Wetlands turn waste dumps, sewage vents

VICTIMS OF URBANISATION

The expansion of concrete roads and pavements is preventing the recharge of groundwater aquifers. Dying lakes are only a part of the problem. The bigger worry is the polluted water in lakes that survive

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BENGALURU: Thimappa, a lean 80-year-old pulling on a bidi, remembers the days when he used to swim in Bengaluru's Subramanyapura lake. He has lived for 40 years in a two-bedroom house located on its shore.

"Back then, we used to think this was a huge lake," said Thimappa, who uses only one name. "It was certainly very big for this area when it was still a village." These days, however, weeds have taken root. They cover almost entire surface of the lake.

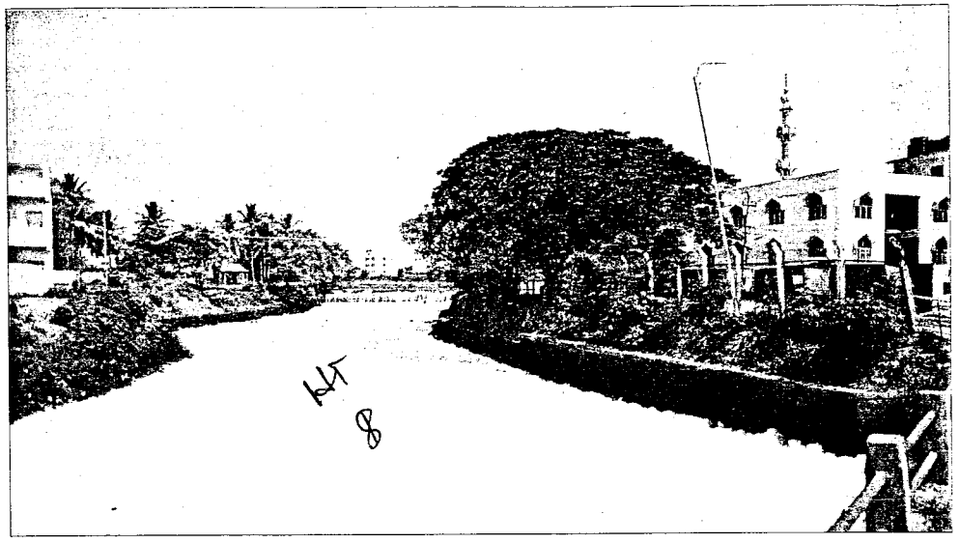
In May, Thimappa's beloved Subramanyapura was in the news: the agitation of chemicals and sewage in the water by pre-monsoon showers and wind caused the lake to start frothing.

Bengaluru's lakes are making headlines regularly. The Bellandur has been the site not just of frothing episodes but also of outbursts of fire. Since Independence, 19 of the city's lakes have disappeared entirely. The National Green Tribunal has repeatedly criticized Bengaluru's civic authorities this year for letting the city's water bodies become, in effect, toxic waste dumps.

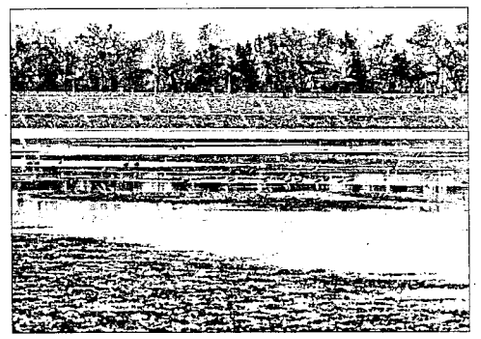
The central body could find similarly mistreated lakes in countless other cities in India. Multiple sorts of wetlands are being lost due to urbanisation, changes in land use and pollution. What lakes have survived are shrinking.

Rapid urbanisation in Delhi NCR, for instance, is taking its toll. The expansion of impermeable surfaces like concrete roads and pavements is preventing the recharge of groundwater aquifers and blocking the flow from water channels to lakes.

In Srinagar, a recent study conducted by the University of Kashmir found that Dal lake has lost 24.49% of its area during the last 157 years due to unregulated changes in land use and land cover.



▪ Bengaluru's Bellandur lake has been in news for its froth and frequent outbursts of fire on the surface. ARIJIT SEN/HT



▪ In Chandigarh's Sukhna lake, the silt build-up in a nearby village is blocking the water flow. RAVIKUMAR/HT

▪ Naini lake in Uttarakhand is under tremendous pressure from urbanisation and is depleting fast. SHUTTERSTOCK

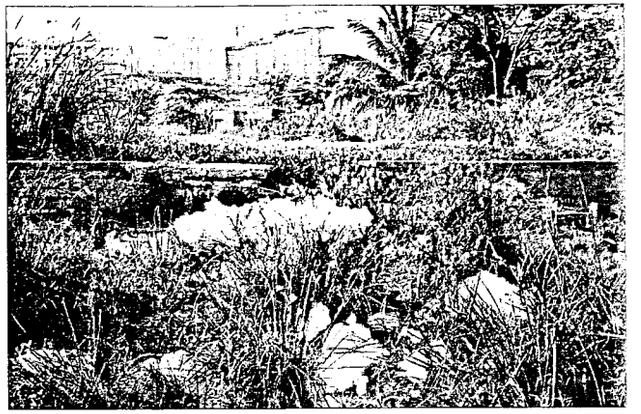
And in Chandigarh's Sukhna lake, silt build-up in a nearby village is choking the lake by blocking water flow. Rainfall deficits are likely to persist this year in north-west India. That would make the condition of the lake even worse.

While dying lakes are one problem, the bigger worry is the polluted water in lakes that survive.

According to a report by the Karnataka State Pollution Control Board, of the 67 lakes surveyed in Bengaluru, none had water that was fit for drinking. Local water conservation expert S Vishwanath said that some industrial effluents are harmful, "but it is domestic waste that we need to worry about because it forms 90 to 95 per cent of the waste that is dumped in lakes."

Untreated sewage is also one of the worst enemies of Dal lake, experts say. Around 20 million litres of untreated sewage are drained into it daily. The lake's popularity as a tourist destination has cost it dearly. In the absence of proper waste disposal facilities, high tourist footfall translates into high waste dumping.

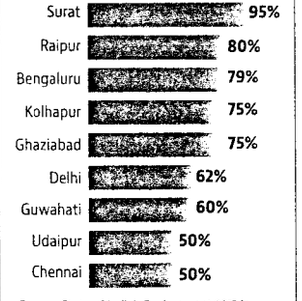
Another popular tourist spot, the Naini lake in Nainital, Uttarakhand, is also under tremendous pressure. Despite the mounds of debris, roaming dogs, and smell of dead fish that hang around the lake, it is still the only local source of drinking water. The rapidly growing population of residents and tourists is depleting its supply. Earlier this month, the water level was 18.3 feet lower than normal.



▪ Subramanyapura lake in Bengaluru is choked by apartments around. ARIJIT SEN/HT

Shrinking lakes

Loss in water bodies/water spread due to urbanisation from 2000 to December 2016



Source: State of India's Environment 2017 in Figures, an e-book published by the Centre for Science and Environment

"If so much water is lifted and with less or no water to recharge the lake, we lose almost 3 to 4 centimetres of water level every day," said Ajay Rawat, an environmentalist based in Nainital.

Tourists may arrive, complain, and leave, but residents have to live with the effects of pollution and mismanagement on their local water bodies. "The stench that emanates from this lake affects all of us every minute we are in this area," said BS Basavaraj, a longtime resident of Subramanyapura in Bengaluru.

Thimappa says every time he thinks about the lake or even looks at it, he seethes in anger. "I can see the culprits right across the lake, living happy lives, unable to imagine the impact they have had on this area and how they have destroyed our lake."

Apartment complexes that have come up in the past decade are lined up across the bund of the lake. Between 2001 and 2011, the city's population increased from 6.5 million to 9.6 million, the highest rate of growth of any city in India.

According to Vishwanath, no place could deal with such a surge in population. But he also said that this did not absolve the Bengaluru real estate developers who flouted rules. "One of the ways that was done, we now know, was by directing the untreated domestic waste from these apartment complexes directly into lakes," he said.

Vishwanath emphasized that the focus of reform efforts should not be on the appearance of the city's lakes so much as on building up wetlands and improving the health of the whole surrounding environment.

"Unlike in Switzerland, we will not have crystal clear water in these lakes, and it is not desirable either," he said. "We cannot keep looking at the water in lakes in isolation. If we do concentrate on wetlands, we will be able to ensure recharge of groundwater, which will then help with the ecosystem."

(With inputs from Abhishek Saha in Srinagar, Anupam Trivedi in Nainital, Manon Verchot in Chandigarh and Prabhu Razdan in Faridabad)

दिनांक 7/6/17 को निम्नलिखित समाचार पत्र में प्रकाशित मानसून/ बाढ़ सम्बन्धी समाचार

Hindustan Times (Delhi)
नवभारत टाइम्स (दिल्ली)
The Tribune (Chandigarh)
The Hindu (Chennai)
The Assam Tribune (Guwahati)
The Times of India (Mumbai)
The Telegraph (Kolkata)
हिन्दुस्तान (पटना)
The Deccan Hearld (Bengluru)
The Deccan Chronical (Hyderabad)
Central Chronical (Bhopal)

(Hyderbad) Deccan Chronicle 7.6.17

1 LAKH AFFECTED BY FLOODS IN ASSAM

Farmers harvest paddy in flood-hit Mayong village in Morigaon district of Assam on Tuseday. Over a lakh people have been affected by floods in Assam and 140 villages are underwater. Over 30 per cent of the Kaziranga National Park has been flooded. The park authorities said the animals have started moving towards the hills of Karbi Anglong district to escape the rising waters. The calamity has damaged crops in 385.67 hectares of land. Karimganj is the worst affected with over 97,000 people affected by the flood. — *PTI*

News item/letter/article/editorial published on June-8.6.2017 in the

Hindustan Times
Statesman
The Times of India (N.D.)
Indian Express
Tribune
Hindustan (Hindi)
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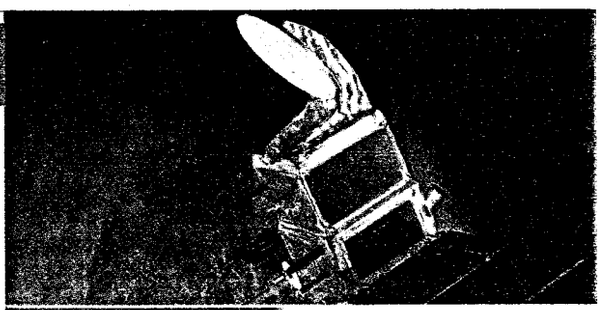
सरल-अल्टिका की ली जा रही सेवा — नेत्रिका-8-6-17

उपग्रह से होगी नदियों के जलस्तर की निगरानी

बेंगलूरु. जल सुरक्षा एवं जल प्रबंधन के लिए नदियों और जलाशयों के जलस्तर पर उपग्रह से नजर रखी जा रही है। इस मिशन में इसरो और फ्रांसीसी अंतरिक्ष एजेंसी सीएनईएस के सहयोग से विकसित उपग्रह सरल-अल्टिका की सेवा ली जा रही है। सरल का प्रक्षेपण 2013 में हुआ था। इसरो ने कहा है कि जल संसाधनों के बेहतर प्रबंधन के लिए जलाशयों, नदी, झीलों, तालाबों, मिट्टी की नमी आदि की निगरानी आवश्यक है। खासतौर पर सूखा और बाढ़ जैसी आपदाओं के मद्देनजर।

इसरो-सीएनईएस द्वारा विकसित

सरल अल्टिका देश में प्रमुख जलाशयों और नदियों के जल स्तरों में उतार-चढ़ाव को मापने में मदद कर रहा है। उपग्रह के दो प्रमुख पे-लोड आर्गोस और अल्टिका का विकास इसरो और सीएनईएस ने संयुक्त रूप से किया है। उपग्रह को समुद्री अध्ययन के लिए भेजा गया था लेकिन यह जलस्रोतों के बारे में भी बेहद महत्वपूर्ण आंकड़े मुहैया करा रहा है।



यह आंकड़े मिले हैं

सरल अल्टिका के आंकड़ों से पता चला कि गुजरात के तापी नदी पर बने उकाई बांध में अप्रेल 2015 की तुलना में अप्रेल 2016 में 19.8 फीसदी कम पानी था। लेकिन अप्रेल 2016 की तुलना में अप्रेल 2017 में पानी की मात्रा में 38 फीसदी की बढ़ोतरी हुई है।

सटीक जानकारी मिल रही है

यह उपग्रह विद्युत चुंबकीय लहर की लघु तरंगों से जलस्तर की स्थिति का पता लगाने में बेहद कारगर साबित हो रहा है। इससे जलस्तर की सटीक और लगातार जानकारी मिल रही है। इसरो ने कहा है कि सरल-अल्टिका उपग्रह से नियमित रूप से विभिन्न नदियों जैसे गंगा, गोदावरी, ब्रह्मपुत्र, गंडक, कोसी, यमुना, सोन, घाघरा आदि में जल स्तर पर नजर रखी जा रही है।