

NATURE LOVERS

Bangalore's green warriors



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They harvest rainwater, treat grey water, plant trees and recycle kitchen waste to redeem the Garden City's reputation

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Do you give back to the earth what you take from it? Surely you've been asked that question at least once. If you live in Bangalore, you've probably been asked that more than once. On the verge of losing its identity as the Garden City, with interminable traffic jams and a construction boom, Bangalore is also seeing a movement of sorts to redeem itself.

Seema Purushottam, a researcher with Ashoka Trust for Research in Ecology and the Environment (Atree), says: "Bangalore has reached a point where its residents are beginning to have serious worries about its future. There's a gradual rise in efforts to restore its environment. It will take much more effort and a long time to see the effects, but a beginning has certainly been made."

We met some individuals and communities who are showing the whole country how to think and live green.

A FAMILY AFFAIR

When I first met Vishwanath S., who runs Rainwater Club in Bangalore, he held out a bamboo rainmaker and shook it. The sound it made was similar to that of falling rain. "If only people knew how to utilize the resources they have and not waste it," he says. He should know, because his wife Chitra and he used every possible natural resource when they built their house in Vidyanayapura in Bangalore. The home, designed and conceptualized by Chitra, an architect, was a nature-friendly endeavour right from the drawing-board stage.

"For making bricks, we used soil excavated from the plot on

which the house was built," Vishwanath says, as he leads me to the terrace to see the rainwater harvesting system. The terrace also houses the grey water treatment system. "Grey water," he explains "is the water that comes out (of your washing machine, bathroom or your kitchen sinks)." To make it reusable for horticulture is a fairly simple process: Pump the grey water out of the machines and pass it through a sand bed which contains plants such as bamboo and reeds. The roots of these plants utilize the nutrients present in the waste water and the sand bed purifies it, making it safe to be used for watering other plants. "The investment for a grey water treatment system can cost as little as Rs1,000," he says. Even though this is a great way to lower water consumption, not many people think about going that extra mile. Chitra feels that the real challenge lies in convincing people to change lifestyles.

FREE FOR ALL

Janet S.K. Yegneswaran started planting trees in Bangalore in memory of her husband three years ago. "I wanted to do something, and trees were the need of the hour. Everybody was crying over the felling of trees in Bangalore, but nobody was planting any." A landscape artist by profession, Yegneswaran says that the sight of Bangalore



becoming a grey concrete zone broke her heart. In 2005, she set up Treesforfree (www.treesforfree.org), an organization that has planted more than 3,200 trees in Bangalore so far.

The beginning wasn't without hiccups. "I had to knock on people's doors and ask them if they were willing to look after a tree if I planted one in front of their house, free of cost. Most people were hesitant; I only managed to plant about 250 plants in the first year," she remembers.

Bangaloreans are now embracing her passion. Yegneswaran receives calls from across the city—people want trees to be planted on roads and in their houses, sometimes even

a few hundreds at a time. "Recently we planted many trees at a residential complex where there wasn't a single tree. Ironically, the complex was named Tropical Paradise."

Yegneswaran and her team of volunteers plant trees in a building only when residents are willing to take care of them. But once in a while, she plants peepul or neem trees because the latter has medicinal properties. "Companies like Yahoo and JPMorgan Chase have sent volunteers who help us plant trees and Himalaya Herbal Health Care has sponsored more than 300 neem trees," says Yegneswaran, hoping that more companies will follow by example.

Torch-bearers: (above) The Vishwanath family recycles water used in the bathroom and in washing machines for horticulture; (left) Kasturi makes compost out of waste by using earthen pots.

"People join us every Saturday, as we go across town planting trees. There is a volunteer, Soumya Iyer, who comes every week without fail, leaving her baby in her husband's care. When I see her dedication, (I feel) Bangalore has a future," she says.

DON'T RUBBISH THE WASTE

Did you know that if you cook at home, your kitchen is likely to produce at least 750g of natural waste every day? If recycled, it can make compost and be used to replenish the top layer of any soil. Two years ago, Poonam Kasturi started Daily Dump (www.dailydump.org) not just to help people in Bangalore manage their household waste usefully, but to help them achieve their goal of becoming nature-friendly citizens. "There are so many myths associated with composting—it's difficult, messy—but in reality, it is easy. All you need is the right information," says Kasturi.

To get started, you need a Daily Dump compost or *khamba*. Each *khamba* consists of three pots placed on top of the other. Your kitchen waste should be thrown in to the top-most pot and this pot should be replaced by the second one once it is full. The two top pots shouldn't have bottoms and should be separated by a sheet of newspaper. It takes about 90 days to get a whole pot of compost. "Most households," says Kasturi, "end up using the compost in their own garden, or for their potted plants because even after composting an entire month's kitchen waste, you get only a few handfuls." Nurseries are also willing to buy compost at about Rs20 per kg, so families which generate a lot of it can donate or sell the organically rich substance.

Kasturi and her team have worked with more than 1,200 families so far, and they hope to see a composter in every home in Bangalore. The composters are available in three sizes, with a starting price of Rs400.

A COMMUNITY CHOICE

Like the Vishwanaths, an eco-friendly lifestyle is becoming a matter of choice for many other Bangaloreans. Many of the newer villas and apartments in the city are being constructed in a manner that causes minimum damage to the eco-system. Among the first builders in Bangalore who made the effort was Total Environment in 1996. It brought in the concept of buildings made out of natural material, with lots of trees and plants in the landscape. "People want to live in natural environments and the demand has gone up significantly since 2005," says Alex Kurian, assistant vice-president, marketing, Total Environment.

Families which live in TransIndus, a sprawling 42-acre complex with 15 villas, practise rainwater harvesting, separate waste every day and ensure that their electricity usage does not go above the set limit of 3kV per month. But these are very basic efforts, say the residents of TransIndus, a housing complex that was built by Biodiversity Conservation India Ltd (BCIL) in 2000.

Ramesh Babu, president of the TransIndus Residents Welfare Association, points out that all 15 families follow the "green" rules set by the association, but believes they still have a long way to go. "Living a green lifestyle is a lot more than just buying property from a builder who has started the initiative. The community has to keep it going. For example, now we want to create biogas, but it's difficult for us to do that without help from the builder. Builders should help residents discover new conservation methods," says Babu.

"Over the years, the number of people who have approached us to help build eco-friendly homes has gone up," says Chandrashekar Hariharan, managing director, BCIL. Their second residential property (built in 2007) has made more headway in becoming an entirely self-sufficient, closed-gate community. Their T2ed apartments—T2ed stands for Zero Emission Development—have 95 homes, mostly apartments, with a few villas. The complex has a central biogas digester (essentially compressors that convert wet biodegradable waste from the households into combustible fuel, which is then supplied to every kitchen instead of LPG, or liquefied petroleum gas), and solar water heaters. All apartments are connected to a central AC plant which uses ammonia, instead of CFC (chlorofluorocarbons) as refrigerant. The use of ammonia cuts the electricity usage by up to 40%.

"The residents end up saving more than Rs12,000 per annum because of the limited electricity they use. We hope to be entirely free of power grids one day," says Hariharan.

But, is buying an eco-friendly home a more expensive deal? "Not really. T2ed apartments were sold at almost the same price as other apartments in the Whitefield area," says Hariharan.

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