

Green Highways Mission remains halted despite a green light

by Arathi Menon on 24 September 2020

- *National Green Highways Mission plans to create green corridors along national highways. With plantation, transplantation, beautification and maintenance as its mainstay, the project, flagged off in 2015, is yet to take off fully.*
- *Greening highways are expected to reduce carbon emissions, protect biodiversity, raise agroforestry and create carbon sinks while providing employment and generating resources at the local level.*
- *Environmentalists say that though green highways sound like a positive step towards cleaning the environment, native species need to be planted and allowed to grow into trees.*
- *While the initial target for the first year was to plant trees along 6,000 km of highways, 3060 km of roads have been greened from 2016-2019. During this phase, 9,02,682 trees out of a target of 24,05,386 trees have been planted.*

If the Ministry of Road Transport & Highways' (MoRTH) highly ambitious plan is to come to fruition, we will soon have tree-lined highways designed to not just please commuters aesthetically but to mitigate the biodiversity degradation caused from highway development. In 2015, the MoRTH launched the National Green Highways Mission (<https://morth.nic.in/green-highways>) with an aim to help the environment as well as the local communities by generating employment through tree planting along all highways in the country. With plantation, transplantation, beautification and maintenance as its mainstay, the Green Highways Mission (GHM) was considered a flagship project of the ministry, but is yet to take off fully.

Highway development results in heavy loss of vegetation. The road development agencies try to mitigate the damage through median and avenue plantation which don't often compensate for the loss of old, indigenous trees and greenery.

Green Highways Policy proposes to engage professional plantation agencies for the development of uniform green corridors. Moreover, a participatory approach from private agencies, NGOs, civil society, forest department and other agencies are sought to execute it. The policy demands that one percent of the civil work cost of the NH that's been greened will be set apart for highway plantation and its maintenance.

While the initial target for the first year was to plant trees along 6,000 km of highways, according to a document received from the GHM, only 3060 km of roads have been greened at a cost of 121.09 cr from 2016-2019 (<https://imgs.mongabay.com/wp-content/uploads/sites/30/2020/09/23204256/Green-Highways-Progress-07.11.2019.xlsx>). During 2016-2020 (<https://imgs.mongabay.com/wp-content/uploads/sites/30/2020/09/23203919/Green-Highways-Progress-31.03.2020.xlsx>), 1,186,525 trees out of a target of 3,089,857 trees have been planted on 3597.39 km of national highways.

Green highways as a post COVID management strategy

National Highways account for two percent of Indian road network with 40 percent of automobile traffic moving on this network, according to a presentation by the Green Highways division of the NHAI. The current CO₂ emission on this network is 391 million tonnes which is expected to reach 966 million tonnes by 2030. Greening the highways, according to the MoRTH, would help achieve the target of 35 percent reduction in carbon emissions which was India's commitment at CoP 21 in Paris in 2015.

This apart, biodiversity protection, raising agroforests to meet industry needs and creating carbon sinks while providing employment and generating resources at the local level are touted as some of the benefits

of developing green highways.

Creating green highways is a good post-COVID management strategy considering its environment and socioeconomic contributions, believes former director of GHM Ajoy K. Bhattacharya. "Greenways can provide tremendous opportunities for post-COVID crisis mitigation in terms of the three 'E' solutions — Employment, Entrepreneurship (jobs) and Enterprise (business). These green highways can serve as hubs for agroforestry and repository of raw materials for plantation-based industries. This will generate plenty of employment and entrepreneurship and can create innovative green highways based MSME (micro, small and medium) ecosystem," he said.



National Green Highways Mission plans to create green corridors along national highways. Photo by Vikas Rana/Wikimedia Commons.

One of the highlights of the green highways project is planting trees. Bhattacharya says that instead of indiscriminately planting trees, a plantation species matrix (<https://imgs.mongabay.com/wp-content/uploads/sites/30/2020/09/23204607/Plantation-Species-Matrix-for-Roadside-Plantation.pdf>) was drawn for each area so that native species and those trees that suit the terrain and weather could be planted there. Environment lawyer Ritwick Dutta says that the idea of the green highways sounds like a positive step towards cleaning the environment, at least in concept. But native species need to be planted and they should be allowed to be grown to become trees. "Traditionally in India, it was a norm to plant trees on either side of the road. It brings down the temperature of the road," he says.

Senior fellow at ATREE Ankila Hiremath concurs. "The choice of species would matter, in this instance — fast-growing species such as eucalyptus are not likely to serve this purpose," she says adding that it is ironic that these highways are envisioned as tree-lined and shaded while in reality, thousands of native old trees get cut for road construction and widening. For instance, environmental impact assessment

([https://imgs.mongabay.com/wp-](https://imgs.mongabay.com/wp-content/uploads/sites/30/2020/09/23205516/NH_516E.pdf)

[content/uploads/sites/30/2020/09/23205516/NH_516E.pdf](https://imgs.mongabay.com/wp-content/uploads/sites/30/2020/09/23205516/NH_516E.pdf)) done in December 2019 for the two-lane upgradation of the Paderu-Araku (up to Bhalluguda) Section of NH 516 E in Andhra Pradesh under the green national highways corridors project suggests cutting down of 1964 native old trees. While replacement of equal number of trees is considered as a mitigation measure, it cannot compensate for the loss of fully grown trees.

The costs of highways are largely borne by farmers whose land gets acquired for highway development. Hiremath says that they may not benefit much from tree planting since the benefits of the NGHM are likely to go largely to the private sector partners given the planting work and only a small proportion to communities, in the form of wage labour.

Read more: Greening with pollution-gobbling trees doubles benefits

(<https://india.mongabay.com/2018/11/world-environment-day-greening-with-pollution-gobbling-trees-doubles-benefits/>)

Unhappy farmers affect project implementation

ITC Paperboards which was on board the GHM to green about 100 hectares of land on NH40 and NH30 had to drop out of a project when encroachment came in the way of the successful implementation of the project. "The work on NH40 along the Cadappa-Kurnool route was completed but then we ran into encroachment issues with a farmer who resorted to destroying saplings that we had planted. It was NHAI's responsibility to give us unencumbered land and to see to it that encroachments did not happen. We handed over the stretch to NHAI and completely pulled out of it," says Suneel Pandey, Vice President-Raw Material and Plantation, Paperboards and Specialty Papers Division, ITC Limited.

He says that green highways are a great model in concept. A lot of local work could be generated. "A hectare of land for this work could employ about 500 people, both seasonally and year-round." Suneel says that they had spent around Rs. one crore (10 million) on the project to plant and maintain social forestry as an extension of ITC Paperboard's activities but couldn't see it through. "Unless the saplings are allowed to grow into trees, there is no point in planting them," he says.

Dutta says that most NHs are expanded on the space allotted for tree plantation primarily to avoid environment impact assessment. "What actually happens is that all NH projects start with four lanes. Trees are planted on the designated space and are allowed to grow to a certain level but are chopped to expand the roads to be made six or eight lanes. If there is no long-term protection guaranteed for these trees, the (tree planting) exercise is pointless. Equally pointless would be choosing ornamental trees over native trees for these exercises," he says.

Bhattacharya rues that (<https://imgs.mongabay.com/wp-content/uploads/sites/30/2020/09/23204433/NHAI-Chairman-1-IGF-Note-29-05-20.pdf>) while the project is conceptually strong, nobody took it seriously but for minister (of Road Transport and Highways) Nitin Gadkari and that is affecting the implementation of the project. "Though the green highways policy envisioned planning, implementation and monitoring of green highways projects for all the three road development authorities – MoRTH, NHIDCL (National Highways and Infrastructure Development Corporation) and NHAI – MoRTH and NHAI which control 50 pc of NHAI have not even initiated any green highways project," he says.

In March 2020, Minister Nitin Gadkari announced that 780 km of national highways cutting across four states of Himachal Pradesh, Rajasthan, Uttar Pradesh and Andhra Pradesh will be converted to green highways at a cost of Rs 7,660 crore. In Dec 2019, the Road Transport and Highways Ministry gave the nod for 22 green express highways in Karnataka worth Rs 1.5 lakh crore. The responses from the NHAI on an RTI application on the status of these projects show that no substantial work has been done under these projects.

The Green Highways Division, now headed by P.K. Jain, declined to respond with details to Mongabay-India saying there has not been much work happening under the project and that he will respond when he has some new developments to share.

Banner image: A 2009 photo of a highway near Delhi. Photo (<https://commons.wikimedia.org/w/index.php?curid=35497672>) by pratiproty/Wikimedia Commons.

