



**Number 6**  
**December 2012**

**Reflections on International Experiences with Resource Based Revenues**

**Managing Future Oil Revenues in Uganda – Alternative Allocation Options**

**Sourcing Capital to Develop Oil & Gas Projects in Growing African markets**

**Oil Revenues and Macroeconomic Policy: New Challenges for Growth and Macroeconomic Stability in Uganda**

**Tapping on the Bond Market as an Alternative Source of Financing for Oil and Gas Projects**

**How Norway Avoided the Oil Curse and Enjoyed its Blessings**

**Steps Uganda Should Take to Avoid the Resource Curse**

**Lessons and Policy Options**

[www.aercafrica.org](http://www.aercafrica.org)

**Foreword** by **William Lyakurwa**, *AERC Executive Director*

## Challenges Associated with the Development of Oil and Gas Sector in Uganda

The African Economic Research Consortium (AERC) in collaboration with the Bank of Uganda (BoU) successfully convened a policy seminar in Kampala, Uganda on February 27-28, 2012 to deliberate on the theme, “The Challenges Associated with the Development of Oil sector in Uganda”. The policy seminar was officially opened by Hon. Maria Kiwanuka, Minister of Finance, Planning and Economic Development, Uganda and the welcome address was by Prof. Emmanuel Tumusiime-Mutebile, Governor, Bank of Uganda. The seminar attracted a total of 160 participants, majority of them policy makers. Participants included 28 members of parliament, ministers, the secretary to the cabinet, permanent secretaries, a central bank governor, resource persons, several scholars and directors of various research institutes. The seminar was described as one of the most successful of such events. Registering their satisfaction in the general organization of the seminar, the participants applauded AERC and BoU members of staff who worked round the clock to ensure the seminar went on smoothly.

The subject matter of challenges associated with the development of the oil sector is commonly acknowledged as being inadequate. The danger is that many African governments often repeat past mistakes by assuming that the oil would be permanent, therefore making unsustainable long-term spending commitments.

The production of oil poses a number of challenges, including the impact of the potential scale of revenues on consumption patterns, inflation and demand for certain goods and services, and the impact of price and production volume volatility on public spending and debt. The revenue generated from oil raises national income, hence it is optimal to increase consumption and investment. However, many of the consumption and investment goods desired by a richer population are of a non-traded nature. Supply capacities in non-traded goods industries can only be increased gradually, as this requires investment in new plant and equipment and the employment, and training where necessary, of more workers. Hence, the increases in demand for non-traded goods will create excess demand relative to supply and drive up the prices of these goods, causing inflation.

Another macro issue regards the possible inefficient public investment as oil revenues flow. Oil revenues should, over the medium term, increase accumulation of public capital. Of course, whether with oil revenues or not, the government of Uganda should accumulate public capital, but in case of potentially large revenues from the depleting resource, these revenues should substantially increase the public capital stock.

Public investment requires a decision process that designs, selects and implements projects. A rapid scale up of public investment could further constrain the already weak capacity to manage the investment process resulting in deterioration in the

efficiency of the investment process. In turn, this would manifest itself as a decline in the rate of return on investment. The challenge is how Uganda should invest in building human capacity to manage the investment process and what levels of public investment are optimal given the constraints on capacity to manage the investment process.

Oil revenues are very volatile, mainly because the international price of oil is volatile. Fluctuations in the volume of domestic production can also contribute to the volatility of revenues. If government spending is linked to the receipt of oil revenues in each period, revenue volatility will be translated into public expenditure and this in turn will be transmitted into volatility in aggregate demand. Hence fiscal policy will become a source of macroeconomic instability. Fiscal policy will be pro-cyclical and this will exacerbate the amplitude of the business cycle.

Revenues from the extraction of oil are generated by depleting the oil reserve assets. This depletion should be offset by the accumulation of other assets. While models of international best-practices are often helpful, they must be appropriate. Several governments are following the practice of successful countries such as Norway, which have established funds for future generations. Norway has abundant invested capital per worker. In contrast, Uganda is short of capital. For a poor country like Uganda, the objective is to speed up the process of convergence to global standards. In part this is achieved by using the revenues for investment, but resource revenues can also directly boost consumption towards global standards

## Reflections on International Experiences with Resource Based Revenues

The discovery and extraction of natural resources has the potential to finance rapid, sustained and broad-based development. However, harnessing this potential is difficult: the opportunity is often missed, and sometimes turns into a nightmare of corruption and violence. This study is based on the experiences of eight countries which all had natural resources, but were otherwise very different: Russia, Iran, Malaysia, Chile, Cameroon, Nigeria, Kazakhstan and Zambia.

In retrospect, two of these stand out as resounding successes, achieving rapid growth with social peace. But ex ante this could not have been predicted: they are Malaysia and Chile, countries utterly different from each other. One of the countries, Cameroon, has been a total failure, the main legacy of oil revenues being a diversion of politics from the wellbeing of citizens. As the consequences of different choices cumulate, the divergence between success and failure becomes astonishingly wide: Malaysia reduced poverty from 50% of the population in 1970 to less than 4% by 2007, whereas in Cameroon all social indicators have deteriorated. The other five countries have had varying degrees of success and failure, although none has sustained rapid and widely diffused growth.

It is thus important to address grievances of the producing region, avoid unsustainable booms, accountability and transparency, and plan well to avoid Dutch disease. Building an oil refinery should be based on commercial viability. There is need for development strategy for the domestic economy and also embracing of private sector led growth.

## Managing Future Oil Revenues in Uganda – Alternative Allocation Options

Uganda has oil. But oil under the ground is not worth much unless it can be extracted and converted into something more useful. While producing oil for sale entails overcoming geological, engineering, and logistical challenges, this paper focuses on the more important challenge, which is economic. Because at some stage oil will run out, sustainable development depends on the rents from resource extraction being converted into other sources of income. The challenge, then, is what to do with the money that will flow to the government from successful production of oil, and how to make the most of such an opportunity. To address that challenge, this paper proposes the need to have a clearer idea of how much money will be generated. That, in turn, will hinge on three closely linked decisions: the scale and timing of investment in production, the scale and timing of investment in refining capacity, and the scale and timing of investment in any export infrastructure. It also depends on the price of oil, which is notoriously difficult to forecast.

Each of those decisions has an impact on the timing and scale of revenue flows, and of new or contingent liabilities on the public finances. To give two examples: (i) if decisions on a refinery or on export infrastructure are delayed, then the production of crude oil will be delayed, which would significantly lower returns to investment in production, and further delay any flow of revenue to government; (ii) if the price of crude oil from the wellhead into a refinery is set below world market prices, then there will be an implicit subsidy to the refinery and a fiscal sacrifice to the government.

This paper sets out some policy options for the use of oil money in Uganda. The aim of the paper is to demystify the opportunities and challenges of oil in Uganda. The presenter starts by setting out how much money is expected, and by considering what it takes to generate such revenue, and then estimates when to expect any serious amounts of revenue to be received. This is followed by the argument that the opportunities offered by oil are reasonably good

— this is unlikely to be a trivial increment to public revenue — but that oil is not going to transform Uganda into a petro-state.

They then present decisions on the allocation of such revenues into a broader fiscal context, considering the ways to think about increments to public investment, the domestic and foreign debt strategy, questions of tax cuts and cash transfers, together with some of the broader issues of intergenerational equity. The presenters also consider the appropriate strategies for using oil revenues to transform the domestic economy.

In conclusion, the presenters observe that the opportunities oil offers will only be realized by tackling the challenges that it will pose for public policy. In brief, public policy will need to do what it should be doing anyway, but better. Oil in Uganda is not primarily a challenge for geologists, engineers or for commercial people in the oil business. It is an economic challenge for Uganda's policymakers.

## Sourcing Capital to Develop Oil & Gas Projects in Growing African markets

### *African Oil & Gas Activities Today*

The paper focuses on sourcing capital to develop oil and gas projects not only in Uganda, but across African countries that are now discovering oil and gas. It notes that there are increased exploration activities across Africa, and East and West Africa has delivered new reserves.

Some of the main points the paper touches on are new frontier exploration in deep/ultra deep offshore; development of infrastructure projects catalyst for exploration and development of oil and gas projects; and financing available from industry players, banks, investment funds and capital markets.

As for recent transactions across 19 countries, there has been sale of 80% of oil products, distribution and retailing business and 50% interest in lubricants blending plants. British Petroleum sold its fuel marketing business to Puma Energy and Engen concluded agreement to purchase 100% interest in Chevron's downstream marketing companies in several Southern African countries.

### *Challenges to Access Domestic Financing*

African governments strongly promote implementation of Broad-Based Black Economic Empowerment Act (BEE) or indigenization programme to finance domestic projects. In South Africa, transactions were historically characterized by ad hoc transfer of equity ownership to a relatively small number of high-profile black individuals. Given its slow progress and the limited success of the early empowerment transactions, the South African Government formalized the BEE process by promulgating the Broad-Based Black Economic Empowerment Act (the BEE Act). This partly resulted in the shift in BEE transaction structures away from share price dependent or option based structures, towards using more sustainable earnings dependent structures in longer-dated transactions.

In Nigeria, the ongoing indigenization process continues to take shape, as the Nigerian government carries on the drive for increasing local content in the oil and gas industry. The Nigerian Content Development Act (NCDA) and the yet-to-be-passed Petroleum Industry Bill (PIB) favour local financing to support indigenous operators. Both SEPLAT and FHN (first successfully completed Shell divestment transactions) were financed by local financial institutions.

## Oil Revenues and Macroeconomic Policy: New Challenges for Growth and Macroeconomic Stability in Uganda

Uganda has the right vision about what to do with its newly found oil wealth: invest in infrastructure and other types of domestic capital to accelerate convergence to middle income country levels. To realize this worthy vision, three major and not improbable underlying risks should be prevented. First, avoid massive mismanagement and eventual ‘oil curse’, through strengthening political accountability and oversight on the executive branch of the government. Second, avoid excessive real exchange rate overvaluation and the ensuing inefficient sectoral specialization, through first investing in the capacity to effectively manage investment before launching the envisaged investment programme. Third, avoid discretionary fiscal policy and the consequent disruptive pro-cyclicality, through adopting explicit fiscal rules to guide and monitor the savings, spending and investing decisions by the economic authorities.

Thus, getting the policies, sequencing and alignment wrong, and ignoring issues of absorptive capacity and good governance; international experience tell us that a ‘boom’ in oil revenues can become a ‘curse’, depressing economic growth, worsening poverty and increasing political instability.

## Tapping on the Bond Market as an Alternative Source of Financing for Oil and Gas Projects

The paper addresses alternative financing of the basic infrastructure in the oil and gas sector of Uganda, with the main focus being the capital market. The Government of Uganda can finance the oil and gas using infrastructure bonds. The paper highlights the future of infrastructure bonds including purpose, long tenor, issuers, pricing and regulatory support. In addition, the paper addresses the advantages and challenges of using infrastructure bonds while highlighting the specific projects that can be funded using this type of financing. In conclusion, the paper looks at what the government of Uganda needs to do and the comparative analysis of the experience of neighbouring countries like Kenya.

## How Norway Avoided the Oil Curse and Enjoyed its Blessings

This paper highlights Norway’s experience, challenges and success story and finally concludes by providing the recommendations for natural resource-rich African countries. Under international law, the right to exploit natural resources, including petroleum, is vested in the countries inside which, or within which jurisdictions, the resources occur. The host country has the right to use the revenues arising from resource exploitation as it sees fit for the benefit of its citizens and does not unduly preclude other nations from benefitting from its sources on fair commercial basis. The commercial transactions and the terms and conditions for conducting petroleum operations are left to the host country.

Oil is also a valuable catalyst that could help improve know-how, operational experience and other assets that will enhance economic growth. The disaster that devastates many countries when they finally discover petroleum is that they rush to sign contracts with oil companies without fortifying their position to control petroleum operations and thus avoid negative impact on national economy and social development in the country.

In rushing to discover and develop oil and gas, these countries become the victims of greed administered by individuals or groups in power. As a result the country is prevented from arriving at policy guidelines for the proper governance of petroleum operations. If we add to this the presence of speculative oil companies that thrive in the absence of good governance

in the petroleum sector, we would then understand why so many oil producing countries have failed to lift themselves out of poverty.

Researchers have found out that negative growth in the non-petroleum sectors of the economy of the host nation increases as the ratio of petroleum revenues to the total national product increases. This is called the Dutch Disease. Many workers in aid organizations have noted that oil operations, instead of improving conditions in the host countries have in fact lead to a most regrettable deterioration in these conditions. “Oil Curse” means deterioration of governance in the country towards a non-democratic direction.

Norway had had the opportunity to learn from the experience of other nations and could therefore avoid their mistakes. Norway came onto the petroleum scene when it announced its first concession round in 1965. It had ample opportunity to review and learn from the experience of other nations over more than a century. In particular, Norway was keen to devise a good relationship between the oil companies and the government.

The approach that emerged combined the lessons learned from other countries with Norway’s own traditions in organizing similar industrial sectors. There was Parliamentary Consensus on Petroleum Policy in 1971 (The Ten Commandments). The early political consensus on major principles of petroleum policy was and still is the very basis for good governance of the petroleum sector. Abundance of the hydropower made Norway less dependent on oil imports than other European countries; hence it could afford to develop its petroleum industry gradually.

The most important steps taken by Norway to avoid the oil curse are: support for the national industry; support to Norwegian oil companies; support to the Norwegian local content; and approval of field development plans by Parliament.

## **Steps Uganda Should Take to Avoid the Resource Curse**

**T**he paper discusses policy options that Uganda could consider if she is to minimize the mistakes of countries like Nigeria, and utilize revenue from oil to grow, develop and prosper the economy. In addition, the success stories of developing countries like Indonesia, Malaysia and Botswana are highlighted. The author argues that the curse is not the natural resource(s) but economic and political mismanagement arising from weak state capacity to use “windfall” revenues to build strong institutions and infrastructure, among others, for long-term growth and development. A critical factor in this regard has been the vexatious issues of lack of transparency and bad governance which turn windfall revenues into a veritable curse. The measures proposed include transparency, good governance, diversification, and financing investments with high linkages with the economy amongst others.

However, it must be noted that the measures proposed are rather general in nature. The Uganda authorities would need to consider them as inputs in their evolution of strategies for avoiding resource curse – strategies which will need to reflect the specific peculiarities of the Ugandan economy.

## Lessons and Policy Options

### *Objectives achieved*

The seminar achieved the following objectives:

- Provided an environment for open discussion on public policy in the oil and gas sector;
- Provided a forum for information sharing and enabling key participants including parliamentarians, ministers, experts and private sector players to share their experience and contribution; and
- Highlighted important policy guidelines on enhancing accountability and transparency within the government as they manage the public resources.

Some of the challenges noted were (lack of) national participation, environmental degradation, poor objectives and strategies to address the gas and oil related challenges and poor strategies to address poverty reduction.

***The Value Addition Bill has been drafted*** under the Ministry of Energy Development. It has been tabled in parliament, where legislators have the opportunity to come up with good laws. The Bill is aimed at increasing the country's resource base. It spells out the roles and mandates of relevant institutions.

- It has been noted that there are no commercial oil and gas production resources in the country. However, the Government has received many applications for the same. So far, only one licence has been issued.
- A study on petroleum storage was undertaken and completed in February 2012. The Government approved the policy as well as finalised the study.

### *Key recommendations:*

- Ministry of Energy officials in collaboration with Makerere University to train in geo-oil management with scholarship from donor countries. The government should also prepare to commission a study on the skills requirement for the oil and gas sector in Uganda, and the findings of the study implemented.
- Information on the national strategy for oil and gas should reach all stakeholders. A website can be developed to increase reach of the information.
- Land use and planning in the areas where oil and gas will be extracted should be improved, as well as building of proper road infrastructure.
- There is need to evaluate the economic and demographic structure of Uganda and put the revenue use into perspective. This may involve a long-term look at the resource and diversification of the production in Uganda.
- The Government of Uganda needs to plan the settlement and development structure of the country in order to stimulate urbanization and have planned settlements. It should also invest in a pipeline and refinery to maximise profits.
- Proper laws, institutional controls and management should also be put in place. A systems and revenue management also needs to be in place.
- Revenues earned from the oil sector should be used to develop other sectors of Ugandan economy including manufacturing, tourism, and export among others. This will assist Uganda to avoid the resource curse and Dutch disease. Further, the Government needs to distribute resources gained from this sector with an affirmative action to the disadvantage areas of Uganda.
- There is also need to solve ideological and capacity problems within the oil debate, i.e. Uganda versus East African region; and capacity should be built at all levels: political, technical, negotiation, and exploration.

## AERC Policy Brief

**Number 6**  
**December 2012**



AFRICAN ECONOMIC RESEARCH CONSORTIUM (AERC)  
CONSORTIUM POUR LA RECHERCHE ECONOMIQUE EN AFRIQUE

The African Economic Research Consortium (AERC), established in 1988, is a public not-for-profit organization devoted to advanced policy research and training. The principal objective is to strengthen local capacity for conducting independent, rigorous inquiry into problems pertinent to the management of economies in sub-Saharan Africa. In response to special needs of the region, the AERC Research Programme has adopted a flexible approach to improve the technical skills of local researchers, allow for regional determination of research priorities, strengthen national institutions concerned with economic policy research, and facilitate closer ties between researchers and policy makers. The Training Programme augments the pool of economic researchers in sub-Saharan Africa by supporting graduate studies in economics, as well as improving the capacities of departments of economics in local public universities. AERC is supported by donor governments, private foundations and international organizations. Further information concerning AERC and its programmes can be obtained from:

THE EXECUTIVE DIRECTOR  
AFRICAN ECONOMIC RESEARCH CONSORTIUM  
MIDDLE EAST BANK TOWERS, 3RD FLOOR  
MILIMANI ROAD  
TEL: (254-20) 273-4150 (PILOT LINE) / 273-4157 / 273-4163  
FAX: (254-20) 273-4173  
EMAIL: EXEC.DIR@AERCAFRIKA.ORG  
WEBSITE: WWW.AERCAFRIKA.ORG

[www.aercafrica.org](http://www.aercafrica.org)