

Uganda's oil resource to grow

By Billy Rwothungeyo

In the 55 years of Uganda's independence, few things have appealed to the imagination of Ugandans like the discovery of commercial oil in 2006. Uganda's "black gold" story though, started back before the country gained self-rule from Britain. As early as the 1920s, when Uganda was still a British protectorate, a geologist named E. J. Wayland discovered oil seeps in the Albertine region. Between 1956 and 1956, shallow wells were drilled by the African-European Investment Company, including a first deep well at Waki-B, in Bunaba, Bullisa in 1958. After independence, the political upheaval that engulfed the country did not provide an ideal environment for further exploration. However, serious exploration work started in early 1980s, after aeromagnetic data of the Albertine graben became available to Uganda.

HOW MUCH OIL DO WE HAVE IN UGANDA?

Oil cannot be found anywhere. One of the world's leading commodities can only be found in sedimentary basins, under which are hydrocarbons held up in rocks. Therefore, in Uganda, oil can only be found in the five sedimentary basins in the country – the Albertine graben, Hoima basin, Kadam-Moroto basin, Lake Wamala basin and Kyoga basin.

So far, the Albertine Graben has been proven to have the highest potential for commercially viable oil and gas deposits. Less than 40% of the Albertine graben has been prospected for oil and the Government has since established that the basin has 6.5 billion barrels of oil.

It is not enough to have oil. Getting it out of the ground has to be commercially viable. Not every country that has crude oil deposits can get it out of the ground due to commercial reasons. From the 2.5 billion barrels, the Government estimates that 1.4 to 1.7 billion barrels are recoverable.

However, in a recent interview with the *New Vision*, former permanent secretary at the energy ministry, Fred Kabagambe Kalisa, now a presidential advisor on oil and gas, said he believes that up to 2.2 billion barrels of Uganda's established crude deposits can be recovered.

"I have not done the math myself, but I have interrogated. In my view, the school of thought that puts the number at 2.2 (billion barrels per day) has better assumptions than the one that puts the reserves at 1.4-1.7 (billion barrels per day)," explained Kabagambe.

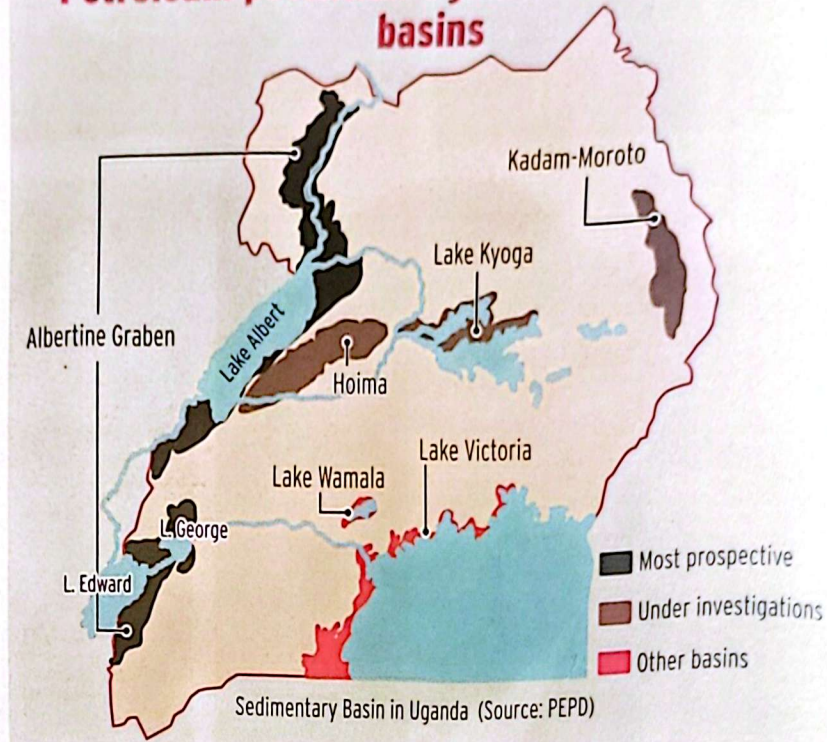
Alongside oil, Uganda also has gas deposits. Current estimates put this at 500 billion cubic feet (BCF) of non-associated gas and 173 BCF of associate gas.

At peak production, going by the current discoveries, between 200,000 and 250,000 barrels per day will be produced. It has been estimated that oil production will last 25 years, making Uganda a mid-level producer compared to what Gabon and Equatorial Guinea are today.

POSSIBLE FUTURE DISCOVERIES

Less than 20% of the Albertine graben has been licensed. China National Offshore Oil Corporation (CNOOC) was issued a

Petroleum potential: Uganda's sedimentary basins



40% Prospects
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first production licence in September 2013 for the Kingfisher oilfield in Hoima. After a long wait, the Government also issued production licences to Total E and P and Tullow Oil in August 2016. Total E and P's licence was for the Exploration Area 1 (EA1), located within Murchison Falls National Park, north of Lake Albert, while Tullow's licence was for the Exploration Area 2 (EA2), east of the lake.

New players have since come on board. In September last year, the Government gave an exploration licence to Australian firm Armour Energy Limited.

In October, the Government issued two exploration licences to Oranto Petroleum, covering the Ngassa block in Hoima district.

The Government also signed two production sharing agreements with the Nigerian firm.

With less than 10% of the Albertine graben licensed, future prospects of more oil in Uganda are looking brighter. The Petroleum Authority of Uganda is in the final stages of negotiating two more production sharing agreements.

"The Government is currently reviewing areas in the Albertine that have not yet been licensed. Some work is also going to be done in the Kadam-Moroto basin," says Gloria Sebikari, the corporate affairs manager at the Petroleum Authority of



A CNOOC worker walking towards the Kingfisher oil field on the shores of Lake Albert. Photo by Richard Sanya

Uganda.

Despite previous intentions, no exploration work has been done on Lake Kyoga yet. The higher cost of drilling offshore on the lake as opposed to on-land, has kept exploration work off the lake as of now.

Kabagambe says Lake Kyoga may have a lot of potential of oil. In 2002, a survey was done by the Government and this

potential was established. So what will it take to explore for oil on the lake?

"To drill on the lake, you need a good ship or a platform on which you put a rig. These days, equipment is not as expensive. It may not be out of reach for a country like Uganda to drill for oil on the lake," he said.

In the near future, we could be looking at oil reserves well in excess of 6.5 billion barrels.

Oil prospects