REGENERATING THE MICRO-CLIMATE OF CHENNAI

With a collaborative effort, and sustained initiatives, Indian cities could effectively address the impact of rising city temperatures, says DURGANAND BALSAVAR

The intense summer in Chennai calls for a range of tangible projects to address the micro-climate of the city. Intervention in a city is often considered either audacious or new ones, indigenous to the region, impossible. However, there have been several initiatives in the past to improve the micro-climate of the city. Agricultural scientists at the M S Swaminathan Research Foundation suggest that cover in Chennai, protect and plant tree more than tree-planting schemes perhaps initiated projects, wherein the process of nurturing can volunteer to conserve the city’s bio-diversity. Dr Indukanth Ragade, a water management expert, has established a simple process for this which is capable of saving as much as 50 to 60 % of the total water used and make it fit for flushing and gardening. If allowed to percolate into the soil, it gets further polished and becomes fit for general use. The process, which is operating in several places in Chennai uses only soil, sunlight and water-loving plants, is practically self-sustaining and needs minimal maintenance. In his book “Self-Reliance in Water - A Practical Manual for Town and City Dwellers” he has given exhaustive details for both rainwater harvesting and grey water recycling. (He can be contacted at isragade@yahoo.com)

Solar and wind energy is gradually gaining a wider acceptance. In the context of high land values, these sources of renewable energy are no longer considered expensive initiatives. The Mahindra World City, New Chennai, in its endeavour to be self-sufficient has installed solar panels and is experimenting on bio-fuel at its research centre. The Master Plan has also dedicated a substantial area for green belts as well as water recharge zones. In the light of climate change initiatives and its adverse impact in urban areas, environmental organisations are studying the implications of building materials and the energy they consume during production, the waste they generate and the heating impact it creates in constructed structures. Climate responsive buildings, through their design, reduce the need for air-conditioners. The Golconda House designed by Raymond Antonin in Pondicherry (1935) and traditional houses with their inner courtyards are a case in point, where buildings create their own micro-climate, with natural ventilation and light. With a collaborative effort, and sustained initiatives, Indian cities could effectively address the impact of rising city temperatures as well as energy conservation.

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