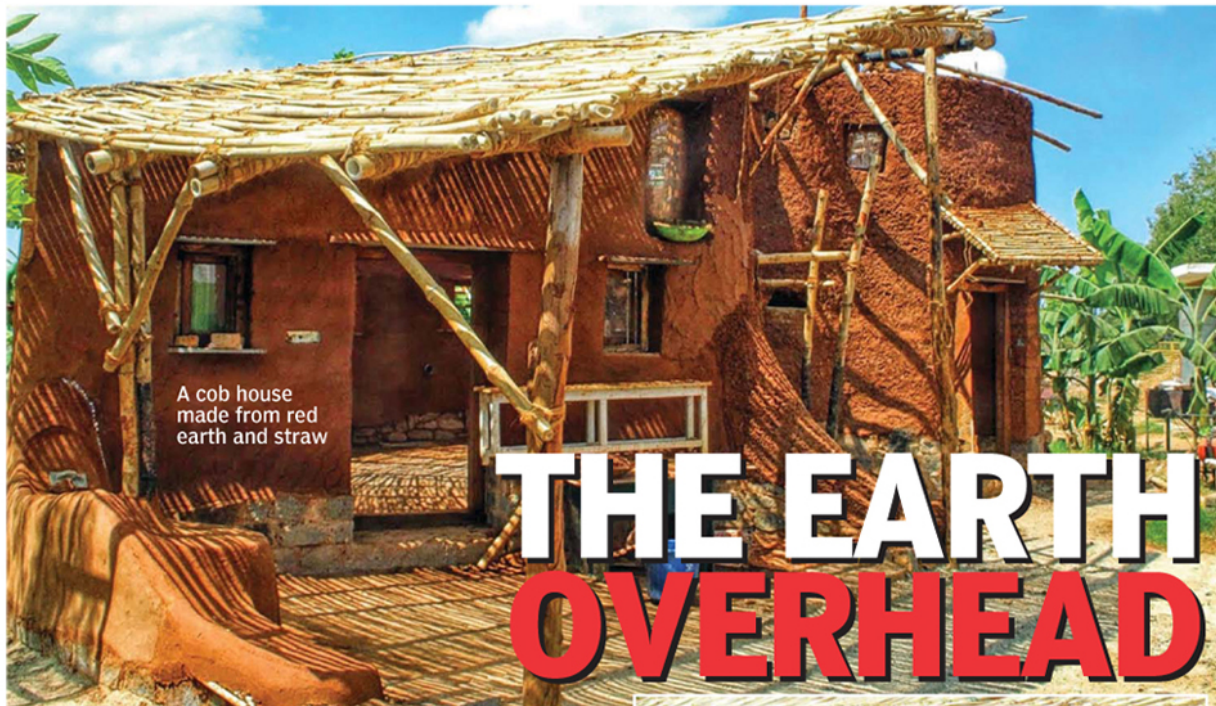




A cob house made from red earth and straw

THE EARTH OVERHEAD

Thannal, an NGO trains architects and designers in the concept of natural, organic shelters

SANOBAR SULTANA I

DECCAN CHRONICLE

A team of five architects from the organisation Thannal Hand Sculpted Homes constructed a simple 342 sq. ft. artist's studio in Thiruvannamalai using bamboo, coconut and palm leaves. The other raw materials for the studio were sourced locally and the palm and coconut leaves were harvested, dried and woven for the shelter. Through this initiative, the team wants to convey the value of palm as a sustainable crop, encourage the planting of palm trees to restore them to a viable population, and reviving palm shelters.

This is one among the many measures taken up by Thannal (meaning 'shade' in Sanskrit), which wants to promote ecological architecture among architects and builders by teaching them through demonstrations.

Biju Bhaskar, who founded



Thannal in 2011, recounts its early days. "I joined an architecture college in Manipal in 1993, but dropped out in the third year as I felt that art and architecture are inter-connected. So, I packed my bags and set out to explore this connection. Midway through my journey, I reached Khajuraho, where I learnt to make sculptures from *kulbel* tribes. They use only driftwood and elements from nature for their work," he recalls.

He also met Professor Valsan Koorma Kollerli from Maharaja Sayajirao University of Baroda, who encouraged him to complete his studies and then pursue his dreams. "I completed my degree from the Indian Institute of Architecture in 2009 and then founded Thannal. The most important lesson I received from the tribes, which can't be found in any textbook, is that one can build homes with their own hands. This was the foundation for Thannal and I set it up in Tiruvannamalai because of the spiritual connection I have with the



VOLUNTEERS AT WORK

location" he says.

"Our aim is to reach out to students, architects, and villagers and turn them into natural builders who utilise minimum space and use only natural materials," says Sindhu Bhaskar, co-founder of Thannal. Techniques such as rammed earth, cob, wattle and daub are taught to them. "Most of the architects who pass out of colleges cater to the 25 per cent of the population that lives in the concrete jungle and in high-rise buildings. We want to create niche builders who can cater to those who live in villages and are rapidly forgetting the mechanics of building homes with natural materials," she adds.

Taking up assignments to train students and volunteers who intern with them, the team creates homes for village dwellers and are now currently creating a training unit for organic farmers in Tumkur. These homes are less than 1,000 sq ft in area and can be built within six months depending on the weather. Lime

stone replaces cement, bamboo plays the role of iron beams, water-proofing is achieved by using a fermented mixture of herbs, *Kadukkai* (yellow Myrobalan), palm jaggery and lime. Sand, clay straw, reeds, leaves and stones are obtained from the location itself.

Highlighting the advantages of such organic homes, Anushree Tendolkar, an architect and volunteer at Thannal believes that earthen homes can survive earthquakes. This concept was well illustrated by Nripal Adhikary, founder of ABARI (Adobe and Bamboo Research Institute), who spoke about this extensively in a BBC report during the Nepal Earthquake. "Also, unlike cement, lime has a cooling effect, which leads to savings of up to 30 to 40 per cent on energy. We make natural paints and use turmeric and beetroot juice as colouring agents. This takes away the toxicity caused by emulsions," she says, adding, "Having traveled across many villages, I realised that each location has an endemic architecture. We are planning to set a school that documents and teaches these learnings," she concludes.

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— BIJU BHASKAR