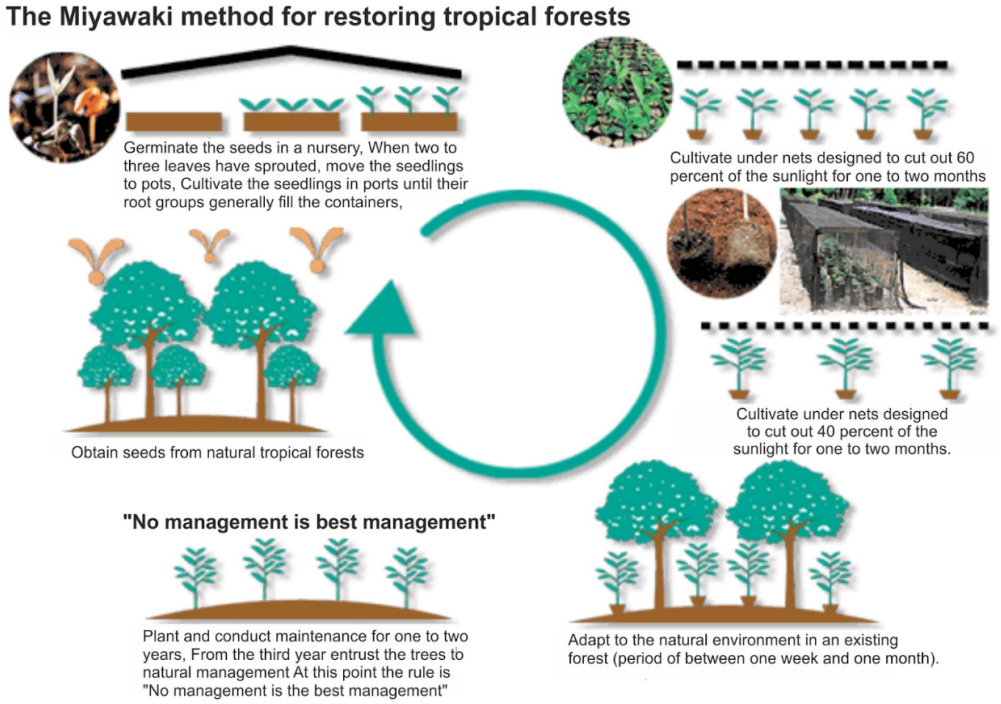
Miyawaki Technique

Why in News?

In preparation for Mahakumbh 2025, dense forests have been developed at various locations across Prayagraj, to ensure pure air and a healthy atmosphere for the millions of devotees expected to visit the city.

- **Miyawaki Foresting** – An ecological engineering technique of afforestation, involves planting a diverse range of *native tree species in a small area*, which then grow into a ***dense, multilayered forest***.
- **Developed by** – *Japanese botanist Akira Miyawaki* in 1970s.
- **Aim** – To create a self-sustaining forest, with a high level of biodiversity and to restore degraded land and combat climate change.
- **Process** – It involves planting *trees and shrubs close* to one another to accelerate their growth.
- Plants ***grow 10 times faster*** with this technique, making it a practical solution for urban areas.
- A completely *maintenance-free*, wild and native forest *after the 1st 3 years*.
- **4 steps of Miyawaki foresting technique**
  - Initial survey of the locality
  - Collection of the seeds
  - Preparation of planting sites
  - Planting



Miyawaki Technique is also known as ***Pot Plantation Method****.*

- **Benefits** – *Up to 30 times more dense* than conventional plantations.
- Up to 30 times better *noise and dust reduction*.
- Up to 30 times *better Carbon-dioxide absorption* as compared to a monoculture plantation.
- It is highly effective in the establishment of *urban forests* as well as converting unproductive wastelands into ecological and socially beneficial productive lands

The Prayagraj Municipal Corporation has utilized the Japanese Miyawaki technique over the past 2 years to establish multiple oxygen banks, which have now transformed into lush green forests. It also contributed to improving air quality, playing a crucial role in environmental conservation.

Reference

PIB| Green Mahakumbh using Miyawaki Technique

