

# World Environment Day

**5<sup>TH</sup> JUNE 2024**

*Theme: "Land restoration, desertification and drought resilience"*

World Environment Day is the biggest international day for the environment. It is a global event aimed at raising awareness and encouraging action for the protection of our environment and it also aims to spread awareness around environmental issues like climate change, pollution, deforestation, and loss of biodiversity.

The theme for World Environment Day 2024 is "*Land Restoration, desertification and drought resilience*" under the slogan "Our land. Our Future. We are #GenerationRestoration." Land restoration is a critical pillar for World Environment Day 2024. Since, the world is facing issues like desertification, degradation, and drought, the event is invested to deliver solutions and raise awareness.

## Campaign Generation Restoration

This year's campaign focuses on the urgent need to restore ecosystems and reverse environmental degradation. It also signifies a call to action for current and future generations to take responsibility for restoring damaged ecosystems, conserving biodiversity, and addressing climate change.

The campaign highlights the critical role of restoring ecosystems in achieving sustainable development, combating desertification, conserving forests, and ensuring food security.

## Land Restoration

Land restoration is the process of rehabilitating and recovering ecosystems that have been degraded, damaged, or destroyed. This involves implementing practices and strategies to bring back the natural productivity, biodiversity, and ecological functions of the land. The ultimate goal is to restore the land to a healthy, sustainable state that can support both wildlife and human needs.



## A few important points of Land Restoration

- 🔑 **Healthy land supports healthy ecosystems:** Restoring land can have numerous benefits such as improving soil fertility, increasing water retention, and preventing land degradation. It also helps in conserving biodiversity by providing habitats for plants, animals, and microorganisms, thus supporting overall ecosystem health.
- 🔑 **Increasing Agricultural Productivity:** Rehabilitating degraded agricultural lands to improve food security.
- 🔑 **Supporting Climate Resilience:** Healthy soils act as carbon sinks, absorbing and storing significant amounts of carbon dioxide from the atmosphere. Restoring degraded lands can help sequester carbon, mitigate greenhouse gas emissions, and contribute to global efforts for climate change mitigation.

## Desertification

Desertification is the process by which fertile land becomes increasingly dry and unproductive, typically resulting in the degradation of the land into desert-like conditions. This phenomenon is primarily driven by various factors such as climate change, deforestation, unsustainable agricultural practices, and overgrazing.

### Causes of Desertification

- **Deforestation:** Cutting down trees and vegetation without replanting can lead to soil erosion, loss of soil fertility and decreased rainfall, all of which contribute to desertification.
- **Overgrazing:** Excessive grazing by livestock removes vegetation cover, exposing soil to erosion and compaction, which degrades the land.
- **Climate Change:** Altered weather patterns, increased temperatures, and changing precipitation rates can reduce soil moisture and exacerbate dry condition.



- **Poor Water Management:** Inadequate or inefficient irrigation practices can lead to waterlogging, salinization and depletion of water resources, which further degrade the land.

## Consequences of Desertification

- ◆ Loss of biodiversity by worsening the conditions of many species.
- ◆ Reduced agricultural productivity.
- ◆ Water scarcity.
- ◆ The decline in agricultural productivity and loss of biodiversity affects the economic stability of regions.
- ◆ Desertification contributes to climate change by reducing the number of plants that absorb carbon dioxide.

## Strategies to reduce Desertification

- **Planting trees:** Reforesting degraded lands and planting new forests can stabilize the soil, improve water cycles, and provide habitats for wildlife.
- **Rotational grazing:** Rotating livestock between pastures allows vegetation to recover and prevent overgrazing.
- **Soil restoration technologies:** Utilizing technologies such as soil conditioners, biochar, and organic amendments to improve soil structure and fertility.

### Did you know?

The Bon Challenge, launched in 2011, is a global effort to restore 350 million hectares of degraded land by 2030.



# Drought Resilience

Drought resilience refers to the ability of an ecosystem, community, or economic system to anticipate, prepare for, respond to, and recover from drought conditions. It encompasses various strategies and practices aimed at reducing vulnerability to drought impacts, ensuring the sustainability of water resources, and maintaining agricultural productivity, economic stability and overall well-being of affected populations.

## Key components of drought resilience

- **Water Management and Infrastructure:** Effective water management practices and resilient infrastructure are essential for sorting, distributing and managing water resources during periods of drought. This includes reservoirs, dams, irrigation systems and water treatment facilities.
- **Diversification of Water Sources:** Relying on multiple water sources such as ground water, surface water and rainwater harvesting can mitigate the impacts of drought by reducing dependence on a single source that may be affected by drought conditions.
- **Drought Monitoring and Early Warning Systems:** Implementing robust monitoring systems to track precipitation, soil moisture, water levels and other indicators can provide early warnings of drought conditions, allowing for timely response and mitigation measures.
- **Community Engagement and Adaptive Governances:** Engaging local communities in drought planning, decision-making, and response efforts fosters resilience by incorporating local knowledge, priorities and needs. Adaptive governance structures that can quickly adapt policies and practices in response to changing drought conditions and also crucial for building resilience.

