

Just outside the limits of Nashik in Maharashtra, a human-made sacred grove or *devrai* thrives with over 33,000 trees. The trees were planted by nature enthusiasts, students and citizen's groups of the city, who now ensure the upkeep of the forest ecosystem

Guardians of forest

Communities across Maharashtra take on the mantle of biodiversity conservation; replicate sacred groves on common land

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OME 20 KM from Nashik city of Maharashtra is a patch of forest, known as Phaashicha Dongar. As the story goes, this was where the British colonial rulers executed freedom fighters by hanging, and hence the name. As if bearing the burden of the past, the forest patch for decades resembled a barren landscape with a few gliricidia trees here and there. Not anymore. "Today. Phaashicha Dongar hosts more than 33,000 trees belonging to 275 native species. It has also become home to over 70 species of butterflies, 100 species of birds and animals, from peacock to porcupine to monitor lizard, hyena and leopard," says Shekhar

Gaikwad, a resident of Nashik. This transformation has been made possible by nature enthusiasts, citizens groups and students of the city, says Gaikwad, who is at the helm of the initiative.

The 57-year-old has been working for the conservation of trees and landscape restoration for over three decades. From time to time in and around the city, he organises drives to plant trees and water them by roping in volunteers, students and residents' associations. Inspired by his work, the Nashik forest division in 2015 permitted Gaikwad to carry out regeneration activities on a 28 hectare (ha) forest patch at Phaashicha Dongar. That year, on

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Nayana Nargolkar has developed a sacred grove in Gorhe Khurd, on the outskirts of Pune. The 73-year-old began planting native tree varieties with her husband in 1989, and now takes care of the forest that is open to students, researchers and visitors on the weekends.

Pune-based naturalist Raghunath Dhole, who has set up a seed bank of tree species, is on a mission to create mini-sanctuarise across the country. Over the past 12 years, he has driven communities to create over 387 sacred groves in five states



World Environment Day, people from across Nashik joined Gaikwad in restoring the barren forest land, each carrying a native tree sapling and a bottle of water. "About 11,000 native trees of multiple species were planted that day. People also volunteered for regular upkeep of the area," Gaikwad says, adding that within three years, the number of trees increased threefold and the forest floor was teeming with a thick layer of grass, shrubs and creepers. Birds and wildlife had also returned.

Managed and maintained by local communities, Phaashicha Dongar is now referred to as *devrai* or a sacred grove. Explains Gaikwad: Sacred groves are patches of natural vegetation traditionally conserved by communities. Usually sacred groves have a deity that the community members worship. They also adhere to strict rules and restrictions on when to enter the forest area, which areas to avoid in which season and how much resources to extract. This is the reason, sacred groves are repositories of valuable genetic resources of plant and animal species. "We are trying to replicate this principle by maintaining the sanctity of the forest," he says. The Nashik devrai is thus open to visitors and volunteers only the during weekends. During the rest of the week, it remains closed to create an

undisturbed habitat for plants and wildlife.

Similar attempts by communities to restore land and biodiversity by creating mini-forests can be seen at various places across Maharashtra. At most places, these initiatives are led by the passion of individuals.

In Pune, Nayana Nargolkar has been nurturing a sacred grove since 1989. Her husband Pramod, an entrepreneur, had purchased a 5.2 ha land on the outskirts of the city in Gorhe Khurd. "He was a nature enthusiast and wanted to replicate the ecosystem of Melghat forest on the land. Over the years we purchased another 13 ha and planted native tree varieties there," recalls

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the 73-year-old. However, Promod went missing during his trip to the Andaman and Nicobar Islands in 2004, when the devastating tsunami struck the archipelago. Since then, Nayana and her son, Amol, are taking care of the forest. "These forests now serve as an open library for students and researchers to learn about the biodiversity that is rapidly getting lost. Apart from trees, the place is sprawling with insects, micro-organisms, reptiles, worms and lichens," she says.

Biodiversity resources, including plants, animals and fungi, are particularly critical for communities who depend on the nature for their livelihood. "These days, it is

livelihood. challenging to even find several native trees," says Durvodhan Nanaware, village head of Velu village in Satara district of Maharashtra. So, over a decade ago, residents of the village decided to set up a sacred grove to conserve and protect traditional tree species from going extinct.

"We planted about 1,000 trees along an artificial lake in the village that was created during the worst drought of 1972," says Nanaware. The aim was to create a mini-forest that would offer shade and act as pastureland for the livestock. The land is unfenced and surrounded by bamboo shrubs for minimal protection from large animals. Goats roam freely to feed on it. There are birds and bees that visit the human-made forest, he adds.

In Pune, Raghunath Dhole, a naturalist, has meticulously created a seed bank of forest tree species that are native to India, and helps individuals and communities who wish to set up mini-forests or sacred groves. For instance, he has collected and preserved seeds of 200 tree species from the forests of Maharashtra alone. "Some environmentally conscious citizens also collect the seeds of native tree varieties from their backyard, forests or other places and send those to us via post. No money is charged from those who procure these seeds," says Dhole. Over the past decade, he has helped communities create over 387 sacred across Maharashtra. groves Gujarat, West Bengal, Tamil Nadu and Karnataka.

Dhole cautions against confusing the mini-forests with conventional plantations. Since the aim is to replicate the immense biodiversity

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and ecology of the forest, each miniforest is spread over a minimum of 0.4 ha and houses about 150 species. "A conventional plantation does not have such a wide variety of tree species. These native trees offer ecological services by housing birds, offering them food and aiding in water conservation," he says. Trees are also planted in a systemic cluster. For instance, four plants of each species are clubbed together in a square or a line which enables easy collection of seeds when they drop on the ground, Dhole explains.

Similar to natural forests, these human-made sacred groves also face threats, such as diseases, logging and encroachment. Baban Sabale, who has created a sacred grove replacing about 0.8 ha of his sugarcane land with nearly 1,000 forest tree species, says, "Farmers in the neighbouring area did not want any shadow hindering the growth of their crops. They chopped some of the trees along the border."

Sabale says that having a forest in the middle of his farm has increased his yield of rice by 20 per cent. "The good insects and increase in organic matter of the soil helped in improving productivity," he says adding that the forest has helped retain groundwater levels through the year allowing him to take promising two crops a year compared to single earlier. He adds that more awareness is needed for

people to understand the importance of biodiversity.

Gaikwad says miscreants often set patches of forest on fire or fell the trees. "Through community funding and using money received under corporate social reponsibility, we have now managed to hire two security guards to be forest " he adds

patrol the forest," he adds.

Nargolkars' forest has also shrunk. Since 2004,it has experienced deterioration due to neglect, encroachment and illegal felling. Nayana says given the rich biodiversity of the sacred grove, forest officials suggest declaring it as a community forest, so that it receives due protection. "We also plan to set up a research centre inside the forest which will be dedicated towards conservation of biodiversity and open for the public," Nayana adds. DTE @@down2earthindia

(The reporter is recipient of Promise of Commons Media Fellowship 2024, on the significance of Commons and its Community Stewardship)