THE TIMES OF INDIA

Mumbai: Yen for Japanese forest therapy turns concrete spaces into green spots

TNN | Apr 13, 2021, 04.02 AM IST

A canopy of kanchan, karanj, neem, jamun and palash trees casting a 20-feet-high shade on the Central Railside Warehouse in Jogeshwari is barely reminiscent of the cement bags, construction debris and toxic air particles that once defined this corner until a year ago. The 23,000-sq-ft of dusty wasteland is now a foliage-rich micro forest with over 7,000 kinds of medicinal and fruit trees with bumble bees and butterflies around.

This jungle-like greenwood, in the middle of Mumbai's urban sprawl, is the first urban forest that sprouted to life in 2020 when Pradeep Tripathi of Green Yatra, an NGO, used the Japanese Miyawaki planting technique to recreate in one year, a natural forest. "A green wall," is what Tripathi calls this bulwark against heat, dust, carbon and concrete in the cityW.

At least 50 such miniature fast forests have been popping up in the city — dumping yards like Nisarga Udyan, busy road like Chembur's Eastern Freeway and in barren wastelands such as Bhakti Park's industrial ward.

Developed by Japanese vegetation ecologist Akira Miyawaki in the '80s and adapted by urban cities like Singapore, Kenya, New York, and now Mumbai, crafting these DIY forests requires saplings with well-developed roots of 20 to 50 different species planted closely together in a random mix like one would find in the wild.

Advocates for the method say these micro forests "grow 10 times faster, 30 times denser and are 100 times more biodiverse" than those planted by conventional methods.

Tripathi has sown nearly 7 lakh saplings in and around Mumbai and gearing up to plant another lakh across Navi Mumbai before monsoon. BMC too has planted 2.21 lakh trees to fill 43 tiny Miyawaki forests over the past year, the first of which bloomed near Worli in January. "The BMC, in its budget for 2020 and 2021, allocated Rs 20 crore to plant at least 3.75 lakh trees using the Miyawaki method and the fact that most of these trees have reached a height of 5 to 7 feet in just one year is a sign that the forests are growing properly and can become the city's lungs," said Jitendra Pardeshi, BMC's superintendent of

gardens.

A would-be forester needs to bear a high initial cost for the intensive process of surveying natural vegetation of the area, to test the soil, dig pits, build nutrients into the soil and judiciously plot out a mix of trees. "It can cost you up to Rs 500-800 per sapling," says Tripathi.

But is creating mini forests enough to salvage the city's traditional tree cover? Urban planner Pankaj Joshi, principal director of Urban Centre Mumbai, feels, while Miyawaki afforestation of critical stretches with large infrastructure projects may be a good way to heal sore plots of land and a great alternative to "farcical" tree transplantations that don't survive, "Care has to be taken that most species planted are indigenous," he says, pointing at the silver oaks brought into Panchgani between the '20s and '40s. "It's been 100 years and even now birds don't sit on those plants nor eat their fruit. It's important that these trees don't just perform as a plant but the entire ecosystem responds."

Tripathi agrees. Just a shade of green does not mean biodiversity. "The flaming red Gulmohar from Madagascar, rain trees native to South America or yellow peltophorum from southeast Asia that you get to see in Mumbai these days are all non-native with hardly any birds nesting in them," he says.

And though Miyawaki forests cannot replace natural ones — "carbon content in an individual tree is less compared to one growing in a natural forest and they score less in hydrology due to a lack of deep roots" points out Subhash Ashutosh, director general, Forest Survey of India — the pros outweigh the cons. "Miyawaki forests can still be effective as a quality reforestation process because their total biomass content is high and so is their nutrient uptake due to their dense 1000-tree cluster of different species compared to natural forests with not more than 250-300 trees," reassures Ashutosh.

Tripathi recently planted 40,000 saplings at Nisarga Udyan in Koparkhairane that will transform the 3-acre landfill site into the largest urban forest in Mumbai metro region. "No land is bad land anymore," he smiles.