machines were distributed to some participants who were selected at random via a ballot system. The decision to give out sewing machines alone must have arisen from the fact that most participants trained in tailoring. The monthly allowance to trainees was to help them save some money to enable them start their trades. We should note that the "trainer status" was lobbied for and a final selection was made by the SCC. CAP too was not sustainable because the financial implications were very high with no return on it whatsoever. It also lasted for only two years until 2003 and 2,893 youths from across the state benefited from the scheme.

iii. KEKENAPEP (Phases I and II)

This refers to the popular green and white tricycles distributed by NAPEP to inspire and boost urban transport as well as create employment for the owner. It had high income generating potentials because it was economical in terms of fuel usage and general maintenance (reducing running costs), and increasing potential benefits. The actual value or cost of KEKENAPEP was N280,000. However, the federal government subsidized them and gave them to NAPEP to sell at either N180,000 (if down payments were made) or N 200,000 (at hire purchase with an initial deposit of N 80,000). In the first phase of the project, 46 KEKENAPEPs were distributed in Benue State. The state government had a poverty alleviation plan which coincided with the second phase of KEKENAPEP and so they made arrangements with the NAPEP headquarters directly and 54 KEKENAPEPs were given to the State government. We still see one or two of these tricycles on the roads in certain parts of the township; this means they are still in use up to date.

iv. Community Development Scheme (CDS)

CDS was embarked upon between 2003 and 2004. This programme was done in partnership with the United Nations Development Programme (UNDP). UNDP provided computers, scanners, printers and other computer accessories to set up computer training centres. The pieces of equipment

provided were used to set up two (2) centres in Makurdi, the State capital. The Centres set up were in St. Joseph Technical College and Makurdi Community Secondary School, Wadata, Makurdi. These computer training centres helped to make secretaries in the Benue State Civil Service computer literate. Their training held at Makurdi Community Secondary School. The second centre was more open to practitioners of other trades-carpentry, plumbing, etc as five youths from each Local Government engaged in these trades were trained. In addition, fresh training was given to 20 youths per trade in carpentry, computer studies, metal work/welding, electrical/AC installation and refrigerator repairs. The programme ensured fair representation from each Local Government. It is not really clear what has become of these centres since they were handed over to the institutions that house them after the first round of training in 2004.

v. NAPEP Multi-partner Microfinance (MP-MF) Scheme

Developed in 2005, the MPMF scheme was another innovative approach by NAPEP to eradicate poverty. It was aimed at promoting savings and providing credit facilities to the poor. It was a unique partnership between NAPEP and some key stakeholders, including the state and local governments, the Central Bank, commercial banks, micro-finance institutions, cooperatives and other private companies for the provision of an enlarged pool of funds for on-lending to the poor. The poor are reached through the instrumentality of cooperatives and microfinance banks. In Benue State, a total of N38million has been disbursed in two phases, to about ten of such organizations. Some of these include:

1.	Asenge Thrift and Loans	N 10m	1st and 2 nd phases
2.	Third Millennium Cooperative	N 2m	1st phase
3.	Blessed Hope Cooperative	N 4m	2nd phase
4.	Ito Community Micro Finance Bank	N 7m	2nd phase
5.	Otukpo Micro Finance Bank	N 3m	1st phase
6.	Zion Microfinance Bank	N 1m	2nd phase
7.	Otia Community Bam	N 2m	2nd phase
8.	Mbayion Community Bank	N 2m	2nd phase

These institutions were to make available the funds to aspiring entrepreneurs. Agricultural loans were to attract 9% interest while other commercial loans attracted 10%. The reason for the difference in interest was to encourage investments in agriculture. The recovery period placed on agricultural loans was longer to allow for planting and harvest seasons unlike commercial loans which required that refunds commence a few months after the loans were given. Over 50 cooperative groups have benefited from this credit scheme in the state. As far as refunds of these loans to NAPEP by the cooperatives that benefited are concerned, the Benue State SCC has expressed satisfaction so far.

vi. Farmers Empowerment Programme (FEP)

FEP was developed in 2006 and was targeted at farmers. The aim was to help boost agricultural output by increasing their ability to purchase necessary farm input. No returns were required from the rural farmers at the end of the harvest but it was expected that their general welfare would have been improved. Farmers from only three local governments namely, Katsina Ala, Ado and Makurdi Local Governments benefited from this scheme. They were selected at random. Each of the senatorial zones was represented and the farmers benefited from the N 4.5m disbursed on the Programme. Cassava and palm tree farmers were targeted by the FEP scheme.

vii. City Serve Orange Box for Recharge Card Production

The orange box is a machine that produces recharge numbers on telecom networks available in a city, NECO/WAEC and JAMB scratch cards. The box is worth N 50,000 but was given to beneficiaries at hire purchase for an initial deposit of N5, 000 for the balance to be paid back within a year. The machine was loaded with recharge cards worth N 5,000 for starters. The recharge value could be increased as the business expanded. Because of the high rates of telecom use in the state, the city serve had a lot of potential especially for rural areas with network coverage and limited access to "card dealers". A total of 320 boxes were distributed to mainly unemployed youth from across the state in July 2007.

viii. Promise Keepers (PKP)

This Programme was launched in 2006 in response to criticism by the religious sects on their neglect by NAPEP and government generally in poverty reduction efforts. The programme, therefore, targeted societies within the church, e.g. women and youth groups, Bible society, etc and relied on them to identify their members who needed to be assisted. This was also a non-profit scheme and although it is ongoing, it is not on a regular basis yet. A total of N 8.4m has been disbursed to several faith based organizations in Makurdi so far. Let us note that the faith based initiative has affected both Christians and Moslems alike.

ix. Village Economic Development Solutions (VEDS)

VEDS were developed in 2008 to empower rural farmers and entrepreneurs via cooperative societies in these areas. Ten (10) local governments benefited from the scheme to encourage fish, poultry and livestock farming as well as cassava farmers in the rural areas. Logo Ukum and Vandeikya from Zone A, Buruku, Makurdi, Guma, Gwer-West from Zone B and Oju, Otukpo and Okpokwu from Zone C benefited from the N200m disbursed on the Programme. The project required that beneficiaries be monitored to ensure that the funds were being used for the purposes they were made available for.

x. In Care of People (COPE)

This is the latest addition to the myriad of programmes launched in 2009. COPE was developed with the aim of breaking the intergenerational transfer of poverty and reducing vulnerability of the core poor in society against socio economic risks. In the COPE programme, grants are provided to qualified poor households on the condition that they engage in investment in the human capital development of their children or wards. It qualifies as Nigeria's first Conditional Cash Transfer (CCT) programme. The conditions tied to COPE are primary school attendance and the utilization of public basic healthcare facilities. Cash provided by COPE first provides emergency assistance while the conditions promote longer-term investment in human capital development for breaking inter-generational poverty. In Benue State, (one of the first 12 pilot states in the first phase), 500 poor families (less privileged with orphans, widows and the disabled given priority) have been selected from the 23 local governments in the state. So far the emergency assistance they are receiving is in three categories. Monthly allowances of N 5,000, N 3,000 and N 1,500 were given to the families based on the number and school age of their children. This allowance is called the Basic Income Guarantee (BIG) so that the children can stay in school. On the longer-term strategy, the Poverty Reduction Accelerated Investment (PRAI) set aside a compulsory N 7,000 monthly for one year for each family which was given to them in bulk at the end of the year (i.e., N84,000) after they had been trained in a particular skill. The 500 benefiting families in Benue State have undergone their complete training and the cash disbursements have been made. The state SMEIDAN and NDE assisted in the training. A total of N 72m was set aside for the scheme.

5.0 Methodology

The study adopted a questionnaire survey research design. The population for the study is the beneficiaries of NAPEP's policies in Makurdi metropolis. The researcher embarked on a pre-field/ reconnaissance survey based on the information got about beneficiaries from the institution to find them. The details given by NAPEP seemed inadequate to find their beneficiaries. NAPEP officials had given details of the different programmes embarked upon and general locations (Local Governments) but there were challenges in identifying individual beneficiaries because of the nature of the records kept on them. The microfinance banks which were commissioned to disburse funds to the beneficiaries were also contacted but they said they had returned all records to the organization on completion. However, one farmers' group mentioned in Makurdi- the sugarcane farmers cooperative in North Bank and one community in Makurdi mentioned to have benefitted from the COPE scheme; Terwase Agbadu(a community from where most households were selected to participate from Makurdi LGA) were identified as beneficiaries. Since we know from literature, the areas of NAPEP's activities in terms of skills in which different types of training were conducted and members of these different trades and businesses can be found within Makurdi Township, except for cases where specific mention was made, we used that information to draw our sample.

Following this, a disproportionate sample (of elements having particular characteristics of interest to the researcher to ensure inclusion of specific elements; in this case benefitting from NAPEP's programmes) of 30 households was drawn from Terwase Agbadu, and 30 members of the sugarcane farmers' cooperative group in North Bank. A disproportionate stratified random sample (as the relative proportions of the strata in the sample may not correspond to their relative proportions in the populations, especially in our case where the entire population is not known) of 30 business entrepreneurs each whose groups are supposed to have members who have benefitted from the scheme was also drawn. The implication is that some strata may have to be assigned more weight and others less weight than their actual proportions in the population. It could also be interpreted that irrespective of their weights in the population, each stratum carries the same weight. The strata are tailors, carpenters, metal workers/ welders, recharge card operators, computer operators and AC/refrigerator repairers. The sample was made up of 30 tailors, 30 carpenters, 30 metal workers/ welders, 30 recharge card producers, 30 computer operators, 30 mechanics and 30 AC/ refrigerator repairers. This gives a total sample size of 270. Because this is concerned with NAPEP's coverage, only such enterprises established between 1999 and 2010 were studied. Descriptive tools, i.e., tables, and charts are used to present the data alongside discussions of the scenarios presented to give a general picture of the performances of the programmes. Secondly, the Logit Regression is employed to test the hypothesis that benefiting from NAPEP does not reduce the probability of being poor. Thirdly, a correlation matrix is used to make pair- wise correlations to investigate the effects that changes in the variables specified within the model have on each other in order to ascertain the magnitude and direction of the relationships among them. Finally, the Fish Bone Diagram is used to discuss the limitations of NAPEP.

5.1 The Logit Regression

The general form of the model to be estimated is;

$$\operatorname{In}\left(\frac{P_i}{1-P_i}\right) = Z = a + \beta x_i + u_i$$

Z – denotes the dichotomic qualitative variable poor/non-poor in the study or poverty not reduced/poverty reduced;

 x_i – denotes the characteristic vector(s) of a household.

 $\boldsymbol{\mu}$ - is the error term.

The study is concerned with the following x_is :

 x_{1i} -household income (INC₁)

 x_{2i} -household's income from other sources (INCS₁)

- x_{3i} household benefits from NAPEP (BN)
- x_{4i} household has a major economic activity (MA₁)

 x_{5i} - household size (HS₁); six or more

- x_{6i} nature of household headship (HH₁)
- x_{7i} source of water (SW₁); access to safe sources
- x_{8i} number of rooms in the house (NR₁); three or more
- x_{9i} School age children going to school (SAC₁); presence or absence
- x_{10i} -Toilet facility (TF₁);adequate or not
- x_{11i} Distance to the nearest health facility (DHF₁); being 30 minutes away or more

The specific form of the model is therefore:

 $Z_{i} = INC_{1}\beta_{1} + INCS_{1}\beta_{2} + BN\beta_{3} + MA_{1}\beta_{4} + HS_{1}\beta_{5} + HH_{1}\beta_{6} + SW_{1}\beta_{7} + NR_{1}\beta_{8} + SAC_{1}\beta_{9} + TF_{1}\beta_{10} + DHF_{1}\beta_{11} + \mu$

6.0 **Results and Discussions**

6.1 The Activities of NAPEP on Beneficiaries

As indicated in the previous chapter, 30 questionnaires were allocated to each of the nine groups identified as having benefitted from the activities of NAPEP. Table 1 shows the distribution of the questionnaires by business type. (All the tables referred to are presented as appendix). Out of the 270 questionnaires administered, 220 were returned and/or valid. This represents 81.5% of the questionnaires while 50 or 18.5% of the questionnaires were either not returned or not properly filled and therefore were invalid. The crux of the investigation is about NAPEP's influence on different entrepreneurial groups in Makurdi and so we sought to investigate awareness levels about the interventions, participation and different interventions on businesses, if any and on the welfare/poverty status of the beneficiaries.

The level of awareness of the respondents regarding NAPEP's programmes is shown in Table 2. The information in the table indicates that 75.5 percent of respondents are not aware of any of NAPEP's programmes while 24.5% are.

Awareness is central to, but not the same as benefitting, i.e., it is possible to be aware of the programme and not participate or benefit from it. As a result we further sought clarification on participation and benefits to business endeavors as well as inquiring if there have been improvement in welfare as a result of these businesses which NAPEP helped to set up; the picture is presented in Table 3. We must make the point, however, that this inquiry can only be made on individuals and households that make up the 24.5 % (or 54 respondents), i.e. those who are aware of NAPEP's programmes.

From the table we see that out of the 54 respondents, 27 (50%) have benefitted while 50% have not. The nature of benefits is diverse in nature as we have seen from the review of the programmes already embarked upon. This investigation also showed that 11 (40.7%) of the beneficiaries got aid to set up their businesses while 16 (59.3%) did not. The aid received by this group of beneficiaries for setting up of businesses was considered sufficient by only 2 (18.2%) of the recipients while for the remaining 9 (81.8%), the aid was insufficient. This group still had to seek other means to establish themselves. Most of them received training and needed to find their own resources to establish the trades. Where items of equipment were given at subsidized rates, shops and other operational materials and tools were still sought. Discussion, in the course of the administration of the questionnaires, revealed that where grants were given, they were insufficient for take- off and in some other cases; they were diverted to tackle some pressing matters, as all that was needed to set up the business was not available at the time. Having made reference to the nature of NAPEP's intervention as being diverse, we sought to find out what the diversity entailed from the beneficiaries. Table 4 is a summary of the findings. NAPEP's major contribution to the economic activities of the entrepreneurs is in training and skills acquisition attested to by 51.6% of responses, followed by loans/micro credit (25.3%), grants (16.5%), and then Keke NAPEP (5.5%).

6.2 Effectiveness of NAPEP

In an attempt to examine the effectiveness of NAPEP's activities, a study of the impact of NAPEP on income and other welfare indicators of beneficiaries and non-beneficiaries alike was carried out. This is in line with NAPEP's aim of tackling income poverty by improving incomes and earning opportunities. To effectively establish this impact, it is useful to first examine the income sources of the respondents, presented in Table 5 which shows that, the major trade is the source of income to 74.1% of the beneficiaries and 85.5% of the non-beneficiaries. The other sources are, however, not completely negligible. At any rate, it is safe to say that a viable business enterprise is extremely important to the welfare of the respondents seeing that it provides the main sustenance to

84% of them. To the 74% of NAPEP's beneficiaries, their main business enterprises being viable may not be unrelated to the benefits received, whether the skill training, grants or loans as the case may be. The picture that the table paints is that while it is not unusual to get support from family members or from other sources, the main source of income for the respondents is their business enterprise. The success and viability or otherwise of their business endeavors will influence their welfare. Having established that most respondents survive on their businesses, the study examines the incomes of all the entrepreneurs in the twelve months preceding the survey and the results are presented in Table 6. Majority of beneficiaries (63%) earned incomes less than N90, 000 per annum. Among the nonbeneficiaries, however, majority (58.5%) earned incomes above N90, 000. This would place most of the non- beneficiaries above N 250 per day and most of the beneficiaries below it. The implication of the earned incomes from both categories is that the incomes of the non- beneficiaries are higher than those of beneficiaries. This may be a pointer to the fact that benefitting from NAPEP's activities is neither a necessary nor sufficient condition for a business enterprise to thrive or flourish. It may also be an indicator of the possibility that their living conditions may have been the criterion for their selection, and in which case, the project has not helped them enough.

We must make a note at this point that it may be possible to query the accuracy of this income data, since people are not always willing to give out this kind of information. However, the researcher used average monthly expenditure profiles, also given by the respondents (which are more likely to present truer pictures) as a control and the results were a match in about 60% of the cases. Next, we sought to inquire, based on self- perception, the respondents' opinion on whether they were poor or non- poor. Table 7 gives the summary of the responses. A self- assessment may or may not be correct but is an indicator of a person's self- esteem and sense of achievement or success at a business venture. These perceptions are based on the ability to meet basic needs of feeding their families three times a day, sending children to good schools, having a roof over their heads and decent clothes to wear. Among the beneficiaries, 70.9% still consider themselves to be poor while 29.1% do not. Comparing this result with the results from the previous income analysis where about 60% were below and 40% above the poverty line, we see that the respondents feel worse than they actually are. We may infer from the foregoing that NAPEP's intervention has not improved the sense of wellbeing among the majority of her beneficiaries.

6.3 Test of Hypothesis

The null hypothesis set in the methodology section was tested using the logistic regression analysis. The model set out to test whether the probability of being poor reduces with benefiting from NAPEP. The results have are presented in Table 8. In addition to the table, the other results that the regression gave in describing the overall performance of the model are discussed. The beginning Block 0 classification that shows the classification accuracy of our dependent variable within our sample's variability is 75.9% correct. The Wald statistic of 52.994 shows that the outcomes, poor and non-poor in the beginning Block 0 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 model coefficients are set to test the hypothesis of whether there is at least some predictive capacity in the regression equation. With a chi square value of 146.599, which is statistically significant, we can feel confident that the model has something to say. Still on the predictive capacity of the model, the test reports that the -2 Log likelihood, which works like the chi square but is considered more accurate for logistic regressions, is 96.336^a and it rates the models performance highly. The more conventional R^2 , the Nagelkerke R square is 0.728 while the Cox and Snell R square is 0.486. Even though within the logistic set up, they are regarded as pseudo R squares, their values are usually good indicators. Measured on two different scales, the results imply that the explanatory power of the model lies between 48.6 to 72.8 per cent. The Block 1 classification of the dependent variable from the sample on estimation increased from 75.9% to 98.6% meaning that we have increased the classification accuracy of the model by about 22 percentage points.

From the results, the coefficients on INC_2 , BN, MA_2 , HS_2 SAC₂ and TF_2 and DHF₂ have signs in accordance with the a priori expectation while $INCS_2$, HS_2 , HH_2 , SW_2 and NR_2 do not. Comparing beta coefficients with their standard errors, the coefficients on INC_2 , SAC_2 and SW_2 are significant while the rest are not. The coefficient on BN is -0.03, this can be interpreted to mean that benefitting from NAPEP reduces the probability of being poor by about 3%. More importantly, inspecting the odds ratio, we see that benefitting from NAPEP will make an individual 0.04 times less likely to be poor. The "smallness" of these values may not be unrelated to the insignificance of the variable but we will discuss this subsequently. The evidence from this sample leads us to reject the null hypothesis and accept the alternative that benefitting from NAPEP reduces the probability of being poor.

Examining the other variables in the equation, the coefficient of income from other sources (INCS₂) carrying a positive sign is explained in terms of the fact that, a household depending on other sources like family members and friends who are well to do are depending on an irregular and uncertain source. This could leave individuals and households in a bad shape when such support is not forthcoming. The unstandardised beta weight carrying a negative sign on MA_2 is an indication that income from a viable enterprise is more likely to reduce poverty than depending on income from other sources which are largely unreliable and irregular. In fact, inspecting the odds ratios shows that depending on other sources makes one 1.3 times more likely to be poor, while having a viable enterprise makes one 0.9 times less likely to be poor. The beta weights on HH₂ confirm that larger households are more likely to be poorer, in this case, 1.1 times more. Households with school age children in school are also more likely to be poor because of the expenses incurred; most respondents prefer private schools to the redundant but free public schools, and it makes a household 1.2 times more likely to be poor. The odds ratios on households having a good toilet system (TF_2) within a house and living in an area where one is at most 30 minutes from a health facility (DHF₂), suggest that such households are 0.92 and 0.79 times less likely to be poor. On the other hand, having access to safe water sources (SW₂) defies our a priori expectation. This may not be unconnected with the fact that within the study area, water shortages pose a serious challenge to most households regardless of their locations or income levels.

Further analysis was carried out by constructing a correlation matrix to help us analyse the relationship between benefitting from NAPEP and incomes and other socioeconomic characteristics that help us describe living standards. The matrix of correlation helps us to concentrate on the effects of benefitting from NAPEP on the other variables in a pair- wise manner to help us strengthen conclusions on the effectiveness of NAPEP. Benefitting from NAPEP (BN) has a very weak negative/ inverse correlation with income (INC₂), income from other sources (INCS₂) and, having a major economic enterprise (MA₂). We may therefore infer that, NAPEP's activities have not affected incomes or enterprises positively and as such, the multiplier transmission to provision of improved water sources (SW₂), toilet (TF₂) and health facilities (DHF₂) as well as getting school children to school is missing (SAC₂). This is also reflected in the very weak negative/inverse correlations with them. This is to say that the intervention has not been able to produce the expected changes in the incomes of even the beneficiaries as intended by the programme. The results we have seen, give us room to question the success of the scheme as its objectives have not been achieved among beneficiaries.

When income is sufficient to provide better living conditions, better water sources, bigger houses with more rooms can be afforded and better sewage will likely be used which will improve hygienic conditions. The location of residence is also likely to be more urban with greater access to medicare when the need arises. One of the objectives of NAPEP is to eradicate poverty and the strategy is to create income earning opportunities and giving out loans, micro credit, grants and aid to participants. The intention is to create incomes that will give access to basic sustenance goods and services. Incomes therefore, are not an end in themselves and so until an income is sufficient to provide the basic goods, a person is still poor. This may be a basis to judge the performance of NAPEP.

6.4 Assessing the Effectiveness of the Institution

In an attempt to deepen our understanding of the operations of the institution, we conducted an interview with the state Secretary, Mr. Matthias on the 15th of September, 2011 in his office between 12:30 and 1:30. This interview was meant to enhance discussions on the effectiveness of the institution. The interview covered several areas and the general assessment is presented.

6.4.1 Programme Design/Budgeting/Selection of Beneficiaries

The nature, time and size of the programmes implemented by NAPEP in Benue State are a result of National Policy from its Headquarters in Abuja, i.e. none of the programmes implemented in the state are initiatives of the state chapter. The amount of resources earmarked for each programme is also decided and allocated from the headquarters and disbursed to the states. It is possible for states to influence the amount of funds that they receive on either all or some specific programmes if, and only if, they provide some counterpart funding to NAPEP. This counterpart funding is, however, not compulsory but without it, whatever is allocated to the state has to be accepted. It is interesting to note that within the state, the contribution of counterpart funds by any local government can increase the number of beneficiaries from the area. In the most recently concluded scheme, In Care of People (COPE), the interview revealed that while 9 of the 10 participating local government areas in the state had 50 participants each, Oju Local Government Area had 62 because the local government provided some counterpart funding on the programme.

On the usage of the funds for the programmes strictly, the state representative interviewed stated strongly that the funds to be disbursed to the beneficiaries are not diverted at all. The budget always includes a separate allocation as overhead and monitoring allowances to cater for office logistics and the members of staff involved on any of the programmes and reiterated that they were satisfied with the allocations to them. However, the selection of the beneficiaries, he claimed, is usually done at the Local Government level and the names are sent to them. The Local Government Committee is made up of the Education Officer, the Social Welfare Officer, Councilors representing the different areas and District Heads. After the number of beneficiaries per Local Government to be included on a particular scheme is agreed upon, this committee raises the number required. On the issue of whether any interests are pursued in the selection process, either of top government officials or any stake holder, he could not completely dispute it as there were only general guidelines handed to them, and screening at the point of implementation was just to verify identities.

6.4.2 Programme Implementation and Monitoring

The selected participants assemble in the state capital for training or any other programme and then disbursements are made, depending on what each programme mandates them to do. The organization employs the use of financial institutions to make these payments especially the microfinance banks since their entry into the sector. The details of payments per beneficiary are kept, i.e., his name and local government but no other address is kept. This means that it is almost impossible to use the records kept (which are for rendering accounts solely) to do any monitoring. When asked about why more details are not kept of beneficiaries, he said that their main objective was accountability to the Centre (i.e. the head office), to make sure that funds given for specific purposes were properly accounted for as having been used for what they were intended. The state representative could only hope that the individuals had kept the instructions and advice given to them on what the funds were meant for or that they were using the skills which had been imparted to them. Where the intervention required that equipment be handed over to participants as in CAP, Keke NAPEP and the Orange Box City serve, these items of equipment were given out at subsidized rates. The researcher sought to find out if the organization could guarantee that the equipment were in use and had not been sold or even broken down, the representative confirmed that this was no longer necessary as the equipment had been paid for, even though at a subsidized rate and an individual could do as he pleased with his property. With regard to the just concluded COPE Scheme where the

Basic Income Guarantee (BIG) was given for 12 months until March 2010 and then the Poverty Reduction Accelerated Investment (PRAI) of N84, 000 disbursed to each participant to improve on their existing businesses after the SMEIDAN training in December, 2010, there is no way to find out if these funds have been or are being used according to the instructions on training and to what extent, because the BIG and the PRAI are grants to the individuals/households.

6.4.3 Reports

Reports are presented at the end of each programme. The contents of reports include a listing of the beneficiaries' signing or thumb printing on collection of the funds received on each programme as compiled from disbursing financial houses. They are spiral bound and submitted to the head office where the funds came from. These reports are not usually publicized; they are confidential materials of the government.

In terms of achieving the objectives of the institution, NAPEP was mandated to carry out intervention programmes where identifiable gaps exist in order to tackle income poverty in a continuous and sustainable manner. The evidence from this sample shows that there are income and entrepreneurship gaps that require filling among unemployed graduates and school leavers, farmers, religious groups, the old and vulnerable in society and among rural dwellers and these have been correctly identified by NAPEP. There is also not enough evidence from this sample to say that efforts directed at the targeted have been successful because of the insignificance of impacts on livelihoods and incomes of beneficiaries so far. In terms of the partnerships, only the National Directorate of Employment (NDE) is mentioned to have conducted the trainings and microfinance banks which disbursed the funds. The continuation and sustainability intended is also lacking as none of the programmes is on- going in the state since COPE's disbursements were concluded in 2010.

6.5 Limitations of NAPEP

The limitations of the scheme were also examined and the results are presented next in a fish bone diagram for clarity as Figure 1.



Figure 1: Fish- Bone Diagram showing the Limitations of NAPEP

7.0 Conclusions and Recommendations

The analysis on NAPEP showed that benefitting from NAPEP has the potential to reduce the probability of being poor but it does not have a positive correlation with income. This does not conform to our a priori expectation. In spite of the fact that NAPEP's activities targeted economic and livelihood activities of its beneficiaries, benefitting from NAPEP did not show a positive correlation with income which is the main index of poverty in its case. This relationship, in turn, affected the other variables that help us to define improved living standards of households and individuals negatively. The inability to capture exactly how much the programme contributed to the welfare states of the beneficiaries, contributes to the controversy. The objective of improving incomes among the beneficiaries has not been achieved so far. While there may be isolated success stories, the programme design and implementation has within it the elements that hinder its own success. The welfare status of beneficiaries of NAPEP's interventions cannot be wholly ascribed to NAPEP because of the inadequacy of the contributions that NAPEP has made so far. The nature of the project designs does not allow for any local inputs on what would be a better project to implement in the State based on the prevailing circumstances. Governments' involvement at the State level is very discouraging. The fact that no counterpart funding is given is an indictment on its commitment to ventures that can improve the welfare of its people. The nature of implementation is shoddy and lopsided, monitoring is intentionally absent and this has led to a waste of the resources that have been put into these interventions. Accountability is only upward, mainly for the purpose of having books piled up and for the staff to keep their jobs. There is no downward accountability provided for and that is why there are no follow up mechanisms. The access to records of NAPEP is very restricted. This may imply a lack of confidence in the quality of the jobs that they do in the state.

Public policy has to be deliberate and that means that the lapses on policy implementation and monitoring which have been revealed have to be avoided completely. When Skills are acquired and mobilized and they are not utilised or they used in the wrong way, resources are wasted. It is important that targeting be done properly when the policy is redistributive or else the essence could be lost. Following from these concluding remarks, the following recommendations are made;

i. The structure of NAPEP, from the stage of Programme design through to post implementation, needs to be improved upon. The improvements should reflect deliberate efforts at ensuring successful programmes rather than just submitting reports to the headquarters.

ii. Governments' commitment to these poverty reduction programmes and other welfare policies needs to be re-awakened. The import of counterpart funding to programme selection and execution should motivate it to make financial commitment. This is because the welfare of the citizen is primarily a state function and while other institutions may participate, government should not be seen to be leaving its responsibilities to others.

iii. Baseline studies for poverty reduction programmes are extremely vital to measure progress. Where progress and viability are the intentions, a "before-assessment" is vital. Data generating bodies in the state need to be re-awakened, retrained and repositioned to embark upon such studies in the future before implementation of policy.
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APPENDIX

Table 1: Distribution of Returned Questionnaires by Business Type

Type of Business Engaged in	Quest. Given out	Quest. Returned/Valid
Carpenters	30	18
Computer Operators	30	17
Households in Terwase Agbadu	30	25
Mechanics/Electricians	30	30
Recharge Card Dealers	30	29
Refrigerator/AC Repairers	30	27
Sugar Cane Producers	30	20
Tailors	30	30
Welders /Fabricators	30	24
TOTAL	270	220

Source: Field Survey, 2011.

		_		_		
Table 2:	Awareness	about any	of NAPEPs	Programmes	by Business	Type

Type of Businesses Engaged in	Aware		Not Aware		Total	
	No.	%	No	%	No	%
Carpenters	4	22.2	14	77.8	18	100
Computer Operators	3	17.6	14	82.4	17	100
Households in Terwase Agbadu	7	28.0	18	72.0	25	100
Mechanics/Electrician	9	30.0	21	70.0	30	100
Recharge Card Dealers	6	20.7	23	79.3	29	100
Refrigerator/AC Repairers	8	29.6	19	70.4	27	100
Sugar Cane Producers	4	20.0	16	80.0	20	100
Tailors	8	26.7	22	73.3	30	100
Welders/Fabricators	5	20.8	19	79.2	24	100
TOTALS	54	24.5	166	75.5	220	100

Source: Field Survey, 2011

Type of Businesses	Benefitted	
	Yes	No
Carpenters	1	3
Computer Operators	0	3
Households in Terwase Agbadu	5	7
Mechanics/Electricians	2	7
Recharge Card Dealers	4	2
Refrigerator/AC Repairers	3	5
Sugar Cane Producers	3	1
Tailors	5	3
Welders/Frabricators	4	1
Total No	27	27
Total %	50	50

Table 3:Distribution of NAPEP's Beneficiaries by Business Type

Source: Field Survey, 2011

Type of Business Engaged In	Skills Training Acquisition	Grants	Loans/ Microcredit	Keke NAPEP	Others	Total
Carpenters	5	0	3	0	0	8
Computer Operators	2	0	-	1	-	3
Household in Terwase Agbadu	0	5	1	0	0	6
Mechanics/Electricians	3	3	3	1	0	10
Recharge Card Dealers	8	0	3	1	0	12
Refrigerator/AC Repairers	8	3	3	2	1	17
Sugar Cane Producers	2	1	1	0	0	4
Tailors	13	3	6	0	0	22
Welders/Fabricators	6	0	3	0	0	9
Total No.	47	15	23	5	1	91
Total %	51.6	16.5	25.3	5.5	1.1	100.0

Table 4: Most Common/Popular NAPEP Intervention by Business Type

Source: Author's compilation from Field Survey, 2011

Table 5:Sources of Income for the Households, including NAPEP Beneficiaries and Non-Beneficiaries

Sources	Beneficiaries		Non- Beneficiaries		Total	
	Frequency	%	Frequency	%	Frequency	%
Major trade	20	74.1	165	85.5	185	84.0
Support from family members	3	11.1	20	10.4	23	10.5
Other	4	14.8	8	4.1	12	5.5
Total	27	100.0	193	100.0	220	100.0

Source: Field Survey, 2011

Ra'	Beneficiaries		Non- Beneficiaries		Total	
	Frequency	%	Frequency	%	Frequency	%
nge of Income						
< 30,000	1	3.7	7	3.6	8	3.6
30,000 - 59, 999	1	3.7	13	6.7	14	6.1
60,000 - 89,999	15	55.5	63	32.6	78	35.5
90,000 - 120,000	2	7.4	50	25.9	52	23.6
> 120,000	8	29.6	60	31.1	68	30.9
Total	27	100.0	193	100.0	220	100.0

 Table 6 : Distribution of Annual Income among NAPEP Beneficiaries and non-beneficiaries in the previous twelve months

Source: Field Survey, 2011

Table 7:Self- perception by Beneficiaries and Non-Beneficiaries on whether they are poor ornon- poor.

Perception	Beneficiaries		Non- Beneficiaries		Total	
	Frequency	%	Frequency	%	Frequency	%
Poor	19	70.9	89	46.3	108	49.9
Non-Poor	8	29.1	104	53.7	112	50.9
Total	27	100.0	193	100.0	220	100.0

Source: Field Survey, 2011

Variables	Coefficient	SE	Sig	Exp (B)
Constant	-5.729	6.892	0.009	0.030
INC ₂	-0.230	0.000	0.000	0.680
INCS ₂	0.249	0.320	0.437	1.282
BN	-0.030	0.639	0.591	0.040
MA ₂	-0.008	0.112	0.946	0.992
HS_2	0.029	0.582	0.960	1.030
HH ₂	0.075	0.731	0.918	1.078
SW ₂	0.264	0.240	0.271	1.302
NR ₂	0.012	0.233	0.958	1.012
SAC ₂	0.193	0.218	0.376	1.212
TF ₂	-0.079	0.237	0.738	0.924
DHF ₂	-0.236	0.212	0.267	0.790

Table 8: Results of the Logistic Regression on the Model

Source: Doki (2012)

NIGERIA'S BACKWARDNESS: WHICH IS TO BE BLAMED, THE ECONOMY OR THE POLITY?

Terungwa Paul Joseph JATO

Abstract

The paradox of Nigeria's situation – a country rich in human and natural resources yet in poverty and generally underdeveloped – has left much to marvel. The situation seems to be getting worse even as more efforts are said to be channeled towards ameliorating it. Out of deep concern for the country and in attempt to proffering solutions to the problem, many arguments have ensued as to where actually the cause of the problem lies. Is it the state of the economy or the polity of the country that should be blamed? Many have wondered. It is in response to this wrangling debate that this work is done to elucidate what problems of a society are economic and those which are political and beyond this, identify which of these are responsible for Nigeria's predicament. A careful and in-depth review of theory was then done and juxtaposed with practical situation. This led to the conclusion of the paper that, Nigeria's conundrum is more of political origin than economic. Identified, among others, as the root cause of the problem is the misused and excessive level of government intervention in the economy. The work thus suggests minimal government intervention and the restructuring of the political process of the state as the way out.

Keywords: Economy, Polity, Politics, Nigeria, Backwardness

1. Introduction

One hardly say when and who started the description that eulogies Nigeria as "a country blessed with abundant human and natural resources", but it is still been heard. Added to this, is that which placed Nigeria as the "Giant of Africa". These are descriptions which, rather than being inspiring, now only remain as mere hopeful saying that can be liken to someone on a dying bed assuring himself/herself that 'it is well'. Undisputedly, however, is that, Nigeria as a State is endowed richly with necessary natural and human resources to provide for the wellbeing of every Nigerian. If these resources are properly exploited, effectively distributed and utilized to the benefit of every Nigerian, Nigeria would be among the most developed States of the world. However, the reverse is still the case. With its peak in the colonial era, the country's development progress has been on a constant decline. The country is progressing negatively.

Though there have been much efforts to revive the country and restore it to a path of development, nothing meaningful can be said to have been achieved. Reforms upon reforms have taken place in almost all sectors of the country but with minimal or yet-to-come benefits.

To make things worse is that, the complexity of the situation has made the identification of its cause(s) problematic. As such, in the quest to identifying and proffering solutions to this worrisome situation of Nigeria, there has been a lot of blame casting. While some see the economy as the root cause of our backwardness and from which a solution must emerge, others hold the polity of the country liable for whatever Nigeria's problem is. While most of those who are engaged in this debate are largely uninformed about the so identified causative agents – economy and polity – even those who are or should

be, sometimes misconceive and misuse these with regard to Nigeria's backwardness, thereby leading to misdirection of efforts.

It is, thus, to create enlightenment about what these (economy and polity) are and the problems associated with each and by so doing redirect the thoughts of all in this debate or who are saddled with that direct responsibility of proffering solutions to Nigeria's problem that this work became necessary. It is hoped that this paper would have equipped all stakeholders with the basic knowledge to properly identify the country's problems, which is the first and necessary step towards moving our country forward (since a problem identified, they say, is a problem half solved). The work is, therefore, organized under the following sections: the introduction; clarification of concept; politicizing of the economy; economic and non-economic problems; a brief overview of Nigeria's backwardness; our backwardness – economic or political; the way forward; and conclusion.

2. Clarification of Thematic Concepts

The problem addressed starts with misconception, misinterpretation and misapplication of some basic terms or concepts. As such, the basic duty was to start with the clarification of these concepts both from the technical and operational stand points.

Economy

An economy, in the words of Lipsey (1983), as contained in Anyanwu, Oyefusi, Oaikhenan and Dimowo (1997), is "any specified collection of interrelated set of marketed and non-marketed productive activities." An economy thus consists of the economic systems, the resources – labour, capital, and land resources – and economic activities of production, exchange, distribution, and consumption of goods and services of a country. It encompasses the large set of inter-related economic activities of production and consumption which aid in determining how scarce resources of the state are allocated.

Constitutionally, in Nigeria, economic activities include activities directly concerned with the production, distribution and exchange of wealth or of goods and services (Section 16(4)(b) of the 1999 Constitution of the Federal Republic of Nigeria). In this light, Yesufu (1996) sees economy of a nation as the conglomerate of different economic activities, within an identified geographical area; the characteristic of which is that, it is a supreme political entity under an overall national Government, and independent of all similar political entities. By this, he said, the Nigerian economy means the intricate web of all the economic activities that takes place within the nation known as Nigeria. He stated further that, the essence of a national economy is that the sovereign Government assumes the role of a holding company in respect of all the units of economic activity within the state. Economy in this wise is concern with the totality of the national wealth created through the various economic activities and how the wealth is distributed between social and economic classes (Yesufu, 1996).

From the forgoing, what makes an economy is then the aggregation of individual economic activities which stem out of their individuals' interests but end-up as social or collective benefits. With such activities, the economy is broadly divided into the producing unit (i.e., the supply side, made up of the business sector) and the consuming unit (the demand side, made up of the household) and it is regulated through the forces of demand and supply. However, sum it up, the economy is no different entity but an important lager component of the state which the state must control for its existence. As an important part (the base or sub-structure) of the state, the economy is said to perform certain vital functions. According to Joshi (1979), economists have identified five closely related functions performed by all economies, be they free-enterprise economies, or completely planned command economies or mixed economies. They must determine: (1) the amount and quality of goods and services to be produced; (2) the organization of production; (3) the distribution of the output among participants; (4) rationing of goods over time; and (5) provision for the maintenance and growth of the system. These are thus the

functions one should expect of the Nigerian economy, and along which the performance of the economy can be assessed.

A given economy of a state, however, is the result of a process that involves its technological evolution, history, political and social organization, legal, as well as its geography, natural resource endowment, and ecology, as main factors. These factors give context, content, and set the conditions and parameters in which an economy functions (Jato, 2012).

Polity

The term *Polity* (according to the Free Dictionary, 2012) involves the form of government of a nation, state, church, or organization. That is an organized society, such as a nation, with a specific form of government. It also means government or administrative regulation of a state or other organized community or body. Polity, thus, has to do with the form or process of governance of a society called the "political entity." It is, however, formed and regulated by the politics of the society.

Politics, as the fulcrum on which revolves polity, on the other hand deals much with the interrelations between individuals in a society. It is variously defined to connote acts of an individual or group of individuals leading to dominance of others. A common definition given by Lasswell sees politics as involving "the decision of who gets what, when and how" (Vande, 2012). By this definition he had, though recognized the fundamental economic problem of scarcity of resources amidst man's survival struggle, shown clearly that politics does not concern itself with how the goods of the state are created but how the created goods are shared by whatever means. Thereby pointing out that, man – as a political animal – scrambles to get the goods produced out of scares resources with all it takes and at the same time try to decide for others what share they get and when they will get it. With the problem of scarcity getting worse even as man is exploring and exploiting more deep into nature, and the unlimited insatiable wants of human ever increasing and ultimately turning into greed, the political nature of man is equally intensifying.

To all these, politics, especially as played by the less developed countries (LDCs) of Africa, cannot but be best described as a "dirty game." Where such dirty game is played the resultant effect is backwardness.

3. Politicization of the Economy

The economies of all societies have being evolving over time. From the traditional form through the classical (the free market, capitalist or the Laissez-faire) economy to the Marxist socialist economy and to the now mixed economy, the working of the economy has been tinkered with to take different forms. Up to the classical era, the independence of man as an economic agent was still recognized and adored, with the role of the state in economic activities greatly prohibited. In such an economy, the individual's right to choice making, guided by full information and the price mechanism, was highly revered. People's feelings were expressed through their demand and supply behaviours – what is known as the 'invisible hand'. With this invisible hand in operation, the economy was regulated and hence the welfare of the whole society.

However, the workings of such economy were criticized by the socialists and other schools of thought. This led to the practice of socialism by some states like Russia, China and Cuba, while the Laissez-faire economy was still been practiced by states like United States of America (USA). It was the little malfunctioning of the free market economy which led to the Great Depression of 1929-1939 that gave room for Keynes to advocate for government intervention. Little did he know the political mind-set of the 'governors', but thought of them as angels that will always act to the best interest of the individuals

and the society at large. By this, the government was to actively participate not only in inducing effective demand and invariably production but also in controlling the pace and direction of the economy. Since the advent of this Keynesian government-led (or public sector) economy, various form of government interventions have been practiced by different states. No matter the level of intervention, the adoption of Keynes type of economy has introduced into the working of the economy the political features of man – where the economic activities of a state are determined via the decisions of the political actors.

World over, the level of government intervention has been equally evolving, and has been in phases which are characterized by the prevailing situations. Adelman (1999) identified two phases as: 1) The Government as Prime Mover Phase. In this first phase, which lasted from 1940 to 1979, government was assigned a primary, entrepreneurial role. 2) The Government as a Problem Phase. This second phase, which lasted from 1979 to about 1996, was a continuation of the neoclassical "getting prices right" line of thought that saw government intervention as constituting economic problem.

Nigeria also went through such phases right from her pre-independence period. The economic activities of the country at the pre-colonial era were individually determined with less or no government intervention. They then became State dominate during the colonial era (which truncated our level and pace of development only to replace it with the imported western style and system of development that was antithetical to our cultures and traditions and way of doing things). The colonial government established some public enterprises to provide essential services like railways, roads bridges, electricity, ports and harbors waterworks, and telecommunication. Social services like education and health were substantially left in the hands of the Christian Mission. The government equally took charge of some of the productive sectors of the economy. However, the post independent era marked a watershed in the growth and spread of public corporations. Between 1960s and early 1970s (the period after World War II), the country, like most countries of the World, particularly the developing ones, is said to have undertook massive government intervention in the economy by establishing Public Enterprises (PEs), State-Owned Companies (SOCs), etc. Public enterprises were seen as veritable tools for achieving national social-economic development. At this period, the state was the major actor in the economy, determining economic activities of production, distribution and consumption.

Ake (1981), as contained in Maduphilo (2001), however, offered four reasons for this growth of public enterprises in the immediate post colonial period. The first reason has to do with the desire of the national petit-bourgeoisie which inherited political power from the colonial masters to create an economic base for its political power. Being essentially capitalists without capital, the petit- bourgeoisie used the instrumentality of the state to empower themselves economically, public corporation served as a conduit through which public funds were channeled to private pockets. The second reason has to do with the struggle by Nigerians for the control of the economy as well as the struggle for economic independence. Nigerian politicians felt that they had to build up enterprises that can compete with the foreign ones. Thirdly, some public enterprises were established as a means of promoting exports and to realize import substitution. Finally, some of the state enterprises came into being as a result of nationalizations of foreign owned private enterprises.

By the mid 1980s, private sector participation was again given the turn to be the lead sector of the Nigerian economy. This was formerly done by the introduction of the Privatization and Commercialization Decree of 1988 as part of the Structural Adjustment Programme (SAP) launched by the Ibrahim Badamosi Babangida administration (1985-93). This, in line with the main objectives of SAP, was to pursue deregulation and the divestment of government in economic activities. This then instituted in Nigeria a free market economy with reduced government control and intervention. Privatization then came to replace the country's overarching public sector and was largely aimed among other things at enhancing the efficiency of resource allocation and utilization in the economy. Though, currently, the private sector seems the leading sector in the economy, due to the fact that it had been weakened and is

still undergoing restructuring, the public sector still dominates, determining the pace of economic activities. Section 16(1) of the 1999 federal constitution of Nigeria reflects this stating that:

The State shall, within the context of the ideals and objectives for which provisions are made in this Constitution-

(a) harness the resources of the nation and promote national prosperity and an efficient, a dynamic and self-reliant economy every citizen on the basis of social justice and equality of status and opportunity;

(b) without prejudice to its right to operate or participate in areas of the economy, other than major sectors of the economy, manage and operate the sectors of the economy;

(c) without prejudice to the right of any person to participate in areas of the economy within the major sectors of the economy, protect the right of every citizen to engage in any economic activities outside the major sectors of the economy.

The problem of continued government intervention and public sector dominance of the economy may not be peculiar to Nigeria. This is due to the growing complexity of polity and the economy of nation-states which have made it difficult to disaggregate the two, because they are ever getting intrinsically and extrinsically interwoven and mutually interactive. This increasing close interrelationship between these has been such that in any given state, the collapse of one tends to portend the destruction of the other as it was the case with the then Soviet Union. As such, Arthur Lewis (1955) (cited in Yesufu, 1996) concludes that "sensible people do not get involved in arguments about whether economic progress is due to government activity or the individual initiative; they know that it is due to both, and they concern themselves only with asking what is the proper contribution of each." He then outlines the following nine categories of functions, worldwide, that governments perform which are relevant to economic growth:

- 1. Maintaining public services;
- 2. Influencing attitude;
- 3. Shaping economic institutions;
- 4. Influencing the use of resources;
- 5. Influencing the distribution of income;
- 6. Controlling the quantity of money;
- 7. Controlling fluctuations;
- 8. Ensuring full employment; and
- 9. Influencing the level of investment.

The sphere of state actions in the economy is, therefore, very vast and all pervading. This has made it hard to tell which problem of the state emanates from the working of the economy and which is as a result of political miscalculations.

4. Economic and Non-Economic problem

An Economic Problem

The much of the problem lies with determining what really an economic problem is. When we talk of economic problem(s) what comes to our mind? Does it mean the problems an economy (as defined above) faces as hindrance to its functioning? Or those problems to a society caused by the working of the economy? These have been a lot confusing to many thereby causing the contradiction.

Traditionally, the basic economic problem of a society is that of scarcity of the goods of life, by which decision-making about their allocation, management, and utilization becomes essential. By this, an economic individual of the above qualities seeks to make decision about what, how and for whom to produce and consume. Thus, it is the problem associated with the allocation, management and utilization of these scarce resources reflected in the various decisions which determine the economic activities of an economy that makes economic problem of a country. This problem then reflects in the imbalances between the supply and the demand sides of the economy. Emanating from this are problems like inflation and unemployment (i.e., of all resources).

In a pure economy, such economic problem can be better resolved by the economic individuals, where the "invisible hand" of demand and supply working through the price (market) mechanism regulates their economic activities. And by this, it is believed the economy though working independently will always be in a state of equilibrium. According to Ogiji (2004):

Because market forces, according to the proponents of the market mechanism, operate freely, i.e., they are not influenced by some other forces or agencies, the outcomes of their interactions are said to be the best for the society: the resulting pattern of demand reflects the preference of consumers, the productive activities that are undertaken reflect the wishes and desires of the people and the prices that consumers pay for goods and services they wish to consume reflect the true cost to the society of the factors that have been employed in the production of the relevant goods and services. In this way, the market mechanism is said to operate impersonally to meet the need of the society.

Afolabi (1998) adds that:

The price system operates in an impersonal manner and therefore eliminates corruption, nepotism and favouritism that are always common in planned economies. The individual gets his reward in the society not because of his personality, sex, tribe, social or religious connection but solely on the basis of the economic resources he owns, i.e., his productivity in the economy.

These self-regulating forces are seen even to be able to correct other economic imbalances like unemployment, inflation, etc, and bring about efficiency in resource allocation and usage and general economic progress.

Poverty, which has been erroneously ascribed as an economic problem, is not wholly an economic problem but of a multivariate origin. It is based on these multi-causative factors that Meghani (2003) maintained that, deciding what poverty is unsurprisingly opens up a complicated debate. He asserts further that, normative values inevitably distort the process that decides what economic and social factors should describe the "poor." Human deprivation can take myriad forms, including, but not limited to, lack of income, shelter, clothing, and food. To some, being free from poverty also includes possessing a set of rights such as the freedom of religion, movement, and speech (Meghani, 2003).

It then means that, most of the other problems (not belonging to this category) usually perceived and taken as economic problems are likely those affecting the performance of the economy rather than those emanating from the working of the economy. They are likely problems to the economy from other aspect of the society arisen out of the non-economic behaviour – basically political – of man, and not problems from the economy to the society as a result of man's economic behaviour.

Non-Economic/Political Problems

Far from the economic problem(s) of the society lie the non-economic problems, which are most time erroneously woven into economic problems to the society rather than from other constituents of the society. These are problems of non-quantitative variables in development, which are most times neglected. Todaro (1977) noting the existence and importance of these stated that, "just as economists sometimes make the mistake of confusing their 'science' with universal practices, so they do also often mistakenly dismiss these non-economic variables as non-quantifiable and, therefore of dubious importance."

Problems like poor leadership, corruption, non-provision and maintenance of basic infrastructure, etc, are non-economical but are political accompanies of government regulated economy. These are not regulated by the forces of demand and supply, but by government authorities external to the decisions of the economic agents – consumers and the producers. But they, as equally or more than the economic problems, determine the pace of development of a state.

5. A Brief Overview of Nigeria's Backwardness

Our backwardness and the pains associated with it need no much effort to elaborate. The story of this can only but be told to a foreigner on first visit to the country who has probably not heard of it before. It is a common story told by all no matter the level education, location, status, age, etc., and in all forms – scholarly write-ups, public lectures, music, poems, sermons, etc. No matter who tells this story or how it is told, it is hard to believe that, hopes upon hopes, Nigerians, since independence, have been waiting for dividends from their naturally endowed country to the point that these hopes seemed dashed to the extent that most people are fast regretting been nationals of this 'great country.' According to Ajayi (2003), "the beautiful dream that many had and pursued in the interest of their country had turned into a nightmare. Nigeria, a country with rich human and natural resources, is still poor and termed underdeveloped." He notes further that:

At independence, the economic and political prospects of Nigeria were very bright; it was thus a very welcome member of the comity of nations. The country started modestly, parading mainly agricultural products on which its reputation and revenue depended. Still in the 1960s, a deluge of Nigerians went abroad on one scholarship or the other with the hop of coming home to build a new nation. At that time, people went to bed literally and dreamt big dreams of a better tomorrow for themselves and their nation. This contrast sharply with the reality of today. (Ajayi, 2003).

Obasanjo, the then President, in a press report (the Guardian, 2003 in Ajayi, 2003) stated that: "the problem with Nigeria is that since independence, when we move a step forward, moved sideways in another step, we then move backward three steps, as such we move further backward than we move forward." In the same way, Akinkugbe (2003) as cited in Ajayi (2003), asserts that, "the four decades of Nigeria's political independence have witnessed a steady decline in values, quality of governance, commitment and the integrity of our environment. Arguing further that our society has become negatively permissive and much passes for norm today that would have caused a rising of eyebrows in yonder years."

Nigeria is ranked 14th and in the Alert category of the Failed States Index¹ of the United States think-tank Fund for Peace (Foreign policy, 2012). There is poor business environment. According to the Doing Business Index, Nigeria is ranked, on aggregate, 125 out of the 183 economies assessed (Oteh, 2009). There is high poverty level, low human development index (HDI), high unemployment,

¹ Common indicators of a failed state include a state whose central government is so weak or ineffective that it has little practical control over much of its territory; non-provision of public services; widespread corruption and criminality; refugees and involuntary movement of populations; sharp economic decline.

corruption, etc. According to the figure by the Statistician-General of the Federation, about 20.3 million Nigerians are currently jobless and not employed in any form of job (Mohammed, 2012). On the 2010 United Nations Human Development Index (HDI), Nigeria is ranked 159 of 178 countries - lower than Togo, Ghana, Senegal and Gambia (Mohammed, 2011). The United Nations' 2011 World Development Report shows that Nigeria has low human development with a HDI of 0.46.

The provision and maintenance of basic infrastructure, which is the responsibility of the state, have been lacking or grossly inadequate thereby affecting economic performance particularly that of the industrial sectors.

These negative indices, among others more daunting, all point to the fact that the country is still backward and far from meeting the aspirations of the people by providing a level playing ground for their economic activities. As such, economic progress of the country has been low and undiversified with the oil sector providing the dominant economic activities and about which much of the politics revolves. While the growth of the oil sector has afforded the government much needed revenue, with oil revenue represented about 90 per cent of foreign exchange earnings and about 85 per cent of total exports, it also created serious structural problems in the economy, especially where the revenue from the oil sector is not channeled into the development of other sectors of the economy. The dominance of oil has affected the agricultural sector adversely.

6. Our Backwardness: Of Economic or Political Origin?

Nigeria, as we know, operates a mixed economy with government control and participation making a greater share of the mixture. By this, much depends on government policies and actions. From the provision of an enabling environment – provision and maintenance of infrastructure, maintenance of law and order, etc – to the direct control of and participation in the economy, the government determines greatly the pace of the economy. Therefore, the private sector (including the shadow economy) is just but a small and weak sector depending so much on the public sector, and made so by the polity of the state. Thus, with an active public sector which is within the dictates of political actors and a weak private sector ruled by the economic laws, much of the quagmire Nigeria finds herself in now can only but be politically explained. The economy is only but an indicator of the performance of the political system. We can buttress this further as follow, keeping in mind what problem is really of economic origin and that which is political.

Recall that Nigeria is said to be a country richly endowed with both human and natural resources. This means that, relatively, Nigeria has, above other countries, what it takes to develop; by which one can be right to say that Nigeria is facing less, comparatively, of the economic problem of scarcity than other states. This partially eliminates the principal economic problem of scarcity.

With a population of over 150 million people at an estimated growth rate of 4%, with an active business sector, and the government sector, the problem of low aggregate demand also barely exist. Even at the heat of the global economic melt-down when there was a decrease in demand, Nigeria was said to be insulated. This equally eliminates any economic problem due to low demand for good/services. In terms of the supply, aggregate supply (expressed in terms of gross domestic product – GDP) has been on the increase with little downward fluctuations. Production at the various sectors has shown such increase. A look at the output of the agricultural, manufacturing sectors, and other productive sectors clearly shows this.

The problem of unemployment, which is more pronounced with reference to that of human resource, is due to the inability of the productive sector to expand, which in turn is due to the failure of the state to provide the needed business environment for its expansion. As such, unemployment is much of an economic consequence of other non-economic variables than a cause from the economy. This can be better understood with a review of the types and causes of unemployment in Nigeria. Dike (2011) commented on this issue saying:

The political leaders have always raised the people's hope by painting glowing picture of their development plans and how to take the nation to the 'Promised Land' of true democracy and economic prosperity. They swore that citizens' empowerment would become their top priority yet they refuse to fix the infrastructure and institutions that would propel the economy and create employment for the millions of graduates churn out by the educational institutions yearly.

In Nigerian, the causes of poverty are rather much associated with polity than the economy. The Nigerian Institute of Social and Economic Research (NISER) (2003) contends that, two critical issues have remained outstanding in the understanding of poverty in Nigeria. The first is the impact of good governance on socio-economic and political development. Stressing that, it is noteworthy that of all the diseases that are fatal to the poor, none is lethal than poor governance as political and economic dictatorship frequently leads to poverty more than any other thing. The second is noted as the lack of consultation and citizens' involvement in programmes for which they remain the target and beneficiaries. The foregoing thus invalidates poverty as wholly an economic problem hindering the development of Nigeria.

Exonerating the economic factors, Thisday Live (2011) has it that, "Nigeria cannot be said to lack resources. No. It is one of the richly endowed countries in the world. It cannot be said to be poor at development planning. Certainly not! There are enough of that, old and new, in files of various ages in the Ministries, Departments and Agencies (MDAs). And for economists, there is no need to ask because it has some of the best and the brightest." Whatever is the problem can then be said to lie outside the purview of the economy.

On the political front, much can be said to be wrong. First and foremost, the size and extent of government in our form of mixed economy is in itself problematic. Immense participation of government in the economy and making economic decisions of what, how and for whom to produce has greatly replaced economic spirit of doing things with political spirit of nepotism, favoritism, sectionalism, influentialism, etc. With these as guiding principles, public policies are formulated and the economic regulated. Ayida (1987), observing in this line, identify five categories of advisers and pressure groups associated with the determination of public policies and which benefit from such policies in Nigeria since 15 January 1966. These he mentioned as:

- 1. Public officers, university dons;
- 2. Political appointees, notably civil commissioners;
- 3. Other members of the Armed Forces:
- 4. The private establishment such as church leaders, trade unionists, and captains of industry and employers; and
- 5. Personal friends and confidant(s).

No longer is it by the needs and demands of the people that societal benefits (in form of goods and services) are supplied. Getting the benefit of any regime of governance in Nigeria so much depends on how closely related or influential one or a group is to the government. This, no doubts, portrays a picture of an economy not working through the forces of demand and supply.

Still as a problem of the over dominance of the public sector in Nigeria's economic system, the polity, through policies, programmes and projects, determines the spread and pace of development in the state. By this, the rural areas with a greater percent of the land mass and inhabiting equally greater proportion of the population are still in poverty and backward, whereas few locations are urbanized and accommodating the few privileged elites or ruling class. This, in Nigeria, is much of a political problem

than economic. Development of areas outside the seats of power depends so much on who has the political connection or influence to woo and win government projects to his/her area. The siting of even economically productive projects is not based on economic factors like availability of resources, demand, etc, but as the powers that-will-be so decide. Akor (2001) had earlier on pointed this out when he argued that:

Since independence, Nigeria's socio-economic changes, goals and other social responsibilities have been channeled through the colonial administrative structures. The result have been either a total lack of progress in the key sectors of the economy in spite of huge annual capital outlays or at best, a disjointed and checkered developmental patterns abundantly evidenced by uncoordinated and unevenly spread projects and programmes.

The over reliant of the government on the oil sector for its revenue is another political blunder that has not just negatively affected the performance of other sectors of the economy but has brought with it a legion of political, economic and social problems that are serious huddles to the country's development path. From the neglect of agriculture to the regulation of production and pricing of petroleum products down to the social crisis of the Niger-Delta region, the choice of oil as the plank on which Nigeria will cross to the world of developed countries has rather brought her miseries of food insecurity, unemployment, urban population explosion, oil theft, oil subsidy problems, resource control struggles, corruption, poverty, illnesses, death, and general underdevelopment. Crude oil mixed with crude political minds has thus not just produced a crude economy but the crudest state – Nigeria.

Ineffective leadership (otherwise known as bad governance) is equally a political factor militating against our effort to develop and thus setting the state backward. Manifesting in all aspects of the state – political, economic and social – bad leadership has accounted for the failure of most institutions and the root cause of social, economic and political problems of Nigeria. According to Dike (2011), the state of Nigeria is defined by the ineffectiveness of the political leaders and poor social institutions that have crippled the economy and pauperized the people. He decried that, the leadership problem that has confronted Nigeria since independence appears to be worsening because the state of the polity is rapidly deteriorating. Adding that, very few of the leaders, if any, work for 'common good.' Over the years a wave reform programs have been undertaken but the society lacks political leadership committed to implement them to address the problems facing the economy (Dike, 2011).

Another notable political problem is also that of the dislocation of the country into sub political units which has negatively affected the development of the country than the intended positive benefits. This has rather instituted disunity and unhealthy competition among the sub-units and between the subunits and the center. Worst of sub-division is the division into north and south as reflected in the creation of the six geo-political zones. This factor has caused serious setback in our development agenda. The north-south issue in Nigeria has transcends beyond who will be the president to basic economic problem of resource allocation. Each region wants to control the exploitation and utilization of its resources and the federal government as it has been. This has brought with it unhealthy agitations (resulting to formation of all forms of social groups) that are detrimental not just to our development programme but to our national unity.

Corruption and greed (the Nigerian factor) have equally made way to the top of the causative problem of the country. Obasanjo, in the same media stated above, had also contended that "corruption, lack vision and waste are responsible for Nigeria's underdevelopment," adding that "our problem is like a water tap that has a closet. While some people are turning the tap for water to run, others are busy leaving the base of the closet open, thus making the filling of the closet an impossible task" (Guardian, 2003 in Ajayi, 2003). Corruption and greed are manifestations of the political nature of man which does not take

cognizance of the wellbeing of others as blindfolded by selfishness. It is due to this corruption that most institutions of the state are near collapsing.

Another issue to be considered as a political problem is the failure of policies, plans, programmes and projects. Agreeing with Ayida (1987), what has gone wrong in Nigeria's state affairs is not so much the formulation of development plans and policies, but the way and the manner in which those plans and policies have been executed. Lofty policies and action plans are put in place with the picture of national development but the implementation has always been the case. For instance, from the 1970-74 national plan's five objectives of fostering a: United, strong and self-reliant nation; Great and dynamic economy; Just and egalitarian society; Land of bright and full opportunities for all citizens; and Free and democratic society to the 7-Point Agenda of the Yar'adua administration down to the transformation agenda of the present administration, nothing can be pointed to as the outcome of such plans, policies or programmes. Even where government policies are implemented without flip-flops, according to Thisday Live (2012), leakages through large vents of corruption make the projects not to be completed or they are not completed on time and budget. This failure in the implementation process, due basically to lack of the common will, has retard our development process in no small measure.

The collaboration that permits the meddling of the international bodies into Nigeria's state of affairs, including economic affairs, is also another political problem that is keeping us backward. From the colonial era to date, Nigeria has been greatly influenced externally. Due to weakness and selfish interest of the political actors and ruling class, the economy and other aspects of the state are unprotected from the dictates of external beneficiaries. In Nigeria, according to Akor (2001), both the economy and the state are being run by the indigenous bourgeoisie with the active collaboration and manipulation of international capital, particularly the multinational corporations who are the primary beneficiary of the exploitation of Nigeria's neo-economy. To Anger (2002), the colonial rulers in Nigeria socialized the Nigerian political leadership in an authoritarian form of governance by monopolizing economic and political powers in their own hands for their interest and of the foreigners. Akor (2001) likewise noted that, "the post-colonial administrative structures were basically designed as instruments to facilitate the political control and effective exploitation of the economic resources of Nigeria in the interest of the imperialist countries. This posture differs substantially from those of their counterparts elsewhere in the advanced countries." He lamented that "the primary contradiction between the Nigerian bureaucrats and the Nigerian masses is that the Nigerian bureaucrats are a willing and active collaborators with the foreign imperialist forces to deprive the overwhelming majority of Nigerians the fruits of their labour" (Akor, 2001) With this kind of a state of affairs, one doubts if Nigeria can progress, where such is not the intention of the international dictators.

7. The Way Forward

As Rodney (1972) pointed out, "a society develops economically as its members increase jointly their capacity for dealing with the environment." Onucheyo (1998) argued in a similar way when he asserted that:

The tragedy of underdevelopment is not that the ordinary people have remained poor or are becoming poor, but that they have been inhibited from developing as human. The elites have taken over the right to develop society and by this very act and claim distorted the natural and profound notion of development. For no one can develop others — one can only stretch or diminish others by trying to develop them.

These statements all points to the simple fact that, for a people to development, much depends on the individual participation of all in the society. That is, the freedom of the individual to make choices and determine their needs must be respected. As Sen (1999) has noted in Dike (2011), is reported to have noted: 'unfreedoms' leave the people with little choice to exercise 'their reasoned agency.'" He posits that

"freedoms are not only the primary ends of development, they are also among its primary means." Therefore, development (social, political and economic) "requires the removal of major sources of unfreedoms." By implication, for Nigeria to move forward, the individuals via the forces of demand and supply must determine their development. Less of government interference in the basic economic activities will be of much help.

The above does not invalidate government interference in the economic affairs of the state to the point of total elimination of political process in the development of state, but rather, a reformation and restructuring of the political process. This is because, the polity of the state remains vital in the development of the state. The words of Wharton (1976), as cited in Onucheyo (1998), clearly explain this, saying:

When I look at the key world development issues – food-policy, distributive justice, resource 'wars' – over the next 25 years, I have concluded that most solutions will be rooted in the ability of the political processes, both national and international, to deal with them effectively. And remember that if political process fails to deal with these basic human issues of hunger, and survival, the inevitable alternatives will be grown interpersonal violence, domestic upheaval and wars.

Still to emphasize the importance of role of the polity, Ayida (1987) had claimed that:

Our recent experience has demonstrated that there will continue to be need in this country for a vigorous and substantial private sector for some time to come. But the efficiency of the private sector depends on the existence of an efficient public service; not only in terms of the provision of infrastructural services and utilities but also because of the ability of the High Civil Service to respond to complex needs of industrial and commerce in the private sector.

Arthur Lewis (1955) in Ayida (1987) equally points out that: "if a community is fortunate to have a good leader born at a crucial time in its history, who catches the imagination of his people and guides them through a formative experience, he will create traditions and legends and standards which weave themselves into the thinking of his people and govern their behaviour through many countries..." What is required, as such, is the restructuring of the polity of the Nigerian state, its political process, reformation of the political actors, prioritization of the citizenry above the interest of the few ruling class, etc. By this, the state will be better repositioned to perform effectively its role in the development of the country.

8. Concluding Remarks

The politicizing of the economy through government intervention has not been much of a blessing to Nigeria. The mixed economy of Nigerian type with much government interference in the economy has not worked in favour of the country. The country still lags behind its counterparts in terms of development. This backwardness of the country, though glaring and generally accepted, the identification of the root cause of the conundrum is still problematic. Whereas the economy has often been at the forefront of the factors responsible for this state of backwardness, the polity of the state is equally highly blamed. A careful look at the situation has thus led us to the conclusion that, much of the problems that have kept Nigeria backward stem from the polity of the state rather than from the working of the economy. The perceptions of many that the economy is the root cause of Nigeria's underdevelopment are thus erroneous and are due to lack or insufficient knowledge to differentiate properly what constitute an economic problem.

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DIVERSIFYING ENERGY SOURCE: A PROSPECT TO ACHIEVING STEADY POWER SUPPLY IN NIGERIA

Kyarem Richard Ngusha Department of Economics and Development Studies Federal University Dutsinma Katsina State.

Abstract

Apart from land, labour, capital and entrepreneur, constant and steady electricity is the fifth modern day indispensable factor of production and hence inevitable for the development of any country. The rate of consumption of electricity is directly proportional to the production level and growth of any country. The study also examines the source, service delivery and problems associated with the present insufficient hydro power supply in Nigeria. Using secondary data, tables and graphs, the research discover that the demand for electricity in Nigeria in the past decade, outstrips the supply; and that the level of electricity production in Nigeria determines the rate of growth of GDP. The study postulates diversification from hydro source to alternative sources of solar and wind because the wind and solar sources are more abundant in Nigeria, cost less and are prone to lesser socio-political interference and restiveness. For programme implementation, the paper recommends a public – private sector collaboration based on a sound legal framework and a national resource survey. The author believes a carefully planned and executed diversification programme will translate Nigeria from an electricity-epileptic power country to that with a constant and consistent power supply and hence a basis and stimulus to growth and development.

Keywords: Energy, Electricity, Electricity Production, Electricity consumption, Scarcity.

1. Background

Energy affects all aspects of life. "Without energy, the entire industrial infrastructure of the world would collapse. Much of the conveniences taken for granted are powered by energy. Energy allows us live under diverse climatic conditions, in great numbers and often in comfort" (Agboegbulem, 2008). There is a good correlation between energy consumption and economic development; higher per capital energy correlates with a higher score on Human Development Index (IEA, 1992).

Development is a process of energy resource exploitation. The higher the level of development, the higher the demand for energy resources and consumption. Inadequate energy supply will put an unavoidable constraint on industrial output, distort artisantry and limit social activities thereby breeding many macroeconomic problems with the resultant high social and economic costs. (Nnanna et. al. 2003).

Nigeria is blessed with both renewable and non-renewable energy resources. The non renewable resource includes crude petroleum, natural gas, coal, tar sands and uranium. The renewable energy resources comprises of solar radiation, biomass, hydro and wind energy. Despite these, the electricity generation in Nigeria is abysmal and can hardly sustain any serious social or industrial adventure. This is regardless of Nigeria's abundant sources of electric-energy.

The African desert gets a lot of sun. The intensity of the sunlight pressing down on that desert makes the area ideal for generating solar power. Plans along this line were conceived in 1913 (by American Engineer Frank Shuman), and again explored in 1986 (by German Particle Physicist Gerhard Knies). They believed the solar energy harvested a few hours in the African Desert could power the whole world for a year (Michelsen, 2011). Nigeria by her privileged location at the fridge

of the Sahara stand the advantage of exploiting massive solar energy before *Desertec* harvest it for the world.

Electricity generation began in Nigeria in 1896 under the British colonial administration. The localized and rudimentary power generation and distribution system led to the development of the Electricity Corporation of Nigeria (ECN) in 1950. The first 132KV line was constructed in 1962 linking Ijora Power to Ibadan Power station. After independence, the Nigeria Dam Authority (NDA) was established in 1962 for the development of Kainji Hydro-Electric Project and some associated 330 kilovolts (kv) transmission lines and sub-stations which were completed in 1969.

The ECN transformed into the monopolistic National Electric Power Authority (NEPA) in 1972 (CBN, 1998) and until 2005, Electric Power Sector Reform Act (EPSR) repealed the NEPA Act and established Power Holding Company Nigeria (PHCN). The Act further provided for the creation of Successor Companies from PHCN and 18 Successor Companies compromising eleven distribution Companies, six generation Companies and one transmission company has since been created. All these are meant to ensure optimal energy resource use and steady uninterrupted electricity power supply which has remained a mirage till date.

The objective of this paper is to review the electricity situation in Nigeria, identify the various forms of energy available in Nigeria, examine the problems associated with the present energy regime and suggest the possibility of an efficient diversification of energy source from thermal and hydro source of power to wind and solar electricity supply. Following this introduction, section two presents the theoretical framework; examine the source, supply and problems of electricity in Nigeria, section three deals with solar energy and wind energy potentials in Nigeria. Section four present the advantages of wind and solar energy while section five concludes by providing recommendations for the implementation of the diversification process.

2.1Theoretical Framework

This work is based on the economic principle of scarcity. Essentially, the concept of scarcity means limitedness of resources in supply relative to the demand for them. There is scarcity of most resources needed for human satisfaction and national development. Many of these resources are natural like land while some are man-made like money. Lipsey (1985), acknowledging Adam Smith, viewed scarcity in terms of money and quotes that "No complaint is more common than that of scarcity of money". Robbin Williams in Lipsey (1985) viewed that "ends are scarce and wants are unlimited". One obvious reason for the non-satisfaction of unlimited wants is the scarcity of means at the disposal of mankind. The time and means available for satisfying these ends are scarce or limited. The ends are of varying importance, which necessarily lead to the problem of choice or selecting the uses to which scarce resources can be put to" (Jhingan 2007).

It is increasingly becoming clear that two basic resources necessary for development in today's world are technical acumen or technology and electricity. For most countries, these resources are either in smaller quantities or hardly available and hence scarcer than the demand for them. The scarceness of these factors that facilitate production and necessitate increase welfare and development varies from country to country (Lipsey, 1985).

The issue of scarce resources is made the more interesting because these resources have alternative uses and for maximum utility, alternative uses must be carefully identified and analysed for the best choice to be made. Scarcity consequently gives rise to choice. Choice therefore may be seen as the act of selecting from alternatives. The economists therefore, chronicles the alternatives in the order of priority and on the basis of the ability to implement, create the facility or demand. This list is called the scale of preference.

Electricity plays an important role in the development of any nation. The rate of energy consumed by any nation is directly proportional to the rate of production and consumption and subsequently the rate of economic development. The electricity demand in Nigeria far outstrips the epileptic supply. Thus energy, which is a scarce resource in Nigeria should be considered a national priority on the national scale of preference.

2.3 Source of Hydro Electricity in Nigeria

Nigeria is endowed with abundant water resources. Annual rainfall decreases from 3400 mm depth in the south central shores of the Niger Delta to 500 mm over the northern boundaries of the country, with a perched increase to 1400 mm over Jos Plateau region. Similarly, the eastern ranges of Adamawa and Cameroon boundaries experience elevated precipitation as high as 2,000 mm relative to contiguous low areas of the country. Rainfall duration is longest in the south and decreases progressively northwards. In the southern areas, precipitation lasts over eight months of the year, whereas, at the extreme north annual rainfall duration can be less than three months. It is clear that the country is blessed with a huge hydropower potential (Okoro et al, 2004).

The current installed electricity capacities in Mega Watts are the Kaiji (760), Jebba (540) and the Shiroro (600). Other hydro power stations in the country are; Zungeru (500), Lokoja (1950), Markudi, Katsina-Ala (600), Mambilla (1000), Jamtari Bali (253), Ikom (400), Dasin-Hausa (350), Manya, Onitsha (750), Afikpo (180), Atan (180), Sutai (45), Langalanga (100), Kam (115) and Gurara (10) etc. The thermal power stations include; Egbim, Sapele, Detta, Onitsha (Obosi), Afam Oron and Makurdi.

A census of estimated resource base from National Electric Power Authority's outstanding total exploitable hydro potential stands at 12,220 MW in the 2000s. Current hydropower generation is about 14% of the nation's hydropower potential and represents some 30% of total installed grid connected electricity generation capacity of the country. (Manohar & Adeyanju, 2009)

Independence power generation is uncommon in Nigeria. The Nigerian Electricity Supply Corporation Ltd. (NESCO), Jos exists. NESCO projects were completed between 1923 and 1964 and have continued to provide virtually uninterrupted power to not only supply the Jos metropolis and meet local consumption, but also feed into the national grid. NESCO operations are a clear example of a very successful Independent Power Production (IPP) that should be replicated in other parts of the country. It should be noted though that, the database on small hydro in Nigeria is quite limited, incomplete and substantially obsolete. In the economic competitiveness, the IPP of hydro source of energy is well placed. Although the small hydro may require a moderately high capital cost, its low operation and maintenance (O and M) requirements coupled with long life spans are its major advantage over other prospective sources of power to small and medium sized local communities and settlements.

The petrol/diesel generators which may be installed at a relatively moderate cost are prone to such serious limitations as unreliability of fuel supply, frequent breakdown, high O and M requirements, short service lives, noisy operation and environmental pollution. (National Energy Plan Vision 2010). They are however becoming very popular for obvious reasons in Nigeria.

The economic value of small hydro schemes would be further enhanced when more units come on stream, local service areas are established and system components, operators and managers are predominantly locally trained. Their Economic competitiveness would increase and improve with more use (Small Hydropower Technology, 2004).

2.4 Electricity Situation in Nigeria

Nigeria is endowed with massive energy resources. She is the world's sixth largest reservoir of crude oil, with proven reserves of nearly 5000 billion cubic meters. Coal and lignite reserves are estimated to be 2.7 billion tons, while tar sand reserves represent 31 billion barrels of oil equivalent. Identified hydroelectricity sites have an estimated capacity of about 14,250 MW. Nigeria has significant biomass resources to meet both traditional and modern energy uses, including electricity generation. The country is exposed to a high solar radiation level with an annual average of 3.5 - 7.0 kWh/m2/day (Federal Ministry of Power and Steel 2009).

The current installed capacity of grid electricity is about 6000 MW, of which about 67 percent is thermal and the balance is hydro-based. Between 1990 and 1999, there was no new power plant built and the same period witnessed substantial government under-funding of the utility for both capital

projects and routine maintenance operations. Generating plant availability is low and the demand – supply gap is widening. Poor services have forced most industrial customers to install their own power generators at high costs to themselves and the economy. By 2005, the transmission network consisted of 5000 km of 330 kV lines, and 6000 km of 132 kV lines. In addition, there were 1,790 distribution transformers and 680 injection transformers. The transmission network is overloaded with a wheeling capacity of about 4,000 MW. It has a poor voltage profile, inadequate dispatch and control infrastructure, radial and fragile grid network, frequent system collapse and exceedingly high transmission losses. PHCN's business operations are inefficient. The system suffers from chronic under-investment, poor maintenance, un-recorded connections and under- billing arising from a preponderance of un-metered connections. The utility's financial performance, as well as its ability to serve customers satisfactorily has been consistently poor. Access to electricity services is low. About 60 percent of the population i.e over 80 million people are not served with electricity. (Federal Ministry of Power and Steel 2009).

Summarising the situation in terms of electricity production, the CIA (2013) asserts that electricity production by source in Nigeria is 61.9% fossil fuel, 38.1% hydro, 0% nuclear and 0% others. Nigeria's modern sector is powered by the 38% hydro source. This depicts that nuclear, solar and wind sources of energy are untapped in Nigeria.

Year	Prd	Con	Dis	GDP
2000	14.75	13.72	1.03	43.46
2001	18.7	17.37	1.33	3.12
2002	15.9	14.77	1.13	46.29
2003	15.67	14.55	1.12	22.78
2004	15.67	14.55	1.12	34.45
2005	19.85	18.43	1.42	27.7
2006	15.59	14.46	1.13	27.4
2007	19.09	17.71	1.38	11.27
2008	22.11	15.85	6.26	17.62
2009	22.11	15.85	6.26	2.05
2010	21.92	19.21	2.71	6.58
2011	21.92	19.21	2.71	8.85
2012	20.13	18.14	1.99	

Source: CIA World Factbook. (2012)

Where Prd = electricity production (This is the annual electricity generated expressed in

kilowatt-hours); Con = electricity consumption (This is the total electricity generated annually plus imports and minus exports, expressed in kilowatt-hours) and Dis = discrepancy between the amount of electricity generated and the amount consumed and is accounted for as loss in transmission and distribution.

It is obvious from table 1 that the amount of electricity produced in Nigeria is consumed. Except for 2008 and 2009, the discrepancy between the amount of electricity generated and the amount consumed is insignificantly less that 13% of production. This shows that it is production that determines the quantity consumed of electricity in Nigeria. Thus, a shortage of electricity supply is due to insufficient production from a mono-cultural base.

Figure 1: Annual Electricity Production, consumption and the Disparity



% change

Source: Author (from table 1)

Where series 1 = electricity production; series 2 = electricity consumption and series 3 = disparity.

Observing the electricity production, consumption and their disparity on graph show positive linearity of production and consumption. Production and consumption follow the same trend and the disparity is almost constant except for 2008 and 2009 which depicts a higher than normal loss due to militia and excess vandalisms. Seeing that almost all that is produced is consumed, and is unable to satisfy the over 140 million Nigerians; and that produce is zero % nuclear, solar and wind, there is obviously a serious need for diversification if the demand for electricity must be satisfied in Nigeria.

It is clear that electricity production determines its consumption and is related to output or GDP annual rate of change in Nigeria but in a one year lag form. A rise in electricity production gives rise to an increased GDP in the year that follows. The below graph demonstrates this





Source: Author (from Table 1)

It can be observed that a low electricity output in 1999 results to a minimum of below 5% annual growth in 2001. A slight rise in electricity production in 2001 give a corresponding increase to a global maximum output of over 45% annual GDP increase in 2002. This logic is visible through most of the years until in 2008 when the electricity production was almost constant while GDP growth rate declined and started increasing from 2010. Here GDP is not constant like electricity because other factors like the activities of militants became wild and wide and seriously undermined the production activities in Nigeria. It is however clear that electricity production and output are positively related in Nigeria.

Following the deplorable state of hydroelectricity supply in Nigeria, the government to do 3 things: privatized the PHCN Distribution Companies (DISCOs) to core investors - 10 indigenous firms, sign a 3 year contract with Manitoba Hydro of Canada for repositioning of Transmission Companies of Nigeria (TCN) and facilitate a power and gas financing package which includes government guarantees and a proposed infrastructure bond of \$i billion (Federal Ministry of Infrastructure, 2012). Enormous efforts, which perhaps if channeled to other sources of electricity production, are enough to guarantee steady and consistent power supply in Nigeria.

.2.5 Problems of Hydro, Thermal Source of Electricity in Nigeria

One inevitable problem is **environmental violation and pollution**. Hydroelectric plants customarily disrupt the original environment and ecology because they significantly alter the landscape or riverscape around them – the chemical reactions produce sulphur oxides, heavy metals, radio-active elements, hydro carbons and large quantities of carbon dioxide emitted subsequently leads to acid rain.

The output of the hydro plants is highly oscillatory according to the seasonal droughts. The large hydropower plants in Kainji, Jebba and Shiroro except for 2012 have produced significantly lower energy as a result of low water levels in their reservoirs due largely to excessive drought in the past decade (Eleri, 2007; Okoro et al, 2004).

Where series 1 = electricity production and series 4 = GDP growth rate

Another problem is **Greenhouse Gases and Oxygenated Depletion**: When a reservoir is first impounded and the area flooded, the submerged plants decompose and release their carbon content in the form of the greenhouse gases CO_2 (carbon dioxide) and methane (CH₄) (Pinguelli, 1995). For every per unit of electricity generated, some reservoirs produce more equivalent units of CO_2 than a fossil fuel power station. The dissolved oxygen from the water and the CO_2 make the subsurface water hostile to aquatic life. (Gabriel, 1997).

The problem of **Methyl mercury Contamination** also exists. The reservoirs allows some toxic chemicals to leach into the water supply. The portable water mix with the mercury in the rock bed to form methyl mercury, which when accumulates in fish results to mercury poisoning to all consumers of the fish (Raphals, 1992). Also the pollution is aggravated in Nigeria because the river Benue and Niger is fed essentially by the Cameroon and Senegal sources.

Floodplain and delta regions contain very fertile farmland due to sedimentation which leaves rich nutrients and minerals, rejuvenating the farmland with each rainy season. However, floods from water released from dams could cause massive damage to people as witnessed recently in Nigeria. An associated problem is the Reservoir Induced Seismicity (RIS), which is the change in seismic activity that often occurs when large reservoirs first begin to fill. (McCully, 1996) Normally, increased seismic activity alters the environment leading to major damages to the usually fragile buildings of the poor riverside people.

There is technical problems of the right expertise for installation and maintenance of the process. Major portions of a nuclear plant are radioactive during and after operation, requiring special system designs to prevent radioactivity release. The PHCN poor technical knowledge leads to further loss through transmission. Between 30 and 35% of power generated in Nigerian power stations is lost in this way. Hence Nigeria's installed generating capacity of between 5000 and 6000 MW never exceeds 4000 MW actual production (Kennedy J. et al 2008).

The Managerial Problems in Nigeria have resulted to high maintenance cost and poor financial performance.; this results generally to low productivity, excessive debts, non-settlement of electricity bills by consumers and the high fixed costs associated with power production. (Kennedy, 2008). Not only this prior to entering Nigeria, the rivers pass through Niger and Cameroon. In order to obtain the maximum amount of energy from these rivers, Nigeria must provide incentives to prevent Niger from installing their own dams on the rivers. Thus, a portion of the energy generated by the hydro plants is exported to Niger to compensate for their agreement not to build dams along the river. Thus, Nigeria receives even less of the already dwindling electricity generated from existing hydropower (Kennedy J. et al 2008). There are many nefarious man-made problems associated particularly with hydro and thermal source of energy in Nigeria like vandalisation of transformers, embezzlement and mismanagement of funds.

3.1 Solar Energy Potentials in Nigeria

Electricity from solar energy may be obtained through solar thermal process and solar Photovoltaic (PV). Nigeria enjoys abundant sunshine because of her location between latitudes 5^oS and 15^oN of the equator. It has nearly 290 days of sunlight in a year and a mean annual average solar radiation of about 3.5 kWhm and about 7 k W hm in the far north. On the average, the country receives solar radiation at the level of about 19.8 MJm. Average sunshine hours per day are estimated at 6. Solar radiation is fairly well distributed. For instance, the minimum average is about 3.55 kWhm–2day-1 in Katsina in January and 3.4 kWhm–2day-1 for Calabar in August and the maximum average is 8.0 kWhm–2day-1 for Nguru in May. If solar collectors or modules were used to cover 1% of Nigeria's land area of 923,773km², it is possible to generate 1850x103 GWh of solar electricity per year. This is over one hundred times the current grid electricity consumption level in the country. (Kalu et al, 2010)

A research by Karolis K. et al (2008) on Solar Energy Implementation confirmed the obvious of the shortage of this energy supply over demand. After thorough analysis of climate in Nigeria, they asserted that solar energy is the most suitable energy source and concluded that solar energy plant is both economically and environmentally sound and could be a solution to the shortage of electricity in Nigeria.

3.2 Wind Energy Potentials in Nigeria

The wind resource is available in Nigeria at annual average speeds of about 2.0 m/s at the coastal region and 4.0 m/s at the far northern region of the country. Wind dynamos are devices which convert the kinetic energy of the moving air to rotary motion of a shaft, that is, mechanical energy (Sambo, 2009). Electricity from wind energy is produced using an aerogenerator, which is an electro-mechanical system. Wind electricity can be generated from both the shallow and deep offshore waters for single unit capacities greater than 5MW, because of higher wind. Wind turbines have life spans of 20 - 25 years (Okafor, *et al* 2010).

Wind is a viability supplementary source of energy supply to electricity. Oriaku et al. (2007) found that there was a 98 % probability of having 2.0 meter per second/ hourly wind speed available in Umudike, Abia State. Ngala et al. (2007) discovered that there is enough wind speed to generate power economically in Maiduguri, Bornu state. The estimated energy densities at 25 meters in height were between 4.712 and 27.449-megawatt hours per month. This will reduce fuel consumption by 40 percent. Kennedy J *et al.* (2008) measured the average wind speed in various parts of the country for periods ranging from three to ten years and discovered that the prevailing wind speeds of 3.5 m/s could provide cheaper energy in Sokoto in the northwest, Borno State in the northeast, and Owerri in the south.

In a similar vein Okoro et al (2004) discovered that the annual wind mean speed at a height of 10m above the ground ranges between 2.3m/s to 3.4m/s for sites along the coastal areas and 3.0m/s to 3.9m/s for high land areas and semi-arid regions. Therefore, using wind energy conversion systems for electric power generation and supply in Nigeria especially around coaster areas and the Sokoto axis will be cost effective. Okoro *et al* (2004) conclude it will be economically more viable to use wind energy in Jos too.

For economic viability, 75-80% costs of wind power electricity generation are upfront costs of physical capital and installation. The remaining costs are dispersed over the life of the wind power system and are comprised of operating, maintenance, and insurances costs. Although the wind power generation is financially competitive with grid extension and diesel generators in most regions, the costs are declining every time the installed capacity doubles.

4.1 Salient Advantages of Wind and Solar Energy

There are some prominent facts that need to be revealed in the adoption of solar source of energy in Nigeria. Solar power systems generate no air pollution during operation except during installation, which is an advantage over the hydro and thermal sources. This energy source is safe. The hazard associated with it is not much different in quality or magnitude from the innumerable hazards people face routinely in an industrializing society like Nigeria. (Brower, 1992).

The advantages of Solar Energy is highly favourable to Nigeria since we have a good ecology for it and it does not cause any environmental pollution like the fossil, hydro, thermal and nuclear power. As applicable to solar source of energy, wind energy produces no air or water pollution, involves no toxic or hazardous substances (other than those commonly found in large machines), and poses no threat to public safety. Another outstanding matter in relation to wind is the fact that there has been yet a serious obstacle facing the wind industry. Few have expressed concern over the visibility and noise of wind turbines but this can be solved with simply installing these turbines meters away from households or residential areas.

One of the most misunderstood aspects of wind power is also its use of land. Most studies assume that wind turbines will be spaced a certain distance apart and that all of the land in between should be regarded as occupied. This leads to some quite disturbing estimates of the land area required to produce substantial quantities of wind power. The truth however is that, the wind turbines themselves occupy only a small fraction of land area and the land in between them can be used for other purposes like farming.

Perhaps the greatest potential for wind power development is consequently in the the north and south east where wind is plentiful and vast stretches of farmland could support hundreds of thousands of wind turbines. In other heavily populated areas like Lagos early and careful planning should surmount such associated problems.

Another salient issue to be noted in the exploration of the wind energy option is the dependence on fossil fuels, which are often subject to rapid price fluctuations and supply problems. Nigeria's increase dependence on gas-fired electric generating capacity because of its low capital cost is obviously a myopic

perception, As world gas demand increases, the prospect of supply interruptions and fluctuations will grow, making further reliance on it unwise and increasing the value of diversity (Fagbenle and Karayiannis, 1994).

Diversification will also minimise the socio-economic upheavals in the polity (Medugu and Malgwi, (2005). The restiveness in the Niger Delta area which shake Nigeria and also had a spiral effect on the world oil market would have been flagged if the wind energy option is developed (Lavagninni *et al.*, 2006). It is also worthy of mention that more jobs per unit of energy produced is possible from wind energy than from other forms of energy (International Energy Outlook, 2006).

An important issue to be noted in wind energy is that selection of a suitable site is a key to the economics of wind energy. The power available from the wind is a function of the cube of the wind speed, which means that all other things being equal, a turbine at a site with 5 meters/second (m/s) winds will produce nearly twice as much power as a turbine at a location where the wind averages 4 m/s. In the electric power business, where technology options often hinge on very small economic differences, good wind resource assessment and siting is critical (Chineke, 2000).

The numerous coastal areas in Nigeria give credence to wind energy advocates. The resource is extremely large along the coastal areas, the energy costs, although initially higher than for onshore, are cheaper than other renewable technologies in the long run (Diab, 1988). Sitting wind turbines at sea will also reduce the constraints that can be found on land (Lavagnini et al, 2006). The Asaba, Port-Harcourt, Yenegoa, Calabar, Ikeja and Lokoja coastal sites are locations in Nigeria that can have optimal wind energy utilization using the offshore option. Kaduna that has a river is another suggested location (Mohsen and Akash, 1998).

The technologies for harnessing this energy have, over the years been tried in the northern Nigeria mainly for water pumping from open wells in many secondary schools in Sokoto, Kano, Katsina, Bauchi and Plateau States. A 5 kW wind electricity conversion system for village electrification has been installed at Sayyan Gidan Gada, in Sokoto State. The technology is an old friend that could be revived with ease and familiarity.

5 Summary and Recommendations

This paper elucidates on key issues surrounding the present electricity sector of Nigeria; the potentials of hydro, solar and wind energy and the problems associated with each of the sources. Wind and solar energy seems much more economic in Nigeria. Based on this, a renewable energy policy and legislation should be enacted. The government should set up an independent private – public sector parastatal to determine the total renewable energy potential in the various ecological zones of the nation.

Three phases should be involved in the implementation process: (1) The formulation phase entails the reformulation of policies and a good resource and survey assessment of the energy potentials in the country according to the various ecological zones. (2) The next phase involves mobilization of human and financial resources. Enlightenment programmes on the new electrification policy. The existing Research and Development Centers and technology development institutions should be adequately strengthened to support the shift towards increased renewable energy utilization. (3) The last phase is the implementation phase which should be carried out with great consideration to other sectors of the economy such as agriculture, small scale industrial enterprises and poverty alleviation. A Monitoring and Evaluation unit should be set up with clearly spelt out duties and periodic reports. It is feasible that the country can attain the objective of stable power supply by the year 2020.

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AN ASSESSMENT OF PROSPECTS AND CHALLENGES OF ISLAMIC BANKING IN NIGERIA

By

Shitile, T. Shimonkabir Senior Economist, Central Bank of Nigeria. Email: tsshitile@cbn.gov.ng

Abstract

In this paper, an attempt has been made to explain the practical issues involved in the application of Islamic banking model (specialized non-interest banking) in Nigeria and provide possible solutions based on enlightenment reflection. The paper was motivated by the confusing debate on Islamic banking in Nigeria and need for further clarification. It has been alleged that Islamic banking is non-inclusive and "no good" for development of the country. Islamic banking experience from other jurisdictions speaks positive developments. Islamic banking in Nigeria is a complement to the mainstream banking which if explore comprehensively would potentially benefit all and sundry. Like in other jurisdictions, such model of banking and financial dealing would succeed through enabling regulatory environment, strict risk management and corporate governance.

Keywords: Islamic Banking, Mainstream Banking.

1.0 Introduction

The role of the banking system in a contemporary economy is of great significance to the development process and hence, it is often regarded as the heart of every prosperous economy (Fakhrul-Ahsan, 1998, Usman, 2003 and Daud et al, 2011). Central Bank of Nigeria (CBN) aimed at growing the banks and inducing improvement in their operational efficiency. Banking system plays pivotal roles in driving development in other sectors of the economy and promoting financial inclusion by introducing alternative products without undermining any group or interest in the country.

In recent times, Nigeria's banking system has steadily evolved, following the forward looking policy of the CBN. This banking sector reform has brought about the emergence of international, national, regional, and specialized banks such as non-interest banks among others. Islamic banking model is one of the two variant of non-interest banking recognized by the CBN. The other type being non-interest financial products and services based on any other established rules and principles.

Islamic banking is simply a system of banking or activity that is consistent with Shari'ah principles, refers to as *fiqh muamalat* and its practical application through the development of Islamic economics. It is a product of modernity, which is evolving to play an essential role in contemporary global community. As the existing and emerging conditions in the financial sector unfold, Islamic banking model has become a more appealing option as different challenges have come to bear amid various risks to be mitigated.

The introduction of Islamic banking in Nigeria can be seen as one amongst many liberal financial measures against the narrowing space of the status quo. But can the weaknesses of the banking industry be reined in by the mere abolition of profit, greed and irrational exuberances with the introduction of Islamic banking? How should stakeholders and policymakers think about Islamic banking? Is Islamic banking phenomenon a mere anomaly sweeping history, propped up by social engineering, or a strategic

development, reflecting a bipolar world? Or, are Islamic banks efficient and focused financial institutions that could, if unleashed, would eventually dominate the retail financial landscape and improve financial intermediation in Nigeria? A better understanding of these policy questions requires matter-of-fact knowledge about the bona fide nature and character of the Islamic banks.

Given that the Nigerian state is dominated by religious and ethnic outlook, a people who either by nature or nurture cannot separate commerce from politics none delineate when religious sentiment end and business raison d'etre, a forward looking approach to issues of possible misconception as Islamic banking should be to enlighten and empower stakeholders with discerning knowledge for all to assess and learn to come to term with realities on ground. From this perspective, the primary motivation of this paper is to add illumination on the Islamic banking in Nigeria.

With the assumption that the existing literature has sufficiently provided explanation of the basic concept underlying the Islamic banking model and the necessary requirements for its legitimacy and application from the Shari'ah standpoint, the objective of this paper is to deal with the practical issues involved in the application of this banking model in Nigeria and their possible solutions based on enlightenment reflection. The rest of the paper is structured as follows: Section two discusses the fundamental features of Islamic banking, while section three explains the challenges and optimism of Islamic banking in Nigeria. The paper is concluded in section four.

2.0 Review of the Fundamental Features of Islamic Banking

The Islamic principles characterizing the socio-economic life of a people that are considered unique as compared to the mainstream abound in existing literature. For instance, i) Ethical investment – Islamic economics require all economic transactions to be considered *halal* and avoiding projects that can cause damage to the public morality e.g. drugs, narcotics and prostitutions and in preserving the environment. ii) The prohibition of *riba* (usury) and the obligation of *zakah* – the essence of these practices are intended to indirectly form the incentive mechanism that would move the idle funds into real sector of economy. iii) Non-speculation transactions – The prohibition of conducting speculative activities, particularly the transaction with no real underlying transaction, is essentially aimed at preventing a financial detachment in an economic system. For a realistic analysis of the operations of Islamic Banking Model (see Usamani, 1999).

Features	Islamic Banking	Mainstream Banking
Nominal value guarantee of: Demand deposits Investment deposits	Yes No	Yes No
Equity-based system where		
Capital is at risk	Yes	No
Rate of return on deposits	Uncertain, not Guaranteed	Certain and Guaranteed
Mechanism to regulate financial returns on deposits	Depending on bank's performance/profit from investment	Irrespective of bank's performance/profit from investment
Profit Loss & Sharing (PLS) principle is applied	Yes	No
Use of Islamic modes of financing: PLS and Non-PLS modes	Yes	N/A
Use of discretion by banks with regards to collateral	Possible for reducing moral hazard in PLS mode Yes is non-PLS mode	Yes always
Bank's pooling of depositors' fund to provide depositors with professional management investment	Yes	No

Comparison of Islamic and Mainstream Banking Model

Adapted from IMF Working Paper (1998)

Conspicuously, neither the capital value nor the return on investment deposits is guaranteed by Islamic banks, and these banks essentially pool depositors' funds to provide depositors with professional investment management. Unlike the investment companies, the Islamic banks do not sell their capital to the public but accept deposits from the public. However, this is in contrast to our experience in Nigeria.

The ideological and operational differences of Islamic Banking operations as compared to the mainstream one lie upon several aspects. First, all the financial transactions have Shari'ah compliant from the Shari'ah authority or board which cover the legality of the transaction and the object transacted (Muljawan, 2008). The Shari'ah boards are composed of Islamic Scholars and jurisprudents. They ensure that Islamic banks' operation conforms to Islamic precepts. All banking facilities should receive their clearance before being offered to the public. Second, the financial services of Islamic banks should be of agency role and asset – based rather than debt-based transaction of the mainstream one. Third, the different financial structures require different financial ratios and methods when assessing the financial soundness.

More so, in terms of financial best practice, Islamic banking could be perceived to promote professionalism, competence and good governance universally, besides ethical contents, which is typical to the Islamic finance. In particular, the implementation of the concept of *shiddiq* (honesty), *fathanah* (professionalism and competence), *amanah* (responsibility) and *tabligh* (openness and education) are in accordance with the international practices of ensuring good corporate governance and minimum level of transparency (see Muljaman, 2008).

Previous studies (Bashir, 1999 and 2003) have posited that the Islamic banks profitability measures respond positively to the increases in capital and loan ratios. There are tangible indications that adequate capital ratios and loan portfolios play an empirical role in explaining the performance of Islamic banks. Factors found in the literature to be promoting Islamic banks' profits are customers and short-term funding, non-interest earning assets and overhead; while external variables to the banks that have been proposed in the literature as possible determinants of performance include: the macroeconomic environment, the financial market structure, the regulation indicators, and country peculiarity factor.

Like mainstream banks, the Islamic banking operations are vulnerable to a degree of financial risks. In the absence of guaranteed returns on deposits, Islamic Banks undertake risky operations in order to be able to generate comparable returns to their customers. Also, in the absence of deposit insurance, high-risk-taking exposes the bank to the risk of insolvency. The good story is that strict monitoring compliant with Islamic jurisprudence reduces such risks.

The existing literature has reveal that Islamic banking is non-homogenous and there is lack of uniformity in specific forms of Islamic principles applied and to what might be considered as Islamic banking practice. In other words, similar banking procedures and financial instruments differ by jurisdictions. Hence, the need for evaluation of the performance of Islamic Banks from the Shari'ah point of view on a continuous basis and to adopt a realistic approach while designing their procedure and products.

It suffice to note that nothing could be further from the truth than to describe Islamic banking as an exclusive platform financing the needs of the Muslim sector alone. The Islamic banking in Malaysia remains a very good example. Islamic banks in Malaysia are banks for all, not limited to Muslim/Malays. This is reflected in the increasing use of Islamic banking products by Muslim and non-Muslim. In Pakistan, the total assets of Islamic banking increased during 2004 - 08 from 44 billion to 276 billion while total deposits during 2003 - 08 increased from 8 billion to 202 billion. According to the Bangladesh Bank (BB), the central bank of the country, the deposits of the Islamic banking systems in Bangladesh stood at 25 per cent of all private banks deposits (Ahmad, 2011).

Study findings of Haron et al (1994) indicate strong desire of non-Muslim (in Malaysia) to have banking relationship with an Islamic bank if they had a complete understanding of how it works and can access excellent service. This implies that, if explored comprehensively, Islamic banking in Nigeria can gain currency from non-Muslim individuals and investors and is potentially beneficial to all and sundry. Kamor (2011) states that many non-Muslim investors who are not only interested in the risk/reward relationship of their investment, but who are also concerned with issues of accountability and social responsibility have been attracted to play major roles in developing the industry. Though its core business remains Islamic content, but the numbers of non-Muslims clientele grows as mainstream banks alienate existing customers.

3.0 Challenges and Optimism of Islamic Banking in Nigeria

In addition to compliance with other regulatory requirements as spelt out in the BOFIA (Banks and Other Financial Institutions Act), compliance to Shari'ah rules and principles (and as may be guided by the Shari'ah Board) should be a serious matter for any organization offering Islamic financial services in Nigeria. The primary users of Islamic financial services assign great importance to Shari'ah compliance
of the services they use because for them it is a matter of faith. In extreme cases, any form of noncompliance may portend operational risk that can result to bank run and instability of the industry.

The Holy Quran and the Sunnah of the Holy Prophet have laid down broad principles in light of which the Shari'ah scholars and jurists deduce specific answers to socio-economic life of people. The progress of any legal system is said to depend on its practical application, the development of Islamic law in Nigeria with regard to business and trade is slowed down by this circumstance of inactive use of Islamic law. The primary reason being that between 1903-1960, when the colonialists eventually took over what was left of the Sokoto caliphate by the defeat of the latter's army and the nation's independence, virtually all the elements of Islam found in the system had been uprooted or transformed. Thus, there is dearth of legal structure such as interpretations or rulings of Shari'ah scholars or jurists in the form of *Fatwas* relating to problems of business, banking and finance. Currently, Shariah Courts are extensively used in the Northern Nigeria.

However, the emergence of Islamic banks in the Nigeria's financial industry would regenerate the development of Islamic legal structure in the country. Islamic banks would operate under the supervision of the Shari'ah Boards. The Shari'ah Boards, comprising Shari'ah scholars, would be resolving the day-to-day problems of the Islamic banks in light of Shari'ah rules and principles and in the process, provide specific rulings on these problems. Also, through exercise and on-going process of *Istinbat* or *Ijtihad*, new ideas, concepts and rulings would keep enriching the Islamic jurisprudence on, but not limited to, economic activities.

In the first phase of Islamic banking implementation in Nigeria, there is the likelihood that it would lead to a disconnect between the theoretical erudition of those learned in *ijtihad* and the actual practice of Islamic banking. However, the contradiction can be over as soon as the practice of Islamic banking catches up with its theoretical foundation and the stakeholders are quick to realize that the practice of Islamic banking is a partnership based on ethical values and faith and has no universality advantage.

It is obvious from the operations of Islamic banking in other jurisdictions that such models succeed through firm regulatory control and strict corporate governance. Eze and Chiejina (2011) argue that given the local banking environment and the weaknesses of the operational framework, it is doubtful if the strict monetary discipline necessary for the success and viability of such banking and financial dealing could be attained in Nigeria. The Islamic banking in Nigeria, no doubt, has promising optimism for development that would benefit the domestic economy in general. The development would also pose challenge to the authority as it requires a different set of banking regulations.

The general expectation is that Islamic banking should be financially sound and Shari'ahly complaint so that the system could also maintain a high level of public confidence. To promote the financial soundness and the salient features of the Islamic banking operations, and appropriate regulatory and supervisory framework, particularly, the design of Islamic bank rating system is a necessary and sufficient condition. Especially as the banking authority should be concerned about possible systemic costs resulting from bank failures that would ultimately put expensive burden to the whole stakeholders. According to Muljawan (2008), the design for Islamic banking regulation, as a matter of fact, should be able to benefit from the current international banking developments such as CAMELS (Capital adequacy, Assets quality, Management quality, Earnings, Liquidity and Sensitivity to Market Risk) rating system and Basel Committee on Banking Supervision framework (Basel I, II & III) achieved in the mainstream banking system.

Contrarily to dedicated stand alone Islamic banks like JAIZ bank, there is the challenge of co-mingling of mainstream and Islamic funds at some of the proposed Islamic banking windows like Stanbic IBTC, since all sorts of compromises are possible if not an eventual norm. Also the Islamic banking window could make it difficult for the banking regulator to effectively implement its monitoring and supervision of

these windows. Although, the regulators (CBN examiners) are sufficiently trained to handle this issue, the coupling of mainstream and Islamic banking activities at the same institution may undermine transparency and competition in the affected banks. Notably, this challenge could be resolved with the use of **notes to accounts** information for clarity purposes.

At the same time, there could be much confusion over the balance sheet treatment of the assets and liabilities of the Islamic banking windows in the financial reports of the mainstream banks, which are not separated. As such this may have implications for the risk management process of the institution.

The application of non-speculative transaction concept would likely reduce the level of liquidity in the market as a trade-off. This would create contradiction to the current development achieved in the financial market innovations in which the players are free to create derivative instruments which is considered acceptable to the market and could potentially generate substantial profits. However, relative benefits of Islamic banking model could far outweigh its drawbacks if the banks as intermediaries are efficient in delivering the expected financing.

In spite of the growth potential in Islamic banking, recent studies show that several challenges facing Islamic financial institutions include shortage of experts in Islamic banking, inappropriate standard of credit analysis, uncertainty in accounting principles involving revenue realization, accounting bases, valuation, revenue and expense matching to Islamic banks. Thus, the results of Islamic banking may not be adequately defined, particularly profit and loss shares attributed to depositors.

From the foregoing, Islamic banking model is not without its challenge. However, the challenges of operating this system are not to be ignored. On this, Umar (2011) made it clear when he submits: the key challenges facing the model include the dearth of knowledge, skills and technical capacity to regulate, supervise, or operate non interest banks. Higher quality personnel with experience in project management and Islamic jurisprudence are required for financing and marketing activities...and the absence of accountants and auditors knowledgeable in accounting and auditing standards pertinent to non interest banks.

It is gladdening to note that the CBN and other regulators are bracing up to tackle the issues head-on. For instance, the National Deposit Insurance corporation (NDIC) has released a draft framework for a Non-interest (Islamic) Deposit Insurance Scheme for stakeholders while the CBN has joined 11 other central banks and 2 Multilateral organizations to form the International Islamic Liquidity Management Corporation (IILM), which should provide treasury instruments that are Shari'ah compliant to address the liquidity management issue of Islamic banks and serve as instruments for open market operations involving Islamic financial institutions.

Therefore, an extensive capacity building through collaboration among various stakeholders to develop cognate expertise in Islamic (non-interest) banking, development of an adequate regulatory and supervisory framework is a must for effective operation of Islamic banking in Nigeria. According to Decker (2011), for his new process to be successful in Nigeria, the Shari'ah board of the Islamic banks should have fair influence on the banks operational and strategic planning to ensure the principles establishing this new system is preserved.

Meeting the customer demand for Islamic banking services will require that the industry and the advisory boards have a particularly strong and sincere dialogue, and a faithful observance of the Islamic rules. In this regard, it is essential that financial organisations do not adopt the mindset that the relationship between them and the market is one of action and reaction only. Instead, they ought to think collectively through the issues and work together to address them successfully to harness the many benefits the future of Islamic banking Nigeria promises.

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Although authors like Onakoya and Onakoya (2013) and Čihák and Hesse (2010) argued that operations of Islamic banks are less risky than mainstream banks for reasons that part of the risk is transferred to depositors and income is accounted on a cash basis and not on accrual basis: thus reducing the danger of accumulation of non-performing assets. Moreover, the ability of Islamic banks to reduce the capital value of investment deposits in case of a loss is seen as an automatic setting aside of provisions against loan losses. Risks (such as investment risks and insolvency risks) cannot be ruled out from Islamic banking, notably in cases where banking operations are carried out in such a manner that assets and liabilities sides of a bank's balance sheet are fully integrated.

Specifically investment risk may be the most operational risks confronting the banks operating this model (see Helmy, 2012 and Sarker, 1999). According to Errico & Farahbaksh, 1998), the fact that when Islamic banks provide funds through their profit, loss and sharing (PLS) facilities, i) there is no recognizable default on the part of the agent-entrepreneur until PLS contracts expire, ii) the banks have no legal means to control the agent-entrepreneur who manages the business, and iii) the banks are entitled only to share with the entrepreneur the profits (or losses) stemming from the enterprise according to the contractually agreed PLS ratio (Errico & Farahbaksh, 1998).

Also poor investment decisions possibly derived from a mix of factors including a volatile operating environment, weak internal governance – notably mismanagement, and limited market discipline could result to risks of economic losses particularly the depreciation of the value of depositors' wealth in the Islamic banks. (see Errico & Mitra, 1998).

The good news, however, is that analysis of the performance of the Islamic banking system during the recent global financial crisis based on empirical evidence shows that Islamic banks performed better than mainstream ones in 2008 in terms of profitability, credit and asset growth (see Hasan & Dridi 2010). The Islamic banking business model's features helped the system by protecting it from the first financial impact of global crisis. According to Caba-Maria (2011), prohibition on excessive leverage and on risk transfer according to Shari'ah principles made the system more resilient, less exposed and thus protected from the impact of toxic assets and derivatives' effects that triggered the global financial crisis.

Those challenges that have to be addressed in order for Islamic banks to maximize their potential include the need to improve management of certain market risks such as liquidity and reputation risk. Liquidity management can be difficult under Islamic finance rules due to the lack or limitation of practical instruments and the small number of participants on the money market. Because most of the mainstream liquidity tools are forbidden according to Shari'ah principles, Caba-Maria (2011) argues that Islamic banks could sustain higher liquidity ratios compared with mainstream banks.

The Islamic banking system's features make its activities more closely related to the real economy (see Caba-Maria, 2011). This reduces its contribution to excesses and bubbles. Beside the ethical principles on which Islamic finance is based, it may bring banks closer to their clients and to the true spirit which should mark every financial service. Nonetheless, there is no such thing as the perfect banking model, there are only models best adapted to the market conditions in which they are operating. Hence, Islamic banking model should not be regarded as a panacea for the mainstream banking system affected by the recent global financial crisis.

Islamic banking requires issues that need to be recognized and addressed to help improve and make the legitimate conduct of the banks. Thus, an appropriate regulatory framework for Islamic banking supervision should be designed and reviewed properly to ensure that: a) legal infrastructure for the supervision are in place; b) investment and other risks are adequately addressed; and c) adequate information is disclosed to improve banks' credibility and allow informed investment decisions from the public.

4.0 Conclusion

Acceptability and success of Islamic banking in Nigeria requires intelligent application of the financial inclusive reform and specifically non-interest finance model in the banking sector. This is because the "unusual environment" in place requires nothing less than sufficient enlightenment and empowerment of the stakeholders with discerning knowledge on issues of possible misconception for all to assess and learn to come in term with realities on ground. Issues of suspicion from non-Muslim should be addressed satisfactorily.

Islamic banking in Nigeria is faced with the daunting challenge of achieving the scale economies that would make banks viable competitors. The proactive solution is to adapt to targeted market conditions and requirements and not to imitate mainstream instruments or risk management strategies. The focus, thus, should be on choosing and structuring the most adequate products, services based on the needs of Muslim sector and non-Muslim customers alike and risk management tools for development of the industry.

Legal reforms are necessary for the purpose of facilitating the smooth running and operations of Islamic banking system. In other words, implementation of Islamic banking model in Nigeria should not be a 'shock therapy' policy application – with nothing being done to develop Islamic law of property and contract. Else it would be another failed attempt at modernization in Nigeria, whose practical effects would be akin to those of pre-deregulatory state banking. Thus, in line with (Obiyo, 2008), Nigeria needs to reframe her banking laws if Islamic banking model is to be fully implemented in the country.

Also, since perfection cannot be attained in alone dosage, there is need for evaluation of the performance of Islamic banks from the Shari'ah point of view on a continuous basis and to adopt a realistic approach while designing their procedure and determining their policies. No doubt, Islamic banking model in Nigeria presents a structural virgin resource and promises optimism, which if explore comprehensively, has vast potential benefits to all and sundry.

Glossary

Shari'ah	Islamic Law: Based on the divine guidance as given by the Holy Qur'an and the Sunnah of the Holy Prophet
Fiqh muamalat	Islamic Rules on transactions
Modernity	Quality of being modern: transformation induced by practical enlightenment or assimilation of results of a systematically organized knowledge.
Social engineering	Efforts to influence popular attitudes and behavior
Halal	Lawful or permitted according to Shari'ah. The opposite of halal is haram
Zakat	One of the most important principles of Islam is that all things belong to God, and that wealth is therefore held by human beings in trust.
Sunnah	Refers to the practices of the Prophet Muhammad (s.a.w.). Literally, custom or manner of life
Fatwa	An opinion on a point of law
Ijtihad	An Exertion to reach comprehension and form an opinion
CAMELS	C(apital), A(sset quality), M(anagement), E(arning), L(iquidity) and S(ensitivity to market risk)

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EMPIRICAL INVESTIGATION OF THE POVERTY- FUELWOOD CONSUMPTION NEXUS IN MAKURDI METROPOLIS BY AKIGHIR, D.T. and NOMOR, D.T.

Department of Economics, Benue State University, Makurdi

Abstract

The paper empirically investigated the poverty-firewood consumption nexus in Makurdi Metropolis. Simple random sampling technique was used to select 200 respondents in the Metropolis. Data were collected using questionnaire, while descriptive tools such as tables, percentages and charts as well as binary choice probit model were used to analyse the data. From the probit models, it was confirmed that the behaviour of the respondents is consistent with the Energy Ladder model's postulations; and as such, firewood was considered an inferior good whose demand is likely to fall given a rise in income. it was also confirmed that there exist substitution effect between the demand for firewood and other cooking energy types. Again, a negative own-price effect in the demand for firewood was found in the study area. Finally, the study has revealed the existence of poverty- environment hypothesis in the study area ; on this basis, it was concluded that poverty leads to high firewood consumption in the study area. Thus, it was recommended that the government should make concerted efforts to reduce the scourge of poverty so as to reduce the of high level of firewood consumption, hence reduction in its attendant consequences of environmental degradation in terms of pollution and deforestation.

KEYWORDS: Energy Ladder, Fuel-wood, Own-price effect, Probit Model, Poverty-environment Hypothesis, Substitution-effect.

Introduction

Fuel wood as a source of energy for cooking and heating is highly utilized by households in both the urban and rural areas particularly among the poor (Sokona, 1996). This is more pronounced in developing countries where the use of other energy alternatives is difficult because of low income levels. According to World Energy Council (1999), the use of traditional fuels is derivable from bio-mass and is common in the rural areas and in the poor outlying urban areas of the developing countries. Amongst poor families, the use of fuel wood as energy for cooking and heating makes up 90% to 100% of residential energy consumption.

In several underdeveloped countries, the use of bio-mass accounts for as much as 95% of home energy consumption both in the remote villages and towns (Bruce, 2002). The contribution of bio-mass to the consumption of primary energy varies between 80% to 90% (poor countries), to 55% to 65% (middle-income countries) and 30% to 40% (high-income countries) (UNDP, 2002).

In Nigeria, empirical studies such as Ojinnaka (1998), Luwapal and Onyekwelu (1995), Adegbehin (1999), Bilyamin (2006), Bello (2010), have revealed high level of fuel wood consumption both in the rural and urban areas in Nigeria. According to the Nigeria's Energy Study Report (2002), despite the abundance of oil and gas and high potential for hydro-electricity, Nigeria still depends to a large extent on traditional energy sources such as fuel wood, bagasse and crop residue for its domestic energy needs. Nigeria's fuel wood consumption is estimated at about 80million cubic meters (about 25million tones). Fuel wood is widely used for heating and cooking, cottage industrial application and food processing. Currently, these traditional energy sources account for about 55 percent of Nigeria's primary energy requirements.

From the foregoing, it can be deduced that the high percent use of traditional energy sources such as fuel wood is precipitated by the high poverty incidence in the country vis-à-vis the shortage of modern energy sources. Relationships have been established between energy and major socio-economic global issues such as poverty, gender disparity, population, food security, health, environment, economy, and security. Thus the energy-poverty nexus is obvious, people living in poverty primarily use wood, and other biomasses for their energy services, and tend to use less electricity and liquefied petroleum gas than those

that are better off. Energy, poverty and social equity are intricately linked and intertwined. (Nigeria Energy Report 2002).

In Benue State, given the high level of poverty, fuel wood is widely used as a major source of cooking energy, both in the rural and urban areas. According to the National Population Commission (2010) the distribution of households by the type of cooking energy revealed 627,030 regular households for firewood, 48,260 for electricity, 6067 for gas, 78,401 for kerosene, 37,749 for coal, 2,558 for animal dung/saw dust/coconut husk, 775 for solar and 93 for others in Benue State. This suggests that firewood consumption is very high in the state more than any other cooking energy source. Also, at the local government levels, Makurdi Local government is third highest with 37,571 regular households in the consumption of firewood after Gboko with 44,573, followed by Kwande with 39,330. Given this high level of firewood consumption in Makurdi local government, the fundamental question that arises is; is it truly that poverty precipitates this high level of firewood consumption in Makurdi metropolis. The rest of the paper is divided into seven sections after the introduction. Section two deals with the conceptual and theoretical issues, section three discusses the empirical review, section four is on firewood consumption in Benue state, section five considers the methodology, section six treats data presentation and analysis, while section seven centers on discussion and conclusion of the paper.

Conceptual and Theoretical Issues

According to the Wikipedia (2013), firewood consumption refers to the use of wood as fuel energy. Wood fuel may be available as firewood, charcoal, chips, sheets, pellets, and sawdust. The particular form used depends upon factors such as source, quantity, quality and applications. Fuel wood can be used for cooking, heating, and occasionally for fuelling steam engines and steam turbines that generate electricity. Also, fuel wood can be used in many bakery industries as a source of energy.

Fuel wood belongs to Biomass group of energy. Biomass refers to energy derivable from sources of plant origin such as trees, grasses, agricultural crops and their derivatives, as well as animal wastes. As an energy resource, biomass may be used as solid fuel, or converted via a variety of technologies to liquid or gaseous forms for generation of electricity power, heat or fuel for motive power. Biomass resources are considered renewable as they are naturally occurring and when properly managed, may be harvested without significant depletion (Bello, 2010). In this study, the terms fuel-wood and firewood are used interchangeably to mean the same thing.

Poverty on the other hand, has been variously conceptualized. Ravallaion and Bidani (1994), defined poverty as lack of command over basic consumption needs, that is, a situation of inadequate level of consumption; giving rise to insufficient food, clothing and shelter. World Development Report (1990), defined poverty as the inability to attain a minimum standard of living. Schubert (1994), classified poverty into absolute and relative poverty. Absolute poverty being that which could be applied at all time in all societies, such as, the level of income necessary for bare subsistence; while relative poverty relates to the living standards of the poor to the standards that prevails elsewhere in the society in which they live.

Two theories, namely; the poverty-environmental hypothesis and the energy ladder model were employed in this study to explain the casual link between poverty and firewood consumption. The povertyenvironment hypothesis was first developed by Leach and Mearns in 1992; and was developed by Reardon and Vosti in 1994 and later modified by Angelsen in 1995 and 1997 respectively; while the Energy Ladder model was popularized by the World Health Organization in 2002. The povertyenvironment hypothesis upholds that poor people tend to extensively exploit the natural resources leading to the depletion of environmental resources. According to the proponents of this hypothesis, a key variable in this framework is local environmental entitlements, which is also central in the framework of Leach and Mearns (1992). This represents an application of Sen's (1981) entitlement approach to the environment-poverty complex. Of particular importance are institutional arrangements in the form of the property rights regime governing the resource use: who has access to natural resources? what are the rules for their use? how effectively are the rules enforced? etc. The local resource rights are functions of, inter alia, the use and claims made by external users, and the level of poverty. This means that poor people see natural resources such as firewood, and animals dung as cheap energy sources for cooking and heating, considering the huge financial implications in the use of other energy sources around them. According to Yahaya(2002) there exist a strong relationship between household income, the most common parameter for measuring poverty, on the one hand, and the type of energy consumed, on the other hand; and he concluded that the poorer a country (or a community) is, the greater its dependence on fuel wood (or inefficient energy sources), and *vice versa*.

The poverty-energy connection could also be approached from the demographic angle within the framework of the poverty-environment hypothesis. According to Osei-Hwedie (1995) the faster population grows among the poor, this tend to translate to pressure on the local resources base. He posits that, as population expands and the number of the poor increases, the demand for resources will also increase. For example, the demand for food, cooking fuel and wood would put greater pressure on agricultural land as well as the stock of a number of environmental resources, especially biomass, the traditional sources of energy.

The figure below shows the poverty-local resources use interaction in an environment.

Source : Angelsen, 1995

Figure 1 Some causal linkages between the natural resource base and poverty.

Dotted arrows indicate that a variable affects another; Solid arrows represent physical or income flows. From the above diagram, it can be seen how poverty leads to pressure on local resources. This implies that increasing poverty and market prices exert pressure on firewood consumption in an environment. Also population increases the use of local resources including firewood. Environmental entitlements in turn affect both the local resource use and investments (with opposite effects on the resource base). The Energy Ladder model of energy consumption posits that people tend to switch to modern energy sources if their income levels increase. In this connection, studies by Gundimeda and Kohlin (2003) have shown that while wood fuel is accepted as a normal good for the poor, it is considered an inferior good for the high income households. Scott (2006) observed that whenever the government increases the prices of oil, people decide to economize, by sliding down the energy ladder and reverting to the use of traditional fuels such as fire wood. A typical Energy Ladder model is depicted in the diagram as shown below.



Source: WHO,2002. Figure 2: The Energy Ladder Model

From the above diagram, it can be seen that the linkage in energy ladder shows that growing access to better cleaner, more efficient and convenient energy services comes with an increasing level of income. This establishes an inverse relationship between poverty and better energy consumption on one hand, and a positive relationship between income and better cleaner, more efficient and convenient energy. This means therefore that, in the rural areas where people are poor with low income, they use crop waste, animal dung and firewood as their major source of energy; while in peri-urban areas where people are moderately poor, tend to use wood, charcoal, kerosene and Gas as their cooking energy. On the other hand, in the urban areas where the majority are non-poor, they use Gas and electricity as their cooking and heating energy as shown in the energy ladder model.

Empirical Review

The effects of poverty on firewood consumption hence environmental degradation have long been variously established in literature. To some authors, poverty is the major cause of high level of firewood consumption and hence environmental degradation in rural areas most especially the rural areas of the Less Developed Countries. For example, Demurger and Fourner (2010) took a study to examine the relationship between economic wealth and firewood consumption in rural areas of China and they found out that, there exists a significant and negative relationship between economic wealth and firewood consumption. As ones poverty level increases, his level of demand for firewood also increases. Studies by Audu (2013); Bello, (2011); Onuche, (2010) and Chikwendu, (2011) all collaborated Demurger and Fourner (2010) submission. According to Audu, (2013), firewood is almost only the means of domestic fuel in many rural areas leading to desertification as other sources of domestic fuel are almost not in use. Onuche (2010) asserted that, the rapid rate of deforestation has been linked with increases in prices of petroleum products, especially dual purpose kerosene. These increases in prices have equally been linked with the incidence of poverty. He concluded that poverty reduction is the key to the sustainability of our

forest resources in Nigeria. Chikwendu (2011), whose study confirmed the energy ladder theory, concluded that, the relationship between economic wealth and improved energy consumption is positive. As ones income increases, the individual energy consumption moves from firewood to kerosene and from kerosene to LPG(Liquefied Petroleum Gas). Buttressing their submission, Abdusalam, (2005), argued that, women consumption of firewood is higher than men and the major reason is that they have a higher incidence of poverty than their male counterpart.

Many studies on the relationship between poverty and environmental degradation have also shown that, the relation between poverty and environmental degradation is transmitted through firewood harvesting. One of such studies was taken by Niringiye, Wambugu, Karugia and Wanga (2012), to investigate the poverty/environmental nexus in Katonga basin. The study revealed that deforestation and wetland degradation were positively linked with poverty in a spiral web through inadequate access to clean water, access to toilets, and access to electricity and use of charcoal and firewood. To Ding (2013), poor people tend to have a lot of children. An increase in the poor population may cause the environment to deteriorate, while deterioration in the environment causes population to increase. For example, as forests recede up the mountainside, and poor households find it harder to have firewood, they need to have an additional child to gather firewood. As children grow, so does the need in the house for firewood and poor people are compelled to collect more firewood at the risk of aggravating the deforestation in progress. So, poor people aggravate automatically, the process of environmental degradation. To Sola and Zinbabwe (2001), a large and growing population of rural people struggling to survive in a limited land resource base has led to the overexploitation of the environment. Firewood is a major source of energy for people in the rural areas. Firewood extraction from indigenous forests is causing widespread deforestation in rural areas. Firewood is a cheap energy source for rural households especially the poor. Anijah-Obi (2001), also submitted that, poverty, a deplorable state of human welfare, is closely linked to environmental degradation. Those who are poor and hungry often destroy their immediate environments in order to survive. Other Studies by Kahyarara, Mbowe, and Kimrere (1998); Nwagbara, Abia, Uyang and Ejeje (2012); Jean-Marie, Pranab, Sanghamitra, Dilip and Rinki (2007), Forsyth and Leach (1998), all have concluded that, there is a relationship between poverty and environment. Poor people are compelled to consume firewood as their major source of energy and high firewood consumption lead to environmental degradation. This phenomenon has serious economic implication.

Fire wood Consumption in Benue State

In Benue state, firewood is widely consumed both in the rural and urban areas. The following table shows the distribution of Regular Households by cooking fuel in Benue state during the 2006 population and housing census of the Federal Republic of Nigeria.

Tabl	Table HCH: Distribution of Regular Households by Type of Cooking Fuel								
STATE	Total	Electricity	Gas	Kerosene	Firewood	Coal	Animal	Solar	Other
							dung/		
							awdust/		
							coconut		
							husk		
BENUE	801833	48260	6067	78401	627030	37749	2558	775	993
Ado	34382	1923	338	2413	27692	1668	277	37	34
Agatu	21998	617	197	2930	17889	280	42	19	24
Apa	18454	653	140	1921	15480	190	41	18	11
Buruku	38405	2216	200	2401	29697	3593	209	51	38
Gboko	66817	8460	644	6669	44573	6077	152	99	143
Guma	36163	617	104	2534	29754	3012	105	21	16
Gwer East	32628	1348	155	2016	27252	1674	107	39	37
Gwer West	23485	322	82	1781	20999	197	72	11	21
Katsina-Ala	39920	630	100	3235	35030	727	151	32	15
Konshisha	42759	2801	312	2385	35082	1982	116	58	23
Kwande	46638	2100	202	3141	39330	1648	115	37	65
Logo	32194	3387	242	2115	22284	4000	116	32	18
Makurdi	58708	1843	1461	16684	37571	810	100	23	216
Obi	18814	253	39	1140	16864	454	46	13	5
Ogbadibo	25185	305	83	3282	21293	132	37	14	39
Ohimini	13798	262	118	1663	11664	49	18	8	16
Oju	34885	1796	131	2339	27646	2627	271	49	26
Okpokwu	34252	1044	292	4310	28052	314	134	51	55
Otukpo	48939	3602	537	7461	36152	832	248	36	71
Tarka	15387	163	37	983	14091	69	7	10	27
Ukum	40732	5884	245	2792	29198	2494	59	32	28
Ushongo	34632	2076	217	2025	27790	2356	76	49	43
Vandeikya	42658	5958	191	2181	31647	2564	59	36	22

Source: National Population Commission, March, 2010.

A cursory look at the above table reveals eight different cooking fuel types used by households in Benue .A total of 801833 households were surveyed about the energy types they used in Benue state during the 2006 census; out of which 627030 representing 78.20% were reported as regular consumers of firewood as cooking fuel. This implies that only 21.80% of the people that used the other energy sources. In order to show clearly the proportions of the people that use the various energy sources in the state, the information in the table above was used to construct a pie chart as shown below;



Figure 3: Household Energy Consumption in Benue State

Furthermore, the table depicts the consumption of the various energy sources in the state by local governments. From the table, it can be seen that Gboko local government has the highest proportion of people that use firewood, that is, 44,573 on regular basis representing 66.71% of the total people surveyed in Gboko LGA; this is followed by Kwande local government with 39330 persons representing 84.33% of the total people surveyed in Kwande LGA. The third highest according to the census figure is Makurdi local government with 37571 people representing 64% of the total population surveyed in Makurdi LGA. For clarity purposes, the information in the above table about the various energy consumption in the local government areas in the state are presented in a pie chart as shown below;





Methodology

The study was carried out in Makurdi metropolis. The choice of Makurdi is predicated on the premise that the 2006 census revealed Makurdi Local Government as the third highest firewood consuming local government in the state after Gboko and Kwande local government areas. In this study, Makurdi metropolis was assumed to comprise Gyado villa zone, Wurukum, North Bank, Wadata, High level, Owner occupiers' zone, Modern Market side, Nyiman Layout, Terwase Abadu and Judges Quarters. This assumption is premised on the fact that, these are the major settlements that constitute Makurdi metropolis.

The population of the study was made up of all the households that use fuelwood, charcoal, kerosene, gas, electricity and other energy sources as cooking and heating energy within these zones specified above. Given that this population cannot be easily ascertained; we randomly selected 20 households from each of these zones and this gave us a sample of 200 respondents. Data concerning the sex, age, occupation, income, household size, marital status, level of education, energy sources used, reasons for using the source(s), daily/weekly or monthly expenditure on cooking fuels.

Data were analyzed using simple descriptive tools such as tables, percentages and charts as well as a probit model. We used the 1.5 dollars per day measure to group the respondents into poor and non-poor with a view to ascertaining the relationship between poverty and the consumption of firewood in the metropolis.

Model Specification

Using the framework of Demurger and Fourner (2010) which expressed the utility function of firewood consumption as:

Where U is the utility derived, C_E stands for consumption of goods requiring energy (basically cooking or heating), C_X is the consumption of other goods and C_L is leisure, Z^C is the vector of the household's characteristics likely to influence its preferences (wealth, household size, education level, etc.). Household utility maximization is subject to budget constraint determined by household consumption expenditures and income;

 $P_X C_X + P_{FW} C_{FW} = R.....2$

Where P_X and P_{FW} are market prices respectively for goods X and firewood, C_{FW} is the amount of firewood consumed and R is the total income.

The consumption of goods requiring energy (CE) depends primarily on the energy consumption, either firewood or other energy sources. The maximization process leads to reduced-form equation for the quantity demanded of firewood, hence, we specified the demand for firewood as: binary choice models. Therefore, the binary model is of the form; following Bello (2010).

 $Y = \beta_0 + \sum \beta_i X_i + \mu_i.....3$

Where Y is an unobserved latent variable. What is actually observed is a binary variable say HDF=(1, if a household demand fuel wood, 0, if other wise). The assumption made is that households are faced with a choice between two alternatives to demand for firewood or to demand for substitutes (Kerosene, Gas, electricity, solar and others). The demand decisions are essentially influenced by their socio-economic characteristics in addition to the prices of the available energy source; hence we postulate the stochastic equation as follows;

 $HDF = \beta_{0+}\beta_1AGE_+\beta_2HSZE_+\beta_3INC_+\beta_4LEDU_+\beta_5PG_+\beta_6PK_+\beta_7PW_+\mu.....4$

Where HDF is demand for firewood, AGE is age of the household head measured in years, HSZE is household size(number of people in the house), INC is the income level (in Naira), LEDU is the level of Education of the household head (Education qualification), PG is the price of Gas, PK is the price of Kerosene, and PW is price of firewood all in Naira. β_0 is the constant, β_1 , β_7 are the parameters to be

estimated and μ is the error term. Secondly, income variable was replaced with the poverty status and the model is expressed as follows:

HDF= $\beta_{0+}\beta_1AGE_+\beta_2HSZE_+\beta_3POV_+\beta_4LEDU_+\beta_5PG_+\beta_6PK_+\beta_7PW_+\mu.....5$

Where POV is the poverty Status measured using 1.5 Dollars per day, any respondent whose income is less than 1.5 Dollars a day was considered poor and a value of 1 was assigned and otherwise was considered non-poor and a value of 0 was assigned. All other variables are as defined in equation 4. The maximum likelihood technique was used to estimate models 4 and 5.

Data Presentation and Analysis

This section presents the results of the data collected. First, energy sources used for cooking by the respondents in the study area are presented. The result is presented in the table below.

Sources	Frequency	Percentages (%)
Fuelwood	118	59.0
Charcoal	43	21.5
Kerosene	29	14.5
Gas	6	3.0
Electricity	4	2.0
Total	200	100

Table 2: Distribution of Respondents According to Energy used for Cooking and Heating

Source: Field Survey, January, 2013

From the above table, it is obvious that more than half of the respondents use fuel wood more than any other energy source. This suggests that there is high level of fuel wood consumption in the study area. Further, the respondents were asked to indicate reasons for using a particular energy source. Their responses are presented in the following table.

Energy			Reasons			Total
Source	Availability	Cheapness	Low Level	Convenience	Efficiency	
			Of Income			
Fuelwood	20	32	63	2	2	118
Charcoal	9	12	19	1	2	43
Kerosene	3	8	15	0	3	29
Gas	0	0	0	4	2	6
Electricity	2	0	0	2	0	4
Total	34	52	97	9	8	200

Table 3: Reasons for Utilization of Energy Sources

Source: Field Survey, January, 2013

From the above table, it can be seen that for fuel wood, charcoal and kerosene, the principle reason for their high usage by the sampled respondents is the low income level; since 48.5% of the total respondents have indicated so. The second reason advanced by the respondents for using fuel wood, charcoal and kerosene is cheapness; 26% of the total respondents have also indicated so. The third reason is availability which make up 17% of the total respondents while (9)4.5% and (8)4% of the respondents indicated convenience and efficiency as the reasons for using gas and electricity. These results are in consonance with the theoretical postulations of the energy ladder hypothesis. The hypothesis postulates that the poor tend use more fuel wood, charcoal, and they are likely to switch over to more convenient and efficient energy source given an increase in their income level.

To further ascertain whether their income levels are truly low as indicated above, they were asked to state their annual income and their responses are presented in the table below. *Table 4: Distribution of Annual Income of the Respondents*

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Income level(₦)	Frequency	Percentage
<100, 000	87	43.6
101, 000-200,000	52	26.0
201, 000-300, 000	41	20.5
301, 000-400, 000	15	7.5
Above 400, 000	5	2.5
Total	200	100

Source: Field Survey, January, 2013

A close examination of the income levels of the respondents revealed that on the average, 43.6% of the respondents' income is less than 1.5 dollars per day (N240) assuming that exchange rate of \$1: N160. This suggests that, 87 respondents representing 43.6% are living below the poverty line; hence, we may say that 43.6% of the sampled respondents are core poor and the rest are considered moderately poor. Thus, we may further deduce that the 59.0% of the respondents in table 2 who indicated that, they use firewood as their major source of cooking energy may be attributed to their income levels as also shown in table 3.

To further confirmed poverty – fuel wood consumption nexus, binary- choice- firewood demand function was estimated. First, we included the income level of the respondents as an explanatory variable and second, the model included poverty status as any explanatory variable. Here, the value of 1 was assigned to the non-poor respondents on the basis of 1.5 dollars (\$240) per day, and the value of 0 was assigned to the poor respondents.

The results are shown below,

MODEL 4				MOD	EL 5			
Variables	Coefficient	Std	Prob		Variables	Coefficient	Std	Prob
		Error					Error	
AGE	0.2339	0.0116	0.0034		AGE	0.0062	0.0129	0.625
HSZE	0.0331	0.0537	0.5370		HSZE	0.0424	0.0562	0.4507
INC	-1.0112	0.512	0.0231		LEDU	0.1216	0.152	0.423
LEDU	-0.0481	0.1359	0.7238		POV	0.2976	0.0441	0.000
PG	0.1421	0.0440	0.0121		PG	3.04E-05	0.0005	0.9496
РК	-1.721	5.182	0.7398		PK	4.54E-05	5.48E-	0.4074
							05	
PW	-2.8311	2.3612	0.0411		PW	-3.26E-05	-2.7400	0.2354
С	-0.1252	0.6684	0.8514		С	0.59116	0.7495	0.4303
Dependent	Variable: HD)F		Depen	dent Variable	: HDF		
Mac Fadde Akaike ifo	n R-Squared Criterion	0.542 1.3820		Mac I Aka	Fadden R-Sq aike ifo Crite:	uared 0.492 rion 1.129		
Schwarz C	riterion	1.51396			Schwarz Cri	terion 1.2	607	
LR Statistic	2	8.175			LR Statistic	53	.83	
Prob(LR S	tatistic)	0.0872		J	Prob(LR Stat	istic) 0.0	000	

Source: Authors' output from E-Views 7

From the results of model 4, AGE is positively related to household demand for fire wood, and it is statistical significant at 1% level of significance. This could be explained as traditional effect as old people tend to use firewood more than young people. The finding is consistent with Demurger and Fournier (2010). The household size (HSZE) is positively associated with the demand for fire wood. This

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suggests that as the house size increases, there is tendencies for increase demand for fire wood hence, lower demand for its substitutes (kerosene and cooking gas). This finding is in line with Bello (2010). An inverse relationship was found between the income and the demand for fire wood in the sample contrary to the findings of Bello (2010). Given this significant negative relationship, we interpreted that, as income increases, the demand for firewood decreases. This implies that income increase make people switch over to better energy sources such as kerosene, gas, etc. This explanation is consistent with the Energy Ladder hypothesis. Thus, we considered firewood as an inferior good. This is in line with Demurger and Fournier (2010). The results also revealed a negative relationship between the level of education and the demand for firewood. This suggests that as ones level of education increases, there is the tendency for such a person to demand for more convenient energy sources, other things being equal. The result again showed a positive relationship between the price of gas and the demand for fire wood. The positive sign suggests the *substitution effect*; while the price of kerosene appeared with a negative sign contrary to our expectations. Lastly, the price of firewood has a negative relationship with its own demand. This suggests the classical *own-price effect*; implying that if the price of firewood increases much, there is tendency for households to switch over to other energy substitutes such as kerosene, if their prices remain fairly stable.

The Mac Fadden R^2 is 0.542 meaning that explanatory variables included in the model explain changes in the demand for firewood in the area by 54.2%. The Akaike and Schwarz statistics are relatively low; suggesting that the model performs well. The LR statistics is significant which suggests element of joint effect by the explanatory variables of the model.

In model 5, income was dropped and was replaced by poverty status. From this model, even with the introduction of the POV variable, AGE, HSZE have appeared with positive signs as in the case of model 4; however, the coefficients are not significant. Conversely, the level of education (LEDU) has appeared with a positive sign as well as the price of kerosene.

The poverty variable is positive and significantly related to the demand for firewood in the study area. This implies that if poverty increases by 1%, the demand for firewood will increase by 29.8%, other things being equal. The price of firewood still demonstrates a negative *own-price effect* character as in model 4. The Mc Fadden R^2 of 0.492 suggests that the changes in the demand for firewood are explained by the predictor variables of the model by 49.2%. The Akaike and Schwarz statistics show goodness of fit of the model, while the significant LR statistic suggests elements of joint effect by the explanatory variables of the model.

Discussion and Conclusion

Emergent from the foregoing analysis, it was found out that 59% of the sampled respondents use firewood as their major cooking energy. Principal reasons advanced for the overwhelming utilization of firewood were; low level of income and cheapness of firewood. It was further found that 43.6% of the sampled respondents' incomes were less than 1.5 Dollars per day. This suggested high poverty incidence.

From the probit models, we confirmed that the behaviour of the respondents is consistent with the Energy Ladder model's postulations; and as such, firewood was considered an inferior good whose demand is likely to fall given a rise in income.

Furthermore, it was confirmed that there exist substitution effect between the demand for firewood and other cooking energy types. Again, there is a negative own-price effect in the demand for firewood in the study area. Finally, the study has revealed poverty- environment hypothesis; on this basis, it was concluded that poverty leads to high firewood consumption in the study area. Thus, it was recommended that the government should make concerted efforts to reduce poverty so as to reduce high level of firewood consumption, hence reduction in its attendant consequences of environmental degradation in terms of pollution and deforestation.

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Analysis of the Response of Agricultural Export Commodities to Price and Exchange Rate Reforms in Nigeria, 1986 -2007

BY

NJIFORTI Peter (Ph.D) Email: <u>Njifortica@yahoo.com</u> and <u>pivadga@gmail.com</u>; Mobile: +2348036069211 Department of Economics, Ahmadu Bello University, Zaria.

Abstract

This paper investigated the extent to which price and exchange rate reforms have affected the output, prices and export supply of selected agricultural export commodities in Nigeria. The Nerlovian adaptive expectation model was adapted for analysis following the work of Njiforti (2005) and Kwanashie et al (1998a and 1998b). Cocoa, coffee, palm kernel, palm oil, cotton and rubber were selected to represent agricultural export commodities (tradables). The analytical framework constituted of three blocks (the output block, price block and export supply block). Each of the block consisted of set of regression equations for the selected tradable agricultural crops. The estimation result in block 1 indicated that, the individual crops had different patterns of responses to policy instruments. The estimated elasticity coefficients were generally low; the short-run elasticities for all the crops were lower than the long-run values. This finding was somehow expected as most cash crops production need longer gestation period The characteristics of each crop are different, the climatic conditions and spatial to maturity. distribution are also different. In block 2 (ie price block), the nominal exchange rate variable was significant at 1% probability level in all equations. This indicated that the nominal devaluation of the Naira/US\$ exchange rate had positive impact on absolute domestic prices of the selected tradable commodities. Devaluation of the naira gave rise to increase in foreign demand for domestically produced goods. This subsequently gave rise to increase in their prices, given the short run inelastic supply of these commodities. Increase in their prices subsequently gave rise to increase in output as abandoned coffee and cocoa farms were revisited, and new investors came into farming to take advantage of these high prices. In block3, (export supply block), cocoa and cotton responded significantly and positively to price variable. The coefficients for Palm produce, rubber and agroprocessed commodities were not significant. Estimates of the short run export elasticities were noted to be very low for the commodities investigated. In addition, they were lower than their long run counterparts. Cotton had higher elasticity values for the export crops both in the short run (1.005) and long run (1.148) respectively. The high elasticity response of cotton export was due to the short gestation period for cotton production. Based on the findings in this paper, liberalization of price and exchange rate were not able to boost the output of the selected export commodities as anticipated. The export reform structure was not adequate for Nigeria. There is the need for more problem oriented programme to boost Nigeria agricultural export commodities. To overcome the export constraint problems, Nigeria should bid for strategic advantage position in world trade to compete favourable in the international scene.

Key works: Agricultural output, Output Prices, Export supply, Exchange rate, tradable agricultural output

1.0 Introduction

Agricultural policy in Nigeria has witnessed several changes since the colonial and post independence years (Yusuf, 2004). The policies and programmes were usually centred towards stimulating greater activities in certain specific aspects of agricultural production system. Before independence, emphasis was on the production of cash crops, such as rubber, cotton, groundnut, oil palm and cocoa, while after independence the rising food shortages shifted the focus to food crops production (Njiforti, 2008).

One of the major thrust of the economic reforms programme was the radical adjustment of agricultural pricing and exchange rate policies. The erstwhile Commodity Boards that were charged with fixing product prices and purchasing agricultural products from the farmers were dissolved and free market forces were allowed to play a prominent role in determining prices of agricultural products. This was expected to ease farmers' marketing problems and allow them to sell the outputs locally at market prices and externally at world market prices. On the other hand, devaluation of the naira exchange rate was expected to enable Nigeria's agricultural commodities to be more competitive in the world market (Ihimodu 1993).

The first major impact of the economic reforms programme was the increase in prices of agricultural products. As observed by Shonekan (1988), farmers received higher prices for the products during the reforms period than before. The prices of crops like cocoa, cotton, palm produce and coffee increased significantly. However, as noted by Ihimodu (1993), the increases in the prices of these crops were in nominal and not in real terms. In a study carried out by Phillip (1990), the price trends during the post SAP period expressed as indices of nominal prices, using 1985 as the base year, indicated that when deflated by consumer's price index, indices for all the crops reduced substantially. For example, the indices for cocoa and palm kernel were 677 and 631, respectively in 1991 and when prices were deflated by the consumer price index, the index for cocoa was 205 while that of palm kernel was 191. This is an indication that substantial part of the increase in prices of these commodities were due to the general price increase (inflation) as a result of naira devaluation.

Even though SAP reforms induced price increases, observed price increases were very unstable and not sufficient to induce output growth. As observed by Smith, (1989), prices of tradable commodities in the world market were highly unstable, as well as very unstable exchange rates of the naira. Such price/exchange rate changes, however, could lead to a major decline in future output if they are unpredictable and erratic. According to Adubi et al (1999), fluctuations - whether positive or negative are not desirable as they increase risk and uncertainty in international transactions and thus discourage trade.

One of the most visible and pervasive policy was the naira exchange rate devaluation. The rate, which in 1981 was N6.39 and \$9.99 in 1985 to the US dollar, in 1986, averaged 13.32. By 1992 it had depreciated to \$19.66, \$19.83 in 1999 and \$130 in 2003. By 2012, the exchange rate of the naira per US dollar is about \$150 per dollar. Economic theory suggests that exchange rate devaluation is good for exports as it makes export prices more competitive. But theory also suggests that devaluation makes import more expensive. So, for an economy like Nigeria that depends on import of inputs, devaluation could be a double-edged sword (Shapiro, 1970).

The demand and supply of agricultural commodities for third world countries according to Abalu, (1975) is inelastic. As observed by Phillip (1990), tradable export supply in the short run in Nigeria is inelastic and the demand for Nigeria commodities in the world market is equally inelastic. Consequently, devaluation of the naira may not be able to boost export supply and export revenue.

Kwanashie et al. (1998a) argues that the price and exchange rate reforms which were prescription of IMF and the World Bank were a kind of political manoeuvring in the international scene. They argue that it was a strategic move by the leading commodity consumers either as a means of diverting the attention of commodity exporters and or making it infeasible for them to persist in their demand for a "New International Economic Order" to replace the one that places their economies at long and short term risks. As again noted by Kwanashie et al (1998a), expansion of commodity will lead to a fall in price and consequently farmers' income because of inelastic demand for primary commodities.

According to Olukosi and Isitor (1990), liberal price policy which gave rise to the abolition of Commodity Board in Nigeria brought about unstable farmers' income, loss of quality control and exploitation of the farmers by independent export commodity marketers.

The dissatisfaction of the performance shown by the agricultural sector, failure of some agricultural programmes and the need to provide a well articulated domestic agricultural policy to serve as a key for Nigerian agricultural development have made the government of Nigeria in 2001 to launch a

policy document as the New Agricultural Policy² (NAP) (FMARD, 2001). The launching of this policy was expected to be a road map in solving fundamental issues in the Nigerian Agricultural sector.

Export promotion of agricultural and agro-industrial products as one of the policy options of the NAP recognised the comparative advantage Nigeria has in the production of a number of exportable agricultural commodities, such as cocoa, palm produce, rubber, ginger, spices, fruits and vegetables, flowers, shrimps and ornamental fish, cassava products, hides and skin, cashew, gum arabic, groundnuts and cotton (products). In order to diversity the base of the Nigerian economy and widen the market for agricultural commodities to absorb the expected increase in production, there is need to promote the export of these agricultural and agro-industrial products. To facilitate the acceptance of Nigerian agricultural commodities in the international market, including taking full advantage of the US African Growth and Opportunity Act (AGOA), there will be need to develop appropriate capacities and institutional framework within the agricultural sector as well as in other relevant sectors to meet the Sanitary and Phytosanitary Standards (SPS) and comply with the Technical Barriers to Trade (TBT) agreements of the World Trade Organisation (WTO).

Therefore, this paper analyses the response of agricultural outputs to price and exchange rate reforms in Nigeria covering the period of 1986 to 2010.

2.0 Conceptual and theoretical literature

2.1 Concept of Exchange rate

An exchange rate is the price of one currency in terms of another (Adubi et al 1999). Given two currencies, the naira and the US dollar, for example, the exchange rate between the naira and the dollar is equal to the units of naira needed to purchase one unit of the US dollar. The value of naira in terms of dollars in this case, is the reciprocal for the N/\$ exchange rate. However, in the current situation in which the currencies of the major trading nations are floating, the movement of the exchange rate so defined may not give an accurate idea of the real changes in the international purchasing power of any given currency (Adubi et al 1999). Thus, for this purpose the concept of effective exchange rate has been developed as the standard technique for dealing with a group of floating currencies. There are both the "nominal" and "real" versions of effective exchange rates. The former refers to the index of the weighted average of the exchange rates of the country's trading partners, relative to its own exchange rate. The latter refers to the nominal effective exchange rate deflated by (or adjusted for) indices of relative prices.

2.2 The Theoretical Foundation of Exchange Rate Policy

The theoretical foundations of exchange rate policy are important in discussing importance in exchange rate. All the models of exchange rate determination are basically hinged on the familiar national income identity and quantity theory of money and its reformulations. The classical, Keynesian, neo-Keynesian and Monetarists arguments, including the structuralists counter arguments, are central to the view expressed by the proponents of the subsisting models of exchange rate determinations (Ogiogio, 1993).

Models of exchange rate determination are simply the different frameworks built on competing school of thought under which the exchange rate of a currency can be determined. The models are based on a body of economic theories on the relationship between the exchange rate of a domestic currency visà-vis that of trading partners and the factors responsible for variations in their equilibrium values. The main models of exchange rate determination are the traditional flow model, the Portfolio balance model and monetary model. The discourse here is based on the monetary approach to exchange rate determination because it is considered as most elegant (Njiforti, 2005).

2.3 Monetary model of exchange rate.

² The previous agricultural policy document was finalized in 1988 and was supposed to remain operative until the year 2000. Hence, in year 2001, a new policy document was launched. The new policy document bears most of the features of the old one, but with more focused direction and better articulation.

The monetary approach to exchange rate determination is the most elegant and perhaps the most complete of all the models of exchange rate compared to traditional flow model³ and Portfolio balance model⁴ (Oyejide, 1986).

The monetary approach is complete because it does not only emphasize the primary role of money but recognised the role of the real sector as a contributory factor in exchange rate determination. The monetary model is based on three legs or a tripod. In the first instance, it asserts that the equilibrium exchange rate depends on the stock equilibrium conditions in each country's money market. The monetary equilibrium condition states that the price level adjusts instantaneously to equate the value of the nominal money stock to the desired or real demand for money. The demand for money itself is a function of real income and nominal interest rates. The movement in the monetary equilibrium is comparatively analyzed with that of a trading partner. An increase in the money stock would induce the depreciation of the domestic exchange rate vis-à-vis trading partner's currencies while a decrease will lead to the opposite response, all things being equal. The rate of growth of domestic income is also adduced as a factor influencing the exchange rate. An increase in the growth rate of domestic income in comparison with those of trading partners would cause the exchange rate to appreciate. This is because the resulting excess demand for money would lead to a fall in the domestic price level. The third leg on which the monetary model stands is the covered interest parity which holds that interest rates are equalized on a global basis. If interest rate in the domestic economy rises, the demand for money would fall, prices would rise and the exchange rate would depreciate. Thus, the exchange rate of a domestic currency is influenced by relative shifts in money stocks, real incomes and interest rates or inflation rates (Ovejide, 1986).

A simple expression for the exchange rate can be derived from the quantity theory of money when there are two countries and an exchange rate that follows its Purchasing Power Parity (PPP) (value Edwards, 1988).

Let the foreign country be denoted by an asterisk (*), so that it has an equation linking money, prices, income, and velocity:

$$M * V * = P * Y * .$$
 . . (1)

Using values for home money supply, prices, velocity, and income, we have;

$$MV = PY. \qquad . \qquad (2)$$

All we need to add is the relationship implied by PPP. That is prices will be the same in both economies when converted at the current exchange rate:

Where P is the home country price level, P^* is the foreign country price level, and E is the exchange rate (number of units of foreign currency per unit of home currency). Now all we do is rearrange (1) and (2) as expressions for P and P*, then substitute into (3) and arrange as an expression for E. This gives

³ The traditional flow model relies on equilibrium in the foreign exchange market as the determining factor of the appropriate exchange rate. The intersection between the demand for and supply of foreign exchange or the market clearing equilibrium rate is regarded as the pure or market exchange rate. The point of intersection is derived from the so called "Marshallian Scissors" which are the demand and supply schedules. The traditional flow model does not relegate the importance of money but it concentrates on forces behind the demand and supply schedules of foreign exchange. It posited that the exchange rate or the strength of a nation's currency is influenced by relative prices, interest rates and real income.

⁴ The portfolio balance model relies heavily on the asset or portfolio market. It holds that the portfolio equilibrium position of wealth holders in each country simultaneously determines the exchange and interest rates. The shift in the allocation of wealth between the domestic money base, domestic public bonds and net foreign bonds denominated in foreign currency influences the equilibrium exchange rate. Movement in domestic interest rates and fiscal operations of government to the extent that they induce movements in net foreign assets holding, influence movement in the equilibrium exchange rate. Accurate forecasts based on this model are therefore difficult because domestic and foreign assets are not perfect substitutes as their rates of returns differ significantly. Furthermore, while some countries are net foreign devices, others are net foreign creditors. The most disturbing omission of this model is the treatment of wealth holders in isolation of the environment in which they operate. The environment influences the decision of wealth holders. The wealth that is being distributed between the various assets would have been earned as a result of certain investment decisions and prevailing economic conditions.

$$E = \frac{M^*}{M} \cdot \frac{Y}{Y^*} \cdot \frac{V^*}{V}.$$
 (4)

This is an important equation which gives us some new insights into the exchange rate. The first term is the ratio of the home and foreign money supplies. E falls in proportion to the home money supply and rises in proportion to the foreign money supply. This means that, when the home money supply rises, the exchange rate depreciates in the same proportion. The logic of this has two steps. First, a rise in home money supply leads to a proportional increase in the home price level (for given levels of Y and V). Secondly, a rise in the home price level leads to a proportional depreciation of the home currency to preserve PPP.

The second term in (4) has a very important implication. Domestic real national income is positively related to E. This means that, other things being equal, a rise in domestic national income leads to an appreciation of the home currency. The reason for this is that an increase in Y leads to an increased transactions demand for the home currency. Anything that increases demand for the home currency will tend to appreciate its exchange rate.

This simple model of exchange rates gives important insights, but it is only a beginning. Many more complicated factors affecting interest rates and expectations can easily be incorporated by a more detailed specification of the determinants of *V*. However, the main elements of (4) are recognizable in many of the empirical exchange rate models of the last two decades.

2.4 Price and exchange rate changes and agricultural exports in Nigeria

In the early 1960s in Nigeria, there was little concern for exchange rate policy, as it had almost no significance in economic management. Between 1960 and 1967, the Nigerian currency was adjusted in relation to the British pound with a one-to-one relationship between them. Between 1967 and 1974, another fixed parity was maintained with the American dollar. This system was abandoned between 1974 and late 1976, when an independent exchange rate management policy was ushered in that pegged the naira to either the U.S. dollar or the British pound sterling, whichever currency was stronger in the foreign exchange market. The main objective of the exchange rate policy in this phase was to operate an independently manage exchanged rate system that would influence real economic variables in the economy and bring down the rate of inflation. Consequently, a policy of progressive appreciation of the naira was pursued over the period and was aided by the oil boom that occurred at the same time. Because of the huge earnings from crude petroleum exports over the period, Nigeria persistently ran appreciable external surpluses in the balance of payments, which supported the appreciation of the naira. This practice led to considerable stability in the naira exchange rate (MUSA, 2011).

Throughout this period the pricing of agricultural exports was done by the established government marketing boards. Specifically, these marketing boards were responsible for fixing prices and ensuring quality of crop exports. Though low, agricultural export prices were stable during this period and not subject to changes in the exchange rate (which was more or less fixed) apart from fluctuations in the international prices of primary products.

Late in 1976, as a result of the changing fortunes of Nigeria's economic circumstance, a policy reversal was affected in the management of the naira exchange rate. There was a deliberate policy to depreciate the naira, though this was not systematic. In the effort to realign the naira exchange rate, the monetarists were convinced that a more appropriate way to ensure stability and viability of the naira was to peg it to a basket of currencies. Hence, a basket of seven (7) currencies of Nigeria's major trading partner countries was adopted. Towards the end of 1985, as the economic crisis deepened, the government allowed the exchange rate to be determined by market forces. This led to many rates that diverged widely from one another. The evidence between 1985 and 1993 showed elements of distortions in the exchange rate that made it difficult to predict the path towards stability of the rate (Ogiogio, 1993).

In the quest for the stability of the exchange rate, the Nigerian monetary authorities tried several biding systems including the Dutch Auction System (DAS) and the Marginal Rate System. An attempt to ensure viability in the market let to many amendments of the rules, intervention by the Central Bank of Nigeria, and opening of different foreign exchange windows for operations during this period. Despite

this, the fluctuating rates of the exchange rate continued to be an issue of concern to the authorities. For example, the naira exchange rate, which stood at N6.7178 = \$1 during the months of January 1989 depreciated to N7.5871 by March 1989. The rate strengthened progressively from N 7.5808 = \$1 to N 7. 1388 = \$1 in July 1989 after a series of tight monetary policy actions had been taken. The rate averaged N7.2593 = \$1 in August, compared with N7.0389 = \$1 in January 1989. As at December 1991, the naira was exchanging for the dollar at the rate of N9.9331: \$1.00. By June 1993, the naira had depreciated to N17.3760: \$1.00.

Prior to the policy reforms in 1986, and especially during the 1960s, Nigeria was known mainly as an exporter of primary agricultural commodities and, to a relatively small extent, as an exporter of one or two solid minerals. From 1960, when Nigeria became an independent sovereign state, until 1970, its economy was largely sustained, at least from the point of view of off-shore commodities, by the export earnings from these basic agricultural and mineral commodities. The export list of the country within this period comprised ground-nut, cocoa-beans, palm oil and palm kernel, cotton, rubber, ginger, hides, and skins, timber, copper, zinc, columbite, tin, and lead.

The commencement of large-scale exploitation and exportation of crude petroleum began in the early 1970s. The huge inflow of foreign exchange revenues that accompanied the oil boom diverted the attention of the government and a considerable number of the producers of the traditional commodities into activities aimed at exploiting the economic opportunities created by the huge oil revenues. This development heralded the decline of agricultural production and the resultant drop in both volume and value of traditional export commodities (Manyong, 2005).

Between 1981 and 1990, the average growth rate was negative, at -2.86%; the period 1981-1985 recorded -4.54% and 1985-1990 had a growth rate of 27.06%. During 1960 - 1981, the average rate of growth was an impressive 22.1% while the period 1981-1994 recorded 11.6%. The impressive performance of merchandise exports before 1981 was largely due to the advent of petroleum in the export list. In 1960, non-oil exports, comprising mainly agricultural commodities, accounted for 97.3% of total exports. This percentage, however, declined continuously (export for three years) to 1.8% in 1981. The percentage then fluctuated until 1991, when it started a consistent decline to 2.6% in 1994. In 1992, nonoil exports, which stood at 144227.8 million, were at their lowest level since 1960. At the same time, crude petroleum exports, which were valued at N8.8 million or 2.7% of total exports in 1960, increased to a record level of N201,383.9 million or 97.9% of total exports that same year. Since the introduction of SAP in 1986 and a policy shift towards support for growth of traditional non-oil exports, there had been an appreciable increase in exports. Thus, growth of non-oil exports has been positive except in 1992. The devaluation of the currency, with the attendant increase in domestic prices of exports, was one of the major factors responsible for the increase. In the 1990s, however, the share of non-oil exports has been consistently less than 5% of total merchandise exports. With regard to imports, exchange rate overvaluation in the 1960s and 1970s helped to cheapen imports of competing food items, as well as agrobased and industrial raw materials. For example, it was cheaper to import maize for domestic use than to grow it locally, while imported talcum was found to be relatively cheaper than the palm kernel oil used by domestic soap manufacturers. The situation was exacerbated by the liberal food imports policy, especially during 1970 -1977 when there was little or no trade tariff on imported food items. This fostered rapid expansion in the importation of these goods to the detriment of local production of similar goods.

When it became obvious that aggregate import demand had outstripped total foreign exchange available for imports, trade restriction through import licensing schemes was introduced. Unfortunately, the implementation of the schemes was grossly abused; it favoured mainly urban political patrons and multinational corporations. With the adoption of SAP, foreign exchange allocation and import licensing procedures were abolished and transactions in foreign exchange were subjected to market forces under an auction system. The new foreign exchange policy helped to remove the over-valuation problem to the extent that it is now generally felt that the naira is undervalued.

In principle, the sharp depreciation in the naira exchange rate should be expected to boost export earnings and producers' prices of export crops. Available data (CBN,1994) showed that despite the

declining trends in the U.S. dollar, prices of Nigeria's agricultural export commodities in the world market, the exchange rate depreciation has resulted in substantial increases in the naira equivalent of the world prices and consequently in local producer prices. Indeed, since the introduction of SAP, producer prices of all export commodities have risen far above what the commodity boards used to pay farmers. This has gone a long way to boost domestic production through improved husbandry of existing farms and the cultivation of increased hectares.

On the imports side, exchange rate devaluation has resulted in dramatic increase in the naira price of imports and this is expected to discourage importation of foreign food items, by raising the level of effective protection for domestic production. On the other hand, the naira costs of imported items have also risen astronomically, taking most of these goods almost out of the reach of many consumers. The sharp rise in the costs of imported inputs could discourage new investments in commercial ventures while the maintenance and rehabilitation of existing equipments would also pose a serious financial strain on modern entrepreneurship.

3.0 Methodology

The analytical framework consists of the domestic price model, the relative price model, the adaptive expectation model, Njiforti (2005). The empirical framework consists of three blocks. These include the production output block, the price block and the export supply block (Kwanashie et al, 1998a; Kwanashie et al, 1998b; Nerlove, 1958b; Phillip, 1990 and Nerlove, 1986; and Njiforti, 2005).Consequently sections 3.1, 3.2 and 3.3 present the derivation of the domestic price estimate, relative price estimate and price expectation model respectively.

3.1 Domestic Price Estimate

 $E_t = nominal exchange rate$

T = export tax rate

(11)

(9)

Taking the total derivative of equation (10)

$$dp_i = dp_i * \left(\frac{dp_i}{dp_i}\right) \times E + dE\left(\frac{dp_i}{dE}\right) \times P_i *$$

This implies $P_i = a_1 E + a_2 P_i^* + e_t$. . . where;

$$a_1 = dp_i * \left(\frac{dp_i}{dp_i *}\right)$$
$$a_2 = dE\left(\frac{dp_i}{dE}\right)$$

Equation (11) above has been converted into a stochastic process by adding the stochastic term (e_t) . Equation 11 implies that changes in domestic prices of exports depend on changes in world price of exports, changes in the nominal exchange rate, relative sensitivity of domestic price to world price and exchange rate and random shocks. It is expected that, domestic prices of exports will response positively to changes in world prices and nominal exchange rate (defined as the ratio of Naira to foreign currency).

3.2 Relative Price Estimate

Equation (12) represents the relative price index which is used as a proxy for domestic price level.

$$\begin{split} RP_i &= P_i / CPI^* 100 \qquad . \qquad . \qquad . \qquad . \qquad (12) \\ Where, RP_i \text{ is the relative price of product i} \\ Pi &= \text{price of product i} \\ CPI &= \text{domestic price index.} \end{split}$$

3.3. Price expectation model

The Nerlovian framework has been adapted for the price expectation model. In actual estimations, the original Nerlovian model has been modified in many diverse ways. Most studies of agricultural supply response include some form of price expectation; constant and partial output adjustments (See Phillip, 1990, Njiforti, 2005). The formation of the price expectation is often taken to conform to the adaptive expectations hypothesis, hence, the formation of the price expectation hypothesis would start with a simple adjustment model (partial and constant) as specified below;

 $Q_t = f(Q_t^*)$.(13). . . Where Qt = actual output $Q^*t = desired output$ Note: $Qt = f(P_t^e)$. .(14) . . P_{t}^{e} = expected price at current time period $Q^{*t} = f(P_{t-1})$ P_{t-1} = actual price at previous time period Hence equations 13 and 14 in stochastic forms are written as; $Qt = \alpha_0 + \alpha_1 p_t^e + u_{1t}$ (15)

$$Q^*t = \alpha_a + \alpha_1 p_{t-1} + u_{2t} . \qquad . \qquad . \qquad (16)$$

The problem of supply model in this case lies on adjustment principle (i.e. Partial adjustment; $(Q^*_t - Q_{t-1})$

or constant elasticity adjustment $(\frac{Q_{t}^{*}}{Q_{t-1}})$

3.3.1 Partial Adjustment

$$Q_{t} = Q_{t-1} + \beta(Q_{t}^{*} - Q_{t-1}) \quad . \tag{15}$$

 β = partial adjustment coefficient.

 $0 \le \beta \le 1$

When $\beta = 0$

 $Qt = Q_{t-1}$, no adjustment

When $\beta = 1$

 $Q_t = Q_t^*$, no adjustment.

So, if there should be adjustment, β must not be 0 nor 1 but in between.

By simplifying equation 15

$\mathbf{Qt} = \mathbf{Q}_{t-1} + \beta \mathbf{Q}_{t}^* - \beta \mathbf{Q}_{t-1}$	•		•	(16)
$Qt = (1 - \beta)Q_{t-1} + \beta Q_{t}^*$.		•	•	(17)
$Qt = (1 - \beta)Q_{t-1} + \beta(\alpha_o + \alpha_1 P_{t-1}) + U_t$		•		(18)
$Qt = Q_{t-1} - \beta Q_{t-1} + \alpha_o \beta + \alpha_1 \beta P_{t-1} + \beta Q_{t-1} + \beta$	βU_{t}			(19)
$Q_t = a_o + a_1 Q_{t-1} + a_2 P_{t-1} + v_t \ .$	•	•	•	.(20)
$\mathbf{a}_{o} = \boldsymbol{\beta} \boldsymbol{\alpha}_{o}, \ \mathbf{a}_{1} = 1 - \boldsymbol{\beta}, \ \mathbf{a}_{2} = \boldsymbol{\alpha}_{1} \boldsymbol{\beta}$				

 $V_t = random \ error \ term$

Constant Elasticity Adjustment Model

The constant elasticity is based on the following equations

$$\frac{Q_t}{Q_{t-1}} = \left(\frac{Q_{t-1}^*}{Q_{t-1}}\right)^{\lambda} e^{ut} \qquad (21)$$
Where $\frac{Q_{t-1}^*}{Q_{t-1}} = \text{constant elasticity adjustment,}$

$$Q_{t}^* = \alpha P_t^{\beta} \qquad (22)$$

 λ = adjustment coefficient and $\lambda \neq 1$ for any adjustment Simplifying equation (21)

$$Q_{t} = \alpha^{\lambda} Q_{t-1} Q_{t-1}^{-\lambda} P_{t}^{\lambda\beta} e^{ut} \qquad . \qquad (23)$$

$$\log Q_t = \lambda \log \alpha + \log Q_{t-1} - \lambda \log Q_{t-1} + \lambda \beta \log P_t + u_t \quad (24)$$

$$\log Q_t = \lambda \log \alpha + (1 - \lambda) \log Q_{t-1} + \lambda \rho \log P_t + u_t \qquad (25)$$

$$Q_{t} = a_{a} + a_{1}Q_{t-1} + a_{2}P_{t} + u_{t} \quad . \qquad . \qquad . \qquad (26)$$

$$a_o = \lambda \log \alpha$$

 $a_1 = 1 - \lambda$
 $a_2 = \lambda \beta$ = Measures price elasticity

The constant elasticity would be measured using the following processes.

Hence equation 30 measures the short-run elasticity of response. From equation 26 the long-run elasticity would be measured as follow;

Long-run Elasticity =
$$\frac{\lambda\beta}{1-(1-\lambda)} = \beta$$
 . (31)

For the purpose of empirical investigation between agricultural production volume, commodity export supply volume, foreign exchange rate and prices of selected agricultural tradable commodities, the following model would be adopted based on constant elasticity adjustment hypothesis;

$$Q_{it} = f(P_i^*, P_t, D_1, D_2, Q_{it-1})$$
 (32)
Where

 Q_{it} = output of tradable crops

D₁ =Dummy for weather (that assumes the value of unity for the drought year and zero for other years)

 D_2 = Dummy for various policy variables which are incorporated through price expectation (P_t^e)

 P_{it} = absolute price of crop i.

Hence the formation of the price expectation is taken to conform with the adaptive expectations hypothesis as follows;

 $Pe_t - Pe_{t-1} = \alpha(P_{t-1} - Pe_{t-1}).$ (33)

 α = adjustment coefficient; (0< α <1)

 Pe_t = current period expected price

 Pe_{t-1} = previous period expected price

 P_{t-1} = previous period actual price

Equation 33 would be used to estimate the response of agricultural production and export supply to adjustment policies. The coefficient of elasticities would be estimated based on the estimation processes indicated in elasticity equations stated above.

3.4 Empirical Models

The empirical models have been presented in three blocks following the work of Njiforti (2005). These blocks include the production, price and export blocks respectively. The choice of these blocks have been informed by the focus of the paper and the work of Njiforti (2005) and Kwanashie et al, (1998a) and Kwanashie et al, (1998b)

Block 1: Production supply

$$\begin{split} & \ln(Qc_t) = a_o + a_1 \ln Pc_{t-3} + a_2 \ln(Qc_{t-1}) + a_3 \ln(CEA_{t-3}) + a_4 D_{1t} + e_t \quad . \qquad (34) \\ & \ln(Qcof_t) = b_o + b_1 \ln PCof_{t-3}) + b_2 \ln(CEA_{t-3}) + b_3 \ln(Qcof_{t-1}) + b_4 D_{1t} + e_t \quad (35) \\ & \ln(Qco_t) = co + c_1 \ln(Pco_{t-3}) + c_2 \ln(CEA_{t-3}) + c_3 \ln(Qco_{t-1}) + c_4 D_{1t} + e_t \quad (36) \\ & \ln(QPo_t) = d_o + d_1 \ln(QPo_{t-3}) + d_2 \ln(CEA_{t-3}) + d_3 D_{1t} + d_4 \ln(Qpo_{t-1}) + e_t \quad . (37) \\ & \ln(QR_t) = e_o + e_1 \ln(PR_{t-3}) + e_2 \ln(CEA_{t-3}) + e_3 D_{1t} + e_4 \ln(QR_{t-1}) + e_t \quad . (38) \\ & \ln QPk_t = fo + f_1 \ln(PPk_{t-3}) + f_2 \ln(CEA_{t-3}) + f_3 D_{1t} + f_4 \ln(QPk_{t-1}) + e_t \quad . (39) \\ & Block 1 \text{ shall determine the responsiveness of selected tradable output to policy reforms.} \end{split}$$

Block 2: Price

$PCo_t = g_0 + g_1INDEXWPco_t + g_2E_t + g_3D_{2t}$	$+ e_t$.		(40)
$Pcof_t = h_o + h_1INDEXWPcof_t + h_2E_t + h_3D_{2t} + h_3D_{2t}$	e _t		(41)
$ot_t = i_o + i_1 INDEXWPCot_t + i_2 E_t + i_3 D_{2t} + e_t.$			(42)
$Ppk_t = j_o + j_1INDEXWPPpk_t + j_3E_t + j_4D_{2t} + e_t$			(43)
$Ppo_t = k_o + k_1 INDEXWPPo_t + k_2 E_t + k_3 D_{2t}$	$+ e_t$.		(44)
$\mathbf{PR}_{t} = \mathbf{l}_{0} + \mathbf{l}_{1}\mathbf{INDEXWPR}_{t} + \mathbf{l}_{2}\mathbf{E}_{t} + \mathbf{l}_{3}\mathbf{D}_{2t} + \mathbf{e}_{t}$			(45)
Plack 2 shall determine the responsiveness of	colootod	tradabla	00mm

Block 2 shall determine the responsiveness of selected tradable commodity prices to policy reforms.

Block 3: Export supply

$\ln(xco_t) = m_o + m_1 \ln(xco_{t-1}) + m_2 \ln(PCo_t) + e_t$			(46)
$ln(xCot_t) = n_o + n_1 ln(xcot_{t-1}) + n_2 ln(PCot_t) + e_t$	•		(47)
$ln(xpal_t) = O_o + o_1 ln(xpal_{t-1}) + o_2 ln(PK_t) + o_3 ln_t$	n(Ppo _t)	$+ e_t$.	(48)
$\ln(xR_t) = p_0 + p_1 \ln(xR_{t-1}) + p_2 \ln(PR_t) + e_t.$	•		(49)
$ln(xaP_t) = q_o + q_1ln(xaP_{t-1}) + q_2ln(PaP_t) + e_t$			(50)

Block 3 estimate the impact of price and exchange rate liberalization policies on the export supply of each of the selected export commodities.

3.6 Definit	ion of Acronym	S
Qco _t	=	quantity of Cocoa
Qcot	=	quantity of Cotton
Qcof _t	=	quantity of coffee
QR _t	=	quantity of Rubber
QPot	=	quantity of palm oil
Qpk _t	=	quantity of palm kernel
PCot	=	domestic Price of cocoa
Pcof _t	=	domestic price of coffee
PCot _t	=	domestic price of Cotton
Ppk _t	=	domestic price of palm kernel
Ppo _t	=	domestic price of palm oil
PRt	=	domestic price of rubber
xco _t	=	export of cocoa
xCot _t	=	export of cotton
xpal _t	=	export of palm produce
xRt	=	export of rubber
xaPt	=	export of agric-processed goods.
INDEXWPco _t	=	Index of world market price of cocoa
INDEXWPcof _t	=	Index of world market price of coffee
INDEXWPCot _t	=	Index of world market price of cotton
INDEXWPPpk	=	Index of world market price of palm kernel
INDEXWPPo _t	=	Index of world market price of palm oil
INDEXWPR _t	=	Index of world market price of rubber
E	=	Exchange rate
Т	=	Time trend
D_1	=	Weather Dummy
D_2	=	Dummy for non price export promotion
et	=	error term
ln	=	natural logarithm
CEA	=	Capital expenditure on agriculture.

Data Source and estimation techniques

Data from 1986 to 2010 were used for the analysis. Data on agricultural price indices, exports, imports and exchange rates were obtained from the Central Bank of Nigeria (CBN) Statistical bulletin, Economic and Financial Review, and Annual Reports and Statements of Accounts, as well as Trade Summary of the Federal Office of Statistics and Abstracts of Statistics of FOS. The CBN data were chosen for three reasons as advanced by kwanashie et al (1998a):

- 1. It is the most comprehensive of economic data on Nigeria.
- 2. CBN data is usually based on the surveys by the FOS of Nigeria, its own surveys and other Nigerian data sources. International organisations based their data on CBN data. As a result, CBN is to be preferred for a Nigerian study for the reason that in spite of its weaknesses, it is arguably the most credible.
- 3. Policy in Nigeria is formulated using CBN data.

The estimation techniques used are the ADF unit root test, the Ordinary Least Square (OLS), the Generalised Method of Moment etc. These various techniques were used to ensure robustness of the results and also avoid spuriousness.

4.0 **Results and Discussions**

Block 1 :Production supply function Estimations Equations 51 to 56 are the estimates for the production supply functions of the selected export commodities. The values in parenthesis are the t-ratios. $\ln(\text{Qct}) = 4.18 **+ 0.53 \ln(\text{Qc}_{t-1}))** + 0.132 \ln(\text{Pc}_{t-3}) - 0.203 \ln(\text{CEA}_{t-3}) - 0.0225 D_{1t}$ (2.207) (2.213)(-1.667) (1.551)(-0.131). (51) $R^{-2} = 0.465, DW = 2.75$ $\ln(Qcof_{t}) = 1.668 - 0.00668 \ln PCof_{t-3}) - 0.0333 \ln(CEA_{t-3}) + 0.8007 \ln(Qcof_{t-1})^{*} + 0.0122 D_{1t}$ (0.724) (-0.0245) (-0.123)(5.235)(.003)(52) $R^{-2} = 0.756$, DW = 2.10 $\ln(\text{Qco}_{t}) = 3.775^{**} + 0.348\ln(\text{Pco}_{t-3})^* - 0.2519\ln(\text{CEA}_{t-3}) + 0.4274\ln(\text{Qco}_{t-1})^{***} + 0.241D_{1t}$ (2.457) (2.221)(-1.632)(2.017)(.212) (53) R^{-2} = 0.569, DW = 2.012 $\ln(\text{QPo}_{t}) = 3.040^{***} + 0.013\ln(\text{PPo}_{t-3}) + 0.008\ln(\text{CEA}_{t-3}) + 0.095D_{1t} + 0.490\ln(\text{Qpo}_{t-1})^{***}$ (1.661)(-0.132)(-0.258)(1.321)(2.494). (54) $R^{-2} = 0.424$, DW = 2.14 $\ln(OR_t) = 3.423^* +$ $0.151\ln(PR_{t-3}) - 0.069\ln(CEA_{t-3}) + 0.695D_{1}^{*} + 0.179\ln(QR_{t-1})$ (2.702)1.677) -0.669) (2.951)(0.840)(55) $R^{-2}=0.679$, DW = 2.04 $Ln(QPk_t) = 3.23^{**} - 0.012ln(PPk_{t-3}) - 0.03ln(CEA_{t-3}) + 0.31D_{1t} + 0.54ln(QPk_{t-1})$ (56)(-0.0116) (-0.029) (0.31)(3.23)0.538) $R^{-2} = 0.675$, DW = 2.65 * = Significant at 1 per cent. ** = Significant at 5 per cent. *** = significant at 10 per cent.

The values in parenthesis are the t-values. The coefficients of the estimates in the equations in Block 1 are elasticities because they are estimated in log-linear forms. This makes it easy to directly obtain short-run output elasticities and also to compute long-run elasticities as specified. All the estimates are good fit of the data used as indicated by the R² and R⁻². The estimates explain between 47%(cocoa), 76%(coffee), 57%(cotton), 42%(palm oil), 68%(rubber) and 67%(palm kernel) of the variations in crop output over the period under review.

As would be expected, the individual crops had different patterns of responses to price policy instruments. Some crops were more responsive to prices than others while some show little relationship to the variables in the equations, suggesting that they may be influenced more by variables not included in their specification. In such a case, this study simply demonstrates that the policy instrument and transmission mechanisms of the reform policy may be inadequate in addressing the supply response of such a crop.

The coefficient for domestic prices are not significant in equations 51 (cocoa), 52 (coffee), 54 (palm oil), 55 (rubber) and 56 (palm kernel). However, the coefficients for coffee (equation 52) and palm kernel are having negative signs. The domestic price variable is only significant for cotton at 10 per cent probability level, (equation 53). This result points out that, even though prices of commodities increased as a result of price reform, prices were not high enough to induce output growth. These results go to confirm the fact that most producers price increases were in nominal and not in real terms. Hence,

producers' prices were not high enough to induce production. Rather, the increases in nominal prices were inflationary due to the devaluation of the naira exchange rate.

The adjustment coefficient in equations 51 to 56 are positive and significant, except for equations 55 (rubber) and 56 (palm kernel) that are not significant. This indicates that all the commodities demonstrated that previous level of production or output had positive impact on their current level of output. This result is contrary to the result of a similar study by Kwanashie et al (1998a) who concluded that current period level of output can instead reduce if previous period level of output was high. This is because they assumed that demand for these commodities are less elastic and increase in supply can lead to a fall in price and consequently a fall in the subsequent level of production.

The coefficients for capital expenditure on agriculture were not significant in all the equations and negative signed except in equation 54 that it showed positive sign. This result is not doubtful as one of the reform agenda was for the government to relinquish productive sector of the economy to the private sector and only play a monitoring and supportive role. Hence, within the reforms period, budgetary allocation to agriculture was actually minimized. The federal government as a result abandoned direct involvement in agricultural production. Most of the Federal Government agricultural projects were commercialised or privatised. For example, subsidy on fertilizer was removed.

The dummy variable D_1 was used to capture the effect of weather and other agro climatic factors. "1" was assigned to those years that experienced poor weather and "0" was assigned for those years with favourable weather conditions. This variable was not significant in all the output equations except equation 55 (rubber). The sign of this variable was positive in all the equations except equation 51 (cocoa). Most explanations Kwanashie et al. (1998a) for poor performance of the agricultural sector give weather conditions significant weights. The use of rainfall dummy (D_1) in these estimations has not captured this phenomenon, as the variable was not significant in the equations except in equation 55. This suggests that weather may not be as crucial as is often assumed. However, the insignificance of rainfall may simply be an indication of methodological problems.

Crop	Short-run elasticities	Longrun	Adjustment
		elasticities	coefficient
COCOA	0.132974	0.285642	0.534474
COFFEE	-0.00669	-0.03357	0.800718
COTTON	0.348672	0.608934	0.427406
KERNEL	-0.0116	-0.02513	0.53838
PRUBBER	0.151455	0.184566	0.179401
POIL	0.013563	0.026642	0.490919

Table 1: Short-run and long-run price elasticities and adjustment coefficients for individual crops

Short – run elasticity = $\lambda\beta$

Long-run elasticity
$$=\frac{\lambda\beta}{1-(1-\lambda)}=\beta$$

Table 1 shows the short-run and long-run price elasticity and adjustment coefficients for the individual tradable crops. Though the elasticity values are generally low, as expected, the short-run elasticities are generally smaller than the long-run elasticities. This is true for all the selected crops.

The short-run elasticities for all the crops were low. These findings are somehow expected as most cash crop production need longer gestation period to maturity. The characteristics of each crop are different, the climatic conditions and spatial distribution are also different. These factors influence responses of individual crops to various price and non-price incentives. It is not accidental that cotton, for example, has a higher short-run responsiveness (0.346) than the rest of the crops. The lag structure of cotton is much smaller than for palm kernel, cocoa, coffee, rubber and palm oil because cotton requires a relatively shorter time between planting and harvesting (gestation period).

Block 2: Price function estimations

Equations 57 to 62 are the estimated equations for the price functions. The values in parenthesis are the t-ratios. $PC_t = 777.08 - 0.103INDEXWPc_t + 859.13E_t^* + 975.09D_{2t}$.(57) (0.232) (-0.327)(17.577)(0.230). $R^{-2} = 0.97$, DW = 1.395 $Pcof_t = 458.50 + 1.77INDEXWPcof_t + 886.72E_t^* - 6566.37D_{2t}$. (58)(0.037) (2.211)(4.853)(-0.419), $R^{-2} = 0.80$, DW = 1.906 $PCot_t = 383.95 + 0.281INDEXWPCot_t + 316.22E_t^* - 801.27D_{2t}$. (59)(0.112) (1.340)(6.58) (-1.513), $R^{-2} = 0.84$, DW = 1.822 $Ppk_t = 78.64 + 1.17INDEXWPPpk_t^* + 148.87E_t^* - 124.71D_{2t}$. (60)(1.531) (6.696) (45.155) (-1.513), $R^{-2} = 0.99$, DW = 2.01 $Ppo_t = 41.62 - 0.35INDEXWPPO_t + 705.42E_t^* + 1376.25D2t$ (61) (0.0052) (-0.950)(6.165)(0.135), $R^{-2} = 0.76$, DW = 1.85 $PR_t = 264.15 + 0.91INDEXWPR_t^* + 485.103E_t^* - 1939.62D_{2t}^*$. (62)(0.550) (3.668)(29.196)(-2.883). $R^{-2} = 0.99$, DW = 1.307 * = Significant at 1 per cent.

** = Significant at 5 per cent. *** = significant at 10 per cent.

Block 2 shows the results for the price functions. The R^{-2} indicates that the functions specified are good fits of the data used. For example 97%, 80%, 84%, 99%, 76% and 99% movements in the prices of cocoa, coffee, cotton, palm kernel, palm oil and rubber are explained by the linear influences of the explanatory variables.

The coefficients for nominal exchange rate are significant at 1 per cent probability level, and positive in all the equations (57 to 62). This suggests that the nominal devaluation of the Naira/US\$ exchange rate had positive impact on absolute domestic prices of all tradable commodities. Devaluation of the naira led to increases in foreign demand of Nigerian tradable as they were cheaper in terms of foreign currency. The increase in demand of these commodities by foreign consumers boosted domestic prices due to short run inelastic supply for these commodities.

The coefficients for world market price are significant only in three of the price equations (equations 58, 60, and 62) and are all positive signed in these three equations. It was not significant in three of the equations with one of them denoting a negative sign (equation 57). These results indicate that world market prices had a mild impact on domestic prices. In certain circumstances, increase in world market prices had direct and positive influence on domestic prices of the commodities concerned like the case of coffee, palm kernel and rubber. In another situation, it influenced domestic prices negatively like the case of cocoa.

The non-price incentive was captured by dummy variable (D_2) . Some of these non-price incentives included monetary and fiscal policies of federal government, interest rate mechanism and sectoral allocation of credits. This variable was not significant in all the equations except one, (equation

62 for rubber) with a negative sign. The other equations equally had negative signs except equation 57 and 61 that showed positive signs. This implies that policies such as the removal of export licenses and the dissolution of Commodity Boards which were expected to have positive impact on prices of the selected tradables was not realized. This can be explained by the slow pace of the transmission mechanism for the adjustment policy to be translated into domestic prices. This result is contradictory to a similar study carried out by Kwanashie et al. (1998a), who concluded that non price incentive had a positive impact on the prices of tradable commodities.

The results led to a general conclusion that liberal exchange rate and trade policies made only a mild impacts on the domestic prices of some tradable commodities, and like in the case of cocoa and palm oil, the impact was not significant at all and negative. This could be due to the intervention of commodity organisations like the International Cocoa Organisation (ICCO).

Block 3: Export Supply function Estimations

Equation 63 to 67 are the estimated equations for the export supply functions. The values in parenthesis are the t-ratios.

$$\begin{aligned} &\ln(xcc_{t}) = 5.83^{**} + 0.44\ln(xcc_{t-1})^{**} + 0.24\ln(PCo_{t})^{***} . \quad (63) \\ &(2.71) \quad (2.39) \\ &R^{-2} = 0.705 \qquad DW = 1.519 \end{aligned}$$

$$\begin{aligned} &\ln(xCot_{t}) = 2.25 + 0.12\ln(xcot_{t-1})) + 1.005\ln(PCot_{t})^{*} . \quad (64) \\ &(1.45) \quad (0.64) \\ &(3.61) \end{aligned}$$

$$\begin{aligned} &R^{-2} = 0.85 , DW = 1.314 \end{aligned}$$

$$\begin{aligned} &\ln(xpa_{t}) = 5.02^{*} + 0.44\ln(xpa_{t-1}) - 0.011\ln(PK_{t}) + 0.188021\ln(Ppo_{t}). \\ &(2.31) \\ &(0.02) \\ &-0.015) \\ &(0.402) \end{aligned}$$

$$\begin{aligned} &R^{-2} = 0.492 , DW = 1.697 \end{aligned}$$

$$\begin{aligned} &\ln(xR_{t}) = 4.85^{*} + 0.515\ln(xR_{t-1}) + 0.204\ln(PR_{t}) . . \quad (66) \\ &(2.53) \\ &(1.76) \\ &(0.69) \end{aligned}$$

$$\begin{aligned} &\ln(xap_{t}) = 2.03^{*} + 0.112\ln(xap_{t-1}) + 0.612\ln(Pap_{t}) \\ &(1.99) \\ &(0.312) \\ \end{aligned}$$

 $R^{-2}=0.711 DW = 1.733$

* = Significant at 1 per cent.

** = Significant at 5 per cent.

*** = significant at 10 per cent.

Block 3 is the export supply block. The values in parentheses in equations 63 to 66 indicate the t-statistics. The two variables considered for the export supply models are the lagged dependent variable and the domestic price variable. The explanatory variables specified in equations 63 to 67 accounted for 70.5, 85, 49.2 and 71.1 per cent of the variability in the observed exports of cocoa, cotton, palm produce and rubber respectively.

The coefficients for the lagged dependent variable are positive in all the equations, but only significant in equation 63 (export supply of cocoa). Though the previous level of export supply were positively related to the current level of export supply, they were not actually significant except in the case of cocoa. This implies that an increase in previous period export supply of cocoa as induced by increase in world market price or devaluation of the naira and consequently increase in domestic prices would give rise to increase in current period level of export supply for these commodities as farmers may increase production to benefit from the high prices.

The coefficients for the domestic price variable are positive in all the equations, except in equation 65 where the domestic price for palm kernel is negative. The domestic price variable is only
significant in equations 63 (cocoa) and 64 (cotton). The positive signed of the domestic prices for these commodities indicated that exporters could increase their export supply in response to increase in domestic prices due to increase in world market prices or devaluation of the naira. But these prices were not significant in the export supply models because the price reform did not cause price to be high enough to induce output growth. Most of the price increases were inflationary and this subsequently gave rise to increase in the cost of imported inputs and consequently increase in costs of domestic production.

CASH CROPS	short	run	long	run	adjustment
	elasticities		elasticities		coefficients
PCOCOA	0.249		0.449		0.445
COTTON	1.005		1.148		0.124
PALM PRODUCE	0.188		0.341		0.446
PRUBBER	0.204		0.421		0.515
AGRIPROCESSED	0.612		0.689		0.112

Table 2 shows the estimates of the export elasticities for five commodities. The short run elasticity estimates is obviously implied by the coefficient on the domestic price variable as indicated in equations 63 to 67. Estimates of the short run export elasticities are noted to be very low for the commodities investigated. In addition, but not unexpectedly, they are lower than their long run counterparts. For instance, the short run elasticities for cocoa, cotton, palm produce, rubber and agric-processed goods are 0.249, 1.005, 0.188, 0.204 and 612 respectively while the long run elasticities for the same set of commodities are 0.449, 1.148, 0.341, 0.421 and 689 respectively. These elasticity estimates are easily interpreted. Taking the cocoa estimates for example, a 10 per cent change in the domestic price will result in a short run 2.49 per cent change and long run 4.49 change in the level of cocoa export. Other estimates can similarly be interpreted. From the elasticities estimate, cotton has high elasticity values both in the short run (1.005) and long run (1.148) respectively. The high elasticity response of cotton export can be due to the short gestation period for cotton production. This result is in agreement with the earlier result observed in cotton production output response to price and other macroeconomic variables. It is equally in agreement with the results of a similar study carried out by Phillip (1990) and Kwanashie et al (1998b).

5.0 Conclusion

The findings in this paper raised fundamental concerns about the role of liberal price and exchange rate policies in boosting the output of agricultural export commodities in Nigeria. The results suggest that Nigeria is unlikely to benefit from a dependence on primary commodities. However, the alternative route to boosting output of agricultural export commodities is for Nigeria to improve its internal and external strategic advantage.

The Bretton Woods School appear to have succeeded in diverting attention of Nigeria and similar economies away from a global approach to the development problems of commodity exporters, it should be obvious that such diversions do not and cannot resolve the international commodity problem nor its consequences in countries such as Nigeria. This is because all aspects of development are linked to patterns of output and trade. In fact, as Killick (1991) pointed out, development of industrial countries was induced by transitions in output-mix and trade mix first, from high primary concentration to high secondary concentration and then to high concentration in services. Consequently, reappraisal of Nigerian development path is necessary. It is therefore to identify and evaluate feasible alternative policies for Nigeria on the basis on how each policy would improve Nigeria's strategic position rather than the myth of the trade gains of exploiting the so call "comparative advantages". The global economy bestows trade gains in favour of nations that possess strategic advantages in world trade while penalizing those that maximize comparative advantages in primary products, Kwanashie et al, (1998a). Therefore

the real challenge for raising non-oil exports revenue and for stimulating Nigeria's development through agricultural export commodities lies in the improvement of Nigeria's strategic position in the global economy.

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BEST PRACTICES AND BUDGET EXECUTION IN BENUE STATE NIGERIA: A LOGISTIC APPROACH

Andohol Jerome Ph.D Department of Economics Benue State University, Makurdi Email Address: torsaa2002@yahoo.com

Ominyi Samuel Department of Economics Benue State University, Makurdi

Abstract

Best practices ensure that the interactive processes and procedures of planned goals and their implementation do not deviate so far from each other. A review of budgeting principles, budget execution processes and the challenges facing developing economies in budget execution are articulated and documented in this paper. A survey approach with questions formatted after the CABRI (Collaborative Africa Budget Reform Initiative) 2008 survey was adopted for this work. The use of percentages, descriptive statistics and Logistic Regression are used as tools of analysis. The findings indicated that fiscal transparency index for the State stands at 30% with the overall Best practice for budget execution for the State weighted at 40%, which is 11% higher than the National index, weighted at 29% as computed by the International Budget Partnership body in their measurement of the nation's Open Budget index (OBI). The reasons associated with the low performance of the fiscal transparency, fiscal reporting and off-budget spending among others includes; delay in the preparation of final accounts, unqualified budget personnel officials, lack of genuine and independent audit team, marginal adjustments on proposed budget votes without actual costing and presenting them as new votes for passage into Law, bureaucratic and political demand of 'kick-backs' at various stages of contract execution and payments. In this connection, it is advised that the State should improve in the areas of Fiscal transparency, Fiscal reporting and off-budget spending. The need to give the Medium Term Expenditure Framework ample room to express its strengths is a welcome development that can leverage the State's Fiscal space.

Keywords: Best Practices, Budget Execution, Fiscal Transparency, Fiscal Reporting, Off-Budget Spending, Medium Term Expenditure Framework.

1. Introduction

The major challenge faced by many African countries is to enhance the credibility of the budget by reducing the gap between planned and actual spending. According to the Public Expenditure and Financial Accountability (PEFA) framework, which have availed best practices in budget execution as a well-performing public financial management system that ensures the budget is 'implemented in an orderly and predictable manner and there are arrangements for the exercise of control and stewardship in the use of public funds' (PEFA 2005). This thought is not different from CABRI (2008) that views best practices in budget execution as the efficacy of public finance management, which plays a key role in supporting economic growth and development. Poor budget execution can undermine fiscal policy, distort

allocations and undermine operational efficiency (Ablo & Reinikka 1998; Stasavage & Moyo 2000). At the same time, however, overly rigid execution rules can be detrimental to performance (Campos & Pradhan 1996; Blöndal 2003). Asen (2003) availed that for Benue state, Financial Regulations(i.e. a collated book form of financial rules) provide the guidelines and procedures for the collection, custody and disbursement of public funds, whose management if not adhered to via these instructions, may have severe and unpleasant consequences on the execution of a budget. For economists the key issues on budget execution are always whether deficit targets are likely to be met and whether any budget adjustments (both on the revenue and expenditure sides) agreed at the preparation stage (or in-year) are being implemented as planned. Budget execution is concerned with processes and institutions to implement the budget, manage resources, assets and policies, report on resource use as well as ex- poste audit reports. In summary, this entails budget execution, accounting and fiscal reporting. Thus the key questions to be addressed relating to best practices and budget execution in Benue State, which have also translated to the objectives of this paper are

- What are the basic principles of budgeting;
- What are the different stages of the budget execution process;
- Who is responsible for budget execution;
- How can budget appropriations and expenditures be revised during the year;
- What are the problems encountered in budget execution procedures;
- What are the generic issues surrounding the socio-economic environment of budget; Execution in developing economies;
- What is the outlook of Best practices of Budget Execution in Africa;
- What is the outlook of Best practices of Budget Execution in Benue State;
- How good is the information on outturn(output) expenditure;
- How should good governance be pursued;

2.0 LITERATURE REVIEW

2.1 What are the Basic Principles of Budgeting?

Brode(1999), Balogun(2006), Dangin(2007) highlights the following principles

- Comprehensiveness to include all revenue and expenditure of Ministries, Departments and Agencies (MDAs). Comprehensiveness is a prerequisite for transparency, which in turn allows for better accountability (CABRI & SPA Strategic Partnership with Africa (SPA) 2008).
- Accuracy in recording actual transactions and flows
- Annuality to cover defined period of time e.g. one year budget
- Authoritativeness ensures that implementation is in line with appropriate Laws
- Transparency indicates that information on spending is made public, timely and understandable. (OECD 2002; see also Kopits & Craig 1998). Several studies have found that fiscal transparency is associated with improved fiscal discipline, better credit ratings and reduced corruption (e.g. Alesina & Perotti 1996; Hameed 2005; Alt & Lassen 2006). Others argue that citizens and taxpayers are entitled to full disclosure with regard to the management of public money (Fölscher 2002) to ensure participation and accountability in policy processes.
- Predictability establishes stability in the Macro and strategic policy and funding in the short and long term.

Kwaghbullah(2011) in his paper presented to Members-Elect of the Benue State 7th Legislature, while citing the reports of Benue State House of Assembly Standing Committee on Finance and Appropriation (FAC) for the years 2008 to 2011 observed that the above budgeting principles are fraught with inconsistencies given the Benue State Fiscal space. He availed that Ministries, Departments and Agencies (MDAs) budget proposal request are a mere wish list with the incentive to ask for more appropriation,

while hoping that after consideration and down-sizing of the request, they might just have enough. This issue conflicts with the principle of accuracy and comprehensiveness. The issues of persistent extrabudgetary spending also exist, which contradicts the principle of predictability. In the Benue State fiscal space, the principle of transparency is also negated by the nagging issue of difficulty in obtaining reliable and timely data especially on cash expenditures, which is always shrouded in secrecy. Low capacity for effective management and control of budget and account procedures in MDAs as well as the general disconnect between fiscal planning and budget execution all tend to affect negatively the principles of budgeting. The principle of annuality of budget is the one that is likely to be met but its processes have been enclosed in open- ended timelines that leads to delay in the passage of the budget into Law.

2.2 What Are The Different Stages of The Budget Execution Process?

Brode (1999); Potter and Diamond (1999) have highlighted the following budget execution process

- Authorization stage; allotment process for money to be spent consistent with legal appropriations
- Commitment stage; when a purchase order is made or a contract is signed to procure goods and services
- Verification stage; ensuring that goods have been delivered as per the agreed terms
- Payment authorization; ordering the payment for the person who has delivered the public good. That is preparing the request for payment
- Payment stage; paying the actual bill
- Accounting stage; transaction recorded in the books as complete and preparing progress report.

These processes are not different in Benue State as revealed by Asen(2003). He availed that no expenditure may be incurred by any officer on any service whether or not included in the approved estimates until he has received an authority to do so, without such authority, any officer who incurs expenditure does so at his sole responsibility and will consequently be held responsible for his action. The extent which these processes are complied with, however, is a matter for discourse in the later part of this work.

Budget implementation is the responsibility of the line ministries and spending agencies, within the regulatory controls set by the Ministry of Finance of Benue State FAC (2011). The Open Budget Survey (2008) Report also highlights same.

2.3 How Can Budget Appropriations and Expenditures be Revised During the Year?

ODI (2005); World Bank (2008) Reports assert that during budget implementation, many countries find that they wish, or need to change the line item appropriations approved by parliament. Some of these revisions are necessary and desirable but excessive switching of budgetary provision between items of expenditure (virement) and excessive use of supplementary estimates cause difficulties and usually indicates a lack of budget discipline and planning. The basic principles to observe according to ODI (2005); World Bank (2008) Reports are that;

- it is better to acknowledge expenditures in supplementaries than resort to "off-budget" transactions or to using suspense accounts. The basic concept that the parliament should approve all expenditures must be regarded as sacrosanct. Any off-budget spending should be considered an illegal act that should be subject to disciplinary action.
- the ministry of finance should exhort line miniseries to live within the budget resources allocated to them. This means not giving supplementaries easily but encouraging the switching of resources from lower priority expenditures to provide for new areas of interest.
- supplementaries should be approved only at fixed times of the year, with the best practice been once at the end of (or in some systems immediately after) the financial year in question. In other

systems twice a year use of supplementaries is followed, but more than twice a year presentations of supplementaries indicates a poorly prepared and inadequate budget execution.

In view of the financial Regulations and Section 212(3) of the 1999 Constitution of the Federal Republic of Nigeria, Asen(2003) and Kwaghbullah(2011) both consented as regards in-year revision of Benue state Budget estimates that;

- a virement may be issued in circumstances which could not have been foreseen when the annual estimates were framed given that the legal permission is obtained from the legislature.
- a Supplementary warrant may be issued in very exceptional cases, where virement is not possible and where an application for additional provisions reveals such a degree of urgency, which cannot be postponed until a Supplementary Appropriation Act is passed, while noting that the issue of such funds should not cause serious injury to public interest.
- a Supplementary Bill should be laid before the State Legislature to Appropriate in areas that need in-year revision and for purposes for which no amount were earlier Appropriated by the previous Appropriation Act. Despite these laid out processes, Kwaghbullah(2011) did expressed reservations on the use of these processes by Government officials given the persistent problem of extra-budgetary spending by MDAs.

2.4 What are the Problems Encountered In Budget Execution Procedures?

The generic problems associated with the budget execution stage according to CABRI (2006), which are also in consonance with those highlighted by Kwaghbullah (2011) for Benue State, are as follows;

- The multiplication of exceptional procedures that bypass expenditure control arrangements
- Difficulty in reconciling bank statements with budget accounts and thus obtaining reliable and timely data on cash expenditures.
- The accumulation of payment arrears
- The lack of fund consolidation of accounts, which could cause a relending of government funds to them by commercial banks at a profit
- Difficulty in managing and accounting for Foreign Aids flows which comes with timing lags and several conditionalities(reimbursement principle, donors direct payments to suppliers, special projects accounts domiciled outside regular government accounts, commodity tied aids) associated with these flows
- Difficulty in pursuing good governance

Other additional problems observed for Benue State as cited by Kwaghbullah (2011) includes; the accumulation of payments of arrears especially pension and gratuities, which affects productivity of labour; poor debt management strategies; unnecessary delays in Appropriation processes; misapplication of funds; recurrent expenditure ratio crowding out capital votes, which is the nucleus of growth.

2.5 What are the Generic Challenges Confronting Developing Economies in Budgets?

Developing economies have generic inherent features in their environment that inhibit on the performance of public expenditure. By observations these features are not different from Benue State, which is a subset of the Nigeria State been categorized as a developing nation according to World Bank Report (2008). Schick (1998) cites these features as follows;

Condition	Impact on Public Expenditure				
Poverty	Lack of resources to respond to rising demands or expectations for				
	public services as such a tendency for the budget to be a wish list				
Economic Instability	Inadequate slack to crowd-out cyclical shocks and other disturbances.				
	Tendency to have a short-term view of budgeting				
Low Revenue Base	Vulnerability to adverse shifts in commodity prices, terms of trade and				
	low access to capital markets				
Informal Market Sector	Much economic activity is extra-legal, in disregard of formal rules and				
	regulating weak enforcement				
Informal Public Sector	Formal rules concerning civil service, public expenditure and				
	procurement tend to be ignored or violated				
Low political Mobilization	Inadequate development of interest groups to express public opinion				
	and monitor government performance				

TABLE 1: GENERAL FEATURES INHIBITING PUBLIC EXPENDITURE PERFORMANCE

Schick A (1998) A Contemporary Approach to Public Expenditure. World Bank

2.6 What is the Outlook of Best Practice and Budget Execution in Africa?

Survey and Preliminary Results of the Country Case Studies on Best Practices of Budget Execution in Africa surveyed by CABRI in 2008 presents literature on several key institutional features that affect the degree of executive flexibility during budget implementation, and on the extent of in-year adjustments. The Collaborative Africa Budget Reform Initiative (CABRI) is a pan-African network of senior budget officials in Ministries of Finance and/or Planning, which is created as a platform for its members to share experiences on budget reform programs and to contribute towards the efficacy of public finance management in Africa. A key factor for the network's ability to achieve its objectives is the availability of comparative information on how budget systems work across the African continent.

The survey gathered information on how central government budget systems for the 26 African countries that participated. Such information cut across the various phases of the budget process. The import of this measure is to allow other interested parties to make informed analyses and research decisions on current practices in budgeting in their specific environments.

It is acknowledged that the medium of data collection for the survey was through online responses from officials of Ministry of Finance of the participating countries. The data gathered was channeled through a peer review mechanism that involved the CABRI Secretariat, the London School of Economics and Political Science (LSE) team and some country experts from each participating country. Thereafter the peer review comments were subjected to response from each of the participating countries. The existence of such a database showcase how budget systems work across a range of countries in Africa

One of the principal ways in which the budget can be changed during the course of the fiscal year involves the cancellation or rescission of spending approved by the legislature. It is worthy to note that budget priorities can be distorted during in-year cuts or adjustments which ensure that the government aggregate spending remains within planned and prudent levels. According to this survey major areas susceptible to off- budget spending based on the questioning that what type(s) of off-budget expenditure exist, had the following response; Tax expenditures, Public.–private partnerships, Off-budget loans, Loan guarantees, Health care funds, Public sector pensions, Higher education funds, Emergency/contingency funds, Donor funds, Stabilization funds, External loans, Military expenditure, Special accounts. Find below the remaining preliminary results or responses of the country case studies surveyed by CABRI

Country/Questions	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11
Benin	Ν	YMS	YR	Ν	1	А	Q	YWE	YAM	YAM	Ν
Botswana	YOR	YMS	YOR	Ν	3	А	М	YWE	Ν	YAM	Y
Burkina Faso	YR	YWL	WFA	Ν	2	С	W	YWE	Ν	YAM	Y
Congo	YR	YMS	WFA	Y	1	А	Q	NV	Ν	YAL	Ν
Ethiopia	YR	Ν	WFA	Y	1	А	М	YA	Ν	YAM	Ν
Ghana	YR	Ν	WFA	Y	2	D	ES	YA	YAM	YAM	Ν
Guinea	YR	YUL	WFA	Y	1	А	ES	R	Ν	Ν	Ν
Kenya	YR	YUL	YR	Y	1	А	Q	YA	YALI	YAM	Y
Lesotho	Ν	YUL	WFA	Y	1	С	ANN	YA	YAM	YAM	Ν
Liberia	YR	Ν	YR	Ν	1	А	М	NV	Ν	Ν	Ν
Madagascar	N	YMS	YR	Y	1	С	Q	YWE	YAM	YAM	Ν
Malawi	Ν	YUL	WFA	Y	1	D	М	YA	YALI	YALI	Y
Mali	YR	YUL	YR	Ν	1	А	Q	YA	YAM	YAM	Ν
Mauritius	YR	YUL	WFA	Y	1	А	ANN	YA	YAM	YAM	Y
Morocco	YR	Ν	WFA	Y	Ζ	А	Μ	YA	YALI	YALI	Y
Mozambique	YOR	Ν	YR	Y	1	А	Q	YA	Ν	YAL	Ν
Namibia	Ν	YMS	YR	Y	Ζ	А	ANN	YA	YAM	YAM	Y
Nigeria	YOR	Ν	WFA	Ν	1	С	ANN	R	YAM	YAM	Y
Rwanda	YR	Ν	YR	Y	1	А	Q	YA	YALI	YALI	Ν
Sierra Leone	YOR	YWL	WFA	Ν	Ζ	А	Q	R	YAM	YAM	Y
South Africa	YR	YMS	WPA	Y	2	D	М	YA	YALI	YALI	Ν
Swaziland	MS	YMS	YOR	Ν	4	А	MS	YA	Ν	YAL	Y
Tunisia	YR	YUL	WFA	Y	MS	A	М	NV	Ν	YALI	Y
Uganda	YR	YUL	YR	N	3	A	ES	YA	YAL	YALI	Ν
Zambia	YOR	YWL	YOR	Y	2	A	Q	YWE	N	YAM	Ν
Zimbabwe	YOR	YUL	YOR	Y	1	А	Μ	YA	Ν	Ν	Ν

TABLE 2: Preliminary Results of Country Case Studies by CABRI Survey

Source: Adopted from CABRI (2008)

NOTE

Y=Yes; N=No; YR=yes with restrictions; YOR= Yes without Restrictions; MS=Missing; YUL=Yes but only up to a certain limit; YMS= Yes but only for mandatory Spending; YWL=Yes there are no limits on overspending or without legislative approval; WPA= with the Approval of the Legislature; WFA= With the Approval of the Finance Minister; Z = None; 1, 2, 3, 4 = One, two, three, four number(s) of supplementary Budget presented to the Legislature in the course of the Fiscal Year; A=Information on Macroeconomic assumptions, budget priorities, fiscal policy objectives for the medium term, clearly defined appropriations to be voted by the legislature; B= Disclosure on off-budget expenditure and extra budgetary funds, tax expenditures, comprehensive annual financial plans and reporting on non financial performance targets; C= limited types of information on the budget provided to the legislature; D= more comprehensive provision of information to the legislature; W= weekly; M=Monthly; O= Quarterly; ES= Every six months; ANN= Annually; NV= Never; R= rarely; YWE= Yes in most cases with exceptions(e.g. audits of the Military); YA= Yes Always; YAL=Yes at the Aggregate Level; YAM= Yes at the Ministry Level; YALI= Yes at the Line Item Level. Q1= asked whether the government has the authority to make such in-year cuts, and to what extent; Q2= asked about the possibility of overspending prior to the approval of a supplementary appropriation by the legislature; Q3, = asked countries, whether ministers are allowed to vire or reallocate funds between line items; Q4 =asked about the use of contingency reserves, which provide flexibility to address such urgent spending needs; O = asked on thefrequency of supplementary budgets; Q6= targets 12 types of information, highlighted in both the OECD

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and IMF guidelines, which should be included in the budget documentation sent to the legislature; Q7 = asked how often do respondent countries publish information on revenues and expenditures during the course of the fiscal year; Q8 = looks at the public availability of audit reports; Q9 = asked which countries include multi-year estimates in the budget documents that are sent to Parliament for approval; Q10= sought to find out the existence of Multi-year targets or ceilings; Q11 =which asks about the basis on which extrapolations for multi-year estimates are done.

In order to give an overall comparative assessment of the level of fiscal transparency across the African countries involved in the survey, The Open Budget Index (OBI), produced by the Washington-based NGO the International Budget Partnership, is used, since it is a much more comprehensive measure of budget transparency. The results scored on a 100% basis with a median index of 54% recorded are as follows as per country and OBI Scores:

South Africa 87; Botswana 62;Kenya 57;Uganda 51;Ghana 49;Namibia 47;Zambia 47;Malawi 29;Morocco 27;Nigeria 19;Burkina Faso 14;Liberia 2;Rwanda 0 (International Budget Partnership 2009)

The survey results as depicted above reveal that there remains substantial variation in fiscal transparency across African countries, although several countries appear to publish substantial amounts of fiscal information. In as much as this feat is valued positively, it should also encourage countries that are underperforming in this regard to focus on both producing and publishing better quality budget information, in formats that promote broad access and understanding.

2.6.1 Budget Execution

Based on the CABRI 2008 Survey Report, in the course of budget execution, responses given on controls instituted for extra-budgetary spending included, that overspending without prior approval by the legislature is not allowed; that overspending without legislative approval is only possible up to a certain limit and or for mandatory spending; while others responded that there are no limits on overspending without legislative approval; No country in this sample prohibits virement outright; some countries have no contingency reserve; the majority of countries report that they submit one supplementary budget per year and no country reported more than four supplementary budgets in a given fiscal year. Survey results highlight the great variation in existing practice across the African continent, but they also point to weaknesses in budget execution and expenditure control via the extensive use of supplementary budgets. As mentioned earlier, the opportunities that exist for overspending and reallocations could easily undermine the overall integrity of control mechanisms in the budget process. On the other hand, some of these mechanisms allow space for the flexibility that many African countries need as they budget with scarce resources and subject to numerous uncertainties and shocks.

2.6.2 Fiscal Transparency

Transparency in government finances implies 'openness about policy intentions, formulation and implementation' (OECD 2002). The CABRI 2008 report further states that several studies reveal fiscal transparency to be associated with improved fiscal discipline better credit ratings and reduced corruption. Transparency ensures that there is adequate budget documentation and relevant information sent to the legislature, which most countries in the CABRI 2008 Survey reported that they include information on macro-economic assumptions, budget priorities, and fiscal policy objectives for the medium term planning. This enables a clear definition of appropriations to be voted by the legislature, and a linkage of appropriations to administrative units. With respect to in-year reporting, it indicated that information are produced either weekly, monthly, quarterly, every six months, and annually which also enables significant monitoring during the course of budget execution. Finally, some countries report that they always publish audit findings, which are often done with considerable delays.

2.6.3 Off-budget Spending

In normal budget documentation, there exist sometimes a series of categories of government expenditure that are often not subjected to normal budgetary procedures therefore reducing the degree of transparency of fiscal operations, while also creating potential liabilities that can undermine fiscal sustainability. Such categories of expenditure include, among others, social security funds, loan guarantees, public sector pensions and donor funds as stated earlier. The survey results suggest that there are a number of challenges to address integrating off-budget spending into the budget process. Even though some categories of off-budget spending covered in the survey do not apply to many African countries, in those cases where off-budget spending exists its nature is often neither accountable nor transparent. In about half of the cases there is no requirement for legislative authorization of off-budget spending, and information is not included in the budget documentation, based on the survey report. For many African countries, donor funds are a particularly important category of off-budget spending, as they are often channeled directly through donor managed projects or other parallel systems. The reported variation of how donor spending is covered in the budget process is large across the countries surveyed. While Ghana, Kenva, Ethiopia, Mali and Uganda report medium-high coverage of aid flows at different stages of the budget process, in countries like Burkina Faso, Sierra Leone and Mozambique coverage is less consistent and comprehensive. On average, coverage seems to be better at earlier stages of the budget process than during reporting on execution. Some inconsistencies exist between survey results and data reported from other sources, pointing to the fact that this area is one where more work is needed.

2.6.4 Medium-Term Expenditure Frameworks (MTEFs) have been promoted across Africa as a 'best practice' approach to bridge the gap between the goals and objectives of medium-term country development strategies and the yearly budget process.

The OECD/CABRI (2002) survey does not allow for an in-depth analysis of the quality and success of Medium-Term Expenditure Frameworks across Africa. A study comparing eight African countries (ODI 2005) included the following key findings:

a) Strong leadership from the Ministry of Finance, progress in macro-economic and fiscal stabilization, the existence of a basic but integrated financial management system and strong stakeholder involvement help the process of MTEF implementation, even though the MTEF itself can stimulate improvements in the basics of budget.

b) A key characteristic of successful MTEFs is the existence of a clear budget timetable that allows sufficient time for a strategic planning phase and for the preparation of detailed budget estimates.

c) Through the provision of a realistic, hard budget constraint, and effective political engagement, the MTEF/budget process legitimizes policy choices, leading to greater credibility of resource ceilings, budget allocations and predictability of funding.

d) By contributing to greater predictability of policy and funding, an MTEF can provide the basis for quality budget implementation. However, developing and sequencing a performance focus to the budget is not an easy task, and evidence from the case studies indicates that it this is difficult to achieve in practice.

e) A decentralized system of government increases the complexity of resource allocation decisions, but an MTEF can help clarify expenditure assignments and therefore support decentralization efforts.

However, another study by (World Bank 2008) points to two common continuing problems with MTEF implementation across a number of countries. First, the MTEF is often considered as a separate process from the budget, with the result that outer-year projections are regularly ignored in following budget

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cycles. Second, the costing sector strategies that are needed for a meaningful policy debate are often absent. Bird (2003); ODI (2005); World Bank (2008)

This preliminary analysis has demonstrated how the survey provides an invaluable source of information for budget practitioners and researchers interested in comparing budget systems across countries. Its extension to other countries or communities and its repetition over time will allow for more significant analysis not only of the evolution of budget practices and procedures, but also of their impact on budget policies and outcomes.

3. Analytical Framework.

The population of the study, which is also the sample size, was drawn from one hundred and twenty (120) budget officials from the eighty-four (84) Ministries, Departments and Agencies (MDAs) of Benue State government. Benue State which is one of the 36 states in Nigeria has an estimated population of about 4.3million people and placed 9th based on the statistics of the 2006 census of the Nigerian National Population Commission.

This paper which has adopted the questionnaire methodology formatted after the Collaborative Africa Budget Reform Initiative (CABRI) Survey in 2008, to factor out responses, from the one hundred and twenty (120) State budget desk officials of MDAs in the Benue State fiscal environment. The justification of the use of CABRI 2008 survey format is predicated on the basis that State desk budget officials of all MDAs are charged with budget preparation, evaluation and periodically share experiences on budget reforms and the efficacy of public expenditure management. The dysfunctional nature of budget preparation at the Local Government Areas (that is in cases where a budget exist), has always been embedded with computational and structural problems, this has served as a limiting factor towards its inclusion in the sample size. One hundred (100) questionnaires returned from the population of the study stated earlier, as such representing 83.3% of responses received.

Two (2) sets of questionnaires were administered which revealed preliminary results on the outlook of the performance of best practices of budget execution in Benue State stated hereunder on Table 3 and Table 4 respectively.

3.1 **Outlook on Best Practices Performance of Budget Execution in Benue State**

Table 3: Observations of Budget Execution Practices in Benue State

No	Question	Answer	Weighted performance Score (0-100%)
1	Whether the State Government has the authority to make in-year cuts and to what extent	Yes, with restrictions	30
2	What is the possibility of overspending prior to the approval of supplementary appropriations by the legislature	Not possible due to legislative enactment	20
3	Are commissioners allowed to vire or reallocate funds between line items	Yes, with the approval of the legislature	80
4	Is there an existence of a contingency reserve and to what extent does its use provide flexibility to address urgent spending needs	Yes, without restrictions	80
5	What is the Frequency of supplementary budgets	At least once in a year.	60
6	How comprehensive are information included in the budget that is presented to the Legislature	Limited information, just enough to get approval	50
7	How often do the State publish information on Revenue and Expenditure during the course of the Fiscal year	None	0
8	How available are the Audit Reports to the Public	Rarely	30
9	What is the predominant off-budget expenditure that exist	Contingency funds	20
10	Are there multi-year estimates	Yes but at the aggregate level	40
11	Are there multi year targets or ceilings	Yes but at the aggregate level	40
12	What is the basis on which extrapolation for multi-year estimates are done	Estimates are simply adjusted on the basis of official macroeconomic forecast	40
13	What is the likely rating of the fiscal transparency index for the state	Below average	30
	Overall index	Average	40

Source: Author's Computation in 2012

A cursory look at Table 3 has shown an average outturn of budget execution in Benue State at about 40%. This calls for improvement especially in areas of fiscal transparency (i.e. good governance), fiscal reporting, and off budget spending.

4. How Good is the Information on Outturn (Output) Expenditure?

A further analysis is made of the effect of the efficacy of fiscal transparency, fiscal reporting as well as off budget spending which are at the heart of any accounting and financial information system, which

maintains the basic records of government transactions and thus outturn expenditures. The efficacy of how well the accounting system is operating was judged indirectly by asking and receiving the following responses documented hereunder in table 4;

Response	A	B	Total
Question			
Q1	30%(30)	70%(70)	100%(100)
Q2	40%(40)	60%(60)	100%(100)
Q3	80%(80)	20%(20)	100%(100)
Q4	See responses below		
Q5	80%(80)	20%(20)	100%(100)
Q6	70%(70)	30%(30)	100%(100)
Q7	30%(30)	70%(70)	100%(100)
Q8	20%(20)	80%(80)	100%(100)
Q9	70%(70)	30%(30)	100%(100)
Q10	80%(80)	20%(20)	100%(100)
Q11	30%(30)	70(70)	100%(100)
Q12	60%(60)	40%(40)	100%(100)
Q13	40%(40)	60%(60)	100%(100)
Sex	60%(60)	40%(40)	100%(100)
Age	80%(80)	20%(20)	100%(100)
Exp	80%(80)	20%(20)	100%(100)

TABLE 4: Table indicating Respondents Responses

Source: Author's Computations in 2012 with numbers in parenthesis indicating number of respondents.

Table 4 has indicated the following questions and responses Q1=speed of final accounts preparation (Speedy=a 0r delay=b); Q2= Lag in the reconciliation of government budget accounts and the banking system (quickly=a or delay=b); Q3=Measurement of the budget execution process (No improvement =a or improvement =b); Q5= Pervasiveness of suspense accounts or below the line accounts (frequent=a. rare=b); O6= Pervasiveness of floats or expenditure arrears (frequent=a or rare=b); O7= genuine and independent audit (genuine=a, not genuine =b);Q8=Frequency of the audit annual accounts (frequent=a or Rare=b);Q9= Need for Qualified budget personnel (Yes=a or No=b);Q10= Operation of a fiscal monitoring unit by Ministry of Finance (Yes=a or No=b):O11= adequate Usage of information by Ministry of Finance (effective usage=a or ineffective usage=b);Q12= Existence of feedback mechanism (Yes=a or No=b);Q13=Management of Foreign Aids flow (Efficient=a or inefficient=b);Sex= Gender of the respondents (Male=a or Female=b); Age= Age of the respondents (below 50 years=a or Above 50Years=b);Exp= Years of experience of the respondents (Below 20years = a or Above 50years=b). The statistics in terms of responses reported for these questions are 01= 30:70. **Q2**=40:60,**Q3**=80:20,**Q5**=80:20,**Q6**=70:30,**Q7**=30:70,**Q8**=20:80,**Q9**=70:30,**Q10**=80:20,**Q11**=30:70**Q12**= 60:40,**Q13**=40:60, **Sex**=60:40, **Age**=80:20, **Exp**=80:20 respectively. **Q4**= on the generic accounting challenges facing the budget execution process, the response recorded were; making marginal adjustments on old budget figures and representing them as new votes, in-year inflation of budgetary votes by contractors without actual costing, kick-backs required before contract commitment papers are signed, contractual agreements entered into with unqualified contractors, poor drafts of contractual agreements, poor monitoring of capital projects, kick-backs received to pass-on finished low quality jobs as standardized, unnecessary delays in contract payments. It is imperative to carryout a Logistic Regression so as to complement the foregoing descriptive analysis. Gujarati (2005) posit that, the Logit

model captures the regressand which is a binary or dichotomous variable that is regressed against other regressors. The use of the Logit regression is adopted because of its wide use in analyzing qualitative data as well as its superiority over other approaches in analyzing qualitative data, since it enables the use of nonlinear estimating procedures via the method of maximum likelihood, while noting that the likelihood function is formed by assuming independence over the observations for the study.

The simplification and log likelihood transformation of the logit model for the purpose of this work is stated hereunder in its structural form;

$$LnQ_{i} = \frac{Pi}{1-pi} = \beta_{o} + \sum_{i=1}^{n} \beta_{k} Q_{ki} + U$$
------Eqn 1
Where:

$$LnQ_{i} = Natural Log of the dichotomous variable$$

$$\frac{Pi}{1-pi} = Odds ratio$$

 $\beta_{o} = \text{intercept}$ $\beta_{K} = \text{Parameters}$ $Q_{ki} = a \text{ set of respondents characteristics}$

When Eqn (1) is explicitly stated we have;

$$\begin{split} L_i &= \frac{Pi}{1-pi} = \beta_o + \beta_1 Q1 + \beta_2 Q2 + \beta_3 Q5 + \beta_4 Q6 + \beta_5 Q7 + \beta_6 Q8 \\ &+ \beta_7 Q9 + \beta_8 Q10 + \beta_9 Q11 + \beta_{10} Q12 + \beta_{11} Q13 + \beta_{12} Sex + \\ &\beta_{13} Age + \beta_{14} Exp + e -----Eqn. \ 2 \\ & \text{Where:} \end{split}$$

 $\frac{Pi}{1-pi} =$

Measurement of the budget execution process (coded as No improvement=0 or improvement=1)

 β_0 = intercept

Q1=speed of final accounts preparation (coded as speedy=1 0r delay=0)

Q2= Lag in the reconciliation of government budget accounts and the banking system (coded as quickly=1 or delay=0)

Q5= Pervasiveness of suspense accounts or below the line accounts (coded as frequent=1, rare=0)

Q6= Pervasiveness of floats or expenditure arrears (coded as frequent=1 or rare=0)

Q7= genuine and independent audit (coded as genuine=1, Not genuine =0)

Q8=Frequency of the audit annual accounts (coded as frequent=1 or Rare=0)

Q9= Need for Qualified budget personnel (coded as Yes=1 or No=0)

Q10= Operation of a fiscal monitoring unit (coded as Yes=1 or No=0)

Q11= adequate Usage of information (coded as effective usage=1 or ineffective usage=0)

Q12= Existence of feedback mechanism (coded as Yes=1 or No=0)

Q13=Management of Foreign Aids flow (coded as Efficient= 1 or inefficient=0)

Sex= Gender of the respondents (coded as Male=1 or Female=0)

Age= Age of the respondents

Exp= Years of experience of the respondents

Using the e-views 7 software package for the analyses of eqn.2 the following results in Table 5 were obtained;

Variable	$Coefficient(\beta)$	Std. error	Z-Stats	Prob.	$Exp(\beta)$		
Q1	0.23	0.77	0.296	0.7670	1.26		
Q2	0.98	0.71	1.389	0.1650	2.66		
Q5	-1.75	0.89	-1.98	0.0481	0.17		
Q6	0.85	0.83	1.02	0.3078	2.34		
Q7	0.32	0.80	0.40	0.6885	1.38		
Q8	-0.84	1.31	-0.64	0.5226	0.43		
Q9	1.45	0.88	1.65	0.0985	4.26		
Q10	-0.61	0.79	-0.77	0.2203	0.54		
Q11	-1.83	1.15	-1.59	0.1131	0.16		
Q12	-0.89	0.69	-1.28	0.2005	0.41		
Q13	-0.92	0.71	-1.30	0.1935	0.40		
Sex	-1.33	0.70	-1.88	0.0597	3.78		
Age	0.12	0.09	1.23	0.2203	1.13		
Exp	-0.01	0.13	-0.11	0.9164	1.01		
С	-4.79	3.50	-1.37	0.1712	120.3		
Mcfadden \mathbb{R}^2 or \mathbb{R}^2 , $r = 0.30$; I $\mathbb{R} = 30.4$ Prob (0.0068); I og likelibood = -34.85							

 TABLE 5: Results Obtained for Analyzing Equation 2

Mcfadden R^2 or $R^2_{McF} = 0.30$; LR= 30.4 Prob.(0.0068); Log likelihood = -34.85 Source: Author's computation 2011

Note: Dependent Variable (Q3) with Convergence achieved after 5 iterations

In holding other regressors constant, the partial slope coefficient of each variable is computed which measures changes in the estimated Logit, given a unit change in the value of each of the given regressors.

Preliminary results so documented in Table 5 above reveal that a unit change in the observed values of Q1, Q2, Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q12, Q13 Sex, Age and experience (EXP) will change the average estimated Logit by 0.23, 0.98, -1.75, 0.85, 0.32, -0.84, 1.45, -0.61, -1.83, -0.89, -0.92, -1.33, 0.12 and -0.01 units respectively, while noting that all the coefficients expressed positive relationships with the estimated Logit except Q5, Q8, Q10, Q11, Q12, Q13, Sex and Exp. Note also that all the coefficients are not statistically significant except for Q5. However, a combination of all the regressors has exhibited statistical significance i.e. they are a combined strong determinants of the outturn of the budget execution process. This is given by the Likelihood ratio (LR) statistic of 30.4 with its almost zero probability. The R^2_{McF} = 0.30 implies that 30% variation is explained by the regressors on their effect on the budget execution process to enhance favourable outturn expenditure given the sampled respondents.

The anti-log or exponential values given as Exp (β) of all the partial coefficients give a more meaningful interpretation of the documented results. This result is interpreted in terms of the odds ratio or likelihood favoring the occurrence of the activity of a good budget execution process or good outturn expenditure. In this regard a cursory look at Table 5 above, it is documented that the delay in the preparation of final accounts; delay reconciliation between government budget accounts and banking system; pervasiveness of floats or un-cashed checks; un-genuine and independent audit team; unqualified budget personnel with Ministry of Finance; and respondents age do increases, the likelihood favoring the improvement of the

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budget execution process will increase by 1.26, 2.66, 2.34, 1.38, 4.26, and 1.13 times respectively. Furthermore, as the level of pervasiveness of suspense accounts or below-the-line accounts; delays in production of annual accounts; delays in setting up a fiscal monitoring unit by the Ministry of Finance; lack of usage of information provided to Ministry of finance to analyze budget for development; unavailability of feedback mechanism to adjust policy in an event of unwelcome developments; inefficiency in management of foreign aids flows; gender ratio favoring men, and years of experience of the respondents increases, the likelihood favoring an improvement in the budget execution process will decreases by 0.17, 0.43, 0.54, 0.16, 0.41, 0.40, 3.78, and 1.01 times respectively.

Note worthy is that as the delay in the preparation of final accounts; delay reconciliation between government budget accounts and banking system; pervasiveness of floats or un-cashed checks; ungenuine and independent audit team; unqualified budget personnel with Ministry of Finance; increases leading to the likelihood favoring the improvement of the budget execution process to increase, this does not meet a priori expectation. This primarily reveals areas of the prevalence of corruption and ethical processes and procedures in the system, towards providing good information on the true status of outturn expenditure in the Benue State execution of its budget. Adequate attention need to be paid on these specifics, aside the generic accounting challenges highlighted in table 4(Q4).

5. Probable Solutions

- Need to ascertain the degree of budget lock –in that is genuinely non discretionary to give a reasonable picture of the maximum degree of expenditure reduction that can be imposed in any fiscal year.
- Avoid excessive details as Pareto's rule of 80/20 should be brought to bear when executing a budget as 80% of the issues are in 20% of the items. Identify and focus on the high impact items as you have the discipline to let other items remain lower priority. It is easy to get caught up in reviewing lots of details because it seems more accurate. This discourages thinking hard about the policy/programs and how they can be improved.
- Need to consolidate many of these accounts as much as possible which assist in reconciling problems of idle funds and facilitate budget execution particularly in cash and debt management.
- Reduction in the provisions for other policies and programs to off-set payment for the old stock of arrears while avoiding accumulation of new arrears by genuine strengthening of the expenditure controls. When using the contingency fund to offset arrears of a line ministry, the ministry of finance can as an internal sanction reduce funds to be channeled to the appropriations of the line ministry, so as not to generate a moral hazard problem, where line ministries can again incur arrears in the future with the hope that they can be bailed out by the ministry of finance; finance should strive not to use tax liabilities to offset any arrears as it undermines tax compliance and encourage the future accumulation of arrears; need to establish sources of problems of accumulation of arrears to guide against them
- Need to hire adequate and qualified staff with training and retraining adopted as a strategy for retooling as well as allowing finance adequate time to process these numbers which are just delivered on consolidated basis. Worthy of note is to give special attention to training of female accounting officials.

Efficient management of the float of un-cashed checks is a welcome development

Need for the government to maintain an up-to-date record both of its external liabilities and the timing of foreign inflows due; need to take visits to agencies of the principal donors and discuss with them your main implementation and reporting problems and how procedures can be improved

Imaginative approaches such as delaying the introduction of a planned wage increase or start of a new policy, placing a freeze hiring, prohibitions on international travels as ways of enabling adjustment of expenditures in-year

Need for the ministry of finance to exhibit caution in targeting reductions of votes in certain categories to account for in-year adjustments as line ministries may sometimes leave important bills unpaid or they may make unrealistic reductions in sensitive areas, hoping to embarrass the ministry of finance to releasing more resources.

Kopits and Craig(1998) suggested that Good governance should be pursued where every participant's action is transparent and accountable as well as such action been properly documented and can be subjected to independent, unbiased and professional audit review.

Other good governance criteria according to Barraclough and Dorotinsky(2001) includes: viewing the budget as a complete process; adjust spending at the earliest stage possible; minimize disruptions to the expenditure process; respect the budget system internal and external controls; limit exceptional procedures.

Frequent reports on budget developments should be presented to the Legislature and final accounts should be presented within a year of the end of the fiscal year.

The budget should be subjected to greater public scrutiny and participation.

6. Conclusions

The analysis of the survey results reveals a number of interesting aspects; First of all, the survey highlights the variety of practices and procedures that characterizes African countries. Secondly, and more substantively, the results identify a number of significant challenges for Benue State. The need to increase transparency and address the issue of off-budget spending, for example, is one area clearly in need of attention, more so that many countries as well as Benue State report very few categories of off-budget spending, even though some of them are quite common. In many cases, country responses reveal the lack of availability and comprehensiveness of budget information, which in turn can have a severe impact on accountability.(CABRI 2006), but also undermine coherence and coordination in policy-making (CABRI 2005). The lack of clear policies, better institutional coordination and quality of information flows in aid management, and the weak basis of medium-term budgeting frameworks are additional areas where there are serious shortcomings. A more proactive management of aid flows could bring about significant benefits in terms of 'putting aid on budget', and improve the capacity of the Benue State government to adopt a medium-term perspective (CABRI 2007). Finally, issues related to the solidity of budget execution and audit procedures show room for improvement.

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