Is Planting Saplings A Solution To The Felling of Trees

Why in NEWS

- The Government has notified the draft Compensatory Afforestation Fund (CAF) Rules, 2018.
- It will facilitate the utilization of over Rs 50,000 crore among states to expand India's forest cover.
- Earlier, the Government had passed the Compensatory Afforestation Fund (CAF) Bill in 2016.
- It is estimated that about Rs 50,000 crore had been *"collected in lieu of forest land diverted under the Forest (Conservation) Act, 1980, for non-forest purposes such as industrial projects like mining"*.

The Hindu's OPED 'Yes, No, It's Complicated', for today discusses if Compensatory Afforestation (CA) will work as planned.

Yes, it will Work

- There is an environmental cost to development. City clusters are the engines of economic growth and India is one of the fastest growing economies of the world. India's urban population (about 32%) contributes over 60% of the GDP. Delhi is also poised to become the most populous city of the world by 2028, as per the UN.
- As more and more people migrate into the cities, urban infrastructure gets highly stressed. This migration is inevitable as the quality of life and avenues for employment in the cities is significantly higher than in rural areas. The focus should therefore be on making cities more liveable and ecologically sustainable.
- The cost of developing basic infrastructure in cities like Delhi has resulted negatively in ecological terms. Of the 10 most polluted cities of the world, nine are Indian and Delhi being one of them.
- This is why urban infrastructure development should be realistic and every instance of felling of trees or filling up of water bodies must be justifiable in the least harm to environment principle and in a net positive impact on quality of life parameters.
- Development of infrastructure is now a necessity. For instance, a 10 km hour-long traffic jam each morning causes more harm to the environment than felling 1,000 trees to build a Metro line. This type of comparative data and analysis ought to be shared with the public so, that stakeholders can have informed discussions on the subject.
- Not creating infrastructure that is essential or basic and which improves the quality of life in cities is not acceptable. Large-scale compensatory afforestation should be norm - *first,* every attempt should be made to replenish the lost tree cover in the immediate vicinity of the site being developed and *second,* technological advancements should be used to the fullest extent so as to not harm the environment, like building underground or elevated corridor for the Metros to run.

No, it won't Work

- Compensatory afforestation (CA) is already in practice in India. States often allow large-scale destruction of forest cover if ecological damage can be offset by planting trees elsewhere. This is seen as a compromise between development and ecological sustainability.
- The real and very serious question is that whether we can truly offset the ecological damage by planting trees in cases where huge numbers of trees are being mowed down, like in the development of the Goa airport, for the bullet train, for building housing complexes in Delhi etc.
- There are *three important reasons* why CA may not work and should be rejected. *First,* growing

trees is not akin to building habitats. In urban areas, trees or any green cover, sustains a habitat of birds and animals, it provides the public with shelter and recreation, helps in groundwater recharge etc. In tribal areas such trees or forest cover can be of cultural and religious importance. Simply, planting trees cannot replace the habitats lost to development activities. *Second,* discussions in the Supreme Court and reports of the CAG has identified reasons why CA has not worked well in the country: non-availability of land where such 'plantations' can be raised; land demarcated for CA are often diverted to other uses; delays in fund disbursements by concerned agencies; lastly, poor utilization of funds by the forest department which is tasked with ensuring plantations.

- *Third,* the CA projects are taken up mostly in floodplains, grasslands and other ecosystems that are not suitable for tree cover. Moreover, administrations often do not carry out impact assessments of the sites being selected for CA.
- The very laws created to protect forests are being used to destroy 35,000 hectares of forests annually in the name of development. This is because laws like CA are being used to justify the loss of forests and ecosystems, as the belief that any loss of green cover can be offset successfully via the plantation route has taken deep roots in government policy making.

It's complicated

- There seems to be two opposing camps - those wanting development and are convinced that trees are a necessary causality for urban living, and those who are pro-conservation and are accused of being anti-development. These are both extreme positions and as such do not facilitate the search for solutions.
- India is getting urbanized at a very fast rate and it is estimated that 300 million urban residents will be added by 2050. This begs that infrastructure be built on a very large scale. Sadly, the only available areas in cities for carrying out development work are urban forests, parks, tree-lined streets etc. The question is if this green cover is sacrificed for development of concrete structures then will the cities be habitable?
- Urban trees provide a lot many benefits like reduction of air pollution, increasing ground water infiltration and even to the effect of cooling the cities. Research from Bengaluru show that street trees reduce PM10 levels by 75%, reduce atmospheric temperatures by 3-5 degrees centigrade and road asphalt temperatures by 23-25 degrees centigrade.
- Most urban development plans provide that 2-10 saplings will be planted for felling every matured tree. But this comparison is not tenable as large mature trees can absorb and sequester as much carbon as 90 small trees. Newly planted saplings will take decades to provide the same scale of environmental services as a fully mature tree.
- Another cause of concern is that urban planners try to compensate for the felling of mature trees by planting fast-growing species like Eucalyptus and Acacia auriculiformis that deplete groundwater and affect soil quality. Trees like these cannot replace the environmental services provided by trees like the giant native peepal, the mango or the tamarind.
- Also, when compensatory plantations are actualized, these are often located in inaccessible locations like defence land or in corporate or educational institutional premises. Thus, trees that were once public resources, accessible to all are now plantations inaccessible to majority of the citizenry.
- The way forward is to blend development activities with conservationist research. For example, if roads can be widened to accommodate large trees in the median, if it can be curved to accommodate a heritage tree - it should be done. Our urban planners will have to spare as many trees, urban forests (and water bodies) as possible, saving the felling of trees to a last resort. Moreover, re-plantation should be done locally, using the right species and the survival of such re-planted trees should be ensured diligently.