

Tree-planting should friendly to local biodiversity

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(Mains GS 3 : Conservation, Environmental Pollution and Degradation, Environmental Impact Assessment.)

Context:

The UN General Assembly has proclaimed March 21 as the International Day of Forests to celebrate and raise awareness about the importance of forests.

Spending on plantation:

- On the International Day of Forests, countries are encouraged to organise activities such as tree planting campaigns to help increase the green cover, conserve biodiversity, and fight climate change.
- For decades, the Indian government has been spending billions of rupees in its efforts to increase the green cover through tree planting.
- Recently, the Central government, through the National Afforestation and Eco-Development Board, launched an ambitious ₹19,000 crore plan for an afforestation project to rejuvenate 13 major rivers.
- According to the government "this project would increase 'forest' cover by 7,417.36 square kilometres in the vicinity of these rivers".

Complex ecosystems:

• Forests are complex ecosystems that are built over years due to the interplay of birds, mammals, reptiles, insects, amphibians, fungi, microorganisms, water, soil, environmental conditions, and other factors.

- Unless these factors are part of the rebuilding process, trees will remain as green cover rather than the enchanting, natural, complex ecosystems that they are.
- It is true that planting trees will help store carbon and reduce pollution but the other benefits which are critical vary widely depending on the species planted and the location of plantation.
- Selection of wrong areas for plantation may alter the natural habitat which will cause habitat specialist species to become extinct.

Conversion of natural grassland:

- The conversion of natural grasslands to wooded areas through tree planting will make the local environment and ecosystem less resilient.
- The Great Indian Bustard, once nominated to be India's national bird, is now staring at extinction with fewer than 200 individuals because many areas where these large birds thrived have been lost due to tree planting.
- The Ranibennur Wildlife Sanctuary in central Karnataka, which was designated to conserve this species, is an example of this unscientific thinking.
- Similarly, the Jayamangali Conservation Reserve, another grassland habitat in Karnataka, hosted wolves. But now there are leopards there as the whole area has been planted with acacia, anjan, eucalyptus and tamarind trees.
- Other natural habitats such as woodland savanna, laterite grasslands, scrubland, wetlands and rocky outcrops that have evolved to support unique biodiversity have been systematically transformed from ecologically rich habitats into sterile landscapes due to tree planting.

Friendly to local biodiversity:

- It is not a bad idea to plant trees but the aim should not be to only plant trees rather it should be to make tree-planting activities friendly to local biodiversity.
- To restore forests, first understand systematically the native vegetation and the biodiversity that play a critical role in forming these forests as if we plant a range of locally found indigenous species, biodiversity will make a comeback.
- There is a rule of thumb in the tree-planting world: One should plant the right tree in the right place. And some add, 'for the right reason'.

Assisted natural regeneration:

- Assisted natural regeneration which is a cheaper and more effective method for letting forests come back on their own through protection.
- Scientific studies have shown that natural regeneration absorbs 40 times more carbon than plantations and hosts a lot more biodiversity.
- But of utmost priority is the task of halting deforestation and protecting existing forests.

Conclusion:

Policy makers need to understand that investing heavily in 'creating' forests while letting our natural forests that have evolved over centuries fade is not a sensible act thus should be given more focus on assisted natural regeneration.

