

Experts worry over stone quarrying in Kalangala

The district environment officer says quarrying in fragile areas like the islands requires well done studies.

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Environmentalists have warned that stone quarrying business -which is taking root in the island district of Kalangala - is pushing the fragile islands' ecosystem toward potential catastrophe.

Kalangala District has about five major stone quarries across Kalangala Town Council, Bujumba and Mugoye sub-counties—most operating illegally.

Among them is the Njoga stone quarry that stands out as the largest, producing over 10 truckloads of stones per day. Across the other quarry sites, operators extract between four and eight trucks full of stones daily, with most trucks headed out of the district.

Mr David Kureeba, the coordinator of the National Association of Professional Environmentalists (Nape), said unregulated stone quarry business in the island district could lead to severe environmental degradation.

"The islands' rock formations play a critical role in stabilising the islands above sea level. Some rocks are attached to the lake bed that in case of any crack created in that stone during the extraction process could destabilise the island," he said.

Mr Kureeba described Kalangala's landscape as extremely delicate. He said most island areas sit on waterlogged ground, punctuated by natural springs and fault lines that constantly discharge water.

"If you have been to some of those places, you realise that most of the area in the island is waterlogged. Either it has some underground springs, because there's always water coming out of the rocks. Wrong rock excavation could lead to flooding or alter in the flow of these springs," he said.

Mr Kureeba also stressed that quarrying "in such tragic fragile areas like the islands requires well done studies. "Beginning with a full geological under-



A woman crushes stones at one of the quarries in Kalangala District on March 12, 2023. PHOTO/DAVID SEKAYINGA

standing of how stones are layered, how they sit on each other, how they link to neighbouring islands, and how they connect to the lakebed. Without that understanding, we couldn't know how to control and monitor stone mining."

"We cannot simply say quarrying is bad, but how bad is it in terms of geology. There is no satisfactory research in Uganda that was made which can be based on to assess the environmental impact of such activi-

ties in the island districts," he added.

Mr Kureeba also expressed alarm over the methods used by quarry operators, noting that workers drill holes into bedrock and insert explosive devices which is also dangerous both to human life and living organisms within the rocks and neighbouring grounds near the quarry sites. "They place something like a bomb and heat it from outside and then the thing explodes," he said.

"The blasting happens with some kind of technology that is closer to bombing, which could damage the underground fracture lines, and without geological mapping, operators risk triggering cracks that can allow water to rush in rapidly that could lead to flooding," Mr Kureeba

The rising demand for stones at construction sites in neighbouring Masaka and as far as Kampala and other sites the trucks supply daily, has pushed workers to dig deeper into bedrock.

Mr Kureeba also dismissed claims of sustainable quarrying. "When you take a stone, it is gone. It is not growing again," he said. Areas mined in the past remain pothole-like wastelands, with many eventually turning into illegal waste dumps due to absence of restoration plans.

He said several times decision-makers prioritise profit and employment over environmental protection.

"The whole thing always revolves around commercialisation of na-

ture and people looking at profit before environment," he said. "That's why no one invests in geological research first before excavation."

He said although Uganda has trained geologists and hydrologists, most districts lack the technology and equipment needed to conduct the studies Kalangala requires.

"It requires a lot of science and a lot of technology that is costly," he said, adding "If a country is failing to invest in a small CT scan machine for checking head damage, that equipment would seem like it's lavish."

The Kalangala District Environmental Officer, Mr Joseph Byaruhanga, said illegal stone quarrying poses a serious threat to the long-term physical survival of the Lake Victoria islands. "When a rock is removed, island heights are reduced, slopes weaken, and soil subsidence becomes inevitable. In some areas, slopes may collapse entirely, increasing the risk of landslides and rapid erosion, especially during heavy rains or periods of high lake levels," he explained.

Mr Byaruhanga added: "If the rock that forms the backbone of these islands is removed, what remains is loose soil. "That soil cannot withstand constant wave pressure. Over time, parts of the islands can shrink, sink, or even partially submerge," he said.

He further explained that Kalangala's islands are essentially rock-based hilltops rising from Lake Victoria and that their rocky foundations act as natural anchors, protecting them from strong water currents, wave action and long-term erosion.

"These islands are virtually rocks. That is why they have not been swept away by water currents over time and excessive extraction of stone directly undermines this natural stability," Mr Byaruhanga added.

ENVIRONMENT CONCERN

Environmentalists caution that continued quarrying could lead to the gradual disappearance of smaller islands and low-lying sections, a risk worsened by climate change and rising water levels.

As pressure mounts for construction materials, officials say failure to regulate stone extraction could see Kalangala trade short-term economic gain for permanent environmental loss. The Kalangala District Environmental Officer, Mr Joseph Byaruhanga,

said although stone quarrying is acceptable by law, the majority of the locals who are engaging in this seemingly lucrative business in Ka-

langala do it illegally and are degrading the environment.

"Unchecked quarrying does not just destroy land. It threatens livelihoods, tourism, public health—and ultimately the very existence of these islands," he explained.

Started in early 2020, the stone quarrying business has gradually grown to feed many islanders, especially those who were affected by the army's operations on illegal fishing on the lake.

The stone quarries are managed by individuals who pay an agreed amount of money to the landlords where the quarries are located. The quarry managers hire casual labourers who are paid for work done daily.