How to Build Eco-Friendly Roads?

What is the issue?

\n\n

\n
- India require both roads and intact ecosystems, and hampering the development or function of one for the sake of the other will not benefit the nation.
\n
- To maximise the benefits of roads and minimise their impacts, far more time and effort should be spent on determining exactly where roads should be built.
\n

\n\n

What are the ramifications of road building?

\n\n

\n
- Building a road requires contiguous stretches of land, and in a country like India, land acquisition has its own financial and political costs.
\n
- Also, road building also has long-term ramifications, especially on the **environment and ecology.**
\n
- Road construction necessitates the altering of ecosystems. Mining of construction materials and the clearing of the road's planned alignment result in the cutting of trees and the disposal of excavated debris.
\n
- While ecosystem alteration itself can have persistent impacts, the **mere presence of a road also has long-term effects,** modifying environmental variables such as the groundwater recharge rate, the local biodiversity, and **even the local temperature.**
\n
- They make wild areas more accessible, **increasing incidences of poaching** and illegal timber felling. And if we factor in traffic movement, the number of impacts increases.
\n

- Over time, animal populations might start avoiding roads, restricting their access to food, water, and shelter, and setting them on the **path to local extinction.**
\n
- This is true across the world, but is felt especially hard in India, where we face both a highly dense human population, as well as high densities of biodiversity in specific regions.
\n

\n\n

What should be done?

\n\n

\n
- In those cases where it is necessary to construct new roads that may have adverse impacts on the environment, **decision-makers must follow the mitigation hierarchy.**
\n
- This is ideally a **transparent step-wise process** whereby the impacts of any given road on the environment are assessed, and efforts are made to prevent or alleviate them.
\n
- Identifying those impacts that can be avoided or minimised, and then mitigating or compensating for those that cannot, would go a long way toward preserving ecosystem services, while also allowing for road development.
\n
- Since the **political imperative is to build more roads faster,** agencies responsible for road construction have little time or effort to allocate toward long-term planning.
\n
- Politicians believe that the promise of building roads attracts votes, as can be seen from the political discourse at all levels.
\n

\n\n

What is the way forward?

\n\n

\n
- Thus, the task falls to India’s civil society, India’s judiciary, and to the development banks that fund road projects, to ensure that the **costs and benefits of proposed roads are well thought** through before

implementation.
\n
- Eliciting constructive feedback from the public, including wildlife and environmental experts, at the planning stage will help prevent delays and the resulting escalations in costs due to legal challenges or protests during the construction phase.
\n

\n\n

\n\n

Source: Business Line

\n