

## Research Article

# Oil and Gas Resources for Sub Saharan African Economic Development: Which One is the Best Approach? The Case of the Selected Approaches in Oil and Gas Industry

Riziki M. Nyello and Abu Mvungi

Institute of Social Work, P.O. Box 3375, Dar es Salaam, Tanzania

**Abstract:** The Oil and Gas Sector in Africa is growing so fast due to the new discovery of Oil and Gas reserves and therefore attract the huge amount of Foreign Direct Investment (FDI). Considering its role in the African economy, several approaches both local and foreign have been introduced; however the anticipated economic benefits have not yet been realized. The study therefore focused on assessing the effectiveness of the selected approaches that were designed to ensure the economic benefits of oil and gas resources reach to the African local population, particularly the poor ones. The study surveyed various literatures to draw its conclusion. It was realized that the selected approaches have failed to ensure that Oil and Gas resources produce the anticipated economic benefits to the local African population. Among others, it was recommended that the approaches should be improved in order to promote the linkage between Oil and Gas Extractive firms and Small and Medium Enterprises. Additionally, they should be enforceable by law in order to ensure legal commitment among African governments and Oil and Gas Extractive firms to the local population.

**Keywords:** Corporate social responsibility, local content policy, transparency approach

## INTRODUCTION

Many developing countries have been advocating on attracting Foreign Direct Investment (FDI) as a means of advancing their economies, including the extraction of Oil and Gas resources. "In the face of inadequate resources to finance long-term development [and projects] in Africa with [income] poverty reduction as one of Millennium Development Goals (MDGs), looking difficult to achieve by 2015, attracting FDI has been assumed to be the prominent economic strategy" (United Nations, 2005).

In 2011, the FDI, in developing countries, increased by 11% reaching a record of \$684 billion and in Sub-Saharan Africa, FDI inflows recovered to US \$ 37 billion, close to their historic peak (United Nations, 2005). One of the factors that attract the huge FDI inflows are natural resources including oil and gas (Dupasquier and Osakwe, 2006; Asiedu, 2002; Deichmann *et al.*, 2003; Mohamed and Sidiropoulos, 2010; Hailu, 2010; Anyanwu, 2012).

In 2010, Africa accounted for 13% of global oil production, with Sub-Saharan Africa contributing 7.25%, equivalent to 56% of the total African oil production. Most of the Sub-Saharan production takes place in Nigeria and Angola while other countries produce on a smaller scale or are still in the exploratory phase (Baumuller *et al.*, 2011). Additionally, between 1998 and 2009, Nigeria and Angola were one of the top recipients of FDI inflows

and most of the inflows went into oil and gas sector (Anyanwu, 2012).

Despite their richness in oil and gas resources, Sub Saharan African Oil and Gas Producing Countries (SSAOGPC) face several economic challenges (i.e., Dutch disease, expansive spending and rentier state) that act as a barrier for their economic development' Thus for the sake of this study, economic development is defined as the broader participation of the local population in the economy. However the economic development can be achieved through the promotion of SMEs growth. Ramdoo (2013) argue that SMEs play a leading role in creating employment and income generation for broad- and lesser-privileged section of the population.

'Dutch Disease' Mechanism, 'Expansive Spending', 'Rentier' State Mechanism and, poor linkage between oil and gas industry and the local population. 'Dutch Disease' Mechanism refers to the massive inflow of resource-based state income that drives the exchange rate and wage level up (Roll, 2011). The raise in exchange rate and wage level up may make 'SMEs, that account for 95% of all firms in Sub Saharan Africa' (Fjose *et al.*, 2010), inefficient in terms of business operating costs and thus lead to SME failure.

Expansive spending, on the other hand, refers to an act of depending on excessive borrowing with anticipation that the future oil revenues will pay back the debt (Roll, 2011). The 'rentier' state means a

country that mainly depends on oil and gas revenues that affect the country's efforts towards economic diversification, including the strengthening of local SMEs. The excessive spending may increase inflation rate and therefore have negative effect on SMEs' financial performance expressed in terms of business operating costs.

With the presence of the mentioned challenges and the need to address them, the international African development partners' efforts and SSAOGPCs have been advocating for the three major approaches; local content approach, the Corporate Social Responsibility (CSR) approach and transparency approach (Bellema, 2010; Milner and Kubota, 2005; Mwakali and Byaruhanga, 2011; Nwete, 2007; Paul, 2005; Roll, 2011; Yeboah, 2009).

According to Mwakali and Byaruhanga (2011), the local content includes socio-economic infrastructure development, research and development (R and D) and private sector ownership. However, for the sake of this study, local content is defined as the competitive and gainful participation of Citizens (local population) and the private sector (SMEs) in an economic activity (Paul, 2005 Cited by Mwakali and Byaruhanga, 2011).

Furthermore, the CSR approach is defined as the *commitment* of business to contribute to sustainable development, working with employees, their families, local community and society at large to improve the quality of life in ways that are both good for business and good for development (Ward, 2004 in Nwete, 2007). Transparency is defined as the public access to information held by government rule makers as well as information about their decision making (Coglianese *et al.*, 2008). However, for the sake of this study, Transparency is basically defined as the disclosure of all information mainly related to income and expenditure of oil and gas revenues.

The earlier mentioned approaches were accompanied by a number of initiatives which include the establishment of African Petroleum Producers' Association (APA), establishment of ECOWAS Department of Energy, establishment of the Mechanism for Conflict Prevention, Management, Peace Keeping and Security (MCPMPS), introduction of Extractive Industries Transparency Initiative (EITI) and 'Publish What You Pay' campaign. Despite the fact that the approaches were accompanied by several initiatives and widely used in ensuring that oil and gas produce the intended economic development has not been achieved.

For instance, Soares de Oliveira (2007) calls the region's exporting Oil Producing Countries (i.e., Africa's Gulf of Guinea) as 'successful failed state'. The countries rich in natural resources (gas and oil resources) are less well off in terms of economic growth and development more generally than countries without such an abundance of resources (Gelb, 1988;

Auty, 1993). Moreover, Dell (2004) argues that the empirical evidence for lower economic growth (and development) among resource-wealth countries relative to resource-poor countries is quite numerous.

Thus it can be generally said that the endowment of oil and gas resources in SSAOGPCs did not produce the anticipated economic development. However, the SSAOGPCs can be able to attain the anticipated economic development when the approaches are able to promote the linkage between oil and gas sector and local SMEs. The linkage may promote economic development to the SSAOGPCs. Focusing specifically on the African extractive industry from the value chain perspective, Morris *et al.* (2011) argue that backward linkage have larger development potential than other types of linkages.

Thus, there was a need of re-assessing the earlier mentioned approaches, namely local content, CSR and transparency. This is supported by Newman (2009) who argued that there is a need of some critical re-thinking on the part of the international [and local] community on how to address the roots of the problems and scrutinize its solutions. It was also important to conduct this study as the findings may potentially contribute to the development of African economies by informing policy makers and other stakeholders on how oil and gas resources can produce the anticipated economic development.

## RESEARCH OBJECTIVES

The study was guided by the following objectives:

- To examine the effectiveness of the selected approaches in ensuring that oil and gas resources produce the intended economic benefits to SSAOGPCs
- To identify the best approach of ensuring that oil and gas resources produce the intended economic development to SSAOGPCs

## THEORETICAL DISCUSSION

It can be generally argued that each party i.e., the host country and the oil and gas extractive firms, has its own unfulfilled need, however they do not possess all the required resources to accommodate their needs. SSAOGPCs need to extract oil and gas resources but they do not have financial resources and technology to do so. The extractive firms have financial resources and technology but they do not have oil and gas resources. Thus, the resource inadequacy among two parties results to the so called resource dependency, which is well explained by the resource dependency theory. However, the resource dependency theory can be supported by the network theory. In order for SSAOGPCs and extractive firms to achieve their needs, they have to network and act for the betterment of each

Table 1: Nigeria Poverty Rate (% of Population)

Per capital	2009-2010	2013-2014
Poverty rate	62.6	64.2
Urban poverty	51.2	52.2
Rural poverty	69	73.4
Adult equivalence		
Poverty rate	46.1	48.3
Urban poverty	34.3	36.8
Rural poverty	52.9	57.4

National Bureau of Statistics and Bank Calculations; adopted by the World Bank (2013)

other. Without networking nothing is going to happen, therefore network theory is of relevance in this study.

**The economic characteristics of Nigeria and Angola:**

Despite the fact that Nigeria and Angola are the largest producers of oil and gas in Africa, they are still faced with relatively high poverty rate and unemployment rate. For example, it is argued “the poverty rate (% of the total population) in Nigeria, measured by the Per Capital was 62.6% in 2009-2010 and increased to 64.2% 2013-2014<sup>1</sup>. The unemployment rate increased from 12% of the working age population to 24% in 2011” (Litwack, 2013). Many Nigerians work in the informal sector doing various low paying tasks that do not add up to regular employment (ibid).

Furthermore, Treinchel (2010) argues that, despite its economic growth performance, Nigeria has not yet responded to the aspirations of its population as a whole, especially the young generations. He further argued that youth unemployment seems to be on the rise, wage employment has declined and therefore it focuses on the growing employment crisis (ibid). It is therefore important to note that the increased unemployment leads to the increased income poverty rate. This is supported by the Litwack (2013) that the number of Nigerians living in [Income] Poverty increasing significantly. The Table 1 gives more details:-

Angola is also the largest oil and gas producer in Africa; however it is still suffering from the relatively high level of income poverty and unemployment. Angola is the Africa’s second largest oil producer after Nigeria, over 1.9 Million barrels per day (bpd)<sup>2</sup>. Despite the fact it is the rich country in terms of oil and gas resources, the unemployment rate and [income] poverty rate are also relatively high i.e., 26% (of the total population)<sup>3</sup> and 36.6%<sup>4</sup>, respectively. Therefore, the oil and gas resources have not yet produced the anticipated economic development to the host country. The Table 2 indicates in more detail the economic characteristics of the Angola’s economy:-

Table 2: The Poverty Rate and Unemployment Rate in Angola

Details	Figure	Year of Assessment
Population	21.47 Million	2013
The per capital income	\$ 5010	2013
Life expectancy	51 years	2013
Poverty headcount ratio at the National Poverty line (% of population)	36.6% (Equivalent to 7,8558,020 people)	2008

Data.worldbank.org/country/Angola and Authors’ Calculations

**The selected approaches and SMEs development:**

**Local content and SMEs development:** Local content is considered to be the internally developed approach of ensuring that oil and gas resources economic development. The local content policy normally touches key areas like procurement, human resources and the use of local resources. Despite the fact that many SSAOGPCs have set the target on the local content, it has been so difficult to achieve it and many SMEs are not able to access the market in oil and gas industry. Thus, the local content policies in SSAOGPCs have not been able to create linkages between extractive firms and SMEs.

The Wilson (2008) argues that “in order to foster linkages between extractive firms and local firm (e.g., SMEs), in Nigeria, a target of 45% local content was set for oil related projects by 2006 and 70% by 2010. However Nigeria did not reached even 20% of the local content. This means that in order to attain high levels of local content requires more that a decree alone.” The following is the best example that justifies more than having the local content policy and the way oil and gas sector is linked with small (and medium) enterprises:-

**A case of South Africa:** The South Africa government has had greater success with the Petroleum and liquid charter which sets a target for Historically Disadvantageous South African (HDSA) Companies to own 25% of the total equity in the operating assets of the oil sector by 2011. In order to empower the HDSA Companies, the South African Government came up with the following intervention strategies:-

- Compiling and updating a list of HDSA suppliers.
- Requiring all licensees to contribute fund toward an upstream training trust to fund skills development strategies for HDSA.
- Promoting HDSA Companies as Joint Venture partners in expansion or upgrades by foreign firms in the oil sector.
- Encourage involvement of small scale HDSA Companies in marketing and Distribution because the entry costs are lower than in exploration of refining and there is an immediate, regular cash flows.

**Source:** Wilson (2008) Small Scale Enterprise Development and FDI in Africa: Challenges and Opportunities.

Therefore, in order to promote the linkage between extractive firms and SMEs, more has to be done beyond the local content policies. This means that SSAOGPCs must develop investment policies [and laws] that may enable extractive firms to enhance the linkage, particularly backward linkages with SMEs. This is due to the fact that it is difficult for SMEs to survive without some link to large scale enterprises (extractive firms).

**Transparency, CSR and SMEs development:**

Transparency and CSR are seen as one of the approaches that can be used to ensure oil and gas resources contribute to the economic development of SSAOGPCs. However, the relevance of the mentioned approaches in achieving the mentioned target is still a debate. Several initiatives relating to transparency have been introduced in order ensure that oil and gas resources benefit the local population. Some of these initiatives include the Publish What You Pay (PWYP) campaign and the Extractive Industries and Transparency Initiative (EITI). However, the latter is being embraced by many governments and industries due to its non-penal and voluntary nature (Nwete, 2007).

Therefore, the transparency approach may have two major weaknesses. Firstly, it is a non-binding approach that may not legally enforce extractive firms to operate according to the interest of the host country. Secondly, it puts more emphasis on the publication of the receipts of oil and gas revenues and forgets to consider also the linkage between extractive firms and local SMEs.

Due to the mentioned weaknesses, SSAOGPCs and the International Community need to act beyond the transparency approach. It is supported by UNACTAD (2012) that “reaping to the development benefits from investment, requires not only transparent rules for the entry and operations of foreign investors. It also requires adequate regulations to minimize any risk associated with investment.” One of the risks associated

with the investment can be SMEs failure as a result of increased inflation in the prices of the factors of production and therefore mass unemployment.

On the side of CSR, situation may be the same since the CSR approach is also voluntary in nature and thus it is a non-binding approach. CSR initiatives and standards have proliferated in recent years and they are increasingly influencing corporate practices, behavior and investment decisions (ibid). As result of its increased influence, several mechanisms have been developed as summarized by the Table 3:-

Despite the presence of transparency and CSR and several initiatives to exercise them, the approaches have not yet produced the intended economic development. Nwete (2007) argues that “CSR and Transparency, as presently practiced in the extractive industry, have failed to deliver measurable and sustainable benefit to both people living along project corridors and natural resource producing communities as a whole” This may be contributed by the fact that CSR and Transparency do not legally bind the extractive firms to link with SMEs where many Africans have engaged themselves.

The non-binding nature of the mentioned approaches has made the extractive firms to have an option on whether to implement the CSR/Transparency requirements and standards or not. For example Spence (2011) argues that, in social responsibility, managers ought to attend to shareholders’ needs first and to stakeholders’ needs only when it advances shareholder returns.

It is therefore important for CSR and Transparency approaches to be converted from being non-binding approaches to binding approaches. For example, Nwete (2007) argues that oil and gas producing countries tend to rely more on companies’ goodwill rather than law in ensuring that they imbibe to internally accepted practices in their operations. In additional, UNACTAD (2012) argues, in balancing state commitments with investor obligations and promoting responsible investment, there is a need for investors to comply with investment related national laws. Thus, with the non-

Table 3: Policy Options to Operationalise Sustainable Development Objectives

Mechanism	Example
Investor obligations and responsibilities.	Encouraging investors to comply with universal principles or to observe applicable CSR Standards.
Institutional setup for sustainable development impact.	Call for cooperation between the parties to promote observance of applicable CSR Standards.
Home Country measures to promote responsible investment.	Encouraging investors through incentives for sustainable developing friendly outward investment, investor compliance with applicable CSR Standards.

UNACTAD (2012)

Table 4: Benefits of Business Linkages

Benefits to Small Scale Enterprises	Benefits to TNC
Knowledge and technology upgrading skills, capacity and standard enhancement.	Reduction In procurement costs.
Access to new markets, domestic and foreign	Opportunity for CSR combined with profit Ability
Diversification of customer and market structures.	Local credibility and reputation.
Risk sharing through joint funding and operations.	Import substitution and foreign exchange savings.
Opportunities to upgrade innovate and increase competitiveness.	
More stable buyer or producer relationships.	
Growth in size and turnover	

Jenkins *et al.* (2007)

binding nature of transparency and CSR, it can be difficult for the approaches to promote the linkage between SME and extractive firms. The linkage between extractive firms and SMEs may have the several benefits as summarized by Table 4:-

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

**Summary:** In most cases, the approaches were set to ensure that the government ascertains the economic benefits of oil and gas resources to the local economy. But they do not legally bind the extractive firms to ensure that they link with the local private sector, particularly SMEs, which will increase employment opportunities and thus reduce income poverty. The extractive firms can voluntarily do so, depending on their business objectives. Additionally, there is no best approach among the existing approaches since each approach addresses a specific issue even though they aim at achieving one common objective i.e., ensuring economic benefits to the local population.

**Conclusion:** The study was aimed to:

- To examine the effectiveness of the selected approaches on ensuring that oil and gas resources produce the intended economic development to SSAOGPCs
- To identify the best approach of ensuring that oil and gas resources produce the intended economic benefits to SSAOGPCs. The findings derived from the literature survey indicate that oil and gas resources have not produced the anticipated economic development to SSAOGPCs. Among others, it was due to the fact the existing approaches which are foreign-based and local-based are not legally binding approaches and do not explicitly promote the linkage between extractive firms and local SMEs

Despite their limitations, their roles in ensuring that oil and gas produce the anticipated economic development to SSAOGPCs cannot be ignored. However, they need to be improved in order to take into account on how SMEs can be linked to the oil and gas industry and ensure legal commitment to each part. Additionally the combination of the improved foreign-based approaches and locally-developed approaches may foster the linkage between oil and gas industry and local SMEs. This may explicitly ensure the economic development taking into consideration that majority of people in SSAOGPCs have engaged themselves in the running of SMEs.

#### **Recommendations:**

- Among others, the selected approaches should focus on the way the oil and gas industry is linked to local SMEs, particularly backward linkages.

- There is a need of developing policies and laws that will legally bind both parties, namely governments of the SSAOGPCs and extractive firms to ensure the linkage between oil and gas industry and SMEs.
- It is also important for SSAOGPCs to develop their own approaches that will accommodate the specific and unique characteristics of their economies. However it can be done without undermining the role of foreign-developed approaches as they are important in managing oil and gas resources. Foreign-developed approaches act as independent monitoring and evaluation approaches and provide valuable inputs for global comparative analysis.
- SSAOGPCs should identify the disadvantageous local business people and how the improved approaches can be able to address their business needs in order to improve the existing approaches.

### **REFERENCES**

- Anyanwu, Y.C., 2012. Why does foreign direct investment go where it goes? New evidence from African countries. *Ann. Econ. Financ.*, 13(2): 425-462.
- Asiedu, E., 2002. On the determinants of foreign direct investment to developing countries: Is Africa different? *World Dev.*, 30(1): 107-1119.
- Auty, R.M., 1993. *Sustaining Development in Mineral Economies: The Resource Curse Thesis*. Routledge, London.
- Baumuller, H., E. Donnelly, A. Vines and M. Weimer, 2011. The effects of oil companies' activities on the environment, health and development in sub saharan Africa. *European Parliament Committee on Development Report*.
- Bellema, U.I., 2010. Local content policy and SME sector promotion: The Nigerian oil industry experience. *Int. J. Bus. Manag.*, 5(5).
- Coglianesi, C., H. Kilmartin and E. Mendelson, 2008. *Transparency and public participation in the rulemaking process. A Nonpartisan Presidential Transition Task Force Report*, University of Pennsylvania.
- Deichmann J.I., A. Eshghi, D.M. Haughton, S. Sayek and N.C. Teebago, 2003. Foreign direct investment in the eurasian transition states. *East. Eur. Econ.*, 41(1): 5-34.
- Dell, M., 2004. The devil's excrement: The negative effects of national resources on development. *Harvard Int. Rev.*, 26: 1-5.
- Dupasquier, C. and P.N. Osakwe, 2006. Foreign direct investment in Africa: Performance, challenges and responsibilities. *J. Asian Econ.*, 17: 241-260.
- Fjose, S., L. Grunfeld and C. Green, 2010. *SMEs and growth in sub saharan Africa: Identifying SMEs Roles and Obstacles to SMEs Growth*. MENON Publication No. 14, MENON Business Economics.
- Gelb, A.H., 1988. *Oil Windfalls: Blessing or Curse?* Oxford University Press, New York.

- Hailu, Z.A., 2010. Demand side factors affecting the inflow of foreign direct investment to African countries: Does capital market matter? *Int. J. Bus. Manag.*, 5(5): 104-116.
- Jenkins, B., A. Akhalkatsi, B. Roberts and G. Amanda, 2007. *Business Linkages: Lesson, Opportunities and Challenges*. IFC.
- Litwack, J., 2013. Nigeria economic report no 77684. Working Paper No. 1, World Bank, Nigeria, Africa.
- Milner, H.V. and K. Kubota, 2005. Why the move to free trade? Democracy and trade policy in the developing countries. *Int. Organ.*, 59: 107-143.
- Mohamed, S.E. and M.G. Sidiropoulos, 2010. Another look at the determinants of foreign direct investment in MENA countries: An empirical investigation. *J. Econ. Dev.*, 35(2): 75 -96.
- Morris, M., R. Kaplinsky and D. Kaplan, 2011. One thing leads to another commodities, linkages and industrial development: A conceptual overview. MMCP Discussion Paper, The Open University, University of Cape Town, Milton Keynes, Cape Town.
- Mwakali, J.A. and J.N. Byaruhanga, 2011. Local content in the oil and gas industry: Implications for Uganda. In: Mwakali, J.A. and H.M. Alinaitwe (Eds.), *Proceedings of the 2nd International Conference on Advances in Engineering and Technology*, Entebbe, Uganda, Macmillan Uganda Publishers, Kampala, pp: 517-522.
- Newman, E., 2009. Securitized Vs. desecuritized African problems. *Contemp. Secur. Policy*, 30(1).
- Nwete, B., 2007. Corporate social responsibility and transparency in the development of energy and mining projects in emerging markets: Is soft law the answer? *Ger. Law J.*, 8(4): 311-340.
- Paul, A.E., 2005. Local content and diversification: Setting up a fair and realistic local content policy adapted to the existing skills base-trinidad and tobago case study. *Proceeding of the Good Governance Workshop II of the National Petroleum Sector*, The British Academy, London.
- Ramdoe, I., 2013. Fixing broken links: Linking extractive sector to productive value chains. Discussion Paper No. 143, European Centre for Development Policy Management.
- Roll, M., 2011. Resource Governance, Development and Democracy. In: Roll, M. and S. Sperling (Eds.), *Fuelling the World: Failing the Region? Oil Governance and Development in Africa's Gulf of Guinea*. Friedrich-Ebert-Stiftung, Abuja.
- Soares de Oliveira, R., 2007. *Oil and Politics in the Gulf of Guinea*. C. Hurst and Co., London
- Spence, D.B., 2010. Corporate social responsibility in the oil and gas industry: The Importance of reputational risk. *Chic. Kent Law Rev.*, 86(1).
- Treinchel, V., 2010. *Putting Nigeria at Work: A Strategy for Employment and Growth*. The International Bank for Reconstruction and Development/ The World Bank, Washington.
- UNACTAD, 2012. Overview: Towards a new generation of investment policies. *World Investment Report*, New York and Geneva .
- United Nations, 2005. *Investing in Development: A Practical Plan to Achieve the Millennium Development Goals*. Overview. UN, New York.
- Ward, H., 2004. *Public Sector Roles in Strengthening Corporate Social Responsibility: Taking Stock*. Prepared for World Bank, Retrieved from: <http://rru.worldbank.org/Paper Links/Open>.
- Wilson, J., 2008. *Small Scale Enterprise Development and Foreign Direct Investment in Africa. Challenges and Opportunities*. Office of the Special Adviser on Africa. Retrieved from: [http://www.un.org/africa/osaa/reports/FDI\\_study\\_2008\\_2.pdf](http://www.un.org/africa/osaa/reports/FDI_study_2008_2.pdf).
- Yeboah, S., 2009. How Content Would Ghana's Local Content Policy Be? [http://www.thecwcgroup.com/CWC\\_Files/Event\\_Content/Modern\\_Ghana.com.pdf](http://www.thecwcgroup.com/CWC_Files/Event_Content/Modern_Ghana.com.pdf).

**End note:**

- 1: Litwack (2013) Nigeria Economic Report. No 1
- 2: [www.Africaneconomicoutlook.org](http://www.Africaneconomicoutlook.org)
- 3: ibid
- 4: [Data.worldbank.org/country/Angola](http://Data.worldbank.org/country/Angola)