

THIS MINI, MAN-MADE FOREST IS A GIFT TO HUMANITY



Imagine you get to know that a few cents of land close to the city is up for sale and it comes too. Not to forget a river flows by. What would you do? Build a villa or a house with a garden, right?

“ While an average Malayali would build a 2000-sq.ft. house with a garden in the land, this techie chose to make it a mini man-made forest

But that's not what Hari M R, the Managing Director of Invis Multimedia (<https://www.invismultimedia.com/index.html>) had in mind. He was clear about what he wanted to do: convert the barren land into a reservoir of different species of plants and trees – simply put, a mini man-made forest!

Situated near the originating point of Karamana river, Hari found two acres of land in Puliyaarakonam, a suburb in Thiruvananthapuram less than 15 km away from the main city.

You are sure to breathe in some fresh air while approaching this spot. On the way to the man-made paradise, which is on a hill-top, I was introduced to a variety of medicinal plants, some that are rare and used to treat cancer.

Further up, the land is divided for different kinds of farming: medicinal plants like various species of *tulsi*, passion fruit on one side; pineapple on the other (which grew naturally). Hari has also dug up a well and a bore-well to make watering of plants easy. To save water, he has planted saplings in paint buckets that need less water than those planted directly on earth. He has also built three tanks that store two lakh litres of water.

“I have, however, got permission from the government to take water from the river,” said Hari.

Further up, there are tanks built for storing asola, a type of fern, which serves as fodder to cattle, poultry and fish. Each tank can hold up to a kilo of asola which is rich in proteins and can be cooked and eaten by humans too. Adjacent to this, is a strip of land ploughed for vegetable farming and Hari plans to make it a vegetable forest in the future. He currently grows chillies there. As I walked further into the micro-forest, *aadalodakam*, *amruthavalli*, *neermathalam*, *oorila*, *thaani*, *changalamperanda*, *thippali* and *ambazham* are some of the medicinal plants and trees I saw. The plants are also labelled for a lay man to recognize.

“Medicinal plants will make a difference in the quality of air. The plants here are not fully ayurvedic but the extracts from these plants can be used to make medicines. Around 100 years ago, Ayurvedic plants were part of one's compound at home and any home maker would know to make a normal '*kashaayani*'. However, ayurvedam has been reduced to pharmaceutical medicines and has become more commercial now,” said Hari.

“It is for this reason that I chose to conserve medicinal plants. For example, *kanjiram* which has high medicinal value and trees like *naatumaav* are rarely seen now. We import gooseberry from Tamil Nadu, which may not be rich in quality. I wanted to create awareness among people on this and that

is how I started this initiative,” he added.

He pointed out that not many trees are being planted on the roadsides in Kerala and are lesser compared to cities like Bengaluru and Delhi. “Lack of trees means reduction in bird population and systematic elimination of diversity,” he said. According to him, a common complaint raised by people to develop forests in their house is the lack of space and the possibility of the presence of snakes. “But these issues can be solved easily as micro forests can be developed even in 100 sq.ft. of land to one acre. Also, enclosing the area using nets (used for covering wells), can stop snakes entering the premises,” said the budding environmentalist.

Sensing the importance of this social cause, the government has leased five cents of land in Kanakakunnu to Hari for cultivating a sample micro forest with medicinal plants there. He has also bought lands in Peyad and Munnar for the same purpose. He is planning to do high altitude farming in Munnar. In Puliyaarakonam, he plans to develop three cents of land a year to a forest and gradually have 30 cents of forest in 10 years. “After three years, there is no question of maintenance in the forest as it will become dense,” he added. He is also planning to develop a flower and fruit forest in Puliyaarakonam.

“Afforestation has been my passion for many years. Knowing this, one of my friends suggested that I watch the TED (Technology, Entertainment, Design) talk of ecoentrepreneur, Shubhendu Sharma. I also studied about the Miyawaki Model of Afforestation, conceived by Akira Miyawaki, a Japanese botanist who planted around 40 million trees across the world. I have developed my micro forests based on the Miyawaki Model,” said Hari.

As a prelude to the afforestation model, Hari brought in some cows and bulls to the land to make it fertile. The nearly a-year-old forest has only native plants in it and there are no invasive foreign species.

When asked about the challenges he faced during the process, Hari says the whole process starting from getting the right place for farming to sourcing plants from different people was challenging. Getting water in a dry land was yet again a hurdle. He had to spend Rs 4.5 lakh for the three cents of land.

“I also had to do a lot of homework on the whole process and study plants deeply,” he said. NGOs also come here to learn the process for future replication.