The second deepest Lake in Africa,

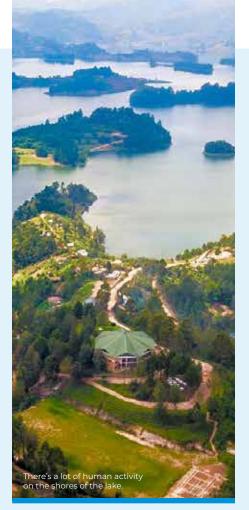
Lake Bunyonyi to be designated a Ramsar site

NatureUganda is raising the profile of Lake Bunyonyi and associated Wetland systems to become a Ramsar site with funding from the project "Secure Wetland Ecosystems to improve livelihoods through Community Conservation Agreements." Several studies have been conducted on wetland ecosystem services and biodiversity richness and all studies show that the lake qualifies for Ramsar designation. Lake Bunyonyi is located in southwestern Uganda in the districts of Kabale and Rubanda The name Bunyonyi is derived from the Banyoni clan who occupied the area in the 18th century before they were driven out by another clan of the Basigi who still occupy the western part (Kagarama) of the lake catchment. The 61km² lake is surrounded by the beautiful scenery of Kigezi highlands and V-shaped valleys at 2,200m to 2,478m above sea level. However, the lake is located in the most densely populated regions of Africa with over 400 persons per km². The dense population has resulted in the conversion of most wetlands in the region and the hills into intensively cultivated landscapes. Lake Bunyonyi is surrounded by hills that are extensively degraded with agricultural plots and terraces and many tourist establishments on one corner close to Kabale Town. The lake itself has close to 30 islands including the popular Punishment Island. Many wetlands surround the lake, the outstanding being Chevu, Nyombi, Bigyegye, and Nyamuriro wetlands among others.

Based on the assessment studies conducted by NatureUganda 2019-2020, the benthic macroinvertebrates community of the wetland systems of Lake Bunyonyi and associated wetlands such as Nyamuriro was poor in diversity constituted by Diptera (Chironomus sp. and Chaoborus sp.) and Oligochaeta indicating poor water quality. The upper catchment of the Lake is occupied by Echuya Forest Reserve (Orugano) and it drains into an expansive wetland called Nyamuriro wetland. Whereas the Echuya Forest is a gazetted reserve, Nyamuriro is not protected but was designated as an Important Bird Area (now Key Biodiversity Area) due to its diversity in bird species especially the globally engendered species of Papyrus Yellow Warbler and the Grey Crowned Crane.

The biodiversity assessment also found may important species of plants and animals including the swamp antelope Sitatunga (enjobe) in the Kyevu swamps, the Zenopus frogs (Enkyere) in all surrounding wetlands and many plants, some of which are not found anywhere else in Uganda.

NatureUganda also conducted an assessment of peat stock of the wetlands in the region. Peat is an accumulation of partially decayed vegetation or organic matter and peat ecosystems are considered the most efficient carbon sinks on the planet. Peat forms in wetland conditions, where flooding or stagnant water obstructs the flow of oxygen from the atmosphere, slowing the rate of decomposition. Peat is harvested as a source of fuel in certain parts of the World. In some sections of wetlands around Lake Bunyonyi, peat depth may reach up to 1000cm deep making these wetlands one of the dense peat stocks in the world with a high potential for protecting the region and the country from adverse Climate Change effects.



NatureUganda is joining efforts with the Ministry of water and environment and **District Local Governments of Rubanda and Kabale and other** stakeholders to assess Lake **Bunyonyi and** surrounding wetlands for potential designation of this lake as a Ramsar site.



However, Lake Bunyonyi is not a protected area, neither a wetland of international importance (Ramsar site). The lake is facing a vast array of threats mainly due to an increase in demand for the limited land resource. Human activities such as conversion to agricultural land, cultivation and siltation, unsustainable harvesting of wetland resources and wolfram mining in case of Nyamuriro are threatening the ecological integrity of the lake and the surrounding wetlands. The exposure of peat from the unregulated wetland drainage will increase carbon emission and its potential threat from harvesting it for energy production will exacerbate climate change effects for the country.

Based on the above unique features of Bunyonyi lake and its associated wetlands, there will be need to improve its conservation status. NatureUganda is joining efforts with the Ministry of water and environment and District Local Governments of Rubanda and Kabale and other stakeholders to assess Lake Bunyonyi and surrounding wetlands for potential designation of this lake as a Ramsar site. Similarly, NatureUganda will work with stakeholders to support sustainable utilization of the lake's resources and wetlands through livelihood improvement projects and rehabilitation of upland soils to increase production outside the wetlands.

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In addition, NatureUgnda will work with stakeholders to provide alternative gains for land users for successful conservation of the ecosystem including exploring potential for payment for ecosystem services in the region as an alternative income generation activity. Whereas the lake belongs to current and future generations, it is however the responsibility of the current generation to bequeath a well-functioning ecological system to the future generations.

By Achilles Byaruhanga



