# Geography · GS - I

**Discuss the role of aeolian processes in desertification and land degradation.**

| EXAM YEAR | PAPER | SUBJECT |
|---|---|---|
| 2026 | GS - I | Geography |

| MARKS | WORD LIMIT |
|---|---|
| 10 | ~150 words |

## Answer Hint

**Wind erosion, deflation, abrasion, sand movement, loss of topsoil, vegetation removal, dune formation, soil fertility decline, arid and semi-arid regions, overgrazing, drought, desertification control**

## Model Answer

Aeolian processes refer to the erosion, transportation and deposition of soil and sediment by wind. They play a significant role in desertification and land degradation, particularly in arid and semi-arid regions.

Wind erosion removes fine and nutrient-rich topsoil through deflation, reducing soil fertility and agricultural productivity. Abrasion by wind-blown particles further damages vegetation and exposes the soil surface. Transportation and deposition of sand can bury fertile agricultural land, infrastructure and vegetation, while dune formation may progressively expand barren landscapes.

Human activities such as overgrazing, deforestation, unsustainable cultivation and excessive groundwater extraction reduce vegetation cover and make soils more vulnerable to wind erosion. Climate change-induced drought and increasing aridity can intensify these processes.

In India, parts of Rajasthan, Gujarat and the Deccan region are vulnerable to wind erosion and land degradation.

Measures such as afforestation, shelterbelts, controlled grazing, sand-dune stabilisation and sustainable land management can reduce aeolian degradation. Thus, controlling wind erosion is essential for combating desertification and maintaining land productivity.