

Sand mining on Lake Victoria: No need to worry

EDITOR: A living organism, under normal situations rejects anything that is foreign, dead or useless within its system. This explains why living organisms excrete. A water body such as a lake in many ways is a living organism and it also excretes unwanted materials.

How? When aquatic animals like fish are alive, water bodies such as lakes support them but on death, the water bodies expel the animals and you will find them deposited on the shores. This can be seen of whales, snails, crabs, underwater plants or a human being who has drowned in the lake.

Now, lake sand is a product of chemical weathering and erosion of lacustrine offshore rocks, that break down into smaller particles and to the water body such sand particles are now dead. The water body or lake then expels the "dead" particles to form sand deposits on the lake shores. Therefore sand mining is just the removal of the unwanted dead lake material!

If the lake doesn't expel the sand, the sand will accumulate in the lake thereby reducing the effective

depth of the lake and in so doing making the lake shallow. This in the end results in high evaporation (the escape of water into the atmosphere in form of vapour) rates and the eventual reduction in the surface area of the lake as is the case with Lake Chad.

Therefore, such areas like those at Lwera on Masaka Road, having huge quantities of sand deposits were once an extension of Lake Victoria. If the sand deposits become a menace to the lake, then their removal becomes a necessity through an engineering activity called dredging which is very costly.

As a country, our construction industry is just starting: Kampala Flyover, Standard Gauge Railway, Housing Schemes, Urban Infrastructure, Nuclear Reactors, Road Interconnections, High-End Educational Institutions, Hospitals etc and these will require huge amounts of sand easily obtainable from the lake.

In such heavy or massive concrete construction, the type of sand to be used must be very clean and be in the form of separate grains. This type of sand can only be

found on the lake shores. If sand used in construction has fine grains, then expect cracks to develop because of what is called heat of hydration. Having given the Chinese massive civil works such as constructing dams and the standard railway; which when construction begins must continue nonstop, it begs the question, where do you expect the Chinese to get such huge quantities sand? Should they import it?

Erosion and weathering of the lacustrine offshore rocks is a continuing process; therefore that sand that is being mined will be replenished.

Further, those carrying out sand mining are helping the lake in a way of dredging it enabling the storage capacity of the lake to increase else the water would otherwise end up in the Mediterranean sea. We do not want another Lake Chad in our midst.

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PICTURE BY DRAKE SSENTONGO

Uganda stick to