



Miyawaki Technique | Uttar Pradesh | 18 Jan 2025

Why in News?

The Prayagraj Municipal Corporation has developed **dense forests** at multiple locations across Prayagraj to provide pure air and promote a healthy atmosphere.

- Using the **Japanese Miyawaki technique**, the corporation **established several oxygen banks** that have now evolved into lush green forests.

Key Points

- Benefits of the Project:**
 - The initiative **aids in managing industrial waste** and reduces dust, dirt, and foul odours.
 - It significantly improves the city's air quality and **promotes environmental conservation**.
 - Miyawaki forests help reduce **air and water pollution**, prevent **soil erosion**, and enhance biodiversity.
- Environmental Impact:**
 - These forests lower the temperature difference between day and night during summers.
 - They enhance biodiversity, improve soil fertility, and create habitats for animals and birds.
 - Large forests developed through this technique **reduce temperatures by 4 to 7 degrees Celsius**.
- Diversity of Species in Miyawaki Forests:**
 - Fruit-bearing trees:** **Mango**, Mahua, **Neem**, Peepal, **Tamarind**, Amla, and Ber.
 - Medicinal and ornamental plants:** Tulsi, Brahmi, **Hibiscus**, Kadamba, Bougainvillea, and Jungle Jalebi.
 - Other species:** Arjuna, Teak, **Sheesham**, Bamboo, Kaner (red and yellow), Tecoma, Kachnar, **Mahogany**, Lemon, and Drumstick (Sahjan).

The Miyawaki Technique

- About:**
 - Developed by **Japanese botanist Akira Miyawaki in the 1970s**, this method **creates dense forests in limited spaces**.
 - Known as the '**pot plantation method**,' it involves planting native species closely together for rapid growth.
- Key Features and Benefits:**
 - Plants **grow 10 times faster**, mimicking natural forests with dense plantations.
 - Improves soil quality, biodiversity, and carbon absorption.
 - Effective in urban areas for **transforming polluted and barren lands into green ecosystems**.