

An Assessment of the Socio-Economic Impact of Foreign Direct Investment in the Oil and Gas Sector of the Nigerian Economy

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Abstract

The study examined the socio-economic impact of foreign direct investment (FDI) in oil and gas sector of the Nigerian economy. The research is based on assessment of literatures, surveys, and interviews with experts, representative of the oil producing communities and business analysts. The findings revealed that FDI has had varied impact on the Nigerian economy and society. While it had positive impact on GDP and government revenue, it had insignificant contribution to employment, and has resulted in environmental damage in the Niger Delta, social inequality and associated tensions, waste through gas flaring, and negative implication on local communities' history. The study therefore recommends institutional changes to facilitate business in the country, and address national systemic weaknesses, community development, corporate social responsibility, human capital development, diversification and environmental hazards.

Keywords: Foreign Direct Investment, Oil and Gas Sector, and Nigerian Economy

1.0 Introduction

Developing economies are faced with the challenge of low domestic capital formation hence the need to depend on external sources to achieve their development needs and aspirations. One of these sources is the foreign direct investment (FDI) which has contributed immensely to the economies of developing countries. In 2011, FDI reached \$1.7 trillion and developing countries, including African countries, accounted for 45% of these flows reaching a record \$684 billion even though Africa and the least developed countries (LDCs) saw a third year of declining FDI flows due to the instability in North Africa and deteriorating economic situation in Europe (UNCTAD, 2012; FGN, 2013).

In Nigeria, the high levels of natural resources endowment and large domestic market have been major attractions for foreign direct investment (FDI) inflows. But the amount of FDI attracted into the country has been modest when compared with the country's resource base and needs. But FDI flows to Nigeria has grown rapidly following the transition from military to civilian administration and the implementation of various economic reforms and development policies by the government, to a peak of 11 billion in 2009 (UNCTAD, 2012). This remarkable growth was in spite of the challenges of the global economic crisis and the Niger Delta crisis in 2006-2009.

Over the course of the last decade, the country has witnessed growth in FDI flows: from \$1 billion in 1999, \$1.14 billion in 2001, and \$2.1 billion in 2004, Nigeria's FDI reached \$11 billion in 2009 according to UNCTAD (2009), making the country the nineteenth greatest recipient of FDI in the world. Nigeria's most important sources of FDI have traditionally been the home countries of the oil majors. The USA's, presence in Nigeria's oil sector through Chevron (Texaco) and ExxonMobil, accounts for some 30% of FDI flows to Nigeria. The UK, one of the host countries of Shell, is another key FDI partner – UK FDI into Nigeria accounts for about 20% of Nigeria's total foreign investment (FGN, 2013).

China is also becoming one of Nigeria's most important sources of FDI especially as it seeks to expand its trade relationships with Africa. Nigeria is China's second largest trading partner in Africa, next to South Africa. From \$3 billion in 2003, China's direct investment in Nigeria is reported to be now worth around \$6 billion. The oil and gas sector receives 75% of China's FDI in Nigeria. Other significant sources of FDI include Italy, Brazil, Netherlands, France and South Africa. But all of these have been on the downturn in the last decade which calls for immediate redress if the economy is to grow and develop as planned (FGN, 2013).

Between 1999-2010, oil and gas have consistently represented an average of 36% of GDP, 80% of Government revenues, and 97.5% of Nigeria's total export revenue (amounting to \$58 billion in 2009); tripling the country's trade surplus since 2002. The research by Goldman Sachs cited in FGN (2013) noted that FDI growth has contributed immensely to Nigeria's improving economic climate with GDP accelerating to an average of 7% in the last five years. Imports have also risen rapidly and much of it in the form of investment goods for the oil sector. Trade surplus has risen to \$40bn (up from \$28bn in 2006 and only \$5bn in 2002).

According to UNCTAD (2002) in its report, FDI triggers technology spill-over, assists in the formation of human capital, contributes to international trade integration, helps create a more competitive business environment, and enhances enterprise development. All of these contribute to higher economic growth, which is the most potent tool for alleviating poverty in developing countries. Moreover, beyond the strictly economic benefits, FDI may help improve environmental and social conditions in the host country by, for example, transferring "cleaner" technologies and leading to more socially responsible corporate policies. The flipside, however, according to the report could be a deterioration of the balance of payments as profits are repatriated (although often offset by incoming FDI), a lack of positive linkages with local communities, the potentially harmful environmental impact of FDI especially in the extractive and heavy industries, social disruptions of accelerated commercialization in less developed countries, and the effects on competition in national markets. Moreover, some host country authorities perceive an increasing dependence on internationally operating enterprises as representing a loss of political sovereignty. Even some expected benefits may prove elusive if, for example, the host economy, in its current state of economic development, is not able to take advantage of the technologies transferred through FDI. It is in view of these that this study attempts to examine the socio economic impact of FDI in Nigeria.

1.1 Objective of the Study

The broad objective of the study is to investigate the socio-economic impact of foreign direct investment (FDI) in oil and gas sector on the Nigerian economy. The specific objectives are:

- To examine the contribution of FDI in the sector to economic growth, employment and technology transfer.
- To investigate the effect of FDI in the industry on environmental pollution, local culture and community development of the Niger Delta areas.

1.2 Methodology of the Study

The research for this study was based on an assessment of various literatures on the subject, surveys and interviews with government and industry officials, experts and participants, and representatives of the various affected communities, as well as various specialists in business analysis. The literature review included an assessment of previously established findings and provided a context for conducting field work. This also identified key informants critical to the assessment process. The primary sources included information collected using interviews and survey questionnaires. The secondary sources included academic research, policy documents, reports and periodicals (newspapers, magazines and journals). Based on the surveys, interviews and transcript analysis, the data was put through domain and hermeneutical analysis. The approach can be considered largely as exploratory data analysis, which aims to gain insight into the process behind the observed data. In an attempt to understand the process and identify possible improvements in the future, the approach uses the data as a window into the process that generated the data.

Some of the identified key stakeholders included: International Oil Companies (in the upstream, mid-stream, downstream), Indigenous Companies (in the upstream, midstream, downstream), Gas-related companies, Petrochemical companies, Sector service providers, Nigerian Government (Federal, State, Local, Executive, Legislative, policy, regulation, operations/services), Civil Society and Community Development Groups (various categories), Local Communities (collective and individual members), Organised Private Sector, Banking and Financial Institutions, Education, Scientific and Research institutions, etc.

The study employed survey questionnaires and individual interviews to collect data from national and local government officials, international and indigenous oil and gas companies, civil society and community development organizations, and others active in the oil and gas sector and in the Niger Delta region. The purpose of these interviews was to capture the detailed and nuanced understanding of industry, information about past and current programs and any measured outcomes of investment (with a focus on foreign direct investment) in the sector. Taken together, the survey results and these interviews shed light on the developments in the sector, help in developing and documenting a holistic and comprehensive narrative on the developments, and suggest areas where improvements may be made.

2.0 Overview of the Nigerian Oil and Gas Industry

The Nigerian oil and gas sector and foreign direct investment have developed hand-in-hand since the turn of the 20th Century. Oil exploration commenced in 1908 by the Nigerian Bitumen Company and British Colonial Petroleum. Then in 1938 Shell D'Arcy (the precursor to today's Shell Petroleum Development Company of Nigeria) was granted sole concession over the whole country. Commercial quantities of oil were however not discovered and successfully extracted until 1956 and 1958 respectively by Shell BP which had by then been joined by the US giant - Mobil Oil (www.nnpccgroup.com).

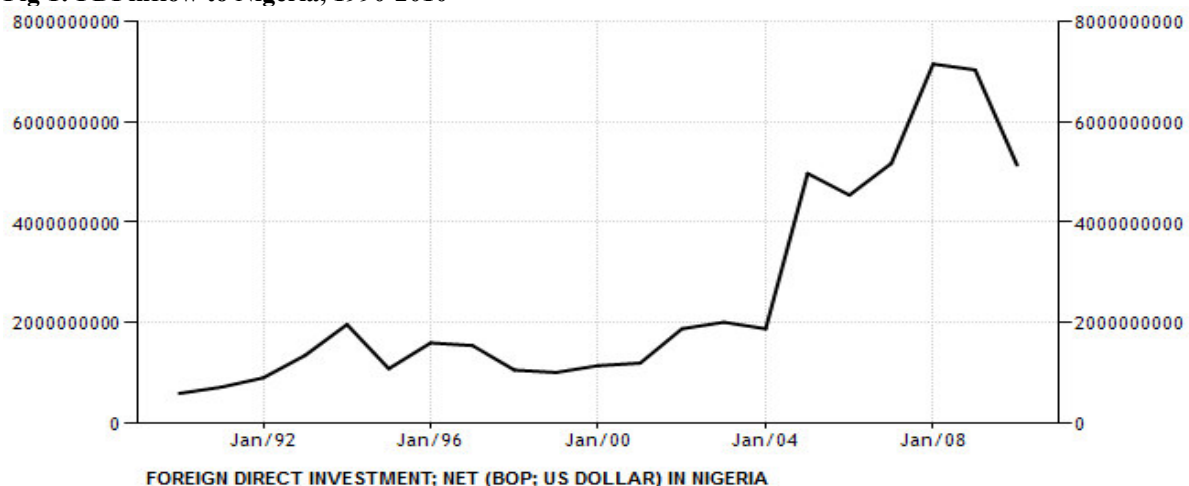
The long and intensive exploration required the technical expertise and capital intensive nature of the

exploration and production process, as well as the underdevelopment of Nigeria contributed to restricting the sector entirely on foreign investment for the first 60 years. The 1970s recorded further developments in the oil industry and infrastructure as a result of the global oil demand boom and the Nigerian Government's post-civil war development drive. The Nigerian National Oil Corporation (NNOC) was incorporated in 1971, and restructured in 1979 into the Nigerian National Petroleum Corporation (NNPC), to serve as the obligatory state partner to foreign oil companies in all Nigerian petroleum ventures (FGN, 2013). Nigeria has some 37.2 billion barrels of proven oil reserves (www.opec.org); and a full production capacity of some 2.5 million barrels per day (www.nnpcgroup.com), with the majority of these reserves to be found along the country's Niger River Delta and off-shore in the Bight of Benin, Gulf of Guinea and Bight of Bonny. In addition to its considerable reserves, Nigeria's oil commands high global demand and interest due to its high quality, low sulphur content, and relative ease of extraction.

3.0 Impact of FDI on the Oil and Gas Sector

Globally, governments strive to attract foreign direct investment to stimulate local economies through job creation, knowledge transfer, revenue generation and infrastructure development. As a result of the perceived positive impacts of FDI, successive Nigerian governments have introduced a number of policies to attract FDI into the Oil and Gas Sector. This has resulted in the growth of FDI inflow to Nigeria as represented in the figure below.

Fig 1: FDI inflow to Nigeria, 1990-2010



Source: CBN; FGN, 2013

However, some studies have suggested that the positive impacts of FDI to economic growth and local economy are actually minimal. In the case of Venezuela, for instance, Aitken and Harrison (1999) found very little evidence to support the argument that FDI results in technological spill-overs to local firms. Similarly, for some 17 transition economies, Katerina *et al.* (2004) found that FDI have positive but insignificant impact on economic growth on the transition economies. This section therefore examines some of the impacts of oil and gas on the Nigerian socio-economic environment.

3.1 Contribution to Economic Growth

Economic growth is an important factor in determining the health of an economy. In the last decade, successive governments in Nigeria have pursued a number of policies including privatization, deregulation and liberalization to encourage private sector participation and economic growth. Although the focus has been disproportionately on the oil and gas sector, the relationship between FDI and economic growth has been established by a number of studies; in his study of nineteen developing countries, Abdus (2008) found that Latin America had a history of relationship with GDP and FDI; countries including Brazil, El-Salvador, Argentina, Guatemala, and South East Asian Country – Sri Lanka showed direct relationship with FDI and GDP.

Similarly, Borensztein *et al.* (1998) carried out a study of 69 developing countries to establish the relationship between FDI and economic growth and the results demonstrated that FDI had a positive effect on the countries' economic growth. However, the higher productivity of FDI holds only when the host countries have a minimum threshold stock of human capital. Hence, FDI would lead to economic growth where there is productive human capital and related advanced technology in the host countries.

Since the 1970s, the Nigerian economy has largely been driven by oil production, although over 60% of the population is engaged in agriculture (National Bureau of Statistics, 2010). Investment in oil and gas sector is capital intensive and requires advanced technology, many of which are not readily available in Nigeria. As a

result, FDI has played a critical role in development of oil extraction and production placing the country as the sixth largest oil producer in the world and the largest in Africa (www. nnpigroup.com). FDI in the sector has been instrumental in the exploration and extraction from difficult areas, particularly in the deep water areas of the Gulf of Guinea (UNCTAD, 2009). On the Upstream side, FDI have dominated the production and exploration of oil; the Nigerian National Petroleum Corporations currently operates Joint Venture Agreements with a number of international oil majors such as Shell, Chevron-Texaco, ExxonMobil, TOTAL-Elf, NAOC, Sinopec, etc. (www. nnpigroup.com). The mid-stream and downstream ventures have been dominated by government owned refineries and a host of indigenous retailers with FDI not playing a particularly prominent role. Attempt at privatization of state owned refineries is yet to be successful.

The impact of FDI in the oil and gas sector can be viewed from its contribution to the overall economy. Between 1999-2010, oil and gas have consistently contributed an average of 36% to GDP, 80% of government revenue, 97.5% of Nigeria’s total export revenue, and 95% of foreign exchange earnings (FGN, 2013). The figure below shows FDI net inflow as percentage of GDP.

Fig 2: FDI in Nigeria – Net inflows as a percentage of GDP

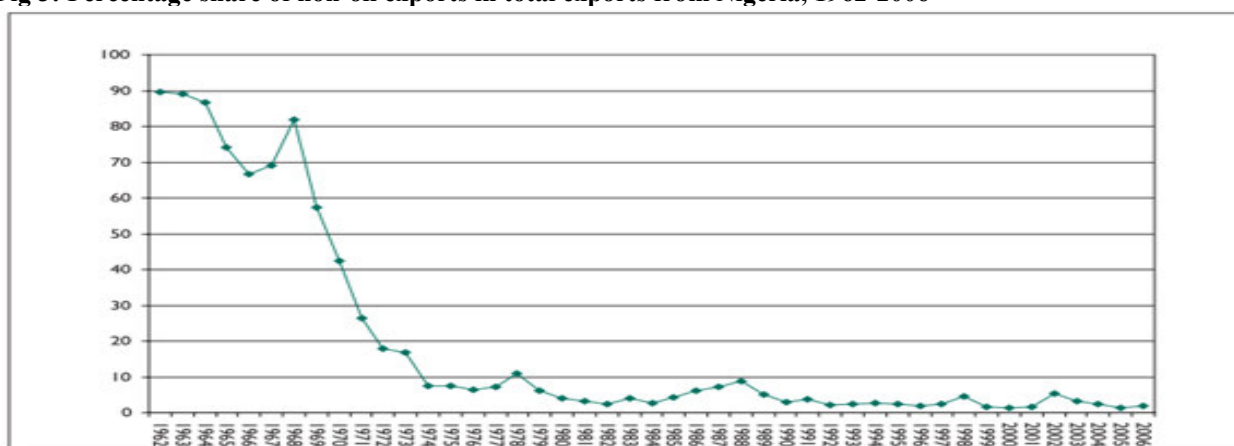


Source: World Bank; CBN

It is worth noting that the industry has very restricted direct contact with the general populace and country; it directly employs only a tiny percentage of the Nigerian labour force (about 2%); and tends to be geographically largely restricted to the south east, south-south, Lagos and Abuja.

Figure 1 below demonstrates the declining role of the non-oil sector and the increasing role of oil sector as a percentage of the national export. The oil and gas industry has continued to dominate the total share of national export and has provided the largest share of revenue to the economy. As earlier noted, the sector is dominated by foreign oil majors that have the capital and technical experience and expertise to invest in the all capital-intensive industry.

Fig 3: Percentage share of non-oil exports in total exports from Nigeria, 1962-2006



Sources: United Nations Comtrade database, Central Bank of Nigeria (CBN).

Kareem *et al.* (2012) in their study of FDI and Economic growth in Nigeria, concluded that FDI in the oil and gas sector has significant impact on the GDP after three years of initial investment. According to the study, a percentage increase in foreign direct investment into the oil sector will increase Nigeria’s GDP by approximately 16 percent. The level of impact could be because the oil and gas sector of Nigeria is mainly managed by foreign investors.

Whilst many sectors of the economy, particularly the service sector and manufacturing, have experienced resurgence in the past decade, FDI in the oil and gas sector continues to dominate capital inflows into the Nigerian economy. The total share of FDI increased from \$6billion in 2004 to \$7billion in 2005 and accounted for over 90% of FDI flow into Nigeria in 2005, even as growth in the sector slowed significantly post-

2006 with the escalation in the Niger Delta militancy and unrest, rise in criminality, 2007/2008 global economic crisis, and subsequently by the uncertainties and controversies that have trailed the introduction of the comprehensive Petroleum Industry Bill in 2008/9.

3.2 Employment

The 2006 Housing and Population Census established that Nigeria had a total population of 140 million people with an annual growth rate of 3.2%. The total labour force was estimated at 55 million in 2004 and 62 million in 2008; the number of people in employment was estimated at 48 million and unemployed 7 million in 2004 whilst the figures for 2008 showed that 9 million were unemployed in 2008 and 53 million people in employment for the same year (National Bureau of Statistics, 2010). The high unemployment rate in 2008 (12%) was attributed to high turnover of graduates, a freeze in employment in the public and civil service, crash in the capital market that caused job losses, and job losses in the manufacturing and oil sectors (Central Bank of Nigeria, 2008).

Out of the 53 million people said to be employed in 2008, the oil and gas industry can only claim to employ less than 2% of that number; this is based on the general analysis of the industry and inference from the economic outlook. Official data on the oil and gas work force is unavailable, but analysis of the structure of the sector shows that it is capital intensive and requires highly specialized skills many of which are sourced from outside Nigeria and are paid very high wages. Globally, oil related salaries have been on the rise; this has been attributed to increased security and safety concerns (in many oil producing countries including Nigeria), economic instability combined with strong oil price and the shortage of skills, particularly in the Liquefied Natural Gas and subsea sectors according to Business Insight (2013). The report noted in particular that labour related issues in the industry will continue to be affected by the security environment and the proposed Petroleum Industry Bill. Thus, higher wage earnings in the sector and the disparity with the other sectors will continue to ensure that only a small percentage of the 170 million Nigerians will benefit from the sector.

Over the years, the Government of Nigeria has undertaken steps to increase the number of Nigerians in the sector through the development of the gas sub-sector, deregulation and privatisation of the downstream subsector, the establishment of the Petroleum Technology Development Fund (PTDF), the Nigerian Oil and Gas Industry Content Development Act (2010) and various research institutions such as the Federal University of Petroleum Resources.

3.3 Local Content

Nigeria can only realize the benefits of the oil and gas sector when a greater percentage of the population participate in the sector and are able to add value, build capacity and develop local skills and industries. Thus, in 2010 President Jonathan signed the Nigerian Oil & Gas Industry Content Development Act into law. Essentially, the law aims to increase indigenous participation in the oil and gas industry by prescribing minimum threshold in relation to the use of local services and goods.

Prior to the law, FDI in the sector did not result in significantly increased participation of local companies in the oil and gas sector. In 2007, the NNPC noted that over 80% of work value in the industry was executed by foreigners outside Nigeria (NNPC, 2007). This implies that for almost 100 years since exploration commenced and 50 years since the first commercial production the investment into the sector via FDI did not result to the development of significant local capacity.

With the new Nigerian Oil & Gas Industry Content Development Act (2010), more commonly referred to as the local content law, the Government intends to encourage technology transfer and stimulate growth of local companies by promoting value addition and utilization of local raw materials and products in the sector.

The implementation of the local content law should lead to increased participation of indigenous companies in the oil and gas sector. However, Government's target of 70% local content in 2010 was not achieved. This was perhaps down to weak industrial base, infrastructure and lack of qualified personnel (Ibilola, 2012).

3.4 Environmental Pollution and Health Hazards

Much of Nigeria's hydrocarbon exploration and production take place in the Niger Delta region of the country, which covers a land area of over 75,000 square kilometers across 9 states (Rivers, Cross River, Akwa Ibom, Abia, Ondo, Edo, Bayelsa, Imo and Delta) with a combined estimated population of 31 million (National Population Commission, 2006). The region has four broad ecological zones – coastal sandy ridge, fresh water swamp, the lowland rainforest and the mangrove swamp. In addition to River Niger, other major rivers in region include: the Cross, Imo, Qua Iboe, Orashi, Benue, Oluwa and Silukon (FGN, 2013). The region is also well endowed with arable terrain for various crop productions, large body of water for fishing and one of the highest concentrations of biodiversity in Africa. Given the nature of the terrain, there is significant fragmentation of lands into islands that create small dispersed settlements with agriculture, fishing and forestry accounting for 44% of employment in the region (UNDP, 2008).

Prior to the discovery of oil and subsequent exploration and production, there was a delicate balance between the richly bio-diverse ecosystems and the activities of the local population of the region, allowing humans and nature to co-exist harmoniously for thousands of years. However, since the commencement of oil and gas exploration and the attendant environmental ills, there have been debates about who is to blame for the environmental degradation – the government, criminal vandals, international oil companies or the local communities. As noted above, the existence, livelihood and wellbeing of the population are linked to the environment and terrain of the region as most locals are farmers, fishermen or petty traders. According to a UNDP report, a sizeable number of the local population whose lives are linked to the environment are considerably poor and more vulnerable to environmental changes.

The activities of international oil companies in the region have created a number of environmental problems many of which were not intended, but are consequences of oil exploration and production. For instance, the construction of canals by oil companies to reduce the time and improved access to oilfield have salt water flow into freshwater thus destabilizing the ecosystem. In addition, the materials from the construction of canals and dredging of rivers are often dumped on the coastlines and in some cases dredging materials are abandoned resulting in negative impact on the local ecosystems.

Another major environmental hazard in the region is oil spillage which occurs accidentally or through the activities of local vandals protesting against the activities of oil companies or demanding better treatment from the Federal Government. Nwilo and Badejo (2008) in their assessment of oil spillage in Nigeria, reported that between 1976 and 1996, a total of 4647 incidents resulted in the spill of approximately 2,369,470 barrels of oil into the environment. Also, between 1997 and 2001 a total number of 2097 oil spill occurrences were reported. In 2011, a United Nations Environmental Programme (UNEP) report found that Shell and other oil companies systemically polluted a 1,000 sq km area of Ogoniland with serious negative impact on the ecosystem and local communities. The report called for a clean-up fund of \$1bn for spills in Ogoni land, and says it will take 25-30 years to restore the environment. As earlier stated, because the lives of local inhabitants are inextricably linked to the environment, there are health risk associated with food products and fishes in local communities, water supply is also affected and local economies are destroyed as a result.

Also, gas leaks and flares contribute to environmental hazards in the area. Gas flaring occurs during oil production when raw natural gas associated with the production is released into the atmosphere. According to the World Bank, “an estimated 150 billion cubic meters of natural gas are being flared annually which is equivalent to 25 per cent of the United States’ gas consumption, and this has impact on climate change. The report further noted Nigeria is the second highest gas flaring country after Russia and that gas flaring in Nigeria represents about one third of CO₂ emission in the country. The Government of Nigeria has, over the years, set targets and dates for ending the menace of gas flaring in the Niger Delta; various reports have reported varying dates set by the Government to stop gas flaring including initial targets for 2001, 2004, 2008, 2010 and 2012, which have all been missed (FGN, 2013). According to a 2011 European Parliament report, gas flares have been associated with various cancers, respiratory disease, heart disease, rheumatic disorders and eye problems. The report further warned that Niger Delta communities exposed to gas flares risk having leukemia; there is also risk of acid rain in such communities, which can contaminate soil and water bodies⁹¹. In addition to the health impact, gas flaring, as noted above by the World Bank, is known to contribute to global warming and greenhouse gases.

Although gas flaring in Nigeria appears to have considerably reduced from 47% in 2002 to 27% in 2009 according to the European Parliament (2011), and 19% in 2010 (NNPC, 2012). But this had clearly failed to meet the Nigerian Government’s target of zero gas flaring by 2010 and concerted effort on the part of government and oil companies is needed to make gas flaring history. Given the limited infrastructure for gas transportation, inadequate local demand, low penalty for gas flaring and high cost of funding gas infrastructure, it will take years for the practice by international oil companies to stop. Therefore greater political will and the requisite business and regulatory climate will be needed to incentivize businesses and the oil companies to invest in gas infrastructure and commercial exploitation.

3.5 Local Culture and Livelihoods

Prior to the discovery and production of oil in commercial quantity, the Nigerian economy depended on the export of primary agricultural produce such as cocoa, cotton, rubber etc. However, with the oil boom in the 1970s, a sizeable number of labour moved from rural areas to urban centres in search of white-collar and blue-collar jobs. The trend has continued largely because rural communities suffer inadequate and sub-standard social and physical infrastructure and agriculture has since become unattractive to youths because of the rudimentary nature of most indigenous agricultural production processes. Cities such as Port Harcourt and Warri, Lagos and Abuja have experienced massive population growth as a result of the influx of labour from other parts of the country seeking their share of the oil money over the last 3 decades (FGN, 2013).

The environmental and health hazard posed by oil exploration and production has forced the people of the Niger Delta to abandon their traditional means of livelihood or relocated to other cities in search of other

means of income. These economic difficult coupled with the sense of injustice has resulted in civil disobedience and criminal activities causing disruption in oil production that decline from its peak of 2.63 million bbl/d in 2005 to about 1.8million bbl/d in 2009 (www.eia.gov). The activities of the militants eroded the authority of traditional institutions in the community as Village elders, traditional rulers and community leaders are simply no longer effective in dispute resolution in many parts of the Niger Delta as armed groups would rather be swayed by unsustainable instant money from kidnapping and oil theft.

3.6 Community Development and Corporate Social Responsibility

The concept of Corporate Social Responsibility (CSR) has been in existence in a variety of forms for hundreds of years, developing from individual patronage and sponsorship of successful businessmen/wealth owners to the modern variant of corporate investment in social activities outside the traditional production process. The formal study of CSR is, however, only quite recent and can be traced back to the late 1940s and early 1950s (Carroll, 1999). In 1971, the Committee for Economic Development (CED) noted that Business is being asked to assume broader responsibilities to society than ever before and to serve a wider range of human values by contributing more to the quality of lives of the people than just supplying quantities of goods and services.

Traditionally, the IOCs operating in Nigeria delivered most of their community development projects via contracts or memorandums with the individual communities. However, following the perceived poor track record, unsustainability and lack of continuity of a lot of these efforts (to date there has been no comprehensive effort to document, track, measure and assess all the disparate efforts in the sector) in 2005 and 2006 the two biggest IOCs, Chevron and Shell respectively, adopted a 'General Memorandum of Understanding' (GMoU) approach to CSR/Community Development delivery. Total have also indicated an interest in considering the GMoU model at the end of their current 3-year community development programme contracts in 2013. A Community Trust, a Cluster Development Board (CDB) and a Steering Committee supervise and administer the GMoU (Chevron utilises Regional Development Councils).

A 2008 review commissioned by Chevron on the performance of its GMoUs reported that while 'many stakeholders believe the GMoUs are more effective at promoting sustainable development, more transparent, and give communities more ownership of the development process over previous strategies; it also found that nearly all stakeholders said that GMoU funding is inadequate for the extensive needs of Niger Delta communities, coordination with government and other development actors needs significant improvements as there is slow implementation of projects (FGN, 2013).

The review further found that many community members did not feel the process was transparent or representative of their needs enough, there was significant anger and frustration with the process and conflict resolution mechanisms intended to address disputes were not functioning or functioning poorly. By the mid-2000s, communal tensions gradually deteriorated from uneasy tolerance to the spates of youth militancy and clamour for resource control that dominated the latter half of the decade.

4.0 Conclusions

As this review confirms, foreign direct investment in the Nigerian oil and gas sector in the period 1999-2010 has had a strong, albeit varied impact on the Nigerian economy and society. While continuing to contribute disproportionately to the federal government's revenues, it has been a largely negative picture across most other measures with a marked and significant decline in growth in the sector during the period, a rupture in social pressures from decades of mismanagement, abuse and neglect, and little new investment in reserves, capacity utilization and diversification.

Overall FDI grew in the period, largely due to the privatisation programme and economic reform efforts of the government, and appears to have peaked having just broken the \$10 billion mark by 2010. In the oil and gas sector it grew less rapidly and significantly and appears to have stalled since the breakdown in law and order in the Niger Delta region, the global financial crisis, and the introduction of the consultation on the proposed Petroleum Industry Bill in 2007-8. The need to jump-start new investment in the sector is lent a further urgency by the nature of Nigeria's current reserves which are generally mature. Consequently, Nigeria will require higher levels of investment just to maintain the current levels of production.

FDI in the sector has contributed most significantly to Nigeria's export revenues (97.5%), Federal Government revenues (>70%), the national GDP (25-48%) and a 10-fold growth in Nigeria's balance of trade position from the start of the period. However, negative contributions to GDP growth from 2006, 2% employment share of the labour force, extensive environmental damage in the Niger Delta, social inequality and associated tensions, waste through underinvestment and gas flaring (which was to have been eliminated by 2010), less than 20% local content utilization, and a chequered local communities history that is largely restricted to a few communities in the Niger Delta region (vis-à-vis the rest of the country) are also characteristics of FDI flows and the sector in the period.

However, it is tempting to attribute all the major problems of poverty, under-development and social

tensions in the Niger Delta region to the activities and effects of foreign investment in the oil and gas sector. This is because evidence from other regions that host large and often dominant extractive industries does not support this and rather place more responsibility on the weaknesses and failings in the institutional arrangements put in place to safeguard the interests of the people and the environment that allow and even encourage exploitation and abuse. These extend through the whole life cycle of the production process from the rules governing the attraction of investment to the disposal of the final products and gains, and their application.

And finally, the study revealed a glaring lack of reliable and comprehensive data on the sector and indeed for most national statistics and information. This appears to be largely the result of both cultural and systemic weaknesses. Credible statistics provide the information needed for government, businesses and citizens; for effective administration, policy making and analysis, planning, investment, transparency and accountability. Timely, reliable, comparable and available information on social, demographic, economic and environmental conditions are key factors for the planning of any country's development. Overall, statistics provide the basis for evidence-based policy decisions and a democratic society.

The private sector and foreign investors in particular, are especially sensitive to and desirous of timely, reliable and complete statistics, more so when planning to make new investment decisions. Information and statistics provide a picture of the present socio-economic situation and the prospects for the future which in turn contribute to understanding and confidence to invest. More investment in turn contributes to economic growth, job- and wealth creation and by extension poverty reduction and general improvements in the quality of people's lives.

5.0 Recommendations

Social and political institutions are meant to provide the resources individuals need to operate and develop successfully. How people act and live is shaped in large part by the social structures they make and in which they find themselves. A systemic problem is a problem due to issues inherent in the overall system. In some cases, a society's social institutions are characterized by exploitation, political exclusion, and unequal access to resources. These structural forces lead to a system of winners and losers in which people become trapped in a particular social situation. Basic human needs go unmet, and groups suffer from inadequate access to resources and exclusion from institutional patterns of decision-making. Unjust structural forces and divisions also contribute to discrimination, lack of education, and inadequate employment opportunities. Structural violence often results, in the form of power inequality, poverty, and the denial of basic human rights.

A change to the structure, organization or policies in that system could alleviate the systemic problem. Social structural changes are critical to make the transitioning to peace and development, as well as addressing the injustices that may have fuelled conflict and stagnation in the first place. Social structural change is also crucial in preventing further protracted conflict. These sorts of systemic changes typically involve policy or institutional adjustments, and the realignment of priorities. The study identifies a set of broad institutional and policy recommendations that should contribute to the policy dialogue, public administration and development planning. We recommend institutional changes that will address the national systemic weaknesses; facilitate business in Nigeria; improve agency coordination and cooperation; tackle oil spills, gas flaring and other environmental and health hazards; improve community development and corporate social responsibility delivery and expectations. The policy recommendations are for the government to; streamline the policy and regulatory framework; revisit past planning and development efforts; accelerate the diversification of the economy and development of the other mineral resources; monitor and evaluate the application and performance of the local content policy; prioritize investment in human capital development; and invest in research and statistics.

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Appendix

Table 1: Selected Macroeconomic Indicators

Year	Real Domestic Product RGDP (%)	Gross Product	Fiscal Balance/GDP (%)	Inflation Rate (%)	External Reserve (US\$)
1999	0.42		-8.93	6.60	5.42
2000	5.44		-2.26	6.90	9.30
2001	8.45		-1.68	18.90	10.27
2002	21.35		-1.36	12.90	7.68
2003	10.23		-2.39	14.00	7.47
2004	10.48		-1.51	10.00	16.96
2005	6.51		-1.11	11.60	28.28
2006	6.03		-0.54	8.50	42.30
2007	6.52		-0.57	6.60	51.33
2008	6.71		-0.26	15.10	53.00

Source: Obieching (2010); FGN (2013)

Table 2: Breakdown of Total Crude Oil Field Production By Company, 2011

COMPANY	NUMBER OF WELLS	CRUDE OIL PRODUCTION		DAILY AVERAGE (BARREL)	% OF TOTAL PRODUCTION
		bb/s	m3		
JOINT VENTURE COMPANIES:					
SPDC	-	175,995,442	27,980,987	482,179	29.72
MOBIL	121	107,577,069	17,103,355	294,732	18.17
CHEVRON	357	96,242,059	15,301,236	263,677	16.25
ELF	136	48,110,422	7,648,932	131,809	8.12
NAOC	206	38,016,541	6,044,136	104,155	6.42
TEXACO	26	3,793,747	603,156	10,394	0.64
PAN-OCEAN	19	2,690,089	427,689	7,370	0.45
Sub - Total	865	472,425,369	75,109,492	1,294,316	79.77
PROD. SHARING COMPANIES:					
ADDAX	78	22,762,409	3,618,927	62,363	3.84
ESSO	8	26,565,338	4,223,543	72,782	4.49
NAE	1	3,610,674	303,189	9,892	0.61
SNEPCO	9	43,191,720	6,866,922	118,333	7.29
Sub - Total	96	96,130,141	15,012,581	263,370	16.23
SERVICE CONTRACT					
AENR	6	2,807,206	446,309	7,691	0.47
Sub - Total	6	2,807,206	446,309	7,691	0.47
INDEPENDENTS/SOLE RISK					
NPDC	-	20,244,780	3,218,657	55,465	3.42
DUBRI	3	97,223	15,457	266	0.02
Sub - Total	3	20,342,003	3,234,114	55,732	3.43
INDEPENDENTS/SOLE RISK					
WALTERSMITH	2	451,915	71,849	1,238	0.08
BRITANIA-U	-	51,785	8,233	142	0.01
Sub - Total	2	503,700	80,082	1,380	0.09
GRAND- TOTAL	972	592,208,419	93,882,578	1,622,489	100.00

NOTE: Data from some Coys (Independent and PSC) were not ready at the time of this report

Source: NNPC; FGN, 2013.