

Delhi govt plans to create 'urban forest' in Najafgarh

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What is a Miyawaki forest?

Pioneered by Japanese botanist Akira Miyawaki, these forests have thousands of native trees grown closely together in a small patch of area, so that they receive sunlight only from the top and they grow upwards, instead of sideways

Experts speak:

“...essentially, it is just a green wall and not a forest”

— Environmentalist Pradip Krishen

Some Miyawaki forests in

Delhi: Mayur Vihar Phase 3, Dwarka A-2 block, Brahma apartments in Dwarka Sector 7, Badu Sarai village, near the CAG building at ITO (in photo)

The forest and wildlife department is set to create its first Miyawaki forest at Kharkari Jatmal in Najafgarh in southwest Delhi and has floated a tender for the project, officials aware of the matter said

on Tuesday. They said that the forest will be created over an area of 2.4 hectares, and added that the department has planned for another such forest in Najafgarh's Jainpur village.

Officials said the Kharkari Jatmal and Jainpur forests will be treated as pilot projects, and if successful, the department will create more such forests in the city.

Pioneered by Japanese botanist Akira Miyawaki, a Miyawaki forest has thousands of native tree species grown closely together in a small patch of area. Compared to a conventional forest, a Miyawaki forest is not only several times denser, but can also be ready in two to three years.

However, experts cautioned that Miyawaki forests cannot replace the ecological role that conventional forests perform, adding that this is an option only for small, cramped [urban](#) spaces.

Delhi already has more than 10 Miyawaki forests, created mostly by the Union government, Municipal Corporation of Delhi, NGOs, and individuals. This is the first time that the forest department has made a foray into the technique.

"The Miyawaki forest concept has been approved for the first time by the forest department. The idea for this forest was conceptualised and approved last month, and will see high-density plantation in a fairly large plot of over two hectares. Two to three saplings will be planted within one square metre of area," said a forest official, declining to be named.

Navneet Srivastava, deputy conservator of forest (west), who planned the project, said Miyawaki forests can also solve the problem of compensatory afforestation for several developmental projects. "This is a move aimed at balancing both the environment and development," he said, adding that the project will also create dense green pockets within busy urban spaces.

However, experts said that Miyawaki forests cannot perform the same ecological roles as a conventional forest.

Environmentalist Pradip Krishen described such forests as "unnatural", noting that they are devoid of any shrubs or ground-level vegetation. "Trees are grown less than 2 feet apart and they are all competing for sunlight. While they grow fast because of this reason, essentially, it is just a green wall and not a forest. This can be adopted in a small office-space or in a commercial or residential set-up spread, where the idea is to carry out greening, but there is no requirement or use for such a forest in large public spaces," he said.

Faiyaz Khudsar, scientist in-charge of DDA's biodiversity parks programme, said, "In a full-fledged forest, there is a top canopy, a middle storey, an understorey in cases, and then ground-level vegetation, each of which performs its own role and provides a wide range of ecological goods and services. There, plants and grasses are used to create a functional ecosystem with complete trophic cascades that support different types of fauna, which is missing in a Miyawaki forest as only the top canopy or in cases, a middle storey is there. While there will be carbon sequestration, such a forest cannot perform the same ecological roles a conventional three-layered forest can."

Khudsar noted that in Miyawaki forests, the dense top canopy also prevents sunlight from reaching the surface, which slows down any microbial activity.

CR [Babu](#), head of the Centre for Environmental Management of Degraded Ecosystems (CEMDE), said the trees in a Miyawaki forest are generally so close together that they suffer from improper growth. "The complete canopy of trees is missing as they cannot bloom completely due to lack of space. The roots of trees also do not have enough space over time. Such a concept can work in some urban spaces, but it cannot replace conventional plantation or forests," he said.

Source: <https://www.hindustantimes.com/cities/delhi-news/delhi-forest-department-to-create-first-miyawaki-forest-in-najafgarh-plans-for-more-if-successful-101691518924074.html>