

Campuses take to recycling water, teach students sustainability

Vindhya.Pabolu@timesofindia.com

Bengaluru: At Kristu Jayanti College, K Narayanapura, Kothanur, the academic year begins with water conservation classes. Students are taken to the sewage treatment plant (STP) on campus and explained how it works and how important reuse of treated water is.

Augustine George, principal of the college, said, "When we model sustainable practices and create awareness, students can understand these concepts better and, in future, apply them at their workplaces and homes. It is important for students to learn both positive and negative aspects, and as an administration, it is our responsibility to guide them toward making the right choices."

Embracing innovative recycling and sustainability practices and setting a benchmark for green campuses, several education institutions in Bengaluru have been harnessing treated sewage water by installing STPs and implementing rainwater harvesting systems.

The International Institute of Information Technology-Bangalore (IIITB) in Electronics City is using 160 kilolitres of treated wa-



MANY BENEFITS: The sewage treatment plant at Kristu Jayanti College also serves as a learning experience for students

ter daily for gardening and washing to bring down its dependency on Cauvery water. "We're also planning to harvest the remaining treated water by building rainwater harvesting pits in partnership with Elcita, the local township authority. Our campus is equipped to store rainwater that meets 10-15% of our freshwater requirements. Rainwater from rooftops is filtered and stored in underground tanks for use, while run-off from the ground is directed to recharge non-operational borewells, helping replenish groundwater le-

vels," Jagadish Patil, chief administrative officer, IIITB, said.

The three campuses of CMR University, Bagalur, have STPs with a total capacity of 1.3 lakh litres. "Treated water is used 100% for gardening and maintaining cricket grounds and sports areas, with 5,000 to 6,000 litres utilised daily at Bagalur alone. While achieving 100% recycling of treated water is challenging, any excess is used for washing equipment or stored for future use," Mohan Reddy, professor and director, CMR University, said.

Chaman Bhartiya School, on Thanisandra Main Road, has installed an STP of 105 KLD capacity, which on average recycles 45 KLD of water daily. "Treated water is primarily used for gardening, landscaping and flushing systems within the campus. Excess treated water is safely stored in designated tanks and utilised when required for purposes like cleaning outdoor spaces. We ensure proper monitoring to prevent overflow and wastage," Geeta Jayanth, head of school, Chaman Bhartiya School, explained to TOI.

BWSSB plans to set up 17 new STPs in city

BWSSB has announced plans to construct 17 new sewage treatment plants (STPs) with a combined capacity of 583 MLD, aiming to enhance wastewater treatment and reuse in the city.

The initiative seeks to address the city's growing wastewater burden and implement a pipeline network to supply treated water to industrial areas. Currently, BWSSB manages an extensive network of 12,000km of pipelines for supplying 2250 MLD of water daily to Bengaluru from the Cauvery river, located 100km away. Approximately 85-90% of this water returns as wastewater from households.

BWSSB earlier supplied 1,450 MLD of water daily, resulting in 1,440 MLD of wastewater generation. The supply quantum went up 2,250km with the recent commissioning of Cauvery V Stage project, increasing the city's total wastewater generation to over 2,000 MLD.

While the existing 33 STPs of BWSSB treat about 1,200 MLD of wastewater, another 800 MLD of water requires treatment. "To

bridge this gap, BWSSB has planned the STPs at a cost of Rs 2,200-2,400 crore," utility chairman Ram Prasath Manohar told TOI.

Of about 1,200 MLD of wastewater treated, only 750 MLD is being reused and supplied to Indian Air Force, ITC, BEL, Bengaluru International Airport, Lalbagh, and Cubbon Park, among others.

Plans are also in place to expand the use of treated water to industrial areas through a dedicated pipeline network, the BWSSB chief said.

As part of efforts to reuse treated water, BWSSB undertook the Koramangala-Challaghatta Valley project, which plans to release treated wastewater into 145 lakes in Kolar, Chikkaballapur and Bengaluru Rural. Of the 400 MLD of treated water allocated for this purpose — 310 MLD from KC Valley STP and 90 MLD from Bellandur STP — only 265 MLD is currently being pumped. The remaining 135 MLD will be supplied following the construction of the additional STPs.

— Nithya Mandyam