

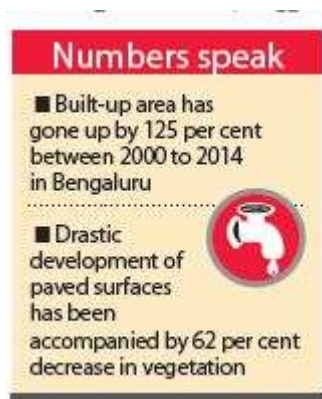
## City Loses 85 per Cent Water Bodies in 14 years

By Papiya Bhattacharya, Published: 18th November 2015 06:08 AM, Last Updated: 18th November 2015 06:08 AM

**MALLESWARAM:** In just 14 years, Bengaluru's vegetation has come down by 62 per cent, and 85 per cent of its water bodies have disappeared, according to a study.

"Bengaluru has grown beyond its bounds in the past two decades. Now the city has just one tree for seven people. Isn't that alarming?" said Dr Bharath Aithal of the Centre for Infrastructure, Sustainable Transportation and Urban Planning, Indian Institute of Science.

A post-doctoral research fellow at the centre, Aithal works with Dr T V Ramachandra, and has recently won the best paper award for a study titled 'Spatial Patterns of Urban Growth with Globalization in India's Silicon Valley'. It was published as part of the proceedings of the National Conference on Open Source GIS: Opportunities and Challenges.



The study says built-up area has gone up by 125 per cent between 2000 to 2014 in Bengaluru. The drastic development of paved surfaces has led to a decrease in vegetation by 62 per cent and water bodies by 85 per cent.

Ramachandra, environmental scientist, says, "Constitutional and statutory provisions protect a person's right to fresh air, clean water and a pollution-free environment. All of us deserve a clean environment. Trees help reduce pollution, clean up the air and reduce temperatures. Bengaluru has heated up by 1 degree Centigrade."

He attributes it to the urban island effect, which refers to the heating up of cities. The higher temperatures can be brought down by having trees around.

Dr Harini Nagendra, environment scientist with Azim Premji University, has demonstrated that trees play a major role in reducing temperatures on roads and urban heat islands.

"My suggestion is to plant more long-lived, urban stress-tolerant trees with wide canopies along our roads. Plantation is now largely taking place in areas away from the roads, and the few trees being planted on roads are narrow-canopied and don't provide the benefits of shade and pollution reduction," she says.

Aithal adds, "The study shows we have a devastating future ahead. Water bodies have decreased from 200 to 96, and most have become sewage tanks. Air pollution has reached its maximum and Bengaluru is being called a hospital paradise. India is the fifth largest emitter of green-house gases."

Architecture from the West has brought glass facades and eco-unfriendly buildings to the city. This leads to heat capturing, not required in our country, say experts. The use of airconditioners is increasing and leading to more green-house gas emissions.