

Forest Landscape Restoration

What is the issue?

The month of July is the best time to talk about forests and their restoration, as Van Mahotsav or 'Forest festival' is celebrated in the first week of July.

What is the history of Van Mahotsav?

- Van Mahotsav or 'Forest festival' is an annual one-week tree-planting festival in India.
- The history of Van Mahotsav Day goes back to July 1947.
- It was first organized by the Punjabi botanist, M.S. Randhawa.

According to the IUCN, deforestation and forest degradation contribute around 12% of global greenhouse gas emissions and the total area occupied by primary forests in India has decreased by 3.6%.

What is forest landscape restoration?

- Typically, governments have relied on afforestation and reforestation as a means of establishing trees on non-treed land.
- These strategies have now evolved, and the focus now is on forest landscape restoration.
- Landscape restoration is the process of regaining ecological functionality and improving human welfare across deforested or degraded forest landscapes.
- Forest landscape restoration seeks to involve communities in the process of designing and executing mutually advantageous interventions for the upgradation of landscapes.
- Nearly 2 billion hectares of degraded land in the world (and 140 million hectares in India) have scope for potential restoration as forestland.
- A crucial aspect of the landscape restoration process is to **ensure the diversity** of the species while planting trees.
- Natural forests with diverse native tree species are more efficient in sequestering carbon than monoculture tree plantations.
- Planting diverse species is also healthier for local communities and their livelihoods, and has positive impact on the quality of the forests.

What is the importance of forest landscape restoration?

- Forests are integral in regulating ecosystems, influencing the carbon cycle and mitigating the effects of climate change.
- Annually, forests absorb roughly 2.6 billion tonnes of carbon dioxide (CO2). This absorption includes nearly 33% of the CO2 released from burning of fossil fuels.
- Forests are a boon for local communities and their livelihoods by functioning as a resource base for goods and services.
- According to the World Resources Institute, forest ecosystems enrich soil fertility and water availability, enhancing agricultural productivity, and in turn the rural economy.

- Tree planting prevents erosion and stems flooding.
- Sustainable forest crops reduce food insecurity and empower women, allowing them to gain access to more nutritional diets and new income streams.
- Agroforestry lessens rural-to-urban migration and contributes to an increase in resources and household income.
- Planting trees is deeply linked to the 'holistic' well-being of all individuals, the community, and the planet.

What are the programmes carried out in India?

The span 2021-2030 is the UN Decade on Ecosystem Restoration, emphasizing efforts to restore degraded terrestrial ecosystems including forests.

- In 2011, the Bonn Challenge was launched with a global goal to restore 150 million hectares of degraded and deforested landscapes by 2020 and 350 million hectares by 2030.
- India joined the Bonn Challenge in 2015, pledging to restore 26 million hectares of degraded and deforested land by 2030.
- An additional carbon sink of 2.5 billion-3 billion tonnes of CO2 equivalent through forest and tree cover is to be created by 2030.
- Other Indian government programmes are,
 - 1. The Compensatory Afforestation,
 - 2. The National Afforestation Programme,
 - 3. The National Mission for Green India (Green India Mission),
 - 4. The Nagar Van scheme and
 - 5. The Forest Fire Prevention and Management Scheme, etc.
- There is a spotlight on youth via the Green Skill Development Programme for youth who aspire to attain employment in the environment and forest sectors.
- State governments are not far behind either, a case in point being Telangana, which has initiated a large-scale tree planting programme called Telanganaku Haritha Haram.

What are the hurdles in India?

- Forest restoration in India faces hurdles in terms of the identification of areas for restoration, and financing.
- There is a lack of importance accorded to research and scientific strategies in tree planting, stakeholders' conflicts of interest, etc.

What is the way forward?

- To be successful, forest landscape restoration must be implemented proactively.
- Strengthening landscapes and forest ecosystems to be durable and adjustable in the face of future challenges and societal needs is a must.
- The restoration of natural forest ecosystems can be strengthened through participatory governance by engaging stakeholders, as in the Punjab example.
- Vulnerable forest-dependent communities should be factored in, and any effort should be tailored to the local socio-economic context and landscape history of a region.

Reference

1. https://www.thehindu.com/opinion/op-ed/a-plan-that-is-much-more-than-just-planting-trees/article65617158.ece

