

Kenya finds '70 year supply' of water in desert region

Scientists using technology developed to search for oil have discovered a vast underground water reservoir in one of Kenya's driest regions that if properly managed could supply the country's needs for close to 70 years.



Water gushes from a pipe in Lotikipi Photo: COURTESY ITV NEWS

By Mike Pflanz, Nairobi

4:10PM BST 11 Sep 2013

The basin has a surface area larger than Suffolk and holds billions of litres of water that add up to close to ten times **Kenya's** current reserves.

Surrounding plains and hills recharge supplies at an annual rate that means the aquifer could potentially fulfil the country's water demands indefinitely.

Researchers from a French-American firm, Radar Technologies International, worked with the Kenyan government and Unesco to layer satellite, radar and geological maps on top of each

other, and then used seismic techniques developed to find oil to identify the reservoir.

It lies in Kenya's extreme northwest, close to its borders with South Sudan, Ethiopia and Uganda. The area is sparsely populated and prone to conflict over existing scarce resources.

"It is important to say that these are early estimates, and these resources must be managed well in order that they benefit the people of Kenya," said Mohamed Djelid, Unesco's East Africa director.

"But if all goes well, we can say that this really is a game changer." Close to half of Kenya's 41 million people have no access to clean water, and farmers in arid areas struggle to raise crops without adequate irrigation.

Tapping the new reserves, in the Lotikipi Basin in the Turkana region and other areas nearby, could create vast new zones of farmland in landscapes where today even the hardiest plants struggle to survive.

"The news about these water reserves comes at a time when reliable water supplies are highly needed," said Judi Wakhungu, cabinet secretary at the Kenyan environment, water and natural resources ministry.

"This newly found wealth of water opens a door to a more prosperous future for the people of Turkana and the nation as a whole.

"We must now work to further explore these resources responsibly and safeguard them for future generations." There have been similar announcements of massive new water finds beneath Africa's driest areas in the past.

In 2007, scientists said that they had identified an underground "megalake" in Sudan's war-torn Darfur region that was ten times the size of the Kenyan discovery, but its bounty has yet to be tapped.

"From what I've seen of the figures on the Turkana find, it looks very encouraging," said Brian McSorley, a water expert at Oxfam in Nairobi.

"But knowing there's water there, and then getting it to the surface, are two different things.

There will need to be decent follow-up studies and then proper investment to ensure it benefits the poorest people there.” The aquifers lie as deep as 1,000 feet, which poses significant technological and cost challenges compared to shallower reserves, Mr McSorley said.

Kenya’s government will now carry out further drilling in areas surrounding the sites where the new water supplies were first drawn to the surface, to gather more data on their true extent.

The land that lies above is among the most hostile in Kenya. There are few roads or electricity supplies, and the Turkana, Samburu and Pokot tribes that live there are regularly at war with each other.

The border area between Kenya, South Sudan and Ethiopia, known as the Ilemi Triangle, has never been officially delineated.

Constructing, fuelling and maintaining boreholes, and building pipelines to bring the water supplies to remote communities, will also pose significant difficulties.

© Copyright of Telegraph Media Group Limited 2013