Fueling Economic Growth

INTERVIEW WITH IRENE NAFUNA MULONI

MINISTER OF ENERGY & MINERAL DEVELOPMENT

IRENE MULONI is a member of the Uganda Parliament for the Bulambuli District. She has worked in leadership and management positions in the energy sector for the past 20 years. She is an advocate for gender equality, women's empowerment, and the utilisation of science and technology for sustainable development. She holds an Honors degree from Makerere University, Kampala, and an MBA from Capella University.

Please bring us up to date on the current situation in Uganda's oil sector.

Firstly, this is a key natural resource that can play a strategic role in the economic development of this country. We see oil supporting the modernisation of agriculture, activating rural electrification, and strengthening the infrastructure network: water, roads, and railways. We also intend to use our oil revenues to help fund the health and education system. This is why the Government has put a special focus on this sector. We are glad that God has blessed this country with its many natural resources, including oil.

Where commercial reserves have been discovered, we have confirmed that there are 3.5 billion barrels (bb), and we think that out of this we can extract between 1.4 bb to 1.7 bb, and this is only from 40 per cent of the current exploration area. So far our success rate in finding petroleum is around 80 per cent. What's more, the cost of finding oil in this country is among the cheapest in the world, at around one dollar a barrel.

In February we signed a memorandum of understanding with the U.K.'s Tullow Oil, France's Total and China's CNOOC, paving the way for the development of the oil reserves recently discovered in western Uganda. The deal with the three companies should lead to more than just development of the oil fields themselves. It's a significant step, because this memorandum of understanding provides a road map for commercialisation of the petroleum resources that are being discovered in Uganda. The plan also provides for use of petroleum for power generation, supply of crude oil to a refinery to be built in Uganda, and the export of crude oil via export pipeline or any other viable options, to be developed by the oil companies. The companies have already invested up to $3.5 billion in exploration. But it will still be at least another two years before production begins.

What developments have there been in terms of legislation which impacts on this sector?

In February of last year, the Ugandan parliament passed the second oil bill, covering the midstream sector, and moving us closer to completing a new regulatory framework. The passing of the bill brings the country closer to reopening a new licensing round for the remaining acreage in the oil-rich Lake Albertine Rift basin.

At the end of 2012, we passed the upstream oil bill, reflecting our commitment to fast-tracking the enactment of the new oil legislation.

The midstream bill will regulate midstream operations, which include refining, transportation and storage of oil products once the country starts production. Since the passing of the new laws we have begun putting into place a new petroleum authority, as well as a national oil company that will handle commercial aspects on behalf of the Government of Uganda. We are also strengthening the Energy Ministry by upgrading the petroleum dept into a directorate so it can give effective support to the process of managing this resource.

As we establish these institutions we are readying for open bidding rounds, which will attract greater competition. Several international companies have already expressed interest in bidding. We are currently preparing the area blocks and compiling seismic data. Hopefully, before the end of the year we should have announced the winners.

And what commercialisation plans do you have?

We have two memoranda of understanding. One is for power generation in the interim: we have ongoing hydropower projects that should come on line in the next three years. In the meantime demand is growing at 10 per cent a year and there is a possibility we might outstrip current capacity. If that happens we will generate power using some of our crude until the hydro projects come on line, by which time our power needs will be fully met, with excess generating capacity for export to our neighbours.

At the same time, we are going to build a refinery which will ultimately be able to handle 60,000 barrels a day. We are targeting its development so that the first train can come on line within the next three years, by 2017. We are also going to build an export pipeline in order to access the international market. This is a regional project. We are also planning to ensure that by the end of 2017 the pipeline will be in place. We are also preparing the logistical and infrastructure requirements so that while all this work is progressing we will be able to ship in the huge amounts of material and equipment needed for oil production, the constructing of the refinery, and the equipment that will go into the pipeline, along with the internal pipelines to carry the crude from the fields to the central processing unit, where it is cleaned before going to the refinery or the pipeline. We are also progressing with a regional project for a refined product pipeline from Eldoret to Kampala and on to Kigali. There will be a depot in Kampala that will be linked to the refinery in Hoima before they are distributed to East Africa. There is also a greater plan to extend the pipeline further north to Sudan, and create a pan-Eastern African conduit that could unlock hydrocarbon deposits across the region. The project will be challenging as the deposits are in remote regions with very little access to infrastructure. Plus, the texture of the crude reserves is waxy, which means oil will have to be heated before it enters the pipelines.

Please expand on your hydro-power development plans and the projects which are set to come on stream over in the near future?

Most of our 800 MW power output comes from hydro-electric generation. In June of last year we signed a contract granting China's Sinohydro Group Ltd a tender to build the 600 MW Karuma dam on the Nile River at a price of $1.65 billion. We are depending on Karuma to generate sufficient cheap power to meet fast-growing energy needs and support an economy that should move into double-digit growth rates once crude oil production starts.

Work on the Karuma dam started early last year. The contractor is now mobilised and is on site. We think in 60 months' time we should commission this power station. In addition to Karuma, we also plan to build a smaller hydro power plant, Isimba, on the Nile, at a cost of $600 million, while a feasibility study is underway for another 600 MW plant. We also plan to increase production from small to medium hydro power plants to 150 MW in the next three years, up from 60 MW at present.

What about plans for other renewables?

Renewable energy is what we are really focusing on in the long term. Hydro provides us with cheap electricity, but we are also looking at solar, particularly in agricultural areas. These would be stand-alone systems in some cases, but we are also exploring fitting into the national grid. Some companies have expressed interest, although the initial cost is high, but the technology is bringing the price down. Then there is cogeneration from sugar waste, biomass, and of course gas is another area to explore.

Would that be associated gas from the oil discoveries?

That is being considered. We are also looking to explore for gas. We are working with oil companies on this. Gas has huge potential for local power generation, for cooking and distilling; we are looking at the different possibilities. We can use gas for mineral development as well. We've carried out surveys that show we have huge mineral deposits. We are attracting investors to the mining sector, but only those interested in value addition, there will be no exporting of raw materials. Now that we have gas we have the energy to develop a metals sector, an iron and steel industry. There is a lot of construction going on here, a lot of demand for steel.

We also have investors looking to build a phosphate factory for fertilizer to improve agriculture production. We have copper and investors who are going to develop that. There is a lot of interest from China. And we have local investors interested in steel: there are already two factories processing steel and iron. And we also have gold. We have investors exploring in western Uganda and in the centre of the country. Aluminium has been discovered in huge quantities, and a number of licenses have already been issued.

What role do you see the oil companies playing in the development of the downstream oil sector?

There will be companies that are licensed to explore, to develop, and to produce. This is a process that is underway. Once a company receives a production license it can prepare for production. Out of the three companies we have signed memoranda with, one has its production licence and the others are currently pending. There are many arrangements which need to be put in place before production can begin. This will involve ferrying huge volumes of equipment. This is being financed up front. What we have in place are production sharing agreements with companies who will recover their investment once production starts. They are investing in all aspects of production: the pipelines, the refineries; as well as local regions in which they are operating. That said, other areas are also open to investors, such as helping the government meet its logistical requirements. A good number of international companies have already joined in the process. We have a roadmap, with timelines for production, the refinery and for the pipeline. The refinery will be developed regionally as a public-private-partnership with a lead investor taking 60 per cent. The remaining 40 per cent will be shared among our East African partners. We have been discussing and agreeing these arrangements at recent summits we've been holding. The Presidents of the region are in agreement that this will involve partner States buying shares in the project. We want a lead investor with the technical know how, and the financial muscle, to build the refinery. We are at an advanced stage with this. The bids will be in by the end of May, and by September the lead investor should be announced. Then we will begin to construct the refinery. F

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