

## IMPACT OF PETROLEUM TAX ON ECONOMIC GROWTH IN NIGERIA (1970-2012)

By

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### ABSTRACT

*Examining the empirical relationship between Economic growth and petroleum taxation is a fundamental step to understanding the economy on the basis of endogenous growth theory and its applicability to the Nigerian situation. In an attempt to investigate the effect of petroleum taxation on economic growth, a simultaneous equation model was used to establish a relationship between the variables Domestic Consumption and production of crude oil, petroleum taxation and government policies. The result obtained from the analysis revealed that a strong positive relationship exist between domestic consumption, Petroleum profit tax (PPT), government policy and economic growth (GDP). It was found in the study that crude oil production had a negative but significant effect on economic growth and other variables. Based on these findings, policy recommendations were made that part of the revenue accrued to the government purse from the PPT should be directed towards exploration and development of other mineral resources in order to achieve diversification of economy. More so, government policy should create a conducive business environment that will attract foreign investors to the country.*

Key Words: Petroleum taxation, Oil production, Growth, Policy

## 1.1 Background of the Study

Prior to the discovery of oil, according to Anyanwu and Oaikhenan (1995), Ogunjemilusi (2011) and Devarajan (1996), Nigeria was majorly an agrarian economy, with the agricultural sector contributing about 55 percent of the Gross Domestic Product (GDP), the mining sector's contribution was just 0.5 percent, while the manufacturing sector (10.2%), building and construction (14.3%) and the services sector (25%) made up the balance.

As a very versatile and flexible, depleting, natural (hydrocarbon) resource, oil is a fundamental input into modern economic activity, producing about 50% of the total energy demand in the world (Anyanwu, Oaikhenan, et al 1997). Since 1970's, the petroleum sector has taken over as the largest contributor- about 70 percent- to the Gross Domestic Product, while the contribution of the agricultural sector to GDP has been on a steady decline. The role of oil sector towards the process of national development can be seen in the aspect of; employment generation, foreign exchange earnings, income generation, industrialization, and improvement in other economic variables.

While the major investors in the petroleum industry are the multinational oil companies, the government regulates petroleum operations in Nigeria through the Petroleum Profit Tax Act (PPTA) of 2007 amended, with its main fiscal instrument as the Petroleum Profit Tax (PPT), through which Petroleum revenue accrue to the government. According to Odusola (2006), the Petroleum Profit Tax is applicable to upstream operations in the oil industry, and its main focus relates to prospecting and exploration leases, royalties, rents, margins and profit sharing elements associated with oil mining.

The fundamental objectives of petroleum taxation is to ensure a fair share of wealth accruing from the extraction of the petroleum resource, while also providing sufficient incentives to encourage investment and optimal economic recovery of the hydrocarbon resources. According to Nwete (2004), the objectives of petroleum taxation includes; achieving government's objective of exercising right and control over the public asset, as well as regulating the number of participants in the industry and discouraging its rapid depletion in order to conserve some of it for future generation.

The high potential for environmental pollution and degradation stemming from petroleum exploration and production makes it a target for environmental taxation. For instance, the Nigerian National Petroleum Corporation (NNPC), reported that a total of 16,083 pipelines break have been recorded within the last 10 years. It is evident that oil spillage incident results to hundreds of thousands of oil being lost to the environment. The runoff and sedimentation of oil in fresh water system severely degraded water quality and aquatic animals thus affecting the health of people in the environment due to consumption of such aquatic animals and the destruction of farm lands and properties. Thus, the host communities suffer environmental degradation, which leads to deprivation of means of livelihood, besides economic and social consequences.

Taxation can be used to mitigate certain economic problems such as the so-called Dutch disease, where the petroleum industry can adversely impact upon the international competitiveness of the non-oil sector.

A tax system offers one of the most effective means of mobilizing the country's internal resources, and it lends itself to creating an environment conducive for the promotion of economic growth. Since there is no objective yardstick for sharing economic wealth between the various parties involved in the petroleum activity, controversy will always exist between investors and the host government. Tax rates that are set too low can leave the government or the nation, the owner of the resource, a small and inequitable portion. However, if tax rates are too high, investment can be discouraged in both new projects and in sustaining the capital investment required to maximize future value added from existing operations (Joanne, Lester and Hunt, 2011).

In Nigeria, petroleum profit tax is a major source of revenue to the federal government (Jerry, 2005). The PPT collected by the federal government enables the government to carry out its planned budget and expenditure, thus translating into economic growth. Generally in any developing economy, an increase in government revenue, favour a large expenditure, which may serve as a boost to economic growth, since it puts money into circulation, increases the demand for labour, relieve the poor by giving them employment, and consequently remove the objection to taxes when the state can return much to its citizens (Aruwa, 2008). A high petroleum profit tax automatically means high revenue for the government, and if the government invest more in capital project, it may to increase in economic growth.

Given the foregoing, this paper to propose to critically examines:

1. Impact of Petroleum Profit Tax (PPT) on economic growth (proxy by GDP) in Nigeria.
2. The effect of domestic consumption of crude oil export on economic growth in Nigeria.
3. The effect of crude oil production on economic growth in Nigeria.

## **2.0 LITERATURE REVIEW**

### **2.1 Conceptual Analysis of Petroleum Profit Tax**

Petroleum taxation is the instrument of choice for sharing hydrocarbon wealth between host governments and international oil companies. It is a direct tax, levied annually on net profit of a petroleum tax payer, who is carrying out the business of petroleum exploration and production (Evans and Hunt, 2011).

Compared to the taxation of other sectors and industries, petroleum taxation has some particular features arising from the oil industry's special characteristics, the central contribution, which the oil and the gas sectors make to both the advanced and developing economies, the volatility of oil prices, the large operating and development costs, the high uncertainty associated with petroleum geology, the specific characteristics of individual oilfields, and the possibility of re-investment. The cost of petroleum projects tend to be incurred up-front and the time lags between the discoveries of oil or gas reserves to the time of first production can be significant. This adds to the challenge of designing and implementing appropriate petroleum tax system aimed at achieving a balance between both government and industry interest (Evans and Hunt, 2011).

#### **2.1.2 Taxation Instruments in the petroleum industry**

A variety of tax instruments have been used to capture the economic rent from oil activity. Four taxation instruments have been used over the years namely; gross royalty, brown tax, resource rent tax (RRT) and income tax. Royalty is an output- based tax because it is levied on the unit or value of production, whereas the other three instruments are profit based or cash flow taxes, because they are imposed on net profit or operating income after capital investment.

#### **2.1.2 Conceptual Analysis of Growth**

Jhigan, (2004), defines economic growth as the process whereby the real per capita income of a country increases over a long period of time. However, it can also be seen simply, as the increase over time of an economy's capacity to produce those goods and services needed to improve the wellbeing of the citizen in increasing numbers and diversity. It is the steady process by which the productive capacity of the economy is increased over time to bring about rising level of national income (Anyanwu and Oaikhenan, 1995).

Economic growth is primarily driven by improvement in productivity, which involves producing more goods and services with same input of labour, capital, energy and materials. However,

economist draws a distinction between short term economic stabilization and long term economic growth. Economic growth is primarily concerned with the long run. The short run variation of economic growth is termed the business cycle (Devaranjan et al, 1996).

A Country economic growth is a long term rise in capital to supply increasing diverse economic goods to its population, this growth capacity based on advancing technology and the institutional and ideological adjustments that it demands (Oremade, 2006).

## **2.2 Theoretical Framework**

Theoretical literatures in the context of this study, focus on both relevant theories of taxation and economic growth.

### **2.2.1 Theories of Taxation**

A tax is a financial charge or other levy imposed upon a taxpayer (an individual or legal entity) by the state or the functional equivalent of a state, such that failure to pay is punishable by law (Ogbonna and Appah, 2012). Four key issues however must be understood for taxation to play its functions in the society: a tax is a compulsory contribution made by the citizens to the government and this contribution is for general common use; also there is the presumption that the contribution to the public revenue by the tax payer may not be equivalent to the benefits received; a tax is not imposed on a citizen by the government because it has rendered specific services to him or his family; and finally, a tax imposes a general obligation on the tax payer (Nzotta, 2007). Thus it is evident that a good tax structure plays a multiple role in the process of economic development of any nation including Nigeria (Appah, 2004). Therefore Government at all levels (national, regional and local) need to raise revenue from a variety of sources to finance public sector expenditures.

### **2.2.2 Tax Rates Theory**

Taxes are mostly levied as a percentage, called the tax rates. An important distinction about tax rates is distinguishing between marginal rate and the effective (average) rate. The effective rate is the total tax paid divided by the tax base, while the marginal rate is the rate paid on the next naira of income earned. The tax rate theory is also known as the ability to pay theory. For equity and justice in taxation, citizens of a country pay tax to the government in accordance to their ability to pay (Musgrave and Musgrave, 2004). Therefore, tax rate theory enables economist and the authorities to know the just and fair amount that should be charged on goods and services or income earned.

### **2.2.3 Theories of Economic Growth.**

Interest in growth issues has led to development of various theories of growth, each purporting to explain the mechanics of growth. However, in the context of this study, the Keynes' growth theory provides the theoretical basis for this study because it explains how expansion through increase in government expenditure can bring about growth, whereas government expenditure is a function of revenue, of which petroleum taxation is a major source.

Keynes was of the opinion that increase in government expenditure leads to higher economic growth. The theory demonstrates a long- term full employment which requires that two fundamental conditions be met, that is, the ratio of investment to income must equal the full employment savings ratio, and the economy's rate of growth must equal the natural rate of growth. Keynes asserted that a key factor that could account for an economy's stagnation and unemployment was the deficiency of aggregate effective demand. Keynes view was that the solution to the problem of economic stagnation rested on expansion of aggregate demand through massive increase in government

expenditure (Alfred, 2005). Whereas, government expenditures also depends on the revenue accrue to it through taxation, including PPT.

Keynesian economics was very influential for several decades and dominated public policy between 1930s and the 70s, even till date, influences policy discussions, particularly on whether or not changes in government spending have transitory economic effects. Policy makers use Keynesian analysis to argue that higher or lower levels of government spending which is a function of revenue accrued to government from taxation, including the PPT, will stimulate or dampen economic growth.

### **2.3 Empirical Literature**

Some researchers have directed the focus of their studies on the relationship between taxation and Nigerian economy. For instance, Onaolapo, Fasina, and Adegbite (2013), empirically examined the effect of petroleum tax (PPT) on Nigerian economy using multiple regressions on such variables GDP, PPT, inflation and exchange rate. The estimated results suggest that PPT impacts strongly upon inflation, exchange rate and gross domestic product. However, the study excluded Crude oil production which is an important variable that determines the PPT.

Ogbonna and Ebimobowei, (2012) investigated the effect of petroleum income on the Nigerian economy for the period 2000-2009 using Gross domestic product (GDP), per capita income and inflation as the explained variables, and oil revenue, petroleum profit tax and licensing fees as the explanatory variables. Result showed that oil revenue has a positive and significant relationship with gross domestic product and per capita income, but a positive and insignificant relationship with inflation. Similarly, petroleum profit tax/revenue has a positive significant relationship with GDP and PCI, but a negative and insignificant relationship with inflation. It was also found that LF has a positive and insignificant relationship with GDP, PCI and inflation respectively.

A negative relationship of petroleum profit tax and inflation was obtained in the works of Ogbonna and Appah (2011). The study revealed the impact of petroleum revenue on the economy of Nigeria for the period 1970-2009. Methodology used were Pearson product correlation coefficient, ordinary least squares regression and descriptive statistics. Finding suggested petroleum revenue affects the gross domestic product and per capita income of Nigeria positively. However the relationship between petroleum revenue and inflation rate was negative. Hence results shows that revenue generated from petroleum exploration in Nigeria contributes to the Gross Domestic product and per capita income.

The effect of petroleum tax was also analysed taking into account other forms of taxes and studying their effect on the economy. Some results indicated that petroleum tax had a very positive and significant relationship with economic growth; another showed it was in between, while also another showed a negative relationship. Such works on tax are; Okafor (2012) which explored the impact of income tax revenue on the economic growth of Nigeria as proxy by the gross domestic product (GDP). Ordinary least squares regression analysis was adopted to explore the relationship over the period 1981-2007. The regression result indicated a very positive and significant relationship with petroleum profit tax contributing most to gross domestic product, however actual tax revenue generated in most years fell below the level expected.

Emeh and Ebiringa (2012) examined the empirical forms of tax on the economic growth in Nigeria. Regression analysis was used covering a period of 1985-2011. The result showed that the determinant factor of economic growth in the country through tax, only custom and excise duties is capable of influencing but has an inverse relationship and significant to the GDP. Petrol tax has little or no effect on the GDP of the economy.

There are research works that were descriptive in the nature of their analysis. For instance, Onyemaechi (2012), attempted to enumerate the benefits of various petroleum policies in Nigeria. His findings revealed three major implications: first it observed rapid expansion of the number of economic actors in the Nigerian petroleum industry; secondly, he observed rapid expansion of the transport system and thirdly, there was improvement in the GDP, foreign direct investment and employment levels. This showed some negative implications of the petroleum policies were observed, especially in relation to consumption related policies.

Ogbonna, and Appah (2011), used relevant descriptive statistics and econometric models such as white test, Ramsey Reset test, Breush Godfrey test, Jacque Berra test, Augmented Dickey fuller test, Johansen test and granger causality test. The result from the various test shows that tax reform is positively and significantly related to economic growth and that tax reforms granger cause economic growth.

Akanni Philip (2004) examined if oil exporting countries grow as their earnings on oil rent increases, using panel data regression analysis for the period 1970-2000 for 47 oil exporting countries, and 13 non-oil exporting countries. The result showed that there is a positive and significant relationship between investment and economic growth and also on oil rents.

This study identifies some gaps in the literature reviewed, which it proposes to address. For instance, though some of the earlier researchers study the effect of PPT on Nigerian economy (Onalapo, Fasina, and Adegbite (2013); Ogbonna and Ebimobowei, (2012); Okafor (2012); and Emeh and Ebiringa, 2012), however, their studies never consider Crude oil production, Domestic consumption of crude oil and Government policies as important variables in determine the impact of PPT on economic growth. Hence, this study proposes to address these gaps. Applying OLS in the context of simultaneous equation model, this study consider Petroleum Profit Tax as an important variable to affect economic growth in Nigeria.

### 3.0 METHODOLOGY

#### 3.1 Source of Data

The time series data for the study were sourced from statistical bulletin of the Central Bank of Nigeria (CBN) 2012. The macroeconomic data cover Gross Domestic Product (GDP), Petroleum Profit Tax (PPT), the crude oil production and consumption and also government policies from 1970 and 2012 in Nigeria.

#### 3.2 Model Specification

From the discussion so far, the Petroleum Profit Tax is an important contributor towards economic growth. On this premise, based on the endogenous growth theory which is a three sector model, to analyse the effect of Petroleum profit tax, our model would be expressed in terms of production function and consumption function. Therefore, the model is specified as:

$$GDP = C + I + G \text{ ----- (1)}$$

Where; GDP = Gross Domestic Product

C= Consumption function

I= Production function

G= Government activities

On further analysis, consumption is a fraction of disposable income after taxes have been deducted. Therefore,

$$C = f(GDP - T) \text{ ----- (2)}$$

The level of investment is dependent on the level of output by firms, so production is a function of labour and capital available to the firm.

$$I = f(L, K) \text{----- (3)}$$

Government activities can be felt in the economy through taxation and policies being implemented.

$$G = f(T + P) \text{----- (4)}$$

Substituting equation (2), (3), and (4) into equation (1):

$$GDP = (GDP - T) + (L, K) + (T + P) \text{----- (5)}$$

In reduced form, we have:

$$GDP = DCP + PRD + PPT + GVP \text{----- (6)}$$

In stochastic form, equation (4) becomes:

$$GDP = \beta_0 + \beta_1 (DCP_t) + \beta_2 (PRD_t) + \beta_3 (PPT_t) + \beta_4 (GVP_t) + U_1 \text{----- (7)}$$

Where,

GDP= Gross domestic Product (real)

DCP= Domestic consumption of crude oil

PRD= Crude oil production

PPT= Petroleum profit tax

Tt = Time series data

GVP = government policies, which in the case of Nigeria there are three major policies that have impacted the economy within the period of study which are:

- I. Structural adjustment program (SAP) 1986-1993
- II. National economic empowerment and Development Strategy (NEEDS) 1999-2007
- III. 7 point Agenda 2008-2012

B<sub>0</sub> = the intercept

β<sub>1</sub>, β<sub>2</sub>, β<sub>3</sub> and β<sub>4</sub> = the slopes of each respective variable

Prior to estimation of the model, standard econometric tests, that is, stationary tests were conducted to test for its stochastic properties through unit root tests in order to avoid estimating spurious regression results, since estimating regressions using non-stationary variables based on ordinary least square lead to spurious and inconsistent results (Aiyedogbon, 2012).

### 3.5 Technique of Data Analysis

The technique of analysis used for the quantitative data in this study would be the simultaneous equation model, making use of Ordinary least squares. The OLS can be applied in the context of simultaneous equations when it is a case of recursive, triangular or causal model, where there is a definite but unidirectional cause and effect relationship among the endogenous variables. The problem of simultaneity does not arise in a recursive simultaneous equation model (Gujarati and Porter, 2009). A co-integration and causality test were also conducted, and if causality exists, it implies that simultaneity may be present and as such the two stage least square method would be more appropriate.

The first step would be diagnostic tests to observe if the model is appropriate and confounds to theory. The study employs the Augmented Dickey Fuller test for unit root, Ramsey RESET for model mis- specification, and Johansen co integration test.

## 4.0 Data Presentation and Analysis

### 4.1 Analysis of Result

Table 1 and 2, shows the summary of the relevant diagnostic test for serial correlation, model specification, and stationarity test.

Table 1: Diagnostic tests

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	1.86913	Probability	0.031682
Obs*R-squared	2.66004	Probability	0.026447
White Heteroskedasticity Test:			
F-statistic	1.116521	Probability	0.037491
Obs*R-squared	7.849297	Probability	0.034607
Ramsey RESET Test:			
F-statistic	4.055502	Probability	0.025799
Log likelihood ratio	8.737185	Probability	0.012669

Source: E views 4 output

The table shows the Breusch- Godfrey serial correlation test of the residuals, the F statistics obtained was 1.186913 which is less than the 5% critical value of 8.59, thus we accept the null hypothesis that there is no evidence of serial correlation exist, given the observed R as 2.66004 and the probability value as 0.031682 and 0.026447. Serial correlation therefore does not exist.

Also, the white heteroscedasticity test shows an F statistic value of 1.116521, probability values of 0.037491 and 0.034607 providing evidence of no heteroscedasticity. The F statistic value is less than the 5% critical F statistics value of 8.59; the T statistics are also significant at the 2<sup>nd</sup> transformation.

The Ramsey RESET test for model specification show an F statistic value of 4.055502, probability values of 0.025799 and 0.012669. The probability values are significant; also the 5% critical F value at 8.59 is greater than the F statistic value. Hence, there is no evidence of model mis-specification. The model therefore is stated in a correct functional form.

Table 2 Unit root test (Augmented Dickey Fuller Test)

Variable GDP				
ADF Test Statistic	-6.210616	1% Critical	-3.6117	
		5% Critical	-2.9399	
		10% Critical	-2.6080	
Variable DCP				
ADF Test Statistic	-5.389860	1% Critical	-3.6117	
		5% Critical	-2.9399	
		10% Critical	-2.6080	
Variable PRD				
ADF Test Statistic	-4.91186	1% Critical	-3.6117	
		5% Critical	-2.9399	
		10% Critical	-2.6080	
Variable PPT				

ADF Test Statistic	-3.524269	1% Critical	-3.6117
		5% Critical	-2.9399
		10% Critical	-2.6080
Variable GVP			
ADF Test Statistic	-6.223140	1% Critical Value*	-3.6117
		5% Critical Value	-2.9399
		10% Critical Value	-2.6080

Source: Eviews 4 Output

The augmented dickey-fuller test for stationarity conducted on the variables GDP, DCP, PRD, PPT, and GVP were stationary at both the 5% and 10% critical values as shown in table 2 taking into consideration 2 lagged values. The variables were found to be a random walk without drift which a difference stationary process was applied and they were stationary at their second differencing. For all the variables, the ADF test statistic is higher than the critical values. Therefore each variable is stationary.

#### 4.2 Vector Error Correction Model

The unrestricted VAR taking into account co integration is an error correction mechanism that serves as a means of reconciling the short-run behaviour of an economic variable with its long run behaviour. After reconciling the long run and short run behaviour, an R-squared of 0.567331 was observed, with an F statistic ranging from 1.313151 to 4.079408 which is less than the 5% critical F of 8.57. Also the coefficients and T values of the variables were significant, having minimal standard errors. The Akaike information criteria and the Schwarz criteria were as low as possible suggesting the estimated result was significant and a true representation of the impact of Petroleum tax on economic growth in Nigeria.

Table 3. Regression Result

Dependent Variable: Economic Growth (GDP)

Method: Least Squares

Date: 07/03/14 Time: 22:40

Sample: 1970 2012

Included observations: 43

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	72462.50	62180.99	1.165348	0.2511
DCP	2.122457	0.312586	6.789994	0.0000
PRD	-0.106360	0.090381	-1.176797	0.2466
PPT	0.059965	0.006083	9.858492	0.0000
GVP	32604.71	26405.07	1.234790	0.2245
R-squared	0.937000	Mean dependent var		295716.0
Adjusted R-squared	0.930369	S.D. dependent var		243961.2
S.E. of regression	64375.78	Akaike info criterion		25.09181
Sum squared resid	1.57E+11	Schwarz criterion		25.29660
Log likelihood	-534.4738	F-statistic		141.2946
Durbin-Watson stat	1.496956	Prob(F-statistic)		0.000000

$$\begin{aligned} \text{GDP} &= \beta_0 + \beta_1 (\text{DCP}) + \beta_2 (\text{PRD}) + \beta_3 (\text{PPT}) + \beta_4 (\text{GVP}) + U_1 \\ &= 72462.50 + 2.1224\text{DCP} - 0.1063\text{PRD} + 0.05996\text{PPT} + 32604\text{GVP} \\ &\quad (1.1653) \quad (6.7899) \quad (-1.1767) \quad (9.8584) \quad (1.2347) \end{aligned}$$

### 4.3 Findings and Discussion

The result in table 3 above show a robust Adjusted R-square of about 93.03 percent, indicating that about 93.03 percent change independent variable (GDP) is explained by the explanatory variables DCP, PRD, PPT and GVP. The value of t-Statistics of each of the explanatory variables shows 6.7899 for DCP, -1.1767 for PRD, 9.8584 for PPT and 1.2347 for GVP, while the F-statistic value is high at 141.2946.

The result showed a coefficient of 2.1224 DCP, -0.1063 PRD, 0.05996 PPT and 3260 GVP, indicating that for every 1% rise in Petroleum Tax, GDP rises by about 0.06%, while 1% change in domestic consumption will lead to a change of about 2.16% in GDP, and a percent change in crude oil production leads to a dropped by 0.11% in GDP, and government policy affects the economy seriously. Therefore, domestic consumption, policy and petroleum taxation has a positive and significant impact on economic growth, Even though the result indicates that government policy has a positive impact on economic growth, however the impact is statistically insignificant. This may be attributed to failure in policy implementation, to effectively utilise the revenue from the oil sector to improve other sector of the economy. Meanwhile, the result shows that crude oil production has a negative and insignificant effect on economic growth.

The Vector correction mechanism established the fact that there exists a long run and short run relationship between variables as such little rise or fall in PPT affects GDP and domestic consumption seriously compared to its effect on production.

### 5.0 Conclusion and Recommendation

Based on the findings, it can be affirmed that PPT have a positive and statistically significant impact on the growth of Nigerian economy. However, the effect is inelastic (0.059), which implies that an increase in PPT has only been able to reflect on economic growth in less magnitude. Hence, despite the huge revenue from oil, the country is still rated among poor countries of the world, with high rate of unemployment leading to social crises. More so, Domestic consumption of crude oil and government policy implementation plays a major role in economic growth, however, government policy shows statistically insignificance in relation to economic growth, indicating that the implementation of the government policies, particularly in the oil sector, has not been effective in propelling the economy towards achieving a sustainable growth. Production of crude oil shows a negative and statistically insignificant impact on economic growth. This may be attributed to environmental pollution and degradation stemming from petroleum exploration and production, in which case, its effect leads to destruction of aquatic lives and destruction of farm lands, thereby depriving people of the host community their means of livelihood.

Based on these findings, it is recommended that the government should try to diversify the economy. In so doing, revenue accrue to government through PPT should be judiciously used to develop other sectors, especially in exploring and developing other mineral resources, which will lead to economic growth.

Government policy should be directed towards creating conducive or investment friendly environment that will attract foreign investors into the country. Policy like tax holiday in some sectors, may attract investors to such economic sector, any increase in investment has the potential of creating job opportunity for the citizens.

On domestic consumption of oil, government must try to put the refineries in order, so that they can be operating at full capacity. This will help to reduce over dependence on fuel importation, and help in preserving the country's foreign reserve which can be directed towards providing other essential infrastructures needed for economic growth.

Crude oil production, without any doubt, has high potential for environmental pollution and degradation, which has deprived the host communities their means of livelihood, besides other social consequences. Hence, the government need to monitor the activities of the oil companies to ensure that their activities give adequate consideration to the safety of the environment, particularly the aquatic lives, and where there is spillage, adequate measure must be taken to clean up the area.

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