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UNCCD COP17 Advances Global Action on Land Restoration, Drought Resilience and Sustainable Management of Fragile Ecosystems

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Recent Developments:

- The 17th session of the Conference of the Parties to the United Nations Convention to Combat Desertification was held in Ulaanbaatar, Mongolia, from 17–28 August 2026 under the theme “**Restoring Land. Restoring Hope.**”
- COP17 brought together governments, scientists, civil society organisations, Indigenous Peoples, pastoralists and other stakeholders to address the interconnected challenges of **desertification, land degradation and drought**.
- The conference gave particular attention to **rangelands, pastoral communities, drought resilience, nature-based solutions, innovative finance and sustainable land management**.
- Egypt will host the **18th session of the UNCCD Conference of the Parties in Sharm El-Sheikh in 2028**.
- India emphasised **community-led and science-based land restoration**, predictable international finance and conservation of **Open Natural Ecosystems**, while highlighting progress towards its land restoration commitments.

Key Outcomes of UNCCD COP17:

Land Restoration as a Development Priority:

- COP17 recognised that **land restoration** is not merely an environmental objective but is closely connected with **food security, livelihoods, water security, poverty reduction and human displacement**.
- Land degradation can reduce agricultural productivity, weaken ecosystem services and intensify competition over natural resources, thereby creating additional socio-economic vulnerabilities.
- The official COP17 agenda also considered the relationship between **desertification, land degradation, drought and migration**, highlighting the broader human-security implications of land degradation.

Rangelands and Pastoral Communities:

- The conference placed special emphasis on **rangelands and pastoralists**, recognising the ecological and economic importance of grasslands, savannas and other open ecosystems.
- Sustainable rangeland management can simultaneously support **livelihood security, biodiversity conservation, carbon storage and climate resilience**.
- The focus was particularly relevant because **2026 is the International Year of Rangelands and Pastoralists**, with Mongolia playing a prominent role in advancing the agenda.

Drought Resilience:

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Plot A P.127, AF block, 6 th street, 11th Main Rd, Shanthi Colony, Anna Nagar, Chennai, Tamil Nadu 600040

Phone: **044 4353 9988 / 98403 94477 / Whatsapp : 09710729833**

- COP17 strengthened the focus on moving from **post-drought relief towards anticipatory drought preparedness and resilience-building**.
- A comprehensive **Drought Resilience Index** was highlighted as a tool for assessing countries' capacity to anticipate, prepare for and adapt to drought risks through data-driven vulnerability assessment.
- The approach can support more efficient allocation of public resources by identifying vulnerable regions before drought impacts become severe.

Innovative Drought Finance:

- The **Drought Resilience Investment Facility** was presented as an innovative financing mechanism intended to use public resources to reduce investment risks and attract private and institutional capital.
- Such financing can support **water security, climate-resilient agriculture, drought preparedness and land restoration**.
- COP17 also maintained strong emphasis on mobilising additional financial resources because developing countries continue to face significant gaps in financing for drought resilience.

Drought Governance:

- Countries did not reach agreement on a **legally binding global drought agreement**, leaving the issue for further negotiations.
- However, drought was given a more prominent institutional position, with the COP17 process providing for **drought as a standalone agenda item from COP18 onwards**.
- A comprehensive global framework could promote **national drought plans, early-warning systems, monitoring networks, data sharing and predictable financing mechanisms**.

India's Position at COP17:

Conservation of Open Natural Ecosystems:

- India highlighted the importance of **Open Natural Ecosystems**, including grasslands, savannas, scrublands, ravines and deserts.
- India launched its first **Guide to Grasslands and Other Open Natural Ecosystems**, seeking to improve recognition and conservation of ecosystems that have historically been undervalued because of their limited tree cover.
- Landscapes such as the **Thar, Banni and Deccan savannas** demonstrate that ecological importance cannot be assessed only through forest cover.
- Conservation of these ecosystems is important for **biodiversity, pastoral livelihoods, soil conservation, groundwater and climate resilience**.

Progress under the Bonn Challenge:

- India has brought **21.76 million hectares** of degraded land under restoration efforts against its target of restoring **26 million hectares by 2030**.
- India's restoration approach increasingly links **land productivity, ecosystem services, biodiversity conservation, climate action and rural employment**.
- The government has reported that restoration activities have generated approximately **1.22 billion person-days of employment**, demonstrating the potential of ecological restoration as a development intervention.

Community-Based Restoration:

- India advocated recognising **pastoral communities as custodians of ecosystems**, securing appropriate grazing rights and integrating traditional ecological knowledge with modern scientific methods.

- Community-protected landscapes such as **Orans of Rajasthan** demonstrate how local institutions can contribute to biodiversity conservation, vegetation protection and water-resource management.
- This approach supports the principle that restoration becomes more sustainable when local communities participate in planning, implementation and monitoring.

Understanding the UNCCD:

Origin and Mandate:

- The **United Nations Convention to Combat Desertification** was adopted in **1994** and emerged from the global environmental process initiated by the **1992 Earth Summit in Rio de Janeiro**.
- It is one of the three major **Rio Conventions**, alongside the conventions dealing with climate change and biological diversity.
- The UNCCD provides the principal international framework for addressing **desertification, land degradation and drought**, with particular emphasis on sustainable land management.

Land Degradation Neutrality:

- **Land Degradation Neutrality** seeks to maintain or improve the quantity and quality of land resources necessary for ecosystem functioning, food production and human well-being.
- It is closely associated with **Sustainable Development Goal Target 15.3**, which calls for achieving a land-degradation-neutral world.
- The approach emphasises avoiding new degradation, reducing ongoing degradation and restoring already degraded land.

Conference of the Parties:

- The **Conference of the Parties** is the principal decision-making body of the UNCCD.
- It reviews implementation by Parties, considers scientific and policy recommendations and adopts decisions necessary for advancing the objectives of the Convention.
- COP17's official documentation included dedicated work on **rangelands and pastoralists, drought policy, migration, land tenure and sand and dust storms**.

Major Challenges in Combating Land Degradation:

Ecological Challenges:

- **Unsuitable afforestation, soil erosion, declining soil organic carbon and salinisation** can undermine restoration efforts.
- Treating natural grasslands and scrublands as wastelands may encourage inappropriate tree plantations that disturb native biodiversity and pastoral livelihoods.
- Excessive cultivation and inefficient fertiliser use can reduce soil quality, while poorly managed irrigation can accelerate **soil salinity and waterlogging**.

Agricultural and Livelihood Vulnerabilities:

- Agricultural incentives may encourage **water-intensive crops** in regions already facing groundwater stress.
- Shrinking **Common Property Resources**, including grazing lands, can increase pressure on remaining pastures and accelerate degradation.
- Insecure land tenure can particularly affect women farmers and reduce their access to **institutional credit, insurance, subsidies and extension services**.

Institutional Fragmentation:

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- Responsibilities for land, forests, agriculture, water and rural development are distributed across multiple institutions, often resulting in fragmented interventions.
- Effective restoration therefore requires **landscape-level planning** rather than isolated departmental schemes.
- Drought management also needs to move from reactive relief towards **anticipatory risk reduction and resilience-building**.

Finance and Climate Risks:

- Land restoration often has long gestation periods and uncertain financial returns, making it difficult to attract private investment.
- Weak **Measurement, Reporting and Verification** systems can further constrain investment in carbon, biodiversity and ecosystem-service markets.
- Climate change is increasing rainfall variability in many regions, with intense rainfall followed by prolonged dry periods contributing to **runoff, soil erosion, reduced groundwater recharge and reservoir siltation**.

India's Major Initiatives:

National and Landscape-Level Measures:

- The **National Action Plan for Combating Desertification** provides an overarching framework for addressing land degradation and desertification through convergence of government programmes.
- The **Pradhan Mantri Krishi Sinchayee Yojana** supports watershed development, rainwater harvesting and soil-moisture conservation.
- The **Green India Mission** seeks to improve forest quality, ecosystem services and carbon sequestration under the broader climate-policy framework.
- The **Soil Health Card Scheme** provides farmers with scientific recommendations regarding soil nutrients and fertiliser use.
- The **Desertification and Land Degradation Atlas of India** developed using space-based technologies supports identification and monitoring of degraded land.
- **Mission Amrit Sarovar** promotes creation and rejuvenation of water bodies, supporting groundwater recharge and drought resilience.
- The **Aravalli Green Wall Initiative** seeks to restore degraded landscapes across the Aravalli region and strengthen ecological resilience.

Way Forward:

Policy and Governance:

- India should promote **agro-ecological zoning** so that agricultural incentives, electricity support and procurement policies become better aligned with local ecological conditions.
- Drought financing should increasingly become **trigger-based and anticipatory**, allowing resources to reach vulnerable regions before severe impacts occur.
- **Ridge-to-Valley planning** at the district level can integrate interventions related to agriculture, forests, water resources and rural development.

Ecological Restoration:

- Grasslands, savannas and scrublands should be recognised as **distinct ecosystems** rather than treated as degraded forests.
- Restoration should prioritise **native species, invasive-species management, soil-carbon restoration, regenerative agriculture and water-efficient farming**.

- Crop residues should be incorporated into **circular bioeconomies**, including biomass-based energy and bio-CNG, to reduce open burning while generating economic value.

Technology and Finance:

- **Satellite imagery, soil-moisture sensors, artificial intelligence and geographic information systems** should be integrated for localised drought prediction and ecosystem monitoring.
- Blended finance and public de-risking mechanisms can encourage private investment in **land restoration, sustainable agroforestry and drought-resilient agriculture**.
- Stronger monitoring and verification frameworks are necessary to improve the credibility of carbon and biodiversity-related financial instruments.

Conclusion:

- **UNCCD COP17** reinforced the understanding that land restoration is simultaneously an environmental, economic, social and human-security priority.
- India's emphasis on **community participation, scientific restoration, ecosystem conservation and predictable finance** reflects the need to integrate ecological sustainability with development objectives.
- The future of drought governance should shift from **crisis response to anticipatory resilience**, supported by reliable data, early-warning systems and accessible finance.
- Achieving **Land Degradation Neutrality** will ultimately require coordinated action involving governments, communities, farmers, pastoralists, scientists and private investors.
- Sustainable land management can therefore become a pathway towards **food security, climate resilience, biodiversity conservation, livelihood protection and inclusive rural development**.

Value Addition for UPSC:

Key Concepts:

- **Land Degradation Neutrality:** Avoid degradation, reduce ongoing degradation and restore degraded land.
- **Nature-Based Solutions:** Address societal challenges through protection, sustainable management and restoration of ecosystems.
- **Ecosystem-Based Adaptation:** Use ecosystem management to help communities adapt to climate-related risks.
- **Anticipatory Action:** Take preventive measures before a forecast hazard produces severe impacts.
- **Landscape Approach:** Manage interconnected ecosystems and human activities across administrative boundaries.
- **Ridge-to-Valley Approach:** Integrate land and water conservation from upper catchments to downstream areas.