

LANDSLIDES IN THE WESTERN GHATS

Posted at: 06/08/2024

Context:

In the past few days, Wayanad district of Kerala has been in the news for a devastating landslide that claimed hundreds of lives.

Background:

Over the past decade, Kerala has witnessed numerous climate-induced disasters, underscoring the urgent need for climate-resilient infrastructure.

Key causes & takeaways:

1. **Landslide Trigger:** Extremely heavy rainfall triggered by the warming of the Arabian Sea caused the landslide. The southeast Arabian Sea is becoming warmer, leading to atmospheric instability over large parts of the Western Ghats, including Kerala.
2. **Ecologically Sensitive Area:** In 2011, the Western Ghats Ecology Expert Panel, headed by ecologist Madhav Gadgil, designated the region as an ecologically sensitive area (ESA). The Gadgil Committee recommended banning construction, mining, and quarrying activities in large parts of the Western Ghats, one of the world's eight hottest biodiversity hotspots.
3. **Recurring Disasters:** A similar tragedy struck Kerala's hilly regions in 2019. Despite clear warnings from experts, unchecked construction and tourism-related activities have continued unabated. Construction of roads and other infrastructure in such regions should be undertaken with scientific precision, considering the environmental impact.
4. **Landslide-Prone Areas:** Nearly half of Kerala comprises hills and mountainous regions with slopes exceeding 20 degrees, making these areas particularly prone to landslides during heavy rains. Evaluating land use changes and development activities in landslide-prone areas is crucial for climate resilience.
5. **Impact of Depleting Forests:** A 2022 study on depleting forests in Wayanad revealed that 62% of the district's green cover disappeared between 1950 and 2018, while plantation cover rose by around 1,800%.
6. **The Wayanad tragedy** is a stark reminder of the delicate balance between nature and human activity. It highlights the dire consequences of neglecting ecological warnings and the pressing need to adopt sustainable development practices to safeguard the environment and the lives that depend on it.