



Tree Transplantation

For Prelims: CAG, Tree Transplantation Methodology

For Mains: Conservation, Impact of failure of the tree transplantation on environment

Why in News?

Recently, Comptroller and Auditor-General of India (CAG) in its audit report showed that only **54%** of the transplanted plants by the **Brihanmumbai Municipal Corporation (BMC), Maharashtra** have survived.

- The audit revealed that Mumbai's transplanted tree survival percentage was considerably below the **national average of 80%**.

What is Tree Transplantation?

- **Transplanting or replanting** is the process of **relocating a plants** from one site to another in an **agricultural field** or **garden**.
- **Tree transplants** allow plants to have longer **growing seasons**.
 - Plants can be **cultivated indoor** at first, then **outside** if the weather conditions are suitable.
- **Tree spade machine** is a specialized kind of machine that mechanizes the transplanting of large plants.
 - Larger trees may require digging, wrapping or boxing of the root ball and then transporting by truck.
- **In October 2020, the Delhi government approved a tree transplantation policy** to prevent felling of trees due to development work in the city.
 - Under the policy, agencies concerned have been asked to transplant 80% trees affected by the projects to a new location.
 - Under this policy, 10 saplings are supposed to be planted in addition to the tree being dug up with the root intact and scientifically transplanted at another location instead of being felled.

What are the Benefits of Tree Transplantation?

- It is a good method to protect young plants from **diseases** and **pests** until they mature.
- This method can avoid the problem of **germination of seeds** by direct planting the plant seedling.
- It is a **relatively convenient but less affordable technique**.
 - Planting a purchased plant immediately in the ground or in a container to grow eliminates a cumbersome stage of our gardening operations.
- Many parks and lakefronts can be **instantly covered with greenery** by transplanting mature trees.
 - Mature trees deliver much **greater eco-services** than saplings.

- The **transplantation of old trees due to development projects can help save them.**

What are the Concerns Associated with Transplantation of Trees?

- CAG in its report has pointed out some concerns regarding low survival rate of the transplanted trees.
 - Transplanted trees **lack proper protection and maintenance.**
 - **Proper infrastructure is not available** to facilitate the process of tree transplantation.
 - **Methodology of plantations** applied by the BMC's appointed contractors are under the question.
 - According to CAG the methodology used in the transplantation is **unscientific.**
- Another problem is that **not all kinds of trees can be transplanted.** While peepal, ficus, semal and sheesham are tolerant to transplantation, trees such as dak, palash, arjun, shahtoot and jhilmil are not.
 - Any tree with a tap root system cannot be transplanted as the root goes deep into the soil, and it is not possible to isolate it without damage.
- **Soil type too, is an important consideration** before transplantation. A tree growing on the Delhi Ridge will not easily acclimatise to soil in the Yamuna floodplain, as the ecosystem is different.

Way Forward

- Appropriate punishment procedures should be adopted by the concerned authority to improve the productivity and efficiency of the entire process of the transplants of the trees.
 - Rs 5.1 lakh fine has been imposed by the BMC to the contractors who have done improper plantations.
- The civic authority must order agencies to employ experienced **horticulturists** for appropriate tree transplantation.
- Technological innovation for better infrastructure is the primary concern to improve the survival of the trees.

Source: IE

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