#### 1

# Energy and the Nigerian economy

Maryam A. Bulama (Mrs).

**Abstract-** The ongoing reform in the energy sector followed the radical transformation witnessed by other sectors, such as financial services, aviation and security services which commenced in the late 2000s. The energy sector is critical to the sustenance of the political and economic system of Nigeria and for the realization of the country's economic growth ambitions. While attaining the goal of one of the 20 nations by the year 2020 may be overly ambitious given the pace of the economic growth in the last 5 years, the potential to grow significantly is huge if the benefits of a successfully reformed energy sector provide the springboard.

Index Terms- Economic development, Energy demand, Energy efficiency, Energy management.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

### 1 INTRODUCTION

Countries in the world always focus on ways to accelerate economic growth and development. Development is traditionally, the capacity of a national economy whose initial economic condition has been more or less static for a long time to generate and sustain an annual increase in its gross domestic product (GDP) of perhaps 5% to 7% or more (Todaro and smith 2003). GDP is the primary indication used to gauge the health of a country's economy and represents the total monetary value. Nigeria's economy is struggling to leverage the country's vast wealth in fossil fuels in order to displace the crushing poverty that affects about 57% of its population. Economist refer to the coexistence of vast natural resources, wealth and extreme personal poverty in developing countries like Nigeria as the 'paradox of plenty' or the curse of oil. (htt://greenecon.net) Nigeria's exports of oil and natural gas at a time

Of peak prices have enabled the country to post merchandize trade and current surpluses in recent years. Succeeding governments of Nigeria have implemented various national plans and the economic reform program such as the National economic empowerment development strategy (NEEDS) and a longer-term economic development program (UN) - sponsored national millennium development goals aimed at accelerating the standards of living. However, the impact of these measures on the teaming poverty-striven populace is yet to be significantly felt.

### 2.0ROLE OF ENERGY IN NIGERIA'S ECONOMIC DEVELOPMENT

The role of energy cannot be under estimated in dealing with economic growth and development; this is due to the fact that energy has positive effects on the various sectors of the economy. Nigerian Economy, for instance, underwent profound changes during the 1970s and 1980s. Once an agriculturally based economy and a major exporter of cocoa, peanuts and palm products, Nigeria now relies on oil for more than 90% of its export earnings, 30% of its GDP, and 70% of its federal budget resources. However, a combination of declining oil prices, overly ambitious industrialization programs, neglect of the agricultural sector, excessive foreign borrowing, and widespread corruption

and mismanagement during those decades caused the Nigerian economy to experience a prolonged period of economic stagnation and decline. Prior to the oil boom of the 1970s, Nigeria was one of the worlds poorest and least economically - developed countries. It had a per capita GNP (Gross national product) of only \$90 in 1968. But with the oil boom of the 1970s and the discovery of new large deposits, Nigeria embarked on a decade of rapid economic expansion and major structural transformation.

Between 1968 and 1980, per capita GNP grew by more than 1000% to \$1,020. However, this growth process was reversed in the 1980s, to the extent that by 1994, GNP per capita had declined by more than 70% to \$240, the same level as in 1972. (Todaro and Smith, 2003). The oil sector has dictated the pace and structure of growth of the Nigerian economy since 1970. Oil contributed over US\$391.6 billion to government revenue between 1970 and 2005, which accounted for 77.1 per cent of total government revenue over the period. Out of this amount US\$118.4 billion or 30.2 percent was earned between 1999 and 2005. Similarly, the Nigerian economy has earned over US\$593.6 billion from oil exports, representing 96.3 percent of total foreign exchange earned between 1970 and 2005. Out of this amount, US\$153.1 billion or 25.8 per cent was earned between 1999 and 2005. (CBN, federal ministry of finance)

Table1: Real Gross Domestic Growth of Nigeria from 2001-2012:

S/N	YEAR	GDP (%)	
1.	2001	8.20	
2.	2002	21.20	
3.	2003	10.30	
4.	2004	10.60	
5.	2005	5.40	
6.	2006	6.20	
7.	2007	7.00	
8.	2008	6.00	
9.	2009	7.00	
10.	2010	8.00	
11.	2011	7.20	
12.	2012	7.10	

Source: Central Bank of Nigeria

Table 1 depicts the real gross domestic growth of the Nigerian economy from 2001-2012. The table dictates positive growth of the Nigerian economy. Overall, the performance of the Nigerian economy in 2011 was impressive in a year characterized by uncertain global recovery. The economy slowed down from 8% in 2010 to 7.2% in 2011. The contraction in the oil GDP was responsible for the slowdown although it is among the highest growth rates in the world during the year. It however fell short of the 2011 target of 8.5% under the President Goodluck's Transformation Agenda. In spite of the slowdown, the total GDP and per capita income increased to N37, 303.41 billion (US\$242.40 billion) in 2011 and N+226, 920.19 (\$US\$1,474.56) respectively from N33, 984.75 billion (US\$ 226.14 billion) and N213, 351.43 (US\$1,419.69). The growth witnessed during this period was supported by Government's initiative to gradually reduce the share of recurrent expenditure in total expenditure. This was also buoyed by the increase in international price of crude oil, which resulted in improved revenue receipts on the Federation Account (FA) from N5, 574.82 billion in 2010 to N9, 987.63 billion in 2011. From the foregoing, the energy sector could be described as strategic for increasing the competitiveness of the Nigerian economy, be it as a way of reducing overall energy cost or as a way to further modernize the technology used by economic agents and businesses. Other Countries have, therefore, taken significant efforts to ensure the efficiency of their energy sector and it worked for them. Using the republic of Ghana as a case study, it is evident that Ghana, formerly a non-oil producing country and largely agrarian as evidenced by the dominant share of agriculture in total GDP, has been doing well in terms of economic growth. The description of the economy is followed by an analysis of the contribution of energy to the Ghanaian economy. The industry sector of Ghana recorded the highest growth of 36.2 percent in 2011, due mainly to the coming on stream of oil production. The services sector continues to be the largest contributor to the country's GDP accounting for 48.1 percent in 2011 on oil receipts and distribution. (Republic of Ghana, 2012 budget speech)

Ghana embarked on energy efficiency measures, one of the most economical sources of new energy that also lowers cost of production and conserves supplies. Ghana accords its energy a top priority status by ensuring regular equipment maintenance and building power plants that are more efficient. As a way of revitalizing the energy sector, Nigeria should embrace similar measures taken by Ghana to improve on the efficiency in the sector in view of its strategic importance to the national economy. Nigeria is fortunate to have huge energy resources, which potentially give the country ample opportunity to transform her economy and the lives of her citizens. Nigeria sits astride of over 35 billion barrels of oil, 187 trillion cubic feet of gas, 4 billion metric tones of coal and lignite, as well as huge reserves of tar sands, hydropower and solar radiation, among others. For understandable reasons, Nigeria has not devoted equal attention to her other abundant energy resources as her efforts have been concentrated on the development, exploitation and utilization of crude oil and gas for fiscal objectives and to generate electricity to power the economy.

Table 2: Comparable oil Export Revenue as % of total revenue (OPEC Countries) 2010

Source: OPEC annual statistical bulletin 2010/2011

OPEC Countries	Total Export	Oil Export	Oil export % of Total export
Algeria	57,800	38,300	66.30%
Angola	49,259	47,239	95.90%
Ecuador	17,369	9,649	55.60%
IR Iran	83,785	71,571	85.40%
Iraq	52,084	51,147	98.20%
Kuwait	65,984	61,667	93.50%
Libya	46,310	41,874	90.40%
Nigeria	70,579	61,804	87.60%
Qatar	72,054	29,278	40.60%
Saudi Arabia	235,342	196,193	83.40%
United Arab Emirates	198,362	74,027	37.30%
Venezuela	65,786	62,317	94.70%

Table 2 shows comparable oil export revenue as percentage of total revenue, Nigeria for instance has a total export of about 70,579 while her oil export is about 61,804 representing about 87.6% of total export, which indicate that Nigeria relies mainly on oil as source of revenue. Iraq records the highest export of oil of its total export among the organization of petroleum exporting countries with about 52,084 of total export, 51,147 of oil export and 98.2% representing oil export% of total export. While on the other hand, United Arab Emirates recorded the lowest percentage of oil export, with oil export representing 37.3% of 198,362 of total export and 74,027 of oil export, United Arab Emirates has one of the highest total of oil export yet its contribution to total revenue is only about 37.2%, this depicts that the economy those not rely mainly on oil as its source of revenue.

## 3.0 PROSPECTS OF SUFFICIENT ENERGY SUPPLY FOR THE ECONOMY

Abundant, sufficient and sustained supply of energy in the Nigerian economy will create million of job opportunities capable of providing of employment opportunities to teeming unemployed individuals. Massive industrialization could be achieved even in the rural areas which can help to curb rural – urban migration which will in turn reduce pressure and congestion in the cities on the available resources.

Small and medium scale enterprises can also be well effective and operational with sufficient energy supply in the country. This development will contribute in reducing not be too much reliance on government by creating jobs for

Nigerians. It will also boost local production of primary goods, discourage importation and expand exports thereby leading to favorable balance of foreign exchange and growth of GNP.

If Nigeria is desirous to turn the tide of its economic misfortunes and mismanagement, it will have to take steps to diversify its energy-mix and use it efficiently, curb corruption and improve transparency in order to boost all sectors of the economy such as agriculture mining etc.

IJSER 2012 2

### 4.0 CHALLENGES

Annual budgets rely principally on income from oil sector which often leads to extreme volatility, a lack of transparency in government spending of proceeds, and difficulty in capturing economic multiplier effects through reinvestments in appropriate sectors of the economy. In the oil and gas sector, poor funding of development projects mainly due to imbalances in the financial capacity of the different joint-venture partners hampers growth. There is also the allegation of inflated operating costs by the parties to the joint venture, which often leads to mutual suspicion between the parties, and the rather unfair distribution of revenues, especially in the event of high oil prices.

The macroeconomic volatility in Nigeria has been occasioned largely by swings in oil prices which affects the nation's revenue. Other challenges include poor corporate relations with indigenous communities, vandalism of oil infrastructure, severe ecological damage, and security problems. In addition, political and economic conflicts largely due to a long history of corruption and complicity of multinational corporations affect major decisions and legislative actions designed for the effective operation of the energy sector.

For instance, refining of petroleum products is largely limited to the inefficient state owned refineries and has necessitated the nation's dependence on importation of refined products for domestic needs thereby paying huge amount of money as subsidies to bridge the difference incurred by the importers on the product against the selling price in the country.

### 5.0 CONCLUSION

Energy is a crucial ingredient for economic development and serves as the backbone for industrial activities in the country. For a developing country like Nigeria, provision of greater access to energy has been suggested by experts as the only way to help grow the economy and improve the lives of the citizens. The government should therefore, collaborate with the private sector on policy targets, annual budgets, new projects and rehabilitation of existing facilities to increase access to energy supply to as many of the population as possible.

REFERENCES

- [1]. BGL Group Inc "Information Technology Services" (2012): <a href="https://www.bgl.group.com">www.bgl.group.com</a>
- [2]. Green Econometrics "Information and Analyses on the Economics of Solar and Alternative energies" (2012): HTT//greenecon.net.
- [3]. OPEC "Annual Statistical Bulletin" 2010/2011: www.opec.org
- [4]. Todaro, M.P., Smith S.C (2003) 'Economic Development, 8<sup>TH</sup> edition'
- [5]. Republic of Ghana, "2012 Budget Speech" Ghanaian Presidency
- [6]. Energy commission of Nigeria: www.energy.gov.ng

IJSER 2012 3

IJSER 2012 4