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This startup replenishes greenery in urban cities using lightweight, soilless products

Natura uses coco peat, which has the ability to absorb and retain 6x its weight in moisture, thereby reducing watering frequency and maintenance requirements

Natura Landscape

A recent study conducted by two scientists at the prestigious Indian Institute of Science (IISC) has found out that by 2020, Bangalore will be "an unlivable sea of concrete and glass" with barely any trees, all thanks to the unplanned urbanisation. The IT hub's greenery will reduce to nearly 6.46 per cent from the 63 per cent green cover it had in 1973, they forecast. In the next couple of years, 93.26 per cent of Bangalore will be covered by concrete structures and the city will be dead by then, according to Dr TV Ramachandra, one of the scientists who conducted the study.

Unsurprisingly, not just Bangalore but other Indian cities are also fast-becoming uninhabitable. Trees are mindlessly felled for skyscrapers, water bodies are fast disappearing, and temperature is going up. And this has contributed to and accelerated global warming. But authorities are still in the hybernation mode.

"Over the span of last 34 years, there has been a 1,005 per cent increase in concrete area in Bangalore. Nearly 88 per cent of vegetation and 79 per cent of water bodies are lost. This year saw record summer temperature. If this trend continues, there will be only 5 per cent green cover by 2020," says Abishek Thomas, Director of Natura Greentech (http://naturaindia.com/).

"The only option left in front of us is to utilise available spaces and structures to replenish greenery, and provide people with possibilities of greenery in limited space. We at Natura can help achieve this goal," he adds.

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Started in 2017 by Thomas and his father Tommy Mathew, as a subsidiary of Naturaflux Pvt Ltd., Natura Greentech provides environment-friendly wall/roof systems and landscape solutions to large enterprises and real-estate developers. Its team has over 40 years of experience with the fibre and has developed a wide range of products, including mattresses, coir-ply for furniture, geo-mats for soil protection, water retention mats for better plant growth and stability.

Natura's primary focus is to develop products that helps urban cities with replenishing greenery, while keeping an eye on water consumption, ease of maintenance, cleaner breathable air and temperature moderation. The company does this by using various light-weight materials.

"The greatest challenges to green urban India is the usage of soil which is heavy, water seepage, costly infrastructure requirements, and maintenance. Natura overcomes these challenges by using soil-less technology. We have developed the Natura Super Absorbent Polymer Substrate (NSAP), a proprietary lightweight modular media slab, which is easy to use and requires 6 times less water than soil-based media," he shares.



Natura's plants growing media is made of coco peat, which, Thomas says, has the ability to absorb and retain 6x its weight in moisture, thereby reducing watering frequency and maintenance requirements. It also boasts of an ability to transport moisture upwards.

"We have developed an in-house adhesive that, when combined with the coir fibre and compressed using a heated press, forms unique crystals binding the fibres together and forming a lasting bond strengthened with moisture. The media base used for growing plants also has a unique compression formula, which allows it to retain six times more moisture than regular soil," Thomas explains the technology behind the system.

Currently, the company offers five systems — green wall system, green roof system, interior plantscaping, designer gardens, and geomat.

Green wall system is an eco-friendly non-plastic system, which is pre-grown and acclimatised to suit each client's site and plants are well adjusted to thrive in any given environment.

The green roof system covers the roof of a building partially or completely with vegetation. This lightweight system can be easily installed on existing structures and customised to any area or shape and helps reduce internal temperature and cooling needs. While a regular soil-based system takes 10-15 days, Natura can install a 5,000-sqft system a day with a 6member team.

Geomat is a flexible and versatile module made with coconut fibre. It employs proprietary compression formula and adhesive in making geomats that can be used in a range of applications.

"We have well-trained and experienced garden maintenance team to help clients keep their gardens up to the mark with the help of innovative technology and techniques," Thomas notes.

Natura has installed its various offerings at several large businesses and real-estate developers in India, including Flipkart-owned fashion e-tailer Myntra, Bharti SoftBank's instant messaging company Hike, PayPal, Honeywell, Deutsche Bank, Sheraton Hotels, and Brigade Developers.

The company was part of second batch of Brigade Real Estate Accelerator Program (http://brigadereap.com/).