MPRI-JPAS | INTERNATIONAL JOURNAL OF PURE AND APPLIED SCIENCE
VOL. 11 NO.9 JUN-2020 ISSN: 1660-5332

STATISTICAL ANALYSIS OF THE PERFORMANCE OF NATIONAL POVERTY ERADICATION PROGRAMME IN NIGERIA (A CASE STUDY OF TARABA STATE)

GOWON DAVID
Department of Statistics, Federal Polytechnic, Bali

Abstract

The study examined statistical analysis of performance of National Poverty Eradication Programme in Nigeria in which Taraba state was adopted as a case study. The specific objectives of the study are to examine the; effect of National Poverty Eradication Programme on the Gross Domestic Product of Taraba state; impact of National Poverty Eradication Programme on the Internally Generated Revenue of Taraba state and the effect of National Poverty Eradication Programme on the Poverty Index of Taraba state. The population of the study is Taraba state. Secondary data was used such that GDP, Poverty index, and internally generated revenue were obtained from National Bureau of Statistics. The study used descriptive and inferential statistics to analyse the data for the study. The inferential statistics adopted is ordinary least squares regression. Based on the analysis of the data, it was found and concluded that; the effect NAPEP has on the Gross Domestic Product is strong, positive and significant. The study found that NAPEP

[redacted]

accounts for a very large proportion of the changes that occurs in GDP. It was found that NAPEP has a strong positive effect on Internally Generated Revenue of Taraba state. Lastly, it was discovered that NAPEP influences poverty index of Taraba state positively. Based on the findings of the study, the author recommended that; poverty index rate of Taraba state is very

KEYWORDS: *Programme, Performance, Satistical, Poverty, Eradication, Analysis.*

high and a divine intervention is highly needed hence, poverty alleviation schemes should be constantly established so as to reduce hunger and pain in the state; more funds should be invested in poverty eradication programmes; Taraba state government should endeavour to always increase NAPEP expenditure such that it will eventually increase the IGR of Taraba state.

INTRODUCTION
BACKGROUND OF THE STUDY

Poverty alleviation is one of the most difficult challenges facing any country in developing world where, on the average, majority of the population is considered poor. Evidences in Nigeria shows that the number of those in poverty has continued to increase. For example the number of those in poverty increased from 27% in 1980 to 46% in 1985 and to 67% in 1996, by 1999 it increased to more than 70% (Baghebo, 2001). Although the Nigeria economic report released in July 2014 by the World Bank put poverty rate at 33.1% for a country with massive wealth and a huge population to support commerce. The report seems inconsistent with reality. Income inequality worsened from 0.43 to 0.49 between 2004 and 2009. The report also shows that, the depth and severity of poverty is more in the rural than in the urban.

Poverty alleviation programmes in Nigeria are means through which the government aims to revamp and reconstruct the economy. The high incidence of poverty in the country has made poverty alleviation strategies important policy options over the years with varying results. Poverty alleviation strategies ranging from Operation Feed the Nation of 1978, the Green revolution of 1982, the Directorate of Foods, Roads and Rural Infrastructures (DFRI), the National Directorate for Employment (NDE), Poverty Alleviation Programme (PAP), up to the National Poverty Eradication Programme, (NAPEP) were all attempts made by various governments in the country to curb the menace of poverty.

It has been known in Nigeria that every government embarks on one form of poverty alleviation programme or the other. However, what has remained unanswered is the extents to which these programmes have impacted on the poor or how far these programmes have successfully reduce the rate of poverty in Nigeria.

INTERNATIONAL JOURNAL – PAS
VOL. 4 NO.1 MAR-2018 ISSN: 1660-5332

Recent studies on the subject poverty and its reduction agencies as well as programmes indicate that considerable gap exists between the target objective – alleviating or eradicating poverty – and achievement. It seems that the efforts of various governments are ineffective and therefore not much has been done to actualize the benefits. For poverty reduction agencies, their results do not seem to justify the huge financial allocations to them. Poor people's perceptions of formal poverty reduction institutions are largely that of ineffectiveness and irrelevance in their lives as government poverty alleviation activities contribute little in their struggles to survive and rarely help them to escape poverty. More disturbing is the fact that despite the colossal amount of resources committed to those programmes, the poverty situation aggravates, and more and more people fall into the poverty region instead of escaping.

Statement of Research Problem

The search by people for employment has become the order of the day presently, our graduates both from colleges and higher institutions and able men face the problem of what to do to make life comfortable.

The government on its part has devised measures aimed at creating gainful employment opportunities to eradicate poverty for the people. The private sector has done little in this regard.

The question remains, has the government created proper measures that will eradicate poverty in the state, especially the graduates.

Why the deficiency in employment in the state and what are the efforts of government and private sector towards these problem until when answers are provided for the above question, the state will remain in this worrisome economic scourge.

Significance of the Study

The study will be of great benefit to stakeholders of the Taraba economy. They will understand what effect it is the poverty eradication programme has had on the common man in the state. The result of the study will be beneficial to business organisations, statisticians, among many others. The study will also add to the existing literature on the subject matter.

Aims and Objectives of the Study

The main aim of this study is to examine statistical analysis of performance of National Poverty Eradication Programme in Nigeria in which Taraba state was adopted as a case study. However, the specific objectives are to;

i. Examine the effect of National Poverty Eradication Programme on the Gross Domestic Product of Taraba state.
ii. Determine the impact of National Poverty Eradication Programme on the Internally Generated Revenue of Taraba state.
iii. Derive the effect of National Poverty Eradication Programme on the Poverty Index of Taraba state.

Research Questions

For the purpose of this study, the following research questions were raised;

i. What is the effect of National Poverty Eradication Programme on the Gross Domestic Product?
ii. Does National Poverty Eradication Programme have any significant effect on the Internally Generated Revenue of Taraba state?
iii. Does National Poverty Eradication Programme have any effect on the Poverty Index of Taraba state?

HYPOTHESES OF THE STUDY

The hypotheses for the study were stated in null forms which include;

H_{o1}: National Poverty Eradication Programme has no significant effect on the Gross Domestic Product of Taraba state

H_{o2}: National Poverty Eradication Programme does not have any effect on the Internally Generated Revenue of Taraba state.

H_{o3}: National Poverty Eradication Programme has no significant impact on the Poverty Index of Taraba state.

LIMITATION OF THE STUDY

In order to successfully carry out this survey, the researchers faced two obvious and significant limitations namely; finance and time. The researchers are students hence they have little access to good finance and are as well engaged in other academic activities which will hinder them from dedicating full time into the survey.

DELIMITATIONS OF THE STUDY

The study is delimited by examining only Taraba state and also adopting a time frame of 2010 to 2015.

Definition of Terms

Poverty:

Condition where people's basic needs for food, clothing, and shelter are not being met. Poverty is generally of two types: (1) Absolute poverty is synonymous with destitution and occurs when people cannot obtain adequate resources (measured in terms of calories or nutrition) to support a minimum level of physical health. Absolute poverty means about the same everywhere, and can be eradicated as demonstrated by some countries. (2) Relative poverty occurs when people do not enjoy a certain minimum level of living standards as determined by a government (and enjoyed by the bulk of the population) that vary from country to country, sometimes within the same country.

National Poverty Eradication Program (NAPEP)

National Poverty Eradication Programme (NAPEP) is a 2001 program by the Nigerian government aiming at poverty reduction, in particular, reduction of absolute poverty. It was designed to replace the Poverty Alleviation Program. NAPEP and NAPEC coordinate and oversee various other institutions, including ministries, and develop plans and guidelines for them to follow with regards to poverty reduction. NAPEP goals include training youths in vocational trades, to support internship, to support micro-credit, create employment in the automobile industry, and help VVF patients.

Performance

The accomplishment of a given task measured against preset known standards of accuracy, completeness, cost and speed. In a contract, performance is deemed to be the fulfilment of an obligation, in a manner that releases the performer from all liabilities under the contract.

Statistical Analysis

This involves collecting and scrutinising every data sample in a set of items from which samples can be drawn. A simple, in statistics, is a representative selection drawn from a total population.

Gross Domestic Product

Gross domestic product (GDP) is the monetary value of all the finished goods and services produced within a country's borders in a specific time period. Though GDP is usually calculated on an annual basis, it can be calculated on a quarterly basis as well (in the United States, for example, the government releases an annualized GDP estimate for each quarter and also for an entire year).

Human Poverty Index

The Human Poverty Index (HPI) was an indication of the standard of living in a country, developed by the United Nations (UN) to complement the Human Development Index (HDI) and was first reported as part of the Human Development Report in 1997

Poverty Alleviation

Poverty alleviation, is a set of measures, both economic and humanitarian, that are intended to permanently lift people out of poverty. Measures, like those promoted by Henry George in his economics classic Progress and Poverty, are those that raise, or are intended to raise, ways of enabling the poor to create wealth for themselves as a means of ending poverty forever. In modern times, various economists within the Georgism movement propose measures like the land value tax to enhance access to the natural world for all. Poverty occurs in both developing countries and developed countries.

LITERATURE REVIEW

Poverty according to (Agwu & Kadiri, 2014) is a situation when the resources of individuals or families are inadequate to provide a socially acceptable standard of living. It can be explained as an act of defects in the economy where resources are scare and mismanaged either by individual, government or organizations. Poverty is evidenced in mass penury, pauperization of the working class, the professional class including artisans, mass unemployment and poor welfare services, absence or lack of basic necessities of life including material wealth, common place regular flow of wages and income and inability to sustain oneself based on existing resources.

Concept of Poverty

There is hardly a universal way of defining poverty because it affects many aspects of human conditions. However, the conventional concept of poverty depicts it as a condition in which people live below a specified minimum income level and are unable to provide the basic necessities of life needed for an acceptable standard of living. Poverty is a plaque which affects people all over the world, though generally considered as one of the manifestations of underdevelopment. Poverty, as cited in Aderonmu (2010), was defined as lack of command over basic consumption needs (Ravallion & Bidani, 2004). Having inadequate level of consumption (Aluko, 2005), and inability of a person to attain a minimum standard of living and high status in a society (World Bank Report, 2010).

Nevertheless, to attempt a compromise definition of poverty, one can see it as a condition "where an individual is not able to cater adequately for his/her basic needs (such as food, clothing and shelter), is unable to meet social and economic obligations, lacks gainful employment, skills, assets and self-esteem; and has limited access to social and economic infrastructure (such as education, health, potable water and sanitation), and consequently has limited chance of advancing his/her welfare to the limit of his/her potentials and capabilities".

Perception of Poverty

Poverty have been illustrated using different criteria; such as glaring defects in the economy - evidenced in mass penury, pauperization of the working class, the professional class including artisans, mass unemployment and poor welfare services, absence or lack of basic necessities of life including material wealth, common place regular flow

INTERNATIONAL JOURNAL – PAS
VOL. 4 NO.1 MAR-2018 ISSN: 1660-5332

of wages and income and inability to sustain oneself based on existing resources. It is "a situation when the resources of individuals or families are inadequate to provide a socially acceptable standard of living" (Agwu & Kadiri, 2014).

Fasoranti (2010) asserted that poverty is seen as a state of involuntary deprivation, lack of capabilities to carry out certain activities and lack of adequate basic necessities of life. Poverty has been perceived by many as not just lack of money, food and assets but also as lack of access to education and health care and lack of security, dignity and independence. However, a person's perception of poverty is a function of his present experience, condition of his environment, the aim of such definition, his vocation and his definition of the good life (Fasoranti, 2010).

Within the Nigerian context therefore, the following conditions are perceived as poor:

i. Households or individuals below the poverty line and whose incomes are insufficient to provide for their basic needs.
ii. Households or individuals lacking access to basic services, political contracts and other forms of support.
iii. People in isolated rural areas who lack essential infrastructures.
iv. Female-headed households whose nutritional needs are not being met adequately.
v. Persons who have lost their jobs and are unable to find employment as a result of economic reforms.
vi. Ethnic minorities who are marginalized, deprived and persecuted economically, socially, culturally and politically.

Indicators of Poverty

Aluko (2003) asserted that measures of economic performance and the standard of living of the population are used to indicate poverty. They include the Poverty Gap Index or Income Gap Index which measures
he shortfall or gap between the average income of the poor and the poverty line, the Gini Index measuring the extent to which the distribution of income or consumption expenditure among individuals or

households within a population deviates from a perfectly equal distribution, the Human Development Index (HDI) which was recently developed by the UNDP to provide a composite measure of both the economic and the social indicators of human development (Aluko, 2003). The HDI, using longevity, knowledge, and income as data, combines measurement of purchasing power with measures of health and educational attainments to indicate progress or retrogression in human life. Some others are GNP per capita, the purchasing power of real GDP per capita, etc. Specifically, a country's poverty line represents the value of basic food and non-food needs considered essential for meeting the minimum standard of living with the society. Therefore a nation's poverty rate is the percentage of its population living below its poverty line. It is good to know that about 70 percent of Nigerians live below the poverty line (Okhiria & Obadeyi, 2015).

Causes of Poverty

There are two broad schools of thought to causes of poverty - Low economic growth and Market imperfections (Uma, 2013). The author continued that the low economic growth is associated with increased unemployment and underemployment when the income of those affected may generally not be sufficient for them to maintain adequate standard of living. Olotu, Salami and Akeremale (2015) asserted that market imperfection on the other hand has to do with institutional distortions which would not make for equal opportunity to productive assets. They include ignorance, culture and inequitable income distribution. The International Community has in recent years given attention to the study of poverty in the Sub-Saharan African region with a view to identifying the causes in order to provide appropriate solutions. The World Bank has done much work in this area, with studies like "Taking Action for Poverty Reduction in Sub-Saharan Africa in 1996; and The Social Impact of Adjustment Operations" in 1995.

Uma and Eboh (2013) posited that the following have been identified as causes of poverty - Inadequate access to employment opportunities; Inadequate physical assets; Inadequate access to the means of supporting rural development in poor region; Inadequate access to markets for goods and services that the poor can sell; Low endowment

INTERNATIONAL JOURNAL – PAS
VOL. 4 NO.1 MAR-2018 ISSN: 1660-5332

of human capital; Destruction of natural resources endowment; Inadequate access to assistance for those living at the margin and those victimized by transitory poverty because of drought, floods, pests and war; Inadequate participation of the poor in the design of development programmes; Poor maintenance culture or failure to retain and maintain existing structures, leading to deterioration in rural, urban, and high way roads and township slums and drainages. Uma (2013) asserted that they can be summarized as follows:

1. **The Stage of Economic and Social Development:** A situation of economic underdevelopment can be a hindrance to the capacity of a nation to formulate and implement programmes and projects that would enhance real economic growth. In a situation like this, poverty will tend to persist, because economic growth is the first necessary step to poverty alleviation.
2. **Low Productivity**: Low productivity may be due to obsolescence of human skill or low acquired skill resulting from low education, poor health and physical incapacity. It could also be as a result of inadequate access to productive assets and consequently unemployment or underemployment. This causes poverty since the consuming unit is unable to earn enough income to maintain adequate/decent living standard. Nigeria's human and physical skills have tended to deteriorate with the passage of time as a result of a combination of brain-drain and falling educational facilities and funding.
3. **Market Imperfections:** Distortions in the employment market which introduce all forms of discrimination and rigidities, and prevent the advancement of people along the social and economic ladder of progress, in the form of sex, age, colour, race and tribe constitute market imperfections. Also, the existence of an income distribution structure which is skewed in favour of some classes in the society is a form of market imperfection that renders the less favoured class poor.
4. **Physical or Environmental Degradation:** A classic case of this cause of poverty is readily seen in countries like Ethiopia, Sudan, and Somalia in Africa. Misuse or overuse of land which

INTERNATIONAL JOURNAL – PAS
VOL. 4 NO.1 MAR-2018 ISSN: 1660-5332

results in deforestation, desert encroachment and blight in an excessive shifting cultivation system of agriculture are destructive of endowed land resources, swelling the population of the poor as well as deepening the incidence of poverty. It is the same effect that oil spillage produces from mindless exploitation of crude oil.

5. **Structural Shift in the Economy:** Inadequate macro-economic management policies usually result in an unwholesome shift in economic activity. Nigeria is a good example of such a structural shift. Before the advent of crude oil, it was a well-balanced economy with five principal export commodities, namely, cocoa, palm produce, rubber, groundnuts and cotton. The country's structural shift occurred when undue concentration was given to crude oil to the neglect of agriculture which provides job for the rural poor. In the progress, the economy became monoculture, while mass poverty became the lot of the rural sector, with the consequent rural-urban drift which also swelled the number of the urban poor. The South-East Asian countries (Malaysia and Indonesia) present good cases of efforts at preventing undesirable structural shift.

6. **Inadequate Commitment to Programme Implementation:** Much of the policies and programmes in the Development Plans of the 1970s and 1980s, in Nigeria for example, were not faithfully implemented even when the country did not suffer lack of funds. This failure contributed to deepening poverty. Specifically, the failure to adequately implement the Structural Adjustment Programme after 1990 worsened the lot of the poor, as this led to continued workers' retrenchment and general economic hardship.

7. **Corruption:** The incidence of corruption has taken a frightening dimension such that Nigeria is now internationally regarded as one of the most if not the most corrupt country in the world. Nigeria is ranked 27, on a scale of 0 (highly corrupt) to 100 (very clean), on the 2014 Corruption Perception Index (CPI). The CPI is based on the damaging impact of corruption on human and economic development, and ranks countries according to

INTERNATIONAL JOURNAL – PAS
VOL. 4 NO.1 MAR-2018 ISSN: 1660-5332

the extent to which they are perceived round the world as corrupt. The frightening damage to well- being and economic development of corruption is such the World Bank in collaboration with the Transparency International published a book entitled **"New perspective on Combating Corruption"** in 1998, as means of combating it internationally. At the regional level, the Asian Development Bank undertook a major study which has led to the evolving and approval of an anticorruption policy in the South East Asian region. The study established the following facts:

a. The total losses due to corruption can be more than a country's foreign debt;

b. Corruption can cost government as much as 50 percent of their tax revenues;

c. Corruption can add between 20 percent and 100 percent to government costs for goods and services.

Past Government and Non-Government Organisations (NGOs) Poverty Alleviation Programmes

Elijah and Uffort (2007) revealed that the first poverty eradication in Nigeria was the Farm Settlement Option introduced in 1960's. The intention of the Nigerian government was to develop both the export and cash crops. In 1972, the scheme collapsed but birthed the National Accelerated Food Production project. The projective was to create an avenue for testing and adapting agricultural research findings and making such available to farmers. The author continued that in 1973, Agriculture Development Project (ADP) was established to provide credit facilities for the development of agricultural projects, in order to promote integrated rural developments. It was partly financed and executed by the World Bank, but became moribund after a brief spell. Okhiria and Obadeyi (2015) asserted that Operation Feed the Nation came on board in 1976 to arouse in Nigerians, the habit of cultivating food and cash crops in order to be self-reliant.

It only succeeded in arousing the awareness of increasing food production without any appreciable increase in agricultural production. In 1977 the Rural Banking Scheme was designed to bring banking nearer to the people at the grassroots through granting of credit facilities. In addition the Federal Military Government in 1978 introduced Austerity Measures by banning the importation of some goods and placing others on license. Government expenditure was greatly reduced and emphasis was placed on the consumption of made-in-Nigeria goods. But the measures were relaxed in 1979.

In 1980, the Shagari government introduced the Green Revolution Programme. To realize this programme, the River Basin Development Authority was formed to assist agriculture and farmers. However, there were many schemes put in place in 1986 by the Nigerian government to alleviate the suffering of the poor (Elijah & Uffort, 2007). Firstly, there was the Structural Adjustment Programme (SAP), designed to put the economy back on the path of recovery. Nigerians were taught to look inward for local sourcing of raw materials. One of its objectives is to lay the basis for a sustainable non-inflationary or minimal inflationary growth. Later the National Directorate of Employment (NDE) was introduced which was targeted at the unemployed youths, to train and provide financial guidance (Fasoranti, 2010). The sole aim was to provide employment, with emphasis on self-reliance and entrepreneurship. There was also the Directorate for Foods, Roads and Rural Infrastructures (DFRRI) which was targeted at the rural areas. It was sustained through the provision of feeder roads, rural water supplies and rural electrification. DFRRI was formed for community development and social mobilization, community self-help projects, adult education, home economics, rural development, data collection and analysis, and the provision of rural housing and infrastructures.

In 1987, the government introduced the Better Life Programme (BLP) targeted at the rural women; the thrust of the programme was self-help and rural development programmes, skill acquisition and health care. There was also the National Policy on Science and Technology, meant to boost the development of indigenous technology. In order to give succour to the industrial revolution sweeping through the country the Federal Government set up the Science and Technology Fund (STF) and the National Economic Recovery Fund (NERFUND) in 1989.

This was further boosted, same year, by the establishment of People's Bank of Nigeria, targeted at the underprivileged in the rural and urban

INTERNATIONAL JOURNAL – PAS
VOL. 4 NO.1 MAR-2018 ISSN: 1660-5332

areas, to encourage savings and to grant credit facilities to small businessmen and women. Community Banking started in 1990 to meet the rural residents' micro enterprises in urban areas through the establishment of banks within a defined geographical area to meet the yearnings of the community. The Family Support Programme (FSP) was another poverty alleviation programme, launched in 1994 and targeted at the families in the rural areas. It was supported with health care delivery, child welfare, and youth development. Family Economic Advancement Programme (FEAP) was another of the series of poverty alleviation programmes introduced in 1997. It was targeted at the rural areas through granting of credit facilities to support the establishment of cottage industries.

National Poverty Eradication Programme (NAPEP)

The current poverty alleviation programme from 1999 till date is the National Poverty Eradication Programme (NAPEP) (Okhiria & Obadeyi, 2015). They continued that it focuses on the provision of strategies for the eradication of absolute poverty in Nigeria. NAPEP is complemented by the National Poverty Eradication Council (NAPEC) which is to coordinate poverty reduction related activities of all the relevant Ministries, Parastatals and Agencies.

The poverty reduction-related activities of the institutions under NAPEP have been classified into four - Youth Empowerment Scheme (YES), Rural Infrastructure Development Scheme (RIDS), Social Welfare Service Scheme (SOWESS) and Natural Resources Development and Conservative Scheme (NRDCS). Since the inception of the civilian administration in 1999, the following policies have been adopted in poverty alleviation programme (Okhiria & Obadeyi, 2015).

1. Trade and payment liberalization.
2. Tariff reform and rationalization for the promotion of industrial diversification.
3. Deregulation and greater reliance on market forces particularly in the downstream activities of the crude oil industry.
4. Adoption of appropriate pricing policies of all commodities and
5. Adoption of measures to stimulate production and broaden the supply base of the economy.

6. Other schemes and programmes that have been implemented in the past include the following.
7. The People's Bank Programme (PBN) established by decree No 22 of 1990. It was designed to extend credit services to the poor.
8. The Petroleum Trust Fund (PTF), responsible for the rehabilitation and provision of urban roads, water, health facilities, educational materials and agricultural facilities.
9. The Oil and Mineral Producing Areas Development Committee (OMPADEC) which provides development aid to the oil producing areas.
10. National Agricultural Land Development Authority (NALDA) for the provision of agricultural infrastructures.
11. The Nomadic Education Programme - to raise the literacy level among the nomadic groups.
12. River Basin Development Authorities (RBDA) for the development of the basins of the country's major rivers.

The list has not been exhausted here but in all there are over twenty of these institutions and programmes established by the government in Nigeria with a view to reduce the incidence of poverty. However, it is sad to observe that all these effort have not produced the desired results as they have only achieved modest successes while the level of poverty still remain high.

Several reasons have been given for the failure of these institutions and programmes (Aliyu, 1999, cited in Aluko, 2003). First, the fact that some of the functions of these agencies and programmes have been duplicated leading to unnecessary plurality of influences and interests. Secondly, in some cases, the implementation agencies have been wrongly identified and as such roles and functions have been wrongly allocated. Thirdly, contended that in some cases, there is the non-existence of the right or appropriate implementation agencies thus creating gaps in the implementation trend. Again, there is the problem of poor management, poor accountability, high level of corruption and dishonesty, pursuit of parochial interests, poor staffing, incompetence, lack of commitment, among the rank and file of the workers in many of the implementation agencies.

METHOD OF DATA COLLECTION

For the purpose of this study, secondary method of data collection was employed. Secondary data shall be employed such that the data to be used was obtained from National Bureau of Statistics on the economy of Taraba State. The data collected include; Gross Domestic Product (GDP) of Taraba state, Internally Generated Revenue (IGR) and Poverty Index of Taraba State.

Method of Data Analysis

This study employed both descriptive and inferential statistics. Descriptive statistics such that tables, percentages and frequency were adopted to describe the variables. However, the inferential statistics to be adopted for this study is Time Series. The Time Series tool adopted is Ordinal Least Square (OLS) regression. This was used to examine the dependent variable(s) on the independent variable.

Model Specification

The equation can be describe as follows:

$Y = \alpha + \beta X_i$, Where

Y is the dependent variable.

α is Y intercept and it is the estimated value of y whenever X = 0

β is the slope of the line or the average change in Y

X is the independent variable represented by years.

Let

$\sum y = na + b\sum x$ ……………………………………… (1)

$\sum xy = a\sum x + b\sum x^2$ ……………………………….. (2)

In above two equations x represent time and y are the observed values. n is the number of pair- values. The constant can be found from the formulas

$$a = \frac{\sum y \sum x^2 - \sum x \sum y}{n\sum x^2 - (\sum x)^2}$$

$a = \bar{y}$- $b\bar{X}$, where $\bar{y}$ is the mean of y observations and $\bar{X}$ is the mean of x observations.

$$b = \frac{n\sum xy - \sum x \sum y}{n\sum x^2 - (\sum x)^2}$$

INTERNATIONAL JOURNAL – PAS
VOL. 4 NO.1 MAR-2018 ISSN: 1660-5332

i.e. $a = \frac{\sum y}{n}$ $\quad b = \frac{\sum xy}{x^2}$

Decision Rule

The data analysis will be carried out with the aid of Statistical Package for Social Sciences (SPSS). Hence, the null hypothesis will be rejected if $p < 0.05$ and thus null hypothesis will be failed to be rejected if the p value is greater than 0.05.

PRESENTATION OF DATA

In this section the GDP (Gross Domestics Product), IGR (Internally Generated Revenue), PI (Poverty Index) were described using descriptive statistical tools. Descriptive Statistics of Relevant Variables:

Table 4.1: Showing the Data collected.

Year	GDP (₦' Billion)	IGR (₦' Million)	PI	NAPEP (₦'Million)
2008	24,296.33	5179.98	0.771	4494.82
2009	24,794.24	5286.13	0.661	4958.85
2010	33,984.75	7245.55	0.741	5777.41
2011	37,409.86	7975.78	0.755	6621.55
2012	40,544.10	8644.00	0.561	6487.06
2013	42,396.77	9038.99	0.58	7631.42
2014	89,043.62	18984.10	0.61	15048.4
2015	73800.00	15734.16	0.77	13372.6
2016	72840.6	15529.62	0.79	13912.6
2017	78901.9	16821.89	0.81	13511.2

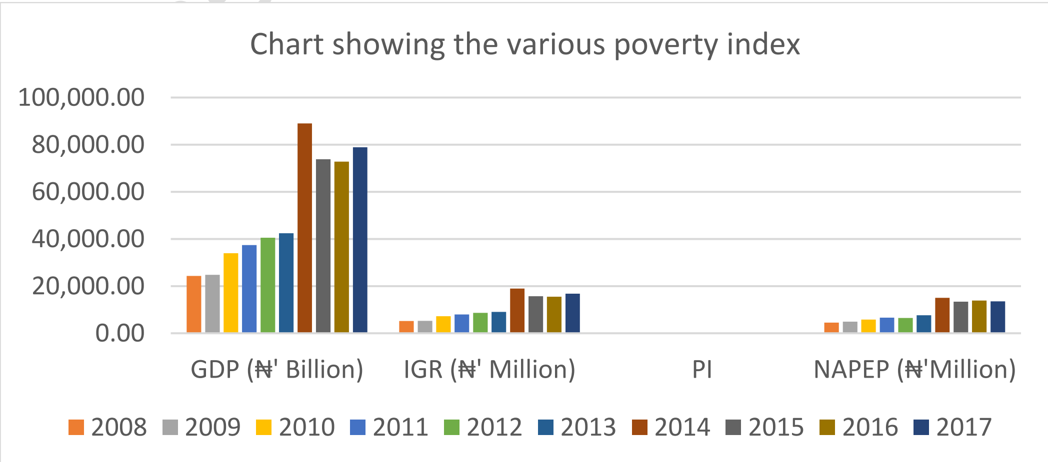


Fig 4. Chart showing distribution of GDP, IGR, NAPEP over the years in review.

Table 4.2 Descriptive Statistics of Relevant Indices used

	Mean	Std. Dev.	Min	Max
GDP (₦' Billion)	51,801.22	22964.42	24,296.33	89,043.62
IGR (₦' Million)	11,044.02	4896.014	5,179.98	18,984.10
PI	0.7049	0.088289	0.561	0.81
NAPEP (₦' Million)	9,181.57	4008.912	4,494.82	15,048.37

Table 4.2 shows the descriptive statistics of the study. It shows the mean, std. dev., minimum and maximum of the variables obtained for the study. It shows that the mean GDP for the years in review (2008-2017) is ₦51.8 Trillion. This indicates that the average gross domestic product of the Nigeria is ₦51.8 Trillion over the 10 years examined. In order to further examine the variable, the standard deviation was used which is ₦22.9 Trillion. This indicates that there is a huge variation in the mean of the GDP over the years. The table further shows that minimum GDP over the years which is ₦24.3 Trillion and a maximum GDP which is ₦89 Trillion. To further describe the variables is the mean IGR of the state which is ₦11 Billion and a standard deviation of ₦4.9 Billion and a minimum and maximum of ₦5.18 Billion and ₦19 Billion respectively. This shows that the state has had low IGRs over the years, even as low as ₦5.18 Billion. The mean expenditure of NAPEP in the state over the years is ₦9.2 Billion with a standard deviation of ₦4 Billion. This indicates that the expenditure in the state has been high over the years which is confirmed by the minimum and maximum values of ₦4.5 Billion and ₦15 Billion.

DATA ANALYSIS

Internally Generated Revenue (IGR): Is the revenue that state government generate within the areas of their jurisdiction. Various source of Internally Generated Revenue available to the state government include taxes, fines, licenses, earning and sales, rent on government property, interest and dividends among others.

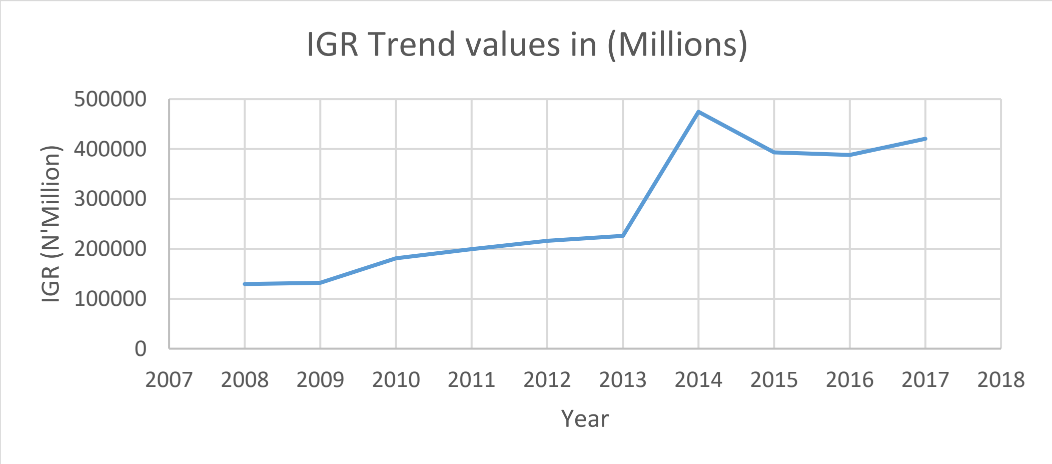
The capacity of a state government to create wealth is very crucial to the growth and development of the state.

Table 4.3 showing the IGR in million

Years	IGR (millions)
2008	518
2009	529

INTERNATIONAL JOURNAL – PAS
VOL. 4 NO.1 MAR-2018 ISSN: 1660-5332

2010	724
2011	790
2012	864
2013	904
2014	189
2015	157
2016	156
2017	168



Using the method of Least Square Equation

Years	IGR (y)	x	xy	x^2	Trend value
2008	518	-4.5	-2331	20.25	782.41
2009	529	-3.5	-1851.50	12.25	719.63
2010	724	-2.5	-1810	6.25	656.85
2011	790	-1.5	-1185	2.25	594.07
2012	864	-0.5	-432	0.25	531.29
2013	904	0.5	452	0.25	468.51
2014	189	1.5	190.5	2.25	405.73
2015	157	2.5	392.5	6.25	342.95
2016	156	3.5	546	12.25	280.17
2017	168	4.5	756	20.25	217.39
Total	4999	0	-5179.5	82.5	

n = 10

$$a = \frac{\sum y}{n} = \frac{4999}{10} = 499.9$$

INTERNATIONAL JOURNAL – PAS
VOL. 4 NO.1 MAR-2018 ISSN: 1660-5332

$$b = \frac{\sum xy}{\sum x^2} = \frac{-517.5}{82.5} = -62.78$$

$$\therefore \quad Y = \alpha + \beta X_i$$

$$Y = 499.9 - 62.78(-4.5) = 782.41$$
$$Y = 499.9 - 62.78(-3.5) = 719.63$$
$$Y = 499.9 - 62.78(-2.5) = 656.85$$
$$\vdots$$
$$Y = 499.9 - 62.78(4.5) = 217.39$$

GROSS DOMESTIC PRODUCT

Gross Domestic Product (GDP) is the monetary value of all the finished goods and services produced within a country in a specific time period. It is usually calculated on an annual basis, it can also be calculated on a quarterly basis as well.

Using the method of semi –average for the years in the data collected we have;

Table 4.4 showing the GDP in billion

Years	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
GDP (in billion)	24	25	34	37	41	42	89	74	73	79

There are 10 years figure available to it so we have two value of 5 years each i.e. 2008 – 2012 and 2013 – 2017

Average of first value = $\frac{24+25+34+37+41}{5} = \frac{161}{5} = 32.2$

Average of second value = $\frac{42+89+74+73+79}{5} = \frac{357}{5} = 71.4$

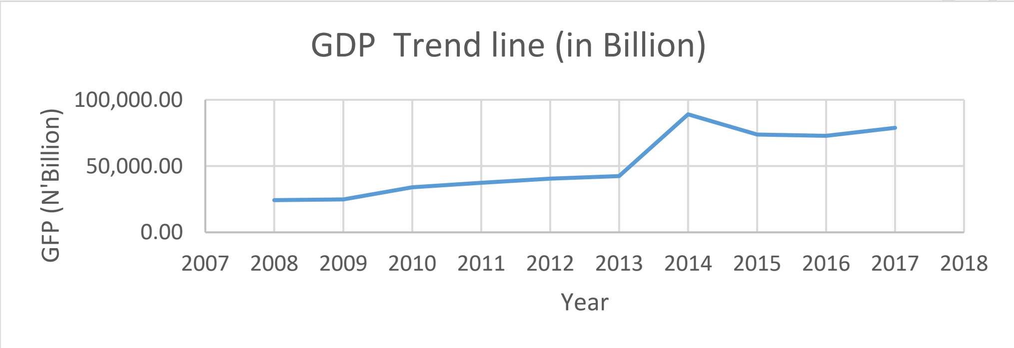
Years	GDP (billion)	Semi Total	Semi Average	Trend Value
2008	24			24.36
2009	25			16.52
2010	34	161	32.2	32.2
2011	37			40.04
2012	41			47.88

INTERNATIONAL JOURNAL – PAS
VOL. 4 NO.1 MAR-2018 ISSN: 1660-5332

242013	42			55.72
2014	89			63.56
2015	74	357	71.4	71.4
2016	73			79.24
2017	79			87.08

The difference in Semi Average = 71. 4 – 32.2 = 39.2

Annual measurement in trend = $\frac{39.2}{5} = 7.84$



POVERTY INDEX

The Poverty Index (P I) was an indication of the standard of living in a country as endorsed by the United Nation to complement Human Development Index (HDI). In this study the Poverty Index is computed using the Ordinal Least Square.

Table 4.5 showing the Poverty Index

Years	Poverty Index
2008	0.77
2009	0.66
2010	0.74
2011	0.76
2012	0.56
2013	0.58
2014	0.61
2015	0.77
2016	0.79
2017	0.81

Years	Poverty Index (y)	x	xy	x^2	Trend value
2008	0.77	-4.5	-3.465	20.25	0.678
2009	0.66	-3.5	-2.31	12.25	0.684
2010	0.74	-2.5	-1.85	6.25	0.69
2011	0.76	-1.5	-1.14	2.25	0.696
2012	0.56	-0.5	-0.28	0.25	0.702
2013	0.58	0.5	0.29	0.25	0.708
2014	0.61	1.5	0.915	2.25	0.714
2015	0.77	2.5	1.925	6.25	0.72
2016	0.79	3.5	2.765	12.25	0.726
2017	0.81	4.5	3.645	20.25	0.732
Total	7.05	0	0.495	82.50	

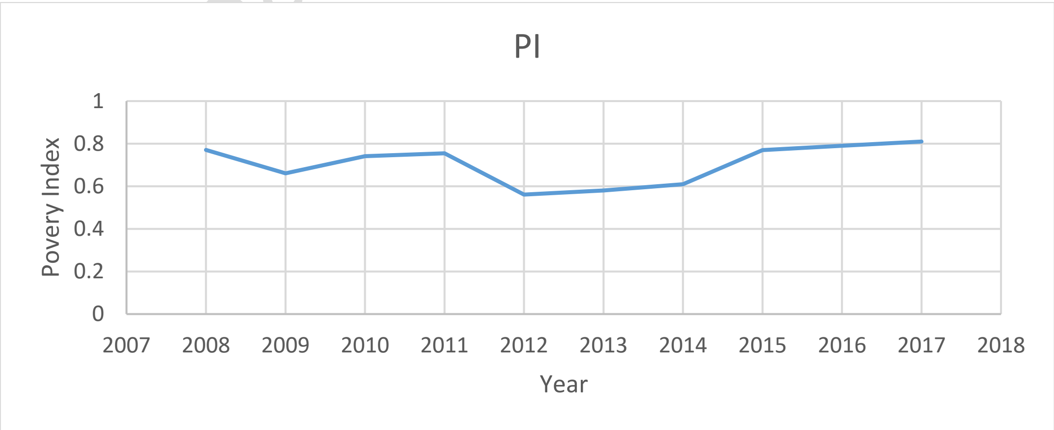
n = 10

$$a = \frac{\sum y}{n} = \frac{7.05}{10} = 0.705$$

$$b = \frac{\sum xy}{\sum \ x^2} = \frac{0.495}{82.5} = \ 0.006$$

$$\therefore \quad Y = \alpha + \ \beta X_i$$

$$Y = 0.705 + 0.006\ (-4.5) = 0.678$$
$$Y = 0.705 + 0.006(-3.5) = 0.684$$
$$Y = 0.705 + 0.006(-2.5) = 0.69$$
$$Y = 0.705 + \ \ 0.006(4.5) = 0.732$$



Test of Hypotheses

In this section, the hypotheses pre-stated were tested using OLS Regression.

INTERNATIONAL JOURNAL – PAS
VOL. 4 NO.1 MAR-2018 ISSN: 1660-5332

Hypothesis One: National Poverty Eradication Programme has no significant effect on the Gross Domestic Product of Taraba state.

Table 4.3 Regression Results

Variables	*β*	*t*	*P*	*F-Ratio*	*Sig,*	*r*	*r^2*	*Adj. r^2*
Intercept	704.45	0.66	0.52	1594.98	0.00	0.99	0.99	0.98
NAPEP	5.57	39.94	0.00					

Source: Author's Computation, 2018.

The effect of National Poverty Eradication Programme on the GDP was examined using OLS regression and the result was presented in Table 4.3. The correlation coefficient (r) of the model is 0.99 which indicates that there is a strong positive relationship between the two variables. The coefficient of variation is 0.99 which also indicates that NAPEP accounts for over 99% of the variation that occurs in the GDP.
The intercept of the model is 704.45 which is however insignificant at 5% alpha level. The β_1 is 5.57 which is significant at 95% level of significance. The overall significance of the model was measured with the F statistics which is 1594 with a p value of 0.00 hence, the null hypothesis is rejected. Based on this, it can be concluded that NAPEP has a strong positive significant effect on the gross domestic product.

Hypothesis Two: National Poverty Eradication Programme does not have any effect on the Internally Generated Revenue of Taraba state.

Table 4.4 Regression Results

Variables	*β*	*t*	*P*	*F-Ratio*	*Sig,*	*r*	*r^2*	*Adj. r^2*
Intercept	-75.41	-0.14	0.90	471.86	0.00	0.99	0.98	0.98
NAPEP	1.21	21.72	0.00					

Source: Author's Computation, 2018

The result of the second hypothesis was displayed in Table 4.4. It shows that the r is 0.99 which indicates that there is a strong positive

INTERNATIONAL JOURNAL – PAS
VOL. 4 NO.1 MAR-2018 ISSN: 1660-5332

relationship between NAPEP and IGR of Taraba state. This indicates that an increased spending in NAPEP will result in an increase the IGR of the state. The R^2 is 0.98 which indicates that NAPEP accounts for over 98% of the variation that occurs in IGR of Taraba state. The coefficient of the intercept is -75.41 which is insignificant at 5% alpha level. The β_1 is 1.21 with a p value of 0.00. F statistics is 471.86 with a p value of 0.00 which is less than 5% alpha level hence, the null hypothesis is rejected. It can therefore be concluded that NAPEP has a positive significant effect on the performance of internally generated revenue of Taraba state.

Hypothesis Three: National Poverty Eradication Programme has no significant impact on the Poverty Index of Taraba state

Table 4.5 Regression Results

Variables	*β*	*t*	*p*	*F-Ratio*	*Sig,*	*r*	*r^2*	*Adj. r^2*
Intercept	0.08	0.78	0.46	239.58	0.00	0.98	0.97	0.96
NAPEP	0.00016	15.48	0.00					

Source: Author's Computation, 2018++

The result of the last hypothesis which sought to determine if NAPEP has an effect on poverty index of Taraba state was displayed in Table 4.5. It shows that the r of the model is 0.98 and the r^2 is 0.97. The intercept of the model is insignificant and the coefficient of the independent variable, NAPEP is 0.00016 with a p value of 0.00 which indicates that it significant at 5% alpha level. The overall significance of the model is measured by the F statistics which is 239.58 with a p value of 0.00 which thereby leads to the rejection of the null hypothesis. It can therefore be concluded that NAPEP has a positive significant effect on the poverty index of Taraba state.

SUMMARY CONCLUSION AND RECOMMENDATION

The study examined statistical analysis of performance of National Poverty Eradication Programme in Nigeria in which Taraba state was adopted as a case study. The specific objectives are to examine the; effect of National Poverty Eradication Programme on the Gross Domestic Product of Taraba state; the impact of National Poverty

INTERNATIONAL JOURNAL – PAS
VOL. 4 NO.1 MAR-2018 ISSN: 1660-5332

Eradication Programme on the Internally Generated Revenue of Taraba state; the effect of National Poverty Eradication Programme on the Poverty Index of Taraba state. The study made use of secondary data which were retrieved from National Bureau of Statistics. The study made use of ordinary least squares regression to test the hypotheses of the study and also to answer the research questions. In response to the first research question of the study, it was discovered that NAPEP has a strong positive relationship with GDP. This indicates that an increase in NAPEP will lead to a rise in the GDP. Based on the second research question of the study, it was discovered that NAPEP has a strong positive effect on the IGR of Taraba state. Thirdly, it was shown that NAPEP significantly influences the performance of poverty index in Taraba state.

CONCLUSION

Based on the findings of the study, it was found out that the effect NAPEP has on the Gross Domestic Product is strong, positive and significant. The study found that NAPEP accounts for a very large proportion of the changes that occurs in GDP. It was found that NAPEP has a strong positive effect on Internally Generated Revenue of Taraba state. Lastly, it was discovered that NAPEP influences poverty index of Taraba state positively.

RECOMMENDATION

Based on the findings of the study, it is therefore recommended that;

i. The poverty index rate of Taraba state is very high and a divine intervention is highly needed hence, poverty alleviation schemes should be constantly established so as to reduce hunger and pain in the state
ii. It was discovered in the study that NAPEP has a positive impact on GDP based on this, in order to boost national production, more funds should be invested in poverty eradication programmes.
iii. Similarly, since IGR and NAPEP are positively related, Taraba state government should endeavour to always increase NAPEP expenditure such that it will eventually increase the IGR or Taraba state.

INTERNATIONAL JOURNAL – PAS
VOL. 4 NO.1 MAR-2018 ISSN: 1660-5332

SUGGESTION FOR FURTHER STUDIES

This study was carried out on a National Diploma academic level, it is thereby suggested that deeper and extensive research be carried out in a Higher National Diploma level.

REFERENCES

Aderonmu, J. A. (2010). Local Government and Poverty Eradication in Rural Nigeria. *Canadian Social Science,* 6(5): 200-208

Agwu, M. E. & Kadiri, K. I. (2014). Analysis of critical strategic factors for successful implementation of poverty alleviation programmes in Nigeria. International *Journal of Computational Engineering & Management, 17*(1), 1-9.

Aiyedogbon, J. O. & Ohwofasa, B. O. (2012). Poverty and youth unemployment in Nigeria. *International Journal of Business and Social Science, 3*(20): 269-274

Aluko, M. A. O. (2003). *Strategies for poverty reduction in Nigeria. Journal of Social Sciences, 7*(4): 255-266.

Elijah, O. A. & Uffort, L. (2007). *Comparative analysis of the relationship between poverty and underground economy in the highly developed, transition and developing countries.* Munich Personal RePEc Archive

Fasoranti, M. M. (2010). The influence of micro-credit on poverty *alleviation among rural dwellers:* A case study of Akoko North West Local Government Area of Ondo State. African Journal of Business Management, 4(8): 1438-1446

Okhiria, O. A. & Obadeyi, J. A. (2015). *Poverty, an African epidemic*: Empirical evidence of Nigeria. Developing Country Studies, 5(6): 29-39

Olotu, A., Salami, R. & Akeremale, I. (2015). *Poverty and rate of unemployment in Nigeria*. International Journal of Management, 2(1).

Transparency International (2014). *Corruption Perception Index*. Retrieved on March 10, 2016 from http://www.transparency.org/cpi2014/results.

Uma, K. E. & Eboh, F. E. (2013). *Corruption, economic development and emerging markets: Evidence from Nigeria. Asian Journal of Management Sciences and Education, 2(3), 5667.*

World Bank (1990). *World Development Report: Poverty*. Washington DC: World Bank Group

World Bank (1996). *Nigeria: Poverty in the midst of plenty. The challenge of growth with inclusion.* Washington DC: World Bank