

Citizens attempt to revive mahua trees in Mumbai

- *A citizen's group is undertaking plantation of the mahua tree for its varied benefits.*
- *While mahua was once seen in Mumbai, over the years, deforestation for urban growth, space constraints and the fact that mahua takes more than a decade to flower, have limited the spread of this species in Mumbai.*
- *Mumbai has lost 1,31,585 trees in the five years between 2016-17 to 2020-21.*

Pratiksha Gurav, 42, a vegetable vendor who grows her own vegetables, has two mahua trees on her farms in Aarey Milk Colony in north of Mumbai city, and plans to plant more mahua now. "Both my mahua trees have just started flowering but the flowers were gathered and taken away by random people. The mahua's dried and crushed flowers are consumed with milk. Our relatives in places around Mumbai like Jawahar and Palghar, continue to use oil from pressed mahua seeds even today. I got a bottle of oil from there and found it quite tasty for cooking. I also relished the vegetables made from mahua fruits," says Gurav, a resident of the tribal hamlet Jivachapada in Aarey.

Her father Kishan Lahare used to go in to the forests to pick up forest produce and firewood for selling. Back then, the family recalls seeing many mahua trees in the area. Subsequently, once the land adjoining the current Aarey Milk Colony, was cordoned off to develop the Film City, access for the tribal families was stopped.

Now, a citizen afforestation initiative in Mumbai has taken up plantation of the native species of the mahua tree in the city to not only compensate for the loss of green cover in the city, but also to ensure its utility for approximately 300,000 tribal communities (adivasis) in the city.

About 100 saplings of the [multi-use native](#) mahua (*Madhuca longifolia*) have been planted or handed over to the local tribal communities for plantation, by the Ped Lagao Ped Bachao (PLPB) group. The activity has been done in various phases across Mumbai Metropolitan region since January 2020.

Unlike regular trees, mahua takes really long to flower and hence is not commercially viable to plant, says Gurav.

Her family has also taken mahua saplings from PLPB to plant and regrets not having planted one long ago. "Had we planted a mahua back then, our mahua would have flowered by now," says Gurav's mother Kashibai Lahare.

Tree species chosen for plantations by PLPB are based on recommendations that emerge from interactions and engagement with the local community. Photo courtesy Ped Lagao Ped Bachao.



Botanist Sasirekha Sureshkumar, quoting from the book *Indian Trees* by Dietrich Brandis, says that mahua is chiefly found in the moist forests of Deccan and along the Indian peninsular region below the Konkan belt, mainly on the banks of rivers. Sureshkumar, who is also a member of the managing council of National Society of the Friends of the Trees estimates that the actual number of mahua trees in Mumbai could be very sparse. “I do recall them being found in the interiors of the Sanjay Gandhi National Park (SGNP) and have heard of it being within the precincts of the Mumbai zoo,” she says.

Afforestation initiatives are important in a city like Mumbai where the city has lost over a 100,000 trees in the past five years, with the numbers dripping from 3.1 million in 2016-17 to 2.97 million in 2020-21 as per the Brihanmumbai Municipal Corporation’s (BMC) Environment Status Reports. The city has a per capita tree cover of [0.28](#) according to a study by the NGO, Praja Foundation.

The multi-purpose mahua

Mahua flowers, fruit and even the sap are used for various purposes – the flowers are dried and distilled for liquor or made into pickles and *ladoos*, dried fruits are consumed as a vegetable, and the sap is used to make gum. Mahua seeds are pressed for oil, which is used both for cooking as well for therapeutic massages. Its leaves and bark are used for medicinal purposes.

“We wanted to replant lost native forest trees like mahua that used to feed indigenous people before deforestation created man-made food shortages. About 30 percent of the dietary requirements of the Warli tribes (indigenous inhabitants in and around Mumbai) used to be met by the fruits, flowers and oilseeds of the mahua tree alone. Once the tree flowers in about a decade, it would be like a factory of sugar, Jaggery, cooking oil, fruits, a mosquito repellent and even liquor,” explains Sanjiv Valsan, organiser of the PLBC

initiative. “With many mahua trees lost out over a period of time, shortage of such trees needs to be corrected. Also, the species chosen for plantations are based on recommendations that emerge from interactions and engagement with the local community. After all, we cannot divorce conservation from the needs of the local community.”

Valsan explains that this drought-resistant tree, that sustains itself by tapping the groundwater resources, should be an excellent source of uncultivated wild foods that are the most eco-friendly for human consumption. “The mahua is organic, highly nutritious food available free of cost involving zero input cost or efforts like irrigation. The continual use of mahua would induce humans to engage with and preserve the forest, like the adivasis have been doing for centuries. Natural farming and wild food use would be vital to incentivise humans to save forests and fight climate change,” says Valsan.



The mahua tree has a variety of uses. [Photo](#) by Dinesh Valke/Flickr.

The group is also planting other native useful tree species like wild jamun (medicinal value), kanchan or *Bauhinia variegata* (edible leaves), hadga or *Sesbania grandiflora* (edible flowers and leaves, soil replenisher), shehtut or local Mulberry (edible fruit), jackfruit (fruit/vegetable), putrajiva (medicinal), kalamb or *Mitragyna parvifolia* (medicinal use) and Pangara or *Erythrina variegata* (supports birds).

While the usefulness of mahua, especially for the tribal population, is well-known, rapid urbanisation and development projects restrict the plantation and growth of these trees. Additionally, because mahua tree takes years to grow, almost a decade for it to flower and requires more space to grow because of its wide girth, people are discouraged from taking mahua for plantations.

The lack of trees also means the [lack of seeds](#) for propagation. Though the mahua flower sputters seeds and such seeds are easily available around the trees, shortage of these trees means that people who want to grow them have to depend on plant nursery. “Sourcing seeds of mahua for plantations is really difficult, since locating a good mahua tree nearby is quite difficult. So, we source the seeds from distant trees and then grow them in our nursery. Since people lack patience enough for the mahua plant to grow on its own, people seek tall saplings that will ensure quicker growth. Thus, taller the mahua sapling, higher the price it fetches as it would mean less time for it to flower and mature. A 9-foot-long mahua plant sells for Rs. 1500 with the advantage being that it will start flowering within a couple of years,” says Lalit Dalvi of Lalit Nursery, who stocks different species in his nursery near Lonavala.

Space is another issue in densely populated Mumbai and as the tribal communities fight to hold on to their living spaces, the area to plant large trees is limited. “Many of our tribal community members are denied and struggling for permissions for basic facilities like water connections. Also, with urbanisation closing in, mainly in the form of slums and other infra projects has resulted in a shortage of space to plant trees. Even if people were to plant trees, shortage of water and space restricts them from taking up plantation of mahua,” says Nalini Bhujad, a tribal leader from the Shramjeevi Sanghatana union.

Link: [Citizens attempt to revive mahua trees in Mumbai \(mongabay.com\)](#)