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Legal and institutional pre-requisites for sustainable oil and gas investments in Africa

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Abstract

This paper provides a synoptic review of the potentials and barriers of oil and gas investments in Africa. It reviews how the absence of robust laws and policies continue to rub the continent of genuine sustainable development, stability and growth, despite the continent's superabundant oil wealth. This paper describes the legal and institutional transformations that are pertinent if the continent is to attain its full potentials in the ever changing global oil and gas markets.

Keywords: Environment; Sustainable Development; Oil; Gas

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1. Introduction

Africa is home to arguably some of the world's largest oil reserves. According to the 2012 BP Statistical Energy Survey, Africa had proven oil reserves of 132.438 billion barrels at the end of 2011, equivalent to 41.2 years of current production and 8.01 % of the world's reserves. Similarly, Africa produced an average of 8804.4 thousand barrels of crude oil per day in 2011, that is 10.44% of the world production and a change of -12.7 % compared to 2010. Five countries dominate Africa's upstream oil production (BP Petroleum, 2012). Together they account for 85% of the continent's oil production: Nigeria, Libya, Algeria, Egypt and Angola. Other oil producing African countries include: South Sudan, South Africa, Namibia, Chad, Gabon, Congo, Cameroon, Tunisia, Equatorial Guinea, the Democratic Republic of the Congo, Cote d'Ivoire and more recently Ghana. Similarly, the downstream oil industry in the continent comprises 44 refineries in 25 countries; with a total distillation capacity of 3,000 thousand barrels of oil per day which represents 4% of the world total (Mbendi, 2013). These show the infinite potentials for oil production and development in the African continent.

Despite these statistics however, many years of oil production and investments in both the upstream and downstream sectors have not triggered the level of growth and development the world expects, in the light of Africa's oil wealth and potentials. Most critical is the fact that oil production in many of these African countries have also resulted in social challenges and exclusions, inequitable distribution of oil income, low level of accountability, restiveness by oil communities, kidnappings, monumental loss of lives and limbs and debilitating environmental problems. For example, the growth of the Nigerian oil industry is closely intertwined with perennial reports of substantial damage to Nigeria's environment, especially in the Niger Delta region, where most of Nigeria's oil deposits are located (Mbendi, 2013). In general, oil exploitation in the last four decades has reportedly resulted in a massive injection of hydrocarbons into the environment, a high level of oil spillage which has resulted in the monumental loss of aquatic life and most significantly the extreme prevalence of gas flaring in Nigeria which has lead to loss of clean air, bad health and loss of night time in oil producing areas. Studies show that Nigeria currently flares more natural gas associated with oil extraction than any other country on the planet. This has led to harmful effects on the health and livelihood of the communities in the Delta vicinity.

These events have led to scholarly conclusions that many oil producing nations in Africa suffer from the strongest categories of 'natural resource curse' or the 'Dutch Disease'- this is the paradox that countries with abundant natural resources have less economic growth and worse environmental and social development than countries with fewer natural resources (Auty, 2001). This paper argues that these challenges are not insurmountable. It discusses Africa's potentials for sustainable oil and gas investments, specifically the legal and institutional frameworks required to transform current unsustainable trends, and to boost the capacity of resource rich African countries to better harness oil wealth, address fiscal accountability, attract foreign investment, achieve the millennium development goals and record economic growth and development. By sustainable oil investments we mean oil exploration in a manner that would foster economic, social and environmental development in Africa. This would include investments in the oil and gas sector in a way that

would result in more jobs for locals, cleaner air and environment, equitable distribution of oil income, technological advancement, water availability and steady economic growth.

First it sets out by discussing the dimensions and advantages of sustainable oil exploration in Africa, we then discuss the relevant legal and institutional reforms that are necessary to spearhead sustainable oil investments. The paper wraps up with concluding thoughts on how to ensure sustainability in oil production in Africa in line with modern realities and global expectations.

2. Importance of sustainability: No longer an option but a necessity

The most commonly cited definition of sustainable development is the definition provided by the Brundtland Commission: 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs' (Brundtland Report, 1987). Article 3(1) of the 2002 Convention for Cooperation in the Protection and Sustainable Development of the Marine and Coastal Environment of the Northeast Pacific (Antigua Convention, 2002) also defines sustainable development as:

> *"the process of progressive change in the quality of life of human beings, which places them as the centre and primary subjects of development, by means of economic growth with social equity and transformation of production methods and consumption patterns, sustained by the ecological balance and life support systems of the region. This process implies respect for regional, national and local ethnic and cultural diversity, and full public participation, peaceful coexistence in harmony with nature, without prejudice to and ensuring the quality of life of future generations".*

As the ICJ noted in the *Gabcikovo – Nagymaros Case*, the need to reconcile economic development with the protection of the environment is aptly expressed in the concept of sustainable development. The Rio+20 United Nations World Summit on Sustainable Development held in 2012 specifically identifies the three mutually reinforcing pillars of sustainable development as economic development, social development and environmental development (United Nations, 2012). Tackling the natural resource curse in Africa, making oil wealth count and ensuring environmental protection in oil investments have been some of the most pressing sustainability challenges of oil exploration in Africa. In the aftermath of the global financial meltdown that crippled the economies of many nations, the reality that Africa's oil wealth must be sustainably harnessed has even become more pressing. Similarly, the rapid ascendancy of shale gas and the hydraulic fracking technology in many parts of Europe also mean that unconventional oil sources may soon become the norm. Unconventional resources include oil and natural gas that are found in source rocks, rather than in a reservoir accumulation, the most common type of oil in Africa. According to the International Energy Agency, unconventional gas will account for nearly half of the increase in global gas production to 2035, with most of the increase coming from China, the United States and Australia (International Energy Agency, 2012). Most recently, Shell signed a $10bn shale gas deal with Ukraine – the biggest contract yet in Europe. Unconventional gas would diversify global trends in energy supply and demand, putting pressure on

conventional gas suppliers in Africa and altering demand and supply trends and traditional pricing mechanisms (Geny, 2012). This means, the time to make Africa's oil wealth count is now.

If Africa must retain its competiveness in the rapidly diversifying global oil market, the time to invest in technology, apply oil wealth for increased infrastructural development, reduce barriers to oil investments and also promote fiscal transparency and accountability is now (Cussons and Bruch, 2013). Africa must promote investor confidence in its oil industries, create a safer and more stable environment for oil investment and also put in place appropriate structure that would enable multinational corporations doing business in African countries to thrive. Without putting in place the appropriate structures, Africa could be losing its competitiveness in the changing global energy markets. It could further worsen the natural resource curse emblem, which many African countries have perennially had to carry.

3. Legal and institutional pathways to sustainable energy investments in Africa

Attracting sustainable oil and gas investments in Africa is closely intertwined with laying down appropriate laws and institutions that could correct existing defects, promote investor confidence and foster a smooth transfer of technologies and facilities required to develop the oil sector. Laws on technology transfer, contractual relations, investments and taxation often play defining roles in encouraging energy investments in every country. There is also a need for government institutions and ministries to facilitate and promote energy investments and growth in African countries. This will be by removing the barriers, bureaucratic frustrations and administrative bottlenecks that frustrate energy investments.

There is also a need to address some of the environmental problems associated with oil and gas production in Africa which often lead to resistance to oil projects by local communities. Reducing these environmental effects of oil production such as gas flaring, oil spillage and pollution would require up-to-date and environmentally sound technologies (ESTs). Most of these technologies are capital intensive, require extensive infrastructure and are not readily available in many parts of Africa. There is therefore the need for technology transfer, high capital investments by private sector, multinational corporations, and development agencies in proliferating and transferring modern ESTs to African countries.

However, any form of investment in Africa's energy sector has generally not been the most straightforward endeavor. Aside from the volatile investment climates, there are legal and institutional barriers and disincentives to foreign investments and technology transfer. Such barriers stifle energy investments, limit the development of energy infrastructure in the continent and make it less ideal for energy investments (Cussons and Bruch, 2013).

3.1. Engineering change

Summarily the way forward for promoting sustainable energy investments in Africa will lie in the following:

- **A. Construction of a coherent National Energy Investment Policy:**

There is a need for policy leaders to develop coherent policies that will set out national energy priorities, tax incentives for energy investments, important investment opportunities and potentials, and procedures for obtaining permits and licenses. Such a policy will also outline the processes and procedures for interested foreign investors to access the oil and gas industry. This information toolkit and master plan would also propose ways to facilitate energy investment procedures, promote independent energy investments and encourage public-private partnerships.

This kind of comprehensive master plan that are in full use in oil producing countries outside Africa are yet to be put in place in many African countries. This absence of well-defined master plans makes it difficult for prospective energy investors to have a fair idea of a country's energy priorities, potentials and processes. There is a need for stakeholders in the energy sector to develop a concrete policy road map, which describes the opportunities for investing in energy projects such that interested investors are not left in the dark.

- **B. Removing Barriers to Technology Transfer and Investments:**

As noted earlier, many of the environmentally sound technologies (ESTs) required to promote sustainable oil and gas investments are not manufactured and available in many African countries. There is therefore a need to import and transfer modern and up-to-date technologies that are critical to sustainable energy investments. Unfortunately, foreign investments and technology transfer to Africa has often been stifled by the narrow scope of the technology transfer laws. For example may African countries are yet to fully embrace the importance of tax exemptions and incentives to promote clean technologies and to encourage the transfer of state of the art oil facilities and equipment from to Africa. This has resulted in the continuous reliance on outdated and less environmentally sound technologies in oil production. Such pollution increases the tensions between oil companies operating in oil producing communities and local indigenes.

Similarly, many African countries are yet to establish simple and less cumbersome procedures for the transfer of technologies, and for obtaining permits and approvals for such transfers. In the absence of clear regulations on these, prospective investors are left without easily accessible guidelines on how to transfer clean technologies into the continent. The current procedures frustrate investors who have had to put up with long and cumbersome processes of applying for technology transfer clearances and permits. A situation whereby a simple application could take several weeks and months, and also where investors have to deal with multiple governmental agencies and ministries to obtain technology transfer clearance and permits frustrates technology transfer.

There is the need to reform the technology transfer laws in line with modern realities to promote the transfer of environmentally sound technologies needed to encourage sustainable oil production across Africa. Such that oil production will not necessarily have to come with oil spillage, pollution and environmental disasters.

- **C. Fostering Intergovernmental Linkages and Coordination:**

Opening up access to oil investments in Africa will require a robust reform process that would cut across all levels of government. For example, different government ministries, organizations and state departments have prominent roles to play in obtaining oil production licences. For example, getting an oil exploration license could require the sanction of over ten government parastatals and fifteen government ministries. For

example, the Ministry of Petroleum, the National Petroleum Corporation, also Ministry of Finance has roles to play in currency importation and approval of payment instruments, while the Ministry of Internal Affairs is needed for granting approvals for project execution. Also, the Corporate Affairs Commission will be needed to grant approvals for foreign agencies to carry out investment activities while Ministries such as Power, Energy and Transportation will have to be involved in approving all projects that may cut across their mandates. It becomes a herculean task for investors to get approval from each of these ministries, because of the weak information link and coordination existing between these agencies and ministries. This weak link between government ministries and agencies often makes them work at cross-purposes and request their separate approval processes from investors. It therefore becomes a cumbersome process for investors to have to shuttle from one ministry to another and from one government agency to another. This failure to strike a meaningful coordination between these ministries and agencies has been identified as a major problem that makes project implementation in Africa less attractive to investors, thereby posing an institutional barrier to energy investments in Africa.

The current situation in many African countries whereby investors have to get one form of approval and permit from different ministries at both the federal and state levels have acted as major barrier and disincentive to energy investments. With appropriate intergovernmental coordination, granting and getting approvals for projects will be less cumbersome and straightforward. Such coordination will also simplify the process of passing information between government ministries, thereby removing irrelevant bureaucracies.

- **D. Monitoring, evaluation and adjustment:**

As oil production techniques and technology change, legal frameworks must be adjusted and adapted to provide sustainability standards for emerging technologies and production techniques. For example, when the Nigerian Petroleum Act was enacted in 1969, certain oil production techniques and technology utilized in the oil industry today were not in prevailing use in Nigeria. There is therefore a need for national institutions that would monitor the implementation of oil exploration laws to ensure they remain up-to-date in the light of available information, production techniques and best practices. Such agency or Unit foster the dissemination of new knowledge, evaluate current legal frameworks to ensure they are up-to-date, foster coordination between different governmental units and Ministries and monitor progress on how the entire scheme is being translated and implemented. It would also resolve competing objectives, and continually bring federal agencies, state and local governments, and other stakeholders together on matters relating to the environment, natural resources and energy.

- **E. Promoting Research and Development:**

Investment on research and development can be an effective means of stimulating the innovation necessary to keep oil production in Africa at the cutting edge. For example, even though Africa is endowed with huge reserves of unconventional oil such as shale gas, hydraulic fracking technology is yet to embraced in the continent. Meanwhile, many countries in Europe are leading a new market in unconventional oil. This gap could be narrowed with intensive research on energy. R&D has an important role to play in helping to adapt energy technologies to local needs and building capacity through the fostering of skills and local enterprise. In many developed countries in Europe, Government and multinational corporations invests in continuous

research in modern technology to enhance the competitiveness of their oil production techniques, to ensure that cleaner and up-to-date technologies are designed and to ensure that only clean technologies are in use at every point. There is therefore a need to promote investments in research and technology in order to ensure that modern and up-to-date production technologies and techniques are utilized and adopted in the oil industry. Inadequate research and technological advancement may result in continued reliance on dirty and outdated technologies that could jeopardize sustainability. It is therefore pertinent for Governments to pursue an integrated and coherent approach to policy making that promotes national research in modern technologies for the oil and gas sector. There is the need to invest in homegrown research activity in research institutions (universities, laboratories and institutes) in order to provide scientific insights and provide responses to fundamental science, engineering and technical questions that may inevitably arise in the sustained use of oil and gas technologies, the oil industry must engage more with research institutes and think thanks in Africa. This will ensure that we do not have to bear the financial burden of importing technical expertise and knowledge at every point or stage of energy projects. R& D is important if Africa is to build the requisite capacity needed to identify and equip new generations of technologists, scientists, engineers and environmental lawyers that could help monitor and sustain Africa's competiveness in the oil market.

4. Conclusion

Much have been said about promoting sustainable oil and gas investments in Africa, improving the competitiveness of Africa's oil and gas industry, attracting infrastructural development and translating Africa's oil wealth into economic, social and environmental growth. Many countries including Nigeria have struggled to translate these well repeated notions of sustainability into practical realities. With entrenched poverty, multifaceted environmental problems, epileptic power supply and rising instances of unemployment across Africa despite rising levels of oil production, sustainable development remains an utopian concept and a will-o-the-wisp to many Africans. The discussions here today provide an innovative and robust template for reversing this trend.

Africa can retain investor investments in the oil industry, shed off the resource curse label and stimulate a balanced economic, environmental and social growth by designing appropriate legal and institutional frameworks. This would be by removing barriers to oil and gas investments, creating stable environments for oil and gas investments, promoting governmental coordination and linkages; encouraging the transfer of up-to-date and environmentally sound technologies and promoting research and capacity development in technical institutes and Universities such that the shift to a research on how to place Africa at the cutting edge of global energy trends can be locally implemented without persistent recourse to imported knowledge and expertise.

References

Altun, N., Hiçyilmaz, C., Hwang, J., Suat Bağci, A. and Kök, M. (2006), "Oil Shales in the World and Turkey; Reserves, Current Situation and Future Prospects: A Review", *Estonian Academy Publishers*, pp. 211–212.

Antigua Convention (2002), Convention for Cooperation in the Protection and Sustainable Development of the Marine and Coastal Environment of the Northeast Pacific (Antigua Convention), Adopted 18 February 2002.

Auty, R. (2001), "Why resource endowments can undermine economic development: Concepts and Case Studies", (Paper prepared for the BP-Amoco Seminar, Lincoln College, Oxford, 29 November 2001).

Auty, R., and Miksell, R. (2000), *Sustainable Development in Mineral Economies*, Oxford University Press, Oxford.

BP Petroleum, Statistical Review of World's Energy 2012' http://www.bp.com/sectiongenericarticle800.do?categoryId=9037130&contentId=7068669 (accessed 21 May 2013).

Cussons, J. and Bruch, N. (2013), "Into Africa, Opportunities and Risks in the African Legal Market", Wilmington Publishing, pp. 2-3.

Geny, F. (2012), "Can Unconventional Gas be a Game Changer in European Gas Markets", Oxford Energy Institute, Oxford.

International Energy Agency (2012), WORLD ENERGY OUTLOOK 2012 FACTSHEET, *How will global energy markets evolve to 2035?* http://www.worldenergyoutlook.org/media/weowebsite/2012/factsheets.pdf, accessed 12 May 2013.

Mbendi (2013), "Oil and Gas in Africa: An Overview", http://www.mbendi.com/indy/oilg/af/p0005.htm, accessed 21 May 2013.

Olawuyi, D. (2012), "Legal and Sustainable Development Impacts of Major Oil Spills", *Consilience Journal of Sustainable Development*, Vol. 10, pp 1-2.

The United Nations World Commission on Environment and Development Report (the Brundtland Report) (1987), The United Nations World Commission on Environment and Development Report (the Brundtland Report), Oxford University Press, Oxford.

United Nations (2012), United Nations, Rio de Janeiro, Brazil, http://www.uncsd2012.org.