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Chennai: Kottur forest to give 200 tonnes of O2

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The urban forest that Greater Chennai Corporation (GCC) is growing on a small patch of land near Kotturpuram MRTS station will consume 43.5 tonnes of carbon dioxide and give out 200 tonnes of oxygen every year after maturity, the civic body's official statistics showed.

According to BBC Science Focus magazine, a human breathes about 9.5 tonnes of air in a year, but oxygen only makes up about 23% of that air, by mass. A person only extracts a little over a third of the oxygen from each breath. That works out to a total of about 740kg of oxygen a year. Which is, very roughly, seven or eight trees' worth.

The forest which is coming up on 20,000sqft is being done according the Miyawaki scheme a Japanese method of growing different varieties of trees on a small patch of land using organic manure. The site was earlier a dump yard for construction debris. In all, 1,600 tonnes of debris was removed from the area to plant trees, an official said.

The corporation said 2,000 saplings of 40 varieties have been planted at the spot at a gap of 1m. Saplings include traditional varieties like poongan, peepal and neem. Fruit-bearing trees would also be part of the forest.

In the first year, the forest would consume 11.7 tonnes of carbon dioxide and give out four tonnes of oxygen.

The civic body sources said this calculation was provided by a consultant based on already established studies.

Dr S Balaji, former principal chief conservator of forests and a forestry expert, told TOI that the extent of carbon dioxide consumed is based on the number of leaves, thickness of the trunk and the weight of a tree. Plants and trees consume carbon dioxide during the day to synthesise biomass and in the process give out oxygen.

"For trees that grow faster, like bamboo, the rate of photosynthesis is higher and hence it would give out more oxygen," he said. The Miyawaki system uses organic manure and soil for growing trees. Wet waste (converted to manure), coir, cow dung and other similar material is used as an organic manure.

Source: https://timesofindia.indiatimes.com/city/chennai/kottur-forest-to-give-200-tonnes-of-o2/articleshowprint/73676380.cms