

Turkana underground water sufficient for 70 years

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A huge underground water reserve the size of Lake Turkana has been confirmed in Turkana county.

Unesco scientists say the new find is a “game-changer” and can meet Kenya's total water needs for the next 70 years because it is constantly replenished.

The discovery was made by a French Company called Radar Technologies International (RTI) at a cost of \$150,000 funded by the Japanese government.

The water lake was found in Lotikipi location in Turkana district.

“Lotikipi Aquifer equals the volume of Lake Turkana today, offering the prospect of becoming the 'New Lake Turkana' since, unlike the actual lake that has alkaline water, its waters are fit for human consumption,” RTI said in its final technical report seen by the Star.

Kenya's Ministry of Water and Unesco had May last year announced the presence of the water reserves, but the amount had not been confirmed through drilling. It was also unclear if the water was potable.

The ministry had estimated Turkana's underground water at 60 billion cubic metres.

The figure has now been revised to 200 billion cubic metres, according to Alain Gachet, the Frenchman who led the exploration for RTI.

He said they drilled more than 300 metres underground to hit the water.

The RTI report says Turkana has a network of other smaller lakes and shallow underground streams that it is shocking residents still have no water.

Lotikipi alone holds 900 per cent more than Kenya's current water reserves. It could also serve 625 million people in one year, according to the findings.

“We have seen the system and the fact is water is there, and that is extremely important and it could be a game changer within the country,” Abou Amani, a Unesco scientist who took part in the discovery told UK broadcaster ITV.

The discovery may benefit millions of drought-hit pastoralists who currently walk for many kilometres looking for water.

“We have enough water and if we utilise it properly this country should not be classified as water stressed,” says head of water resources in Kenya John Rao Nyaoro.

The technical report says the underground lake is constantly replenished by waters from Uganda highlands and South Sudan.

The confirmation comes even as UK oil company Tullow confirms Turkana residents also sit on huge amounts of oil reserves.

RTI is now asking county governments to allow it drill across the country. “Turkana can be a model for other counties,” the company said in a statement.

RTI now also wants the land gazetted. “Kenyan authorities are recommended to gazette the land above the aquifers in order to protect them from harmful activities,” it said in its report.

It has also asked the government to establish a limit on abstraction rates for both the Lotikipi and Lodwar Aquifers.

The discovery also puts exploration skills and capacity of the Kenyan borehole drilling industry on the spotlight.

RTI said the drilling equipment in Kenya are “outdated”. “A major campaign should be launched to build the capacity of the industry as a whole, and reduce the inefficiencies in the market,” it said in a statement.

But scientists are cautious. “Some of these water aquifers are more than 100 years old so any development should focus on sustaining the water,” said Dr Saud Amer, a US geological survey expert who attended the launch of the exploration last year.

- See more at: <http://www.the-star.co.ke/news/article-135715/turkana-underground-water-sufficient-70-years#sthash.PsMepIWt.dpuf>