

Desertification

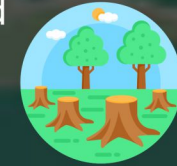
is the degradation of land in drylands, eventually leading to desert-like conditions. It's driven by a combination of natural factors and human activities.

Key Causes

Climate Change: Rising temperatures and erratic rainfall patterns increase drought frequency and severity.



Deforestation: Removing trees reduces water retention and increases soil erosion.



Overgrazing: Excessive cattle grazing depletes vegetation and prevents healthy regrowth.



Unsustainable farming: Practices like excessive plowing and use of chemical fertilizers deplete soil nutrients and organic matter, leading to decreased fertility and increased erosion.



Impacts of Desertification

Loss of Biodiversity: With the loss of habitat due to drying of land, the life suffers



Food and water scarcity: Decreased agricultural productivity and unreliable water supply



Land degradation: Loss of fertile land hampers agricultural productivity, and can also damage infrastructure during heavy rains



Fighting Desertification

Sustainable land management: Crop rotation, cover crops, decreased plastic pollution can help in combating desertification



Reforestation programs: Planting native trees helps in retaining moisture and ensures that other species of flora and fauna are not challenged for survival, which is often the case with foreign invasive species



Water Conservation: Sustainable usage of water with techniques like drip irrigation, rainwater harvesting, water treatment plants for reusing water should be encouraged in order to make wise use of water



Community Education: Raising awareness about desertification and promoting responsible land management practices



1. Loss of soil cover (11.01%), water erosion (10.98%), vegetation degradation (9.15%), and wind erosion (5.46%) are the main causes of the desertification in the country. (<https://www.drishtiiias.com/daily-news-analysis/land-degradation-and-desertification-in-india>)
2. According to the Desertification and Land Degradation Atlas 2021, at least 30% of India's total geographical area is under the category of "degraded land". (<https://www.nextias.com/ca/current-affairs/04-10-2022/desertification-and-land-degradation>).