Bengaluru's vanishing lakes: recovery in the face of unchecked urbanisation

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Once lovingly called the 'City of Lakes', Bengaluru today finds itself at a crossroads. A place where glistening water bodies have been silent witnesses to centuries of change, now struggles against the pressures of unchecked urbanisation, pollution, and overall neglect and disrespect. The city's story is inseparably tied to its lakes, with them shaping its ecology, urbanisation, growing pollution, and even being a part of one's weekend stroll plans. However, a walk along a Bengaluru lakeshore today will primarily bring up frustration at Bengaluru's relentless expansion.

Nagadasanahalli Lake, Photography Credit: Avi Singh Majithia

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A few centuries ago, Bengaluru's landscape was full of nearly 285 water bodies (lakes and reservoirs) scattered around the city. The water from these lakes kept the city afloat, sustaining its gardens, birds and unique character. However, as the city's boundaries expanded to over 740 sq km and the population was estimated to have exceeded 14 million in 2025, more than two-thirds of these lakes have vanished. They've been swallowed up by roads, apartment blocks, malls and the never-ending pursuit of 'development' in this city. The government today recognises only 81 lakes, and only 34 are considered 'live' (a healthy water body that supports a thriving ecosystem).

It's not merely a reduction in the number of lakes, the ones that remain are in a dire condition. Studies from 2017 indicate that 85% of Bengaluru's lakes are severely polluted, incapable of supporting ecosystems, flood management; and are unfit for human use. A more recent study conducted by the Karnataka State Pollution Control Board in 2025 found that out of 115 lakes, 47 were classified as Class E, having the worst possible water quality.

Bellandur Lake, Photography credit: Shivam Gupta

The study also showed that the remaining lakes fell under Class D, which is still bad, with none qualifying for Class B or C. In short, the water from the city's lakes is no longer potable.

The underlying causes of Bangalore's Lake crisis remain clear, even as solutions are elusive. Decades of unchecked urbanisation have hemmed in the lake banks in concrete or encroached upon them. A senior Hydrologist from WELLs Labs explained that storm water drains were historically built at the lowest elevations, but over time have been encroached upon and built further on. These stormwater drains or rajakaluveys used to thread reservoirs together but have now been blocked off either by construction or clogged with waste. Monsoon floods, which are increasingly unpredictable, also bring new hazards to neighbourhoods, especially in low-lying areas.

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Additionally, while more affluent neighbourhoods have access to piped water from the Cauvery river, poorer neighbourhoods in the city don't and have to rely on expensive water tankers.

Bellandur Lake, Bengaluru's largest waterbody, spans over 900 acres. Once a vital part of the city's interconnected water channels, it is now infamously called the 'Lake of Fire'. The lake used to be the basin of a thriving ecosystem of agriculture, fishing and other human activities, but is now known for chronic frothing, toxic fires and a sickly smell of contamination reported by many. An estimated 40% of Bengaluru's untreated sewage flows into the Bellandur Lake daily. Time and time again, the lake is in the headlines, from reports of horrifying fires with the lake's surface being ablaze for over 30 hours, to residents reporting persistent health problems, including respiratory and waterborne diseases like cholera, typhoid and dysentery. Resident, who once remembered a simpler time, watches bewildered and worried as the froth rises higher than the lake's banks.

Despite this grim picture, new data offers some respite. Recent monitoring by water authorities shows that the groundwater levels have risen by 0.5 to 1.2 meters, largely thanks to rain, recharge structures and clever use of treated wastewater for both groundwater recharge and lake rejuvenation. Rainwater harvesting has been made mandatory for new buildings, with over 2.5 lakh rainwater harvesting structures installed and 4500 recharge wells and pits across the city. Around 28 sewage treatment plants (STPs)

have been leveraged to feed treated water into lakes to support partial recovery and rejuvenation. In some cases, wells that have been dry for years have started to yield water again, a rare glimmer of hope for residents and planners. Still, the city remains in the 'critical' category due to over-exploitation of borewells.

Finding a solution for this crisis might seem like a mammoth task, but some tangible measures can be implemented in the city. Installing trash traps or floating barriers at strategic locations is a good starting point to stop plastic waste from entering water bodies. This waste can be collected regularly and potentially used to generate power to fuel water treatment. The city has plans to build 20 new STPs that have the potential to treat 60% of the city's wastewater. This, combined with energy recovery with the use of plastic waste would support lake rejuvenation as well as reduce landfill waste.

Constructed wetlands – engineered ecosystems with vegetation, soil and microbes- are another solution. These will include shallow ponds that have aquatic vegetation to help break down pollutants before reaching reservoirs. Over the past few years, citizen groups have stepped up, leading lake clean-ups, monitoring water quality, and demanding transparency. The Sarakki Lake in south Bengaluru was restored in 2020 due to the joint collaboration of the BBMP and citizens. Lakes under the vigilant care of citizens tend to show better recovery when compared to those handled by contractors alone. **This combined approach shows that long-term ecological recovery of water bodies is possible through technology, collaboration and community engagement.**

(The views expressed in the article are those of the author and do not reflect in any way his affiliation to any organisation or institution)

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