

What are eco-bridges? Analyse the significance of eco-bridges in conserving wildlife of country.

Eco-bridges / Eco ducts refers to the creation of artificial bridge / tunnel / culvert for the passage of animals through natural root bridge or artificial construct in order to reduce human-animal conflict.

Reducing human-animal conflict:

1. Due to core-buffer situation there are situations inside forest of human-animal conflict.
2. By eco-bridge, there could be safe passage for food, water etc.
3. (e-g) Tribes inside Deer National Park has high human-animal conflict which is recently reduced due to artificial culvert linking to water bodies.

Reducing animal deaths:

1. Elephant collision, elephant train collision are frequent due to roadway/railway through forest.

2. Thus root bridges and corridors can result in reduced animal deaths and ecosystem management.
3. (e.g.) There are 87,000 elephant corridors that are yet to be identified for biodiversity of elephants by Wildlife Institute of India.

Infrastructure development:

1. As per NHA, there are around 95,000 km highway that has to be built cutting forest.
2. Thus eco-bridges will serve the dual need of ecosystem management and infrastructure development.
3. (e.g.) NH-37 in Kaziranga National Park and its root bridges serve the protection of One-horned Rhinoceros.

Concerns and Challenges:

1. Promoting eco-bridges may in future lead to decreased forest zone due to more infrastructure development which needs to be addressed.
2. Not all times eco-bridges are good option. (e.g.) Mudumalai Sanctuary eco-bridges are still not being used by monkeys due to less lifetime of the bridges.
3. Proper analysis using drone and camera traps is essential to study eco-bridges.