EITI is a viable option for Uganda

2016 may well be the year. With a new political term underway and an export pipeline deal secured, all indications are that the three oil companies operating in Uganda will get their long-awaited production licences this year and embark on developing the country’s oil fields. According to Minister Peter Lokeris, it may just be a matter of weeks.

If we go by pronouncements by President Museveni, Uganda should start producing oil around 2020. The government is banking on oil revenues to drive its ambitious ‘middle income status’ project but some pessimists are doubtful that oil money will have that kind of impact on the Ugandan economy. They fear that the unforgiving plague of corruption in public offices may have already spread to the oil and gas sector irrespective of its infancy and oil money will be gobbled up with the same appetite as other public resources have been.

Luckily, the oil and gas sector is just taking off. There is a big opportunity for President Museveni to get things right from the start, particularly on the revenue generation side.

One political action he can consider is directing his Energy Minister, Irene Muloni, to actively start on the process of getting Uganda to join the Extractives Industries Transparency Initiative (EITI).

EITI is a global transparency and accountability mechanism, where oil and mining companies publish what they have paid to governments and governments, in turn, publish how much they have received from oil companies. This arrangement enables interested citizens and other stakeholders to monitor how much money the government is making from the exploitation of the country’s natural resources and if the funds are being put to proper use. (Learn more about EITI on page 10)

The government obviously has reservations about signing up to EITI as it would mean that all its transactions would be out in the open, but it is in fact in its best interests to disclose that information because it would earn the trust of its citizens. Ugandans have very high expectations of how they will directly benefit from their oil and gas resources and those expectations have to be managed properly to avoid resentment and conflict. Allowing them access to information about the government’s dealings is a good starting point.

The President has declared war on corruption in his new political term, but that is a war he cannot win by himself. He should let Ugandans help him fight that war. They are after all the victims of a corrupt system and therefore too willing to help. Like any war, the fighters need adequate ammunition which in this case is reliable and current information. This information can only be available if the government commits to full disclosure by joining EITI today.

Land fraud on the rise in Bunyoro

By Oil in Uganda Staff

Things have generally been slow in the oil and gas sector over the past year as the oil companies get to terms with the low oil prices while awaiting production licenses from government. Despite this slow down, one commodity remains in very high demand—land.

Many communities in oil-rich Bunyoro region are falling victim to fraudulent land acquisitions that have left some of them homeless. The perpetrators are either wealthy businessmen seeking to tap into the multi-billion-shilling oil and gas service industry, or mere speculators seeking to make an extra buck by acquiring land from unsuspecting villagers and selling it expensively to wealthy individuals.

According to newly re-elected MP for Buliisa, Stephen Mukitale, many local and international actors are interested in acquiring land in the district, a trend which has left the locals fearing that they will be evicted anytime.

The MP claims to have faced a stiff challenge in the February elections from candidates who were funded by rich oil speculators that want him out of the way because he threatens their business interests.

“There are oil speculators who funded candidates at various political levels with a hope that when they win offices, they will safeguard and advance their interests. This applied to me. I was fought but I narrowly survived,” said Mukitale. “The oil politics is already at play.”

...continued on page 2
Land fraud on the rise in Bunyoro

The legislator added that many of his voters are currently embroiled in conflicts with wealthy businessmen over ownership of their land. Some of the land under contention has been proposed to host a Central Processing Facility (CPF) near the Kasemene oil field in Buliisa Town Council.

“There are politically connected businessmen including my relative Kaahwa Francis who are claiming huge chunks of land those communities own customarily,” he told Oil in Uganda.

Mr. Kaahwa has a knack for prime land in the district particularly that which is in some way linked to oil developments. He is involved in disputes over other pieces of land that are said to fall along the route that the oil pipeline that will evacuate crude oil from Rumungo and Kikube villages. The study was carried out by Newplan Uganda and Ramboll, a Danish firm.

According to the area Chairman, Francis Bwesigye, such incidents have left residents suspicious. The mere sight of strangers in their villages causes unease. A survey to determine a pipeline route from the proposed refinery in Kabalea Parish to Bukoba, Wakiso district, close to the capital Kampala, was concluded mid-2016 was almost blocked by some villagers who questioned the motive of the surveyors.

Kaahwa’s exploits have caused a lot of fear and anxiety amongst locals who fear that they will soon be evicted.

“We have already received complaints from locals alleging that he has dragged them to court while others have been served with eviction notices,” said Isaac Nkuba, the Buliisa district NGO Forum Chairman.

Facing allegations

Kaahwa denies the allegations, maintaining that he legally owns all the different pieces of land that he is laying claim to. He admits that at least 18 oil wells are located on his land.

Pressure group sues government

In the meantime, court cases are piling up as more affected people seek legal redress to either protect or regain control of their land. In one recent case, the Bunyoro Kitara Reparations Agency (BUKITAREPA), a pressure group in Bunyoro, sued the Government of Uganda and the three oil companies claiming that

A meeting of the displaced families in Rwamutonga, Hoima. Court ruled that they were illegally evicted from their land but did not reinstate them. They are now suing the Attorney General for violation of their human rights.

have started this exercise without fear or favor, we shall not allow people to be evicted anyhow, we must go deeper into the core of the issues regarding land grabbing and any titles we find were got in a fraudulent manner shall be cancelled.”

Oil in Uganda is yet to receive information about the findings of that investigation.

Suspicious

In Hoima, rural communities are now very apprehensive towards any oil infrastructure plan for fear of losing their land. Hoima has been the scene of the most violent land conflicts in the Albertine Region over the past few years given its central role in Uganda’s oil industry.

Over 250 families remain homeless two years after they were illegally evicted from their land in Rwamutonga, Hoima in 2014. The families endured a gruelling legal battle since then until August 2015, when Court ruled that they were indeed illegally evicted. It however hesitated to reinstate them on the land and they continue to live in a temporary camp under very difficult conditions.

Such incidents have left residents suspicious. The mere sight of strangers in their villages causes unease. A survey to determine a pipeline route from the proposed refinery in Kabalea Parish to Bukoba, Wakiso district, close to the capital Kampala, was concluded mid-2016 was almost blocked by some villagers who questioned the motive of the surveyors. During the exercise, surveyors met resistance from sections of residents in Kiziranfumbi Sub-County who demanded that government consults them first. According to the area Chairman, Francis Bwesigye, the Surveyors were not well received in Kiziranfumbi Sub-County who demanded that government consults them first.

According to the Public Finance and Management Act 2015, individual land owners have no share of the royalties from oil and gas. The royalties are shared by central government, local government and gazetted cultural institutions.

President steps in

At the peak of the presidential campaign in early 2016, opposition politicians capitalised on the land issues to discredit the ruling party in Bunyoro region. This eventually forced President Museveni to dispatch a team of state house officials to investigate the incidents. The team was headed by Florah Kiconco, a state house legal officer.

According to Kiconco, the team set out to verify all land titles in the region stretching from Kibaale to Hoima and Buliisa. “We shall ensure that all irregularities in the process of land acquisition are investigated,” she said. She explained that her team would investigate the circumstances under which some of the disputed land titles were acquired. “We
Export pipeline puts EAC relations to the test

By Oil in Uganda Staff

Uganda and Tanzania finally reached a deal in April this year that will see an oil pipeline deliver the former’s crude oil to the Tanga port along the North Eastern coast of Tanzania.

President Yoweri Museveni announced the decision in Kampala at the 13th Northern Corridor Infrastructure Projects (NCIP) meeting that attracted co-founders, Kenya’s President Uhuru Kenyatta and Rwanda’s Paul Kagame, as well as representatives from South Sudan, Tanzania, Ethiopia and top oil industry executives.

The signing of the multi-billion-dollar pipeline deal put an end to several years of speculation and intense negotiations on what is seen as the most critical infrastructure project for Uganda’s oil industry. The push for the pipeline to go through Tanzania rather than Kenya was given a lot of weight by French Major Total SA. The company repeatedly expressed its preference for the ‘southern route’ and its willingness to bankroll the project. Its counterpart, its preference for the ‘southern route’ and its willingness to bankroll the project. Its counterpart, Tullow Oil, was in favour of the Kenyan route.

In the end, Uganda chose the Tanzanian route, that is cheaper (at $3.55 billion), more secure and likely to be completed faster according to the Gulf Interstate Engineering study that was commissioned by Total. Not only is the Kenya/Lamu route more expensive, costing around $4.2 billion, it is also reportedly vulnerable to bad weather and insecurity as some of its sections would pass dangerously close to the border with the volatile Somalia.

According to an April 11, 2016 report authored by technocrats at the Energy Ministry’s Petroleum Directorate, the Tanzania route was a clear favourite because “Tanga is fully operational; Lamu port is to be constructed. Tanga port is naturally deep while Lamu is shallow and requires dredging,” the report reads in part, before concluding that the Tanga route is the least cost option for transporting crude to the East African coast.

Another consideration according to the report is that the Kabaale (Hoima)-Tanga route is generally flat for over 1,239 kilometres with few slopes and presents the lowest environmental footprint. The Lamu port on the other hand was found to have a lot of environmental concerns. “Due to international environmental sensitivity, the project is likely to face unacceptable reputation risks for investors and lenders,” reads the report which assessed the routes on their constructability, ruggedness, environmental issues and availability to support the infrastructure.

The report adds that the Lamu port still has a lot of problems and the attendant costs would be enormous for the parties involved. First, the port is exposed to the south east waves over its banks, with the surrounding islands of Lamu, Manda, Mwamba, Chongoi and Pate unable to shelter it. (This means that more costs would have to be incurred, for example, in constructing artificial shields to ensure safe anchorage of oil tankers/transport ships). In comparison, Pemba Island shelters Tanga bay from the South East monsoon, reducing the wave heights to less than 1 meter.

The technocrats also raised concerns on land compensation along the Lamu route. The report said that from past experiences, it took Kenya more than two years to compensate people and pave way for a particular development project while Tanzania needed only nine months to avail land for development. It notes that there is a smooth and well established land acquisition process in Tanzania that allows to shorten the project execution. A considerable portion of the Tanga pipeline (about 500 Km) will be on mud reserve meaning that the land compensation bill will be much lower.

Two pipelines

Following that decision, President Uhuru Kenyatta’s next stop was Addis Ababa. Hardy three months later, Kenya and Ethiopia announced that they would construct their own pipeline that will run from the Ethiopian capital to Lamu. The pipeline is part of the Lamu Port—Southern Sudan-Ethiopia Transport Corridor (LAPSET) project.

The Kenyan President had been pushing to have Uganda opt for the Lamu route as this would increase his country’s stake in the region’s oil sector but also bolster Kenya’s most ambitious infrastructure project—the $25 billion LAPSET project that is supposed to connect Kenya to South Sudan and Ethiopia with ports, roads, railways and oil pipelines.

Kenya’s case was further made by the Toyota Tsusho Corporation feasibility study completed in 2014 that indicated the Kenyan route was more feasible.

For many years, Kenya has been promoting the LAPSET project to create road, rail and pipeline transport corridors to landlocked neighbours from a new port at Lamu. This would not only boost Kenya’s national economy. It would also help to correct a historically unbalanced development pattern that left the country’s north economically marginalised, with some areas only barely integrated into the post-colonial nation state.

LAPSET has so far remained more of a vision than reality. In July 2015, three years after an official ground-breaking ceremony, a Chinese contractor finally started work on the first three berths of the planned port. But the transport corridor plans lack finance.

Fearing the troubled north

The main drawback to the northern route was the lack of security in northern Kenya. The pipeline would pass through hundreds of kilometres of land that is sparsely populated but preyed upon by armed bands including, most notoriously, Al Shabaab terrorists crossing the porous border from Somalia.

A graphic representation of the two pipeline routes from Hoima to the Indian Ocean

...continued on page 4
Chinese investment transforms rural fishing community

The new road is among other preparations the Chinese oil company is making around the Kingfisher oil field for commercial oil production expected around 2018.

The Kingfisher oil field, operated by CNOOC Uganda Ltd, was granted a production licence in September 2013. The field is located in a remote village at the bed of the rift valley, mainly inhabited by fishermen and pastoralists, cut off from the rest of the Sub-County by a steep cliff on one side and Lake Albert on the other.

The new road is among other preparations the Chinese oil company is making around the Kingfisher oil field to kick start commercial oil production expected to commence around 2018. It was commissioned in March by Prime Minister, Ruhakana Rugunda. According to junior Energy Minister, Peter Lokeris, the cost of the road will be recovered by the company when oil production commences.

Not just oil

Although the road was built mostly to support development of the oil field, residents are already reaping big from it because they can now easily take their produce, mainly fish and beef, to Hoima town unlike in the past.

“The first tarmac road in our Sub-County,” an excited Omuhereza Rwemera Mazirane, area Chairman told Oil in Uganda. “The road will give us opportunity to trade, access better services and attract investors.”

Prior to the construction of the road, cars could not access the area. People used a 1.7 km winding, narrow, rocky steep path that snaked dangerously down the escarpment to the landing site. The only other access was by water on Lake Albert. Oil company executives flew in and out of the area in chartered helicopters and small planes.

The lack of a road was the main reason government teachers and medical personnel posted to the area abandoned their posts. To encourage them to stay, CNOOC Uganda Ltd has been contributing around $2000 (Seven Million Shillings) monthly as top up allowance for the 9 teachers at Buhuka Primary School and 3 nurses at the Buhuka Health Centre.

“Since this is a hard to reach area, this initiative motivates the nurses and the teachers in Buhuka to ensure sustainability in their work,” noted the company’s Public Relations Supervisor, Aminah Bukunya.

Corporate Social Responsibility

In Hoima district, CNOOC Uganda Ltd has set up a community relations team which does mobilization, consultation and engagement with the community, information sharing and grievance handling.

“With this varied spectrum of stakeholders engaged, it ensures that information about the company in regards to planned, ongoing and executed activities is widely disseminated and understood by everyone and they are able to appreciate at what stage the company is in regard to the development of the oil and gas industry in Uganda,” explains Bukunya.

CNOOCUganda Limited has formed Local Oil and Gas Advisory Committees in their area of operation. The groups include women, youth, elderly, persons with disabilities, religious leaders, local leaders, business community, technical staff of local government and representatives of civil society.

...continued on page 15
Hoima farmers rue shrunk market for their produce

By Oil in Uganda Staff

Thousands of farmers in Hoima are feeling the pinch from the slowdown of the oil and gas industry that has been in a lull for the past two years. Uganda’s petroleum industry has slowed down partly due to a stalemate with the government over award of production licenses as well as the prevailing low crude prices. Both factors have made the oil firms reluctant to increase their investment in the sector.

Some farmers Oil in Uganda spoke to relished the times when they were able to supply vast amounts of agricultural produce to the oil camps through Traidlinks, a non-profit organisation backed by some of Ireland’s leading businesses, including Tullow Oil.

Traidlinks was contracted by Tullow Oil to build the farmers’ capacity and link them to the oil markets.

“I used to supply between 150 to 200 kilograms of vegetables every week to oil camps through Traidlinks,” recalls John Byaruhanga, a vegetable farmer in Buswekera, Hoima Municipality. “In two weeks, I would earn between seven hundred thousand to one million shillings.” However, the 55-year old farmer is now rationed and cannot supply more than 50 kilograms a week. Worse, the supply is also intermittent.

Byaruhanga is just one of the thousands of farmers who used to supply vegetables, maize flour, potatoes and other agricultural products to the oil camps.

Irish support

Five years ago, farmers in oil-rich Hoima district were keen to sell produce to the camps accommodating oil workers in the district, but didn’t know how—and indeed for several years, the camps sourced their food from Kampala or even overseas. However, as exploration activities expanded and more companies moved into the sector, Traidlinks was at hand to link local farmers to the oil camps.

The Irish founded organisation set up an Enterprise Centre in Hoima in February 2012 and started by training farmers to improve their food standards. Consultants from the National Organic Agriculture Movement of Uganda were brought in to conduct the trainings. After the farmers had adopted the required farming techniques, Traidlinks started buying produce from them, cleaning it, packing it and delivering it to the oil camps.

The bubble bursts

However, after scaling down their operations, oil firms also significantly cut down on their purchases of local food stuffs from the farmers. The farmers preferred the oil market because it was more lucrative—in many cases offering twice the price offered by traders in the local markets.

According to John Bosco Kalule, the Traidlinks Agriculture Supply Chain Project Manager, over 120 farmers supplied food to Tullow camps every week. He said that the demand had been steadily increasing; from 12,966 kilograms in 2012, to 19,668 kilograms in 2013, and further to 73,286 kilograms in 2014, only for it to dip to 2,490 kilograms in 2015. 2015 is the year that Tullow Oil closed its Kisingya camp that accommodated close to 200 workers. Today the camp has less than ten workers. Tullow Oil and Total E&P were forced to take some austerity measures to cut operating costs that included closing or sharing camps and laying off workers. Total closed its Bugungu and Tangi gate camps and company workers now share the Buliisa camp with a handful of Tullow Oil workers who were lucky to retain their jobs.

Kalule explains that the severe reduction in numbers in the oil camps has had a big impact on the farmers because his organisation has been forced to rotate their supply in order to equally share the small market.

All is not lost however, according to Kalule, as Traidlinks is working hard to link the farmers to other retail markets across the country. “Farmers who get opportunity to sale their produce have appreciated and attained the standards. With a reduced market in the oil camps, we are linking them to other markets such as super markets,” he told Oil in Uganda.

In the meantime, the farmers will bear the low prices offered by local traders as they wait for the oil camps to fill up again.
You have spent more than 20 years in Total. Tell us about that journey.

I have worked as an engineer, I have been in the upstream, engineering department, production development, operations and exploration and management roles. I have headed projects across the world, on shore, off shore and deep shore.

The experience I have brought with me spans nearly all aspects of the upstream oil and gas activities covering Health Safety and Environment (HSE), Engineering, Project Development, Operations and Exploration at various capacities in different countries and in different domains (land, swamp, offshore, deepoffshore). This is what I bring with me to Uganda, to ensure that I get things moving.

Total is big. It looks at the gap (in a particular country where it operates) and then gets someone who can create a solution for the existing gap.

**What do you bring to Uganda from your experience working in Ivory Coast?**

In Ivory Coast, our activities are only in exploration in the deep offshore areas. There are of course a lot of initiatives in the other countries which are worth emulating like local industry development and capacity building.

The focus should always be on how to responsibly maximize the value of the upstream in Uganda through maximization of the reserves and lowering the cost of development and operations, amongst others. This strategy is what will ensure the maximum benefit to the country.

Synergy is key in attaining all this, it is what I want to bring to minimize costs. For instance we can work with partners for cost effectiveness, where one partner can implement one thing and us another, without repetition.

**But there is already synergy reflected through the Joint Venture Partnership...**

There is no limit. We are looking at the industry and the country as a whole, so we can get other players on board. The main issue is to maximize reserves at production, to bring the best and the most from the ground.

Total has also deployed new technologies in the country, for example the 3D cable-less seismic technology used for the first time onshore in Africa as well as horizontal drilling used for the first time in East Africa. In addition, we have undertaken the first best practice survey in the Murchison Falls National Park aimed at establishing baseline data for the park.

**What is your plan to ensure that Total E&P receives production licenses in the shortest time possible?**

The Production licenses are high on our list of priorities for the project and we will continue to engage with the Government on them. It is an interactive process which requires attention to detail considering the magnitude of this project as well as constant communication with the Ministry of Energy and Mineral Development to ensure that all inquiries pertaining to the Field Development Plans (FDPs) are addressed before production licenses are awarded.

Progress has been made and we hope to have our Field Development Plans approved and awarded production licenses soon. The oil process is a long one, the Production Licenses will be in place for 25 years therefore it is important to ensure that they have been looked at carefully because they form the basis of our work for the next two decades or more to come.

**Isn't the delay affecting your work in Uganda?**

The delay is not affecting our work because we know for a country to start oil production, it takes quite sometime, it is a long process. We need the authorities to do what they must do. It is not a question of whether we are going to get a production license or not, we are already part of the process. Whenever it (Production License) shall be given to us, we shall be assured of 25 years of service. But before we attain this, we must meet some prerequisites expected of us by Government, which we have been working upon.

**Another licensing round is on, but Total E&P did not feature among those who showed interest, unlike Tullow. Why?**

East Africa is a new frontier for Total E&P; an area of future growth to complement our spectacular deep water development program in West Africa. The acquisition of the Lake Albert fields was a turning point for our East African strategy, putting Uganda at the center. Total is always interested in new prospects whether in Uganda or around the world.

Currently we are focusing our efforts in delivering first oil for the Lake Albert project, which is over one billion dollars in investment. This is very big, we want to first focus on this. However, we continue to keep a close eye on the sector developments in the country.

**How are the low crude oil prices affecting your operations?**

The Lake Albert oil project active exploration and appraisal campaign was completed at the end of 2014. The partners are now preparing for the development phase, which will ultimately lead to production. In this transition period characterized by a reduction of operations and related activities, Total has adapted to the pace of the project, while also taking into account recent trends in the international crude oil price and impact on our capital intensive industry.

Consequently, synergies with partners in terms of infrastructure and equipment have been promoted. (For instance Total is sharing infrastructure with Tullow in Buliisa District). Total & E&P Uganda has also made efforts in the interim to assign some local personnel to either other Total affiliates abroad or on pertinent international training.

When launched, the development phase will have intensive resumption of activities resulting in significant manpower, goods and services demands. Currently together with our Joint Venture Partners we are working with Government of Uganda towards finalizing the key steps that will enable us to continue the journey towards the Final Investment Decision for the project.

The availability of the necessary infrastructure to develop the oil and gas project is key in ensuring the timely execution of the project. Presently, active work is being done by Uganda national Road Authority and Ministry Of Works and Transport to upgrade or build the road network needed for the oil project. This infrastructure development will facilitate the development of the oil industry.

The development of the oil resources will also further boost the development of other sectors and industries in the country.

**Questions put by Flavia Nalubega**
We are mere spectators, says Nwoya District Chairman

In an exclusive interview with Oil in Uganda, Patrick Okello Oryema, the Nwoya district Chairman complains about what he perceives as systematic exclusion of his people and region from participating in the oil and gas sector. Nwoya district in Acholi sub-region is one of the districts in the Albertine Graben where a substantial amount of oil has been discovered. The district boasts of oil wells such as Jobi, Rii, Mpyo and Lyec among others, where Total E&P (U) Ltd is the main operator.

The issue of oil is a new phenomenon in Uganda and as Nwoya district, it took us time to understand it fully. First of all, oil in Nwoya district is within a protected area (Murchison Falls National Park). That in a way made it very difficult for our community to see and understand what was going on and get acquainted with the process unlike in other districts like Buliisa or Hoima where oil is drilled within the community. For our case, oil is in the Park.

So, in a way, this created a lot of suspicion on how our community is going to benefit from the oil. What I want to say is that the oil exploration has not yet benefitted our people much even in terms of Corporate Social Responsibility [CSR].

What can be noted as a benefit is the Local Sponsorship Programme introduced by Total. As we talk now, we have 15 of our students benefiting from this Scheme [since 2013]. They have been taken to really good schools in Kampala which, if their parents were the ones to pay there is no way they could have afforded such expensive schools.

So, we look at this as a benefit. Out of these 15 students, 10 have already completed their A level and some qualified for government scholarships at university. As a district, we believe this (sponsorship) can go a long way in addressing the challenge of skills gap in our people. The second benefit is a few employment opportunities that our youths were able to get. We have been able to send 207 of our youth to go and work as casual labourers with the oil companies.

But generally, when you compare the Corporate Social Responsibility that was done in other districts, then you realize that the oil company [Total] has really not done much for Nwoya. When you go to Buliisa, in addition to scholarships, you are able to see hospitals fully constructed, schools fully renovated, water points constructed in the communities; which is not the case here.

How do you want CSR to be handled?

We believe that a company should really come to the local government. We are not attempting to give the company a shopping list, but as a district, we have priority areas that we believe should be addressed. So, I believe oil companies should look at priority areas of the district and make a choice on which ones to support and not just dreaming and coming with something that is not necessary.

That is why I recently rejected mosquito nets from Total. When government started distributing mosquito nets, that is the time when Total also came to us, that we are giving you mosquito nets as CSR. I said what is this? We stopped them. I can’t allow duplication of services.

The Acholi Technical Working Committee on Oil and Gas (ATWCOG) has often complained to the President about the unbalanced development of oil infrastructure. That most of the infrastructure projects are going to Bunyoro and a few are planned for Nwoya, have you got a response from government?

This has been a very disturbing matter for us. Our view is that not every infrastructure should go to Bunyoro, Acholi is also producing oil. If you have a refinery in Bunyoro, there should be something for Acholi region. We have already tabled this issue in the Acholi sub-region leader’s forum and we have also already tabled this before the Acholi Parliamentary Group.

Government’s response has been to establish a petroleum college in Nwoya district. We are now looking for the land where it is going to be constructed. We can not have oil and fail to benefit. So, we hope that this petroleum institute that is to be constructed in Nwoya will attract courses at a higher level. We want government to establish this as a Petroleum University, that is our stand. It should be something big. You see, the refinery is in Bunyoro, so why can’t we have a petroleum university and other infrastructure in Acholi?

There should be a win-win situation, because this is one thing that can easily divide Uganda if not balanced. As we talk now, there is a lot of suspicion that government has already put pipes underground and is taking oil to Bunyoro, it is because we see a lot of these things being done on the other side (Bunyoro) and we are like spectators. It something government needs to critically handle, otherwise it will be like a time bomb which can explode any time. Issues of regional balance must be fully addressed if oil is to benefit all of us.

As Acholi leaders, we wrote a Memorandum to the President in which you raised these same issues, has he replied you?

We have not got the response up to day. We really insist that we need a response, we shall continue to put this before him.

Have there been any initiatives in the district to empower the locals, for example, to supply oil companies?

There has not been...
The Extractive Industries Transparency Initiative (EITI)

The Extractive Industries Transparency Initiative (EITI) is a global Standard to promote open and accountable management of natural resources. It seeks to strengthen government and company systems, inform public debate, and enhance trust. In each implementing country it is supported by a coalition of governments, companies and civil society working together.

Countries implementing the EITI disclose information on tax payments, licences, contracts, production and other key elements around resource extraction. This information is disclosed in an annual EITI Report (EITI Reports, go to data.eiti.org). This report allows citizens to see for themselves how their country’s natural resources are being managed and how much revenue they are generating.

EITI Principles

These provide the cornerstone of the Extractive Industry Transparency Initiative.

1. We share a belief that the prudent use of natural resource wealth should be an important engine for sustainable economic growth that contributes to sustainable development and poverty reduction, but if not managed properly, can create negative economic and social impacts.

2. We affirm that management of natural resource wealth for the benefit of a country’s citizens is in the domain of sovereign governments to be exercised in the interests of their national development.

3. We recognise that the benefits of resource extraction occur as revenue streams over many years and can be highly price dependent.

4. We recognise that a public understanding of government revenues and expenditure over time could help public debate and inform choice of appropriate and realistic options for sustainable development.

5. We underline the importance of transparency by governments and companies in the extractive industries and the need to enhance public financial management and accountability.

6. We recognise that achievement of greater transparency must be set in the context of respect for contracts and laws.

7. We recognise the enhanced environment for domestic and foreign direct investment that financial transparency may bring.

8. We believe in the principle and practice of accountability by government to all citizens for the stewardship of revenue streams and public expenditure.

9. We are committed to encouraging high standards of transparency and accountability in public life, government operations and in business.

10. We believe that a broadly consistent and workable approach to the disclosure of payments and revenues is required, which is simple to undertake and to use.

11. We believe that payments’ disclosure in a given country should involve all extractive industry companies operating in that country.

12. In seeking solutions, we believe that all stakeholders have important and relevant contributions to make – including governments and their agencies, extractive industry companies, service companies, multilateral organisations, financial organisations, investors, and non-governmental organisations.
At its 7th seating in Peru in February 2016, the EITI Global Board acknowledged Ghana as a star performer and awarded it the Chair’s Award for using EITI to reform the country’s natural resources sector. In his speech, Ghana’s Finance Minister, Mona Quartley, said, “The EITI for Ghana is not a fanciful exercise designed to please development partners and to enhance the international public image of Ghana. It is for us, a deeply thought-through exercise meant to enhance the development outcomes of natural resource exploitation in our country.”

Ghana signed on to the EITI in 2003 and since that time the Ghana EITI has caused the increment of corporate income tax from 25% to 35%; fixed the mineral royalty rate at 5%; and developed guidelines for allocation and use of mineral royalties.

A 2013 report following an audit by the Nigerian EITI found that colossal sums of money were being lost by government through under-assessment, under-payment of levies, taxes, bonuses, royalties and other ‘clever’ accounting practices. Consequently Nigeria’s President Goodluck Jonathan ordered Nigerian revenue collection agencies to recover $9.6 billion in underpaid or unpaid taxes and royalties from oil companies operating in Nigeria. Earlier in 2009, NEITI had identified over $ 800 million of unresolved differences between what companies said they had paid in taxes, royalties and signature bonuses against what the government said it received.

Nigeria joined EITI in 2004 and passed the Nigeria Extractive Industries Transparency Initiative Act in 2007—making Africa’s current biggest oil producer the first country on the continent to make reporting of payments by all extractives companies and revenues received by government legally binding under national legislation.

One of the good things that former President Jakaya Kikwete will be remembered for is signing the Tanzania Extractive Industries Transparency and Accountability Act 2015. The legislation effectively enshrines EITI requirements into law by making full disclosure mandatory and requires extractive companies exploiting Tanzania’s vast mineral and petroleum resources, as well as the government entities they deal with, to provide timely and accurate information for the Tanzania EITI’s annual report. The law also lays out penalties for those individuals, companies, agencies or institutions that fail to provide information about their transactions or provide false information to TEITI.

Unfortunately, Tanzania is currently serving a suspension from EITI for failing to publish its report for 2012/2013 in time. Normally, a country is reinstated upon fulfilling the conditions of its suspension. The Democratic Republic of Congo (DRC) was suspended in 2013 for not fully disclosing financial information in its annual report, but was later re-admitted and confirmed as a full EITI member a year later after it had addressed the Board’s concerns.

Following the visit of U.S. President Barrack Obama to Kenya, both governments released statements detailing their shared commitment to transparency in the extractive industries. The Kenya Government committed to implementing EITI and adopting a progressive and transparent policy and legislative framework for upstream, mid-stream, and downstream extractive activities including transparency in licensing procedures, publication of contracts, and environmental and conservation and labour requirements in line with international standards.

**Facts & Figures**

- **51 Implementing Countries**
- **31 Are compliant with EITI requirements**
- **49 Countries have published revenues**
Libyan sovereign wealth fund case offers good lessons for Uganda

By Chris Musiime and Gerald Byarugaba

The Libyan Investment Authority (LIA) has taken two international banks to court seeking to recover over $3.3 billion (11 trillion shillings) that the oil-producing country lost in ‘bad deals’ that were initiated by the banks during former President Gaddafi’s reign.

LIA is attempting to recover $1.2 billion (4 trillion shillings) from U.S. investment bank Goldman Sachs and another $2.1 billion (almost 7 trillion shillings) from French bank Societe Generale.

The country’s sovereign wealth fund alleges that the two banks advised it to enter risky deals back in 2008 that ended up being worthless. Hearing of one of the cases resumed in London in June 2016 with the Fund’s lawyers accusing Goldman Sachs executives of taking LIA officials on luxurious trips to Morocco and Dubai in order to influence their investment decisions. One witness in court claimed the trips were laden with “heavy drinking and girls.”

Key in the case is Goldman Sachs’s relationship with Haitem Zarti, a brother to LIA’s second-in-command at the time, Mustafa Zarti. The bank paid for a lavish trip for him to Dubai and later offered him an internship at their headquarters in New York. The Fund’s lawyers now argue that the Bank’s treatment of Haitem Zarti biased his brother to stake the fortunes of the $67 billion Fund in a series of bad deals.

The second case against Societe Generale is expected to commence in early 2017 but indications are that the Fund’s lawyers will attempt to link the bad deals to bribery and influence peddling involving the first family, particularly Gaddafi’s son, Saif Gaddafi.

The Libyan case provides a good example of how sovereign funds that have weak governance structures can be vulnerable to abuse by an overbearing government. It offers important lessons for Uganda which also has plans of setting up a Petroleum Fund as provided for in the Public Finance Management Act, 2015.

Reading through Act, it is not clear what the objectives of the Petroleum Fund as established by the law are. The Act seems to say that the Fund will help in supporting budget stability [Section 58 (a) and Section 63 (2)] as well as providing heritage for future generations [Section 64 (3) & (4)] but neither of these is clearly stated as its objective. This failure to clarify objectives leaves ambiguity as to what sort of assets the savings can be invested in as well as the nature of restrictions that should be put in place for government to access the Fund.

At the same time, objectives would inform the types of investments that can be made out of Funds from the Petroleum Fund/ Petroleum Revenue Investment Reserve.

If on one hand the Fund is to play a stabilising role, a significant chunk of that money should be invested in liquid assets that can easily be accessed in case of budget shortfalls, like bonds. On the other hand, if the Fund is to serve as heritage for future generations, restrictions for accessing it have to be made tighter, for example by requiring that the money is invested in long term assets like real estate. Where the Fund has a dual function, then regulations would need to be made accordingly. There is therefore need for regulations to clarify the objectives of the Petroleum Fund in order to overcome any implementation challenges.

The experience of Azerbaijan, where for a long time petroleum revenues were wasted on the military, engaging in an arms race with neighbouring Armenia as well as construction of huge stadiums just for national pride, is a stark reminder of the need to be methodical in spending oil revenues. Regulations for the Act should restrict these revenues to financing those projects that are defined and prioritised in the country’s development frameworks, such as the periodic National Development Plans or the capital expenditures listed in the Medium Term Expenditure Framework. This will also prevent the Petroleum Fund from acting as a second budget for wasteful projects that may be ‘politically correct’ but non-viable in all other ways.

The Act falls short on clarifying, in terms of jurisdiction, where funds in the Petroleum Revenue Investment Reserve shall be invested. Although Section 63(2) mentions that the money shall be invested in internationally convertible currency deposit or a debt instrument denominated in internationally convertible currency, it remains silent on whether these investments are to be made in the domestic economy or abroad.

Lessons from the Management of the Government Pension Fund of Norway show that investing petroleum revenues internationally protects domestic industries (and economy), diversifies risk and maximises returns.

Thus, although some of the petroleum revenues which will be transferred to the consolidated fund can be spent domestically, investment should only be made internationally, to fetch the country better returns from developed international financial markets but also avoid harming the domestic economy.

Late Gaddafi’s son Saif Ali is accused of using the Libyan Fund’s resources for personal and family gain.

<table>
<thead>
<tr>
<th>The top ten sovereign oil funds</th>
<th>Year fund was started</th>
<th>Net Worth in billions</th>
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<tbody>
<tr>
<td>Norway</td>
<td>Government Pension Fund</td>
<td>1990</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>SAMI Foreign Holdings</td>
<td>1952</td>
</tr>
<tr>
<td>Abu Dhabi (UAE)</td>
<td>Abu Dhabi Investment Authority</td>
<td>1976</td>
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<tr>
<td>Kuwait</td>
<td>Kuwait Investment Authority</td>
<td>1953</td>
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<tr>
<td>Qatar</td>
<td>Qatar Investment Authority</td>
<td>2005</td>
</tr>
<tr>
<td>Russia</td>
<td>National Welfare Fund</td>
<td>2004</td>
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<tr>
<td>Russia</td>
<td>Reserve Fund</td>
<td>2004</td>
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<tr>
<td>Algeria</td>
<td>Revenue Regulation Fund</td>
<td>2000</td>
</tr>
<tr>
<td>Dubai (UAE)</td>
<td>Investment Corporation of Dubai</td>
<td>2006</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>Kazakhstan National Fund</td>
<td>2000</td>
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</tbody>
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Source: Columbia Centre for Sustainable Investment

While a trendy priority for new oil producers, sovereign wealth funds can easily be manipulated if their internal governance is not solid enough.

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...continued on page 12
Locals accuse Tororo Phosphate investors of cheating them

By Edward Ssekika

“When I went in, they opened for me pieces of paper and said you sign here. I first hesitated and asked where the rest of the (project affected) people were, they told me if I don’t want the money, I should get out, and if I don’t sign my land would be taken by government for free,” Rose Tibita, narrates.

Tibita is one of the hundreds of residents affected by the phosphates mining project in Osukuru and Rubongi sub-counties in Tororo district. She was forced to sign a surface rights agreement without knowing the contents of the contract, later realising that she had surrendered her land to Guangzhou Dongsong Energy Ltd, a Chinese company that is mining phosphates in the area, for 99 years.

In 2013, government awarded the company a mining lease to mine and process phosphates. The investor will construct a plant that is expected to produce 300,000 tons of phosphate fertilizers, 300,000 tons of steel and establish a sulphuric acid plant with an annual capacity of 200,000 tons, among others.

The phosphates project covers 26.5 square kilometres (approximately 1,907 hectares) of land. Already, 123 project affected persons have been compensated and evacuated from the area, with the project expecting to displace 4,800 people in 14 villages in the two sub-counties.

However, locals are accusing the company of dishonesty in their dealings with them, particularly regarding land leases and compensations. Like, Tibita, most the project affected persons claim they received meagre compensation. They now want the President to intervene, claiming they have been cheated. “We want these agreements [Surface Right Leases] to be revised to reduce the lease period from 99 years to 21,” says James Oketch, the local council Chairman in Abur village, Rubongi sub-county. “They should use the district rates for compensation and we also want our land titles, or else government should terminate the mining lease for investor,” he adds. The locals were promised land titles as part of the deal.

Misled

According to Tibita, she only discovered she had been hood winked when an educated friend of hers interpreted the agreement for her. “After signing and receiving the money, I gave the agreement to somebody to read to me and I learnt that the agreement said I had leased my land for 99 years,” she told Oil in Uganda. “The government had told us we (project affected persons) shall lease our land for 21 years.”

Lucy Onyango, another project affected person, adds that in addition to signing a 99 year lease, the Chinese investors used their own rates to compensate locals for their land and property instead of the approved district rates.

Just like Tibita, Onyango was told not to share the agreement with any person because they could steal her money in the bank. However, after some months, when she gave the agreement to someone to explain it to her, she realized that compensation rates for crops and other developments on the land were lower than what had been promised.

Inter-ministerial committee

Vincent Matano, one the project affected persons says that local people had initially rejected the project but an inter-ministerial committee set up by President Museveni persuaded them to accept. The committee was headed by Energy Minister, Irene Muloni and included her deputy at the ministry, Peter Lokeris, then lands minister, Daudi Migereko, Peter Nyombi (then Attorney General), police chief, Kale Kayihura and some statehouse officials.

“I remember in one of the meetings with the committee, Peter Nyombi told us we would be given land titles,” Matano recalls. “To my surprise, they have taken our money, our land and no land title has been given to any of us. Why should government connive with an investor to cheat its own people?” he questions.

The affected persons have raised their complaints with relevant government ministries and departments but have not received any help so far. “Last year, we wrote a petition to the Speaker of Parliament asking Parliament to investigate the way the project is being implemented,” says Matano. “Up to today, there is no response.”

Indeed, in their petition to the Speaker of Parliament, dated April 29, 2015, the affected persons report that they were intimidated and induced to sign lease agreements whose contents they didn’t understand.

...continued on page 12
Libyan case

The challenge with investing domestically has always been, most governments that have tried it have spent directly through their Fund’s choices of asset holdings, rather than through the budget process, obstructing parliamentary oversight and undermining normal public finance management procedures. Because the Funds are managed separately from the rest of the government monies that go to the Consolidated Fund, politicians can influence the choices of investments made by the Fund managers, as has been the case with the Angola Sovereign Fund, largely used for political patronage. The National Development Fund of Iran and National Wealth Fund of Russia are other cases where decisions are by-passing the budget and therefore evading parliamentary oversight have been rampant.

The choice of that ‘international investment’ is very crucial and that is where the Libyans got it wrong. They now claim that they were hoodwinked by street smart bank executives to invest in risky ventures but then they should have had their own advisors as well to assess the risks. Of course under Gaddafi’s rule, patronage and family links were much more important that competence, but the Uganda government should be wise. It should let the Fund be independently managed by competent people, set clear objectives for its work and establish strong independent oversight of its dealings.

There’s a possibility of conflict of roles and powers over choice of investments between the Minister and Bank of Uganda or an external Fund Manager appointed by the bank. Section 63 (2), (C) gives power to the Minister to prescribe a qualifying instrument into which the Fund’s finances may be invested. Yet, Section 64 (6) (a) leaves it to the Bank of Uganda to establish risk management arrangements for the instruments to be used in the management of funds in the Petroleum Investment Reserve.

Certainly the crisis for Libya is not investing internationally in itself, but rather, failures in the way investment choices or decisions are made. In any case, Norway invests the bulk of monies in her Fund in stock markets in USA. But because of a more streamlined investment decision making mechanism, even when Norway made losses in hundreds of millions of American dollars in the 2008 economic downturn, the loss was attributed to the global business cycle, rather than poor management.

Norway is an easy example given that they have been exemplary in running their extractives sector. Several similar funds around the world have been successful as well. It is estimated that globally, sovereign wealth funds hold assets in excess of three trillion dollars.

Uganda too can join this elite club in a decade or so. However the politicians need to let the proposed fund function independently and only allow for independent third party oversight over its operations. The PFMA as it stands does not take that into account yet it is cardinal in ensuring transparency and accountability in the way public funds are managed.

Chris Musiene is the Managing Editor, Oil in Uganda while Gerald Byarugaba is a 2014 PETRAD Fellow and works as a Research Associate at the Advocates Coalition for Development & Environment (ACODE).

Locals accuse Tororo Phosphate investors of cheating them

It was a good deal, company lawyers insist

Guangzhou Donggang Energy Group Ltd officials declined to talk to Oil in Uganda, referring us to their lawyers. When we spoke to Denis Kusasaíra, the managing partner at ABMAK Associates, the law firm that handled the transaction, he blamed the affected persons’ actions on civil society organisations whom he accused of confusing the locals. He maintained that the project was well handled. “Even when you do everything well, they [CSOs] will still find something to complain about,” he shot back. “So we are not one hundred percent clean, but this is a well-executed project. It should be a case study,” he said.

He said people were sensitized on whether to take a monetary compensation or be resettled but none opted for resettlement.

He explained that the compensation at the rate of thirty million shillings for each acre of land, additional compensation for crops and other developments on the land as well as a thirty percent disturbance allowance were commensurate with the 99 year lease. “I have told those people that it’s okay we can sign a 21 year old lease agreement, but we have to reduce the money,” adds Kusasaíra. “So there is nothing we didn’t follow, but people will always hope for more.”

On the different rates, Kusasaíra said Tororo District had compensation rates of 2013. However those rates were not approved by the Chief Government Valuer and in his opinion (Government Valuer) those were top of his list and he would soon meet all relevant actors over the issue. “I will have to fight for my people. I’m going to raise all these issues with the investor and the ministry and if possible these agreements will be reviewed,” he said.

Denis Kusasaíra says it is possible for the agreements to be reviewed, but that would mean that the project affected persons refund part of the money they were paid because a 21 year lease costs much less.

On the land titles, Joshua Byabahija, also a partner with ABMAK, blamed Tororo District Land Board for the delay in processing them. He said the law firm deducted one hundred twenty five thousand shillings from each affected person’s compensation for the titles and forwarded their applications to the Land Board but the Board claims that it has no money to facilitate meetings to process the applications. “The investor can’t fund government institutions to do their work,” he argued.

Martin Orochí, the Tororo Resident District Commissioner (RDC) agrees, blaming the Land Board for frustrating the titling process. “The confusion is in the district land office. Some of the officials there have their own interests,” he said.

The newly elected district Chairman, Apollo Jaramogi, told Oil in Uganda that the affected persons were top of his list and he would soon meet all relevant actors over the issue. “I will have to fight for my people. I’m going to raise all these issues with the investor and the ministry and if possible these agreements will be reviewed,” he said.

DID YOU KNOW?

Products like fertilizers, plastics, car tyres, perfumes and even bubble gum are manufactured using petroleum products obtained during the crude oil refining process.
We are mere spectators, says Nwoya District Chairman

much although there was an attempt to train the business community. What is important here is to first look at the capacity. The Tradelinks in Bunyoro is training the local people to meet international standards but for us here, we can’t talk about meeting international standards when our people don’t have that capacity.

Our emphasis is how to accommodate the people of Acholi to meet these standards gradually. If you look at the training that they gave, for one to do business with an oil company, you need to at least have capital of 100 million shillings, do we have such kind of people? But if you have capital of 10 or 20 million shillings how can you be accommodated. Yes, the law already talks about locally produced goods, but they (goods) must also meet the standards. So the issue is how we accommodate our people within the district or the sub-region so that they are not left out.

Should we just continue allowing our people to be spectators and allow international companies because they have standards? There should be a way our business community must be accommodated within these international standards. Technically, I may not have the answer, but how I look at it, it is very possible.

You see, when you are doing a business in my community and I’m not getting the benefit and someone comes from far, gets the benefit, will I own what you are doing in my area? That explains conflict in resource rich areas because communities remain spectators as outsiders reap the benefit. So, there should be a deliberate effort to make communities own projects in their areas.

Aren’t there local companies doing business in the oil sector?

Today, not a single local company is doing business with the oil company. So, how do you expect the community to say oil is theirs? What we are seeing today as Nwoya district is just waste dumping and that is how the government is rewarding the people of Nwoya.

Is the waste dumping still rampant?

It has stopped because there are no activities, but if you ask anybody from Purongo sub-county what they can easily say about oil, it is waste dumping. People shouldn’t be talking about waste, they should be talking about business opportunities. We still have a problem with elephants. The rate at which elephants are crossing to people’s land is very alarming. Some people believe they are poor because of elephants destroying their crops. So, it remains an issue. There is need for deeper studies to find out the relationship between oil exploration in the park and animals crossing to people’s gardens.

As a district, the Public Finance and Management Act gives you 6 percent of the royalties from oil, are you already looking at how you will utilize the oil money?

Of course, our target is infrastructure. When you look at Nwoya, it is a very productive district but with a lot of spring rivers. We need many community access roads in order for our farmers to be able to take their goods to the market and for the business people to be able to access the villages, so that is our target. Again, our schools are not in good shape, the health centers are not in good shape. Our target is investing that money in infrastructure mainly and scaling up production.

Chinese investment transforms rural fishing community

The company also supports vocational training and donated $50,000 (over 130 million shillings) to support 70 youth to enrol for a Basic Skills Training Programme at the Nile Vocational Institute in Hoima district in 2013.

Mathias Kisembo, one of the beneficiaries, completed a plumbing course in December 2013. Oil in Uganda caught up with him at a construction site in Hoima town where he was installing water pipes and drainage systems in a newly constructed residential house.

“I now earn between five hundred thousand shillings and one million every month,” he revealed. “Am also looking after two of my sisters—one at St. Jude Primary School and another at St. Andrea Kaahwa’s college.”

Before obtaining the scholarship, Kisembo, a school dropout, was a casual worker at construction sites around Hoima. He now employs five people.

As Uganda’s oil industry slowly enters the production phase, communities across the Albertine Region are eager to get involved and start earning a living from the sector. For some, however, the benefits are already evident.
How feasible are Uganda’s nuclear plans?

By Luke Williams

Surveys show that Uganda has about 52,000 square kilometres of uranium prospects. This includes 18,000 km² in the Buganda-Toro region, 12,000 km² in the Karagwe-Ankole region, 5,000 km² between Lake Albert and Lake Kyoja, 5,000 km² around Lake Edward, 900 km² on the Buhwezu plateau and 12,000 km² in Lake Albert. The exact amount of uranium deposits and their commercial viability remain unknown pending extensive surveys, research and analyses, although Water and Environment Minister, Ephraim Kamuntu, has been quoted in the media as saying that “Uganda is seated on a pile of Uranium.”

Uranium is a slightly radioactive metal that occurs throughout the Earth’s crust in most rocks and soils. It is almost 500 times more common than gold and is found in concentrations of about four parts per billion in granite which makes up 60% of the earth’s crust. However, there are only a limited number of places in the world where uranium is found in high enough concentrations for it to be deemed economically viable to extract for use as nuclear fuel.

The options for a Ugandan Nuclear Energy Programme

Apart from South Africa, the other African countries that are producing uranium are exporting it. Namibia is the largest African producer; shipping out around 4,000 tonnes of Uranium annually, while Niger and Malawi each produce and export around 1,000 tonnes of uranium per year.

For the case of Uganda, however, President Museveni has repeatedly spoken out against exporting Uranium in its raw form, insisting on exploiting it to make up for the country’s energy deficit. “As long as I am in the chair, nobody will touch the Uranium in Uganda,” he told a Summit of East African leaders in Kampala in 2013.

Uganda’s National Development Plan 2010-2015 and Vision 2040 indeed reflect the President’s ambition. Both documents indicate that the country will exploit its uranium resources to generate electricity using nuclear power stations.

The Uganda government will have to pick from two options:

- **Process overseas**

  Once the uranium ore is mined and milled, the government could decide to send it overseas for processing into finished fuel and then bring it back for power generation in Uganda. Although this would mean Uganda losing out on some of the benefits of value addition, the country would escape the massive upfront investment in expensive and highly technical processing facilities and skills development, focusing instead only on mining/milling and power generation.

- **Process in Uganda**

  On the hand, the government can invest in the construction of one or more, and perhaps even all, of the required processing facilities. A nuclear energy programme in Uganda would be extremely expensive to implement but would certainly create many jobs, particularly during the construction phase, but also in the operation of power stations and processing facilities as well as ancillary fields such as waste management.

Benefits of going nuclear

Nuclear energy is undeniably reliable, providing on-demand energy 24-hours a day – the average nuclear facility is online 90 percent of the time.

Uganda currently has one of the lowest electricity consumption rates in the world with 215 kWh per capita per year. Sub-Saharan Africa’s average is 552 kWh per capita and the world average is 2,975 kWh per capita – more than ten times that of Uganda.

Although one cannot assume that the uranium prospects found to date are guaranteed to translate into commercially viable reserves, the government seems determined to develop a nuclear program in country. Uganda’s Vision 2040 estimates that the country will require 41,738 MW of installed capacity by 2040, of which nearly 60% is expected to come from nuclear power. One 1,000 MW (1 GW) nuclear power station would produce four times as much power as the 250 MW Bujagali Hydroelectric Power Station (currently Uganda’s biggest) and more than the entire of Uganda’s current 822 MW capacity. This amount of power would sharply reduce the country’s power deficit, bringing much needed energy to Ugandan homes and businesses.

Nuclear energy is considered to be a low carbon energy technology. According to the International Panel on Climate Change, the median carbon footprint of nuclear is 12 grams of carbon dioxide-equivalent per kilowatt-hour of electricity generated (gCO2eq/kWh), including construction and decommissioning. This compares to 820 gCO2eq/kWh for coal and 490gCO2eq/kWh for gas. Given the breakthrough deal reached in Paris at COP21 recently (which strives to limit global temperature rise to 1.5 degrees centigrade above pre-industrial levels), nuclear energy’s low carbon credentials could become increasingly important, particularly as the world looks to move away from a fossil fuel driven global energy system. It could even be possible to attract international climate finance to support a Ugandan nuclear industry.

Cost

Perhaps the most important factor in determining whether nuclear is good for Uganda or not is the cost. This includes the cost of mining, processing and generating energy as well as all associated activities. The government will have the difficult challenge of ensuring that the cost of generating electricity is competitive with other technologies – a cost that will ultimately be passed onto consumers – while ensuring that the environment, health, safety, security and quality is not compromised.

There is no getting around it, nuclear power plants are expensive and will require a huge amount of...
capital investment. To give one high profile example, the UK has just announced that it will spend 24 billion pounds (over 110 trillion shillings) on the first British nuclear reactor in two decades – claimed to be the most expensive power station of all time!

One option for Uganda could be the emerging field of small modular reactors (SMRs). The UK Government recently announced funding of 250 million pounds over five years for the research and development of SMRs. If the technology comes online within the timescales needed by the Ugandan government, this could be a cheaper and more appropriate option.

Investors will be well aware of the risks and technical complexity of the nuclear industry so where will Uganda find the finance? Based on recent trends, the government could look east to countries such as China who currently offer cheaper capital, and less political interference.

Nuclear fuel costs are only a minor proportion of the total generating costs for nuclear power. Decommissioning and waste disposal must also be fully taken into account. For Uganda, the most important thing will be whether nuclear can be cost competitive with other available energy options while balancing the health, safety, environment and security considerations. Government must make the decision-making process, especially contract negotiations, open and transparent to ensure accountability and value for money.

Environmental considerations

Despite a bad reputation, there is evidence over six decades that shows nuclear power is actually extremely safe. The risk of accidents in nuclear power plants is low and declining. In fact, in terms of the number of people killed by one kind of energy or another per kWh, nuclear energy is actually the lowest (together with wind); coal is unsurprisingly the highest. Modern advanced reactor designs (unlike those built at Chernobyl and Fukushima) are generally considered inherently safe.

However, mining activities will without question cause widespread environmental disturbance at sites across Uganda by generating large quantities of toxic (and to some extent radioactive) tailings and run-off. Furthermore, mining will necessitate the relocation and compensation of large numbers of people which, as seen in the oil and gas industry, can lead to land grabbing and conflict as well as challenging social issues – often disproportionately affecting women.

Uranium itself actually has a very low level of radioactivity comparable with granite and is handled with gloves as a sufficient precaution. However, uranium is also toxic chemically, being comparable with lead, and this too must be managed. Mining methods, tailings and run-off management as well as land rehabilitation will be subject to government (NEMA) regulation and inspection.

Depending on where the uranium is mined and processed, it will need to be transported – by road, rail and/or sea – on a regular basis over the course of many years. As well as the risk of accident during transport, there is also the unfortunate threat from terrorist groups (such as al-Shabaab) who could seek to attack transport containers, or even steal radioactive material which can be used to make a dirty bomb.

An issue of waste management is the high-level radioactive waste (mostly spent fuel) that people will be most worried about. This is the material that is dangerous to people and the environment for thousands of years. Used fuel will need to be stored in pools for 40-50 years before the heat and radioactivity is low enough for indefinite storage or permanent disposal. It should be noted that there is no accepted best practice for the disposal of high level waste and this remains an issue worldwide.

The Myths:

- It is not safe to live or work in a nuclear power station – nuclear reactors are in fact safe places with safely every day. People died because of radiation from the chernobyl and Fukushima Daiichi nuclear facility accident in Japan – there is no evidence that any person died because of radiation exposure. However, a small number of nuclear workers did receive doses that were many times the natural background. Radiation is man-made, as described above there are many sources of natural radiation that we live with safely every day.
- Nuclear reactors can explode like bombs – this is not possible as the enrichment level is too low and plants are designed with robust safety systems where multiple layers of physical and electronic security support each other.
- It is not safe to live or work in a nuclear power plant – nuclear reactors are in fact safe places to work for thousands of staff around the world. In fact, if you stood at the site boundary of a nuclear power plant for a whole year you would receive less than a quarter of the radiation you would receive from a chest x-ray or a third of the radiation you would get on a flight from Paris to New York!!
- Nuclear energy isn’t safe – according to the US Bureau of Labor Statistics it is safer to work at a nuclear power plant than at a fast food restaurant or a grocery store.

Finally is the issue of nuclear decommissioning. The government will need to factor in the clean-up of radioactivity, progressive dismantling and decontamination of all nuclear power plants, processing facilities and mines so that sites are eventually made available for other uses. This can be a long, expensive and complex process which has been known to cost taxpayers in other countries many millions of dollars.

Strategic cooperation with nuclear powers

Comprehensive preparation and planning of a nuclear programme requires cooperation with other countries and organisations. Significantly, Uganda signed a Country Programme Framework with the International Atomic Energy Authority (IAEA) in 2008 and again more recently covering the period 2014-2018. One of the key components is the Agency’s support in conducting pre-feasibility studies for the first nuclear power plant.

Reports state that Uganda has approached India for technical advice on how to exploit its uranium reserves for the generation of electricity. Uganda has also reportedly had discussions with Iran around nuclear cooperation.

Uranium mining and processing, not to mention nuclear power generation, will inevitably raise lots of questions within the country and region. It is paramount that the whole process is open and transparent right from the start to avoid any additional scepticism and public mistrust. The industry is already perceived as secretive and dangerous and the best way to combat this is through dialogue and engagement.

Luke Williams is an Environment, Health and Safety professional with five years experience in the UK civil nuclear industry. This article is an extract from a four-part series he wrote for Oil in Uganda on the nuclear industry. Please visit our Mining Section at www.oilinuganda.org to access the series in greater detail.
Exploit the full potential of artisanal mining

By Chris Musiime

Every once in a while, Ugandan media will report about a ‘gold rush’ usually in central and eastern Uganda, where thousands of people storm an area following a new discovery of gold.

These discoveries are usually made by artisanal miners although in some rare cases, ordinary village folk will accidentally stumble upon gold nuggets or traces of it in their backyards and gardens. There was a case in Mubende, where a family was digging a pit latrine only to discover gold veins a few feet into the pit. Another family in Bugiri was digging a grave and also encountered the ever elusive gold veins.

In both cases, the villagers immediately abandoned their regular income generating occupations and turned into artisanal gold miners almost overnight. Word then went around and soon, other people from neighbouring villages joined in and an artisanal mining camp was born, just like that.

Artisanal mining, strictly speaking, is the most basic form of mineral extraction where the miners use basic tools like pick axes and shovels. There is very minimal investment in machinery at the onset. Small scale mining is a notch higher. Such mining operations have basic machinery like power drills and small generators. Combined, they are referred to as Artisanal and Small Scale Mining (ASM).

It can be hard to tell the two operations apart when you visit a gold mining camp in Uganda. Miners seem to oscillate from one to the other depending on how well they are doing financially, some even border on medium scale mining. I have been to some artisanal gold mining camps and seen power generators that cost at least forty million shillings supplying power to the underground pits. The days when artisanal miners used only pick axes and shovels are fast diminishing, the new generation now uses heavy duty electric drills.

Artisanal mining is a lifestyle, a lucrative source of income that the miners are willing to invest in irrespective of their legal status. At a civil society meeting in Kampala recently, an artisanal miner fearlessly introduced himself as “an illegal gold miner.”

His courage stems from the reality that it is almost laughable that Ugandan law does not recognise artisanal mining when it is estimated that the number of Ugandans directly involved in ASM has doubled in the last three years to an estimated 400,000 in 2015, with another 1.5 million indirectly benefiting from artisanal and small scale mining activities.

Globally, ASM occurs in over 80 countries and employs 30 to 50 million miners (90% of the global mining workforce). Ironically, it only contributes 10% of the world’s minerals up to 20% in the case of gold. Industrial mining on the other hand, employs only 10% of the global mining workforce but produces 90% of the world’s minerals.

This equation somewhat makes ASM a delicate matter especially with politicians world over. How do you appease such a big constituency that contributes virtually nothing to your economy and yet maintain good business relations with the large scale miners who have the potential to support a significant chunk of your national budget?

The answer to this puzzle lies in understanding and appreciating ASM. The economics of ASM are such that the miners work for daily survival normally because they have failed to secure any other form of employment. I have not met any miner who confesses he or she is living her childhood dream. They were mostly forced into the sector one way or another by very difficult circumstances and only care about one thing—survival. And while they are at it, there is a whole value chain that is feeding off them as well: restaurant operators, clinics, lodging facilities, sanitation, airtime vendors, gold brokers and buyers, and many others. Every mining camp is some sort of self-sustaining economic ecosystem in its own right.

There are hardly any services that the government provides to the mining camps. The miners procure everything for themselves: electricity, water, health care, education, even security. Nevertheless, they are desperate to win the government over and so are willing to cooperate with government, pay their dues and in turn acquire some form of legal recognition so that they build legitimate businesses.

This is an opportunity that government must exploit. It should start looking at ASM as a potential money maker that can be organised, regulated and controlled, not a nuisance that curtails investment in the sector. It is possible for both ASM and large scale mining to co-exist.

There are many negative things associated with ASM, some of them extreme, like the huge environmental foot print they leave behind by using mercury and cyanide; frequent accidents that are often fatal and (sometimes forced) child labour. But these can be handled. In many respects they are happening because of the temporary state they are working in. No one can make any substantial investment in an area when they are not sure that they will be allowed to stay there for the foreseeable future.

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