

# Beyond desert sands

## Three priorities for combatting land degradation

**Saudi Arabia and other Gulf Cooperation Council countries have much arid desert, but they are also home to mountain forests, rangelands, wetlands, and mangrove forests. Yet these habitats, which play a vital role in supporting biodiversity and traditional culture in the region, are at risk. Degraded land increased from 0.7% in 2015 to 9.5% in 2019, according to UN reports, but some experts estimate the actual percentage may be much higher.**

What can be done to counter such land degradation, and accelerate efforts, was the focus of the UN's COP-16 Convention to Combat Desertification (UNCCD), held in Riyadh December 2–13, 2024. While less prominent than carbon emissions, land challenges are no less important; land provides sustenance, supports biodiversity, and plays an essential role in climate-change adaptation and mitigation.

Land degradation is mainly the result of man-made causes including deforestation, unsustainable agricultural practices, overgrazing, and urbanization, compounded by climate change. Globally, more than **100 million hectares of land were lost** to degradation each year between 2015 and 2019, according to the UNCCD—the equivalent of losing total land roughly twice the size of Saudi Arabia.

In the GCC, tackling land degradation will help reduce occurrences of dust storms, enhance air quality, and advance countries' environmental agendas. Culturally, lands are needed for continued grazing and linkages to nomadic life. We believe GCC countries should focus on three priorities as they look to slow or reverse land degradation.

**1** Addressing the primary contributor to land loss—overgrazing—should be prioritized. While degradation has many causes, overgrazing accounts for about **90% or more of land degradation** in Saudi Arabia, Qatar, and Kuwait. In fact, the land today supports livestock and free-roaming camels far beyond its current capacity. A rapid shift to sustainable grazing models that restore land and increase its carrying capacity is needed. That, in turn, should be articulated in an integrated land-use plan, which includes economic and social factors as well as ecological.



**Tackling land degradation in the GCC will help reduce occurrences of dust storms, enhance air quality, and advance countries' environmental agendas.**

**2** The second priority is to adopt a more holistic ecosystem rehabilitation approach should be adopted, in addition to reforestation, which has been successful in the regeneration of several areas in the GCC. Building on these efforts through restorations that adapt interventions to the intrinsic characteristics of the land can yield healthy habitats that support the livelihood of a variety of wildlife species.

**3** A third priority is to combine assisted and natural land restoration, which is important from both an ecological and economic perspective. Globally, afforestation is at least **four times more costly than passive regeneration**. In the GCC region, the cost difference is even higher, given the typical need to irrigate newly planted saplings for a period of two to three years, coupled with the scarcity and cost of water. Adopting a habitat rehabilitation approach will be especially important for the successful delivery of large-scale programs in the region, such as the **Saudi and Middle East Green Initiatives**.

Combatting land degradation will require coordinated efforts to increase awareness of the problem, greater collaboration with local communities and others, and broader use of advanced technologies, including artificial intelligence.

Awareness of the importance of land in the GCC and the challenges it faces is a starting point. Land champions are needed, similar to those for climate and biodiversity. The UNCCD COP meeting in Riyadh in December surely helped raise the profile of the issue.

Collaboration is another critical element. This includes collaboration with local communities, particularly rural ones, as they are at the forefront of challenges and solutions for land stewardship. Private-sector engagement is also needed and should be supported by the creation of bankable business models.

Technology also has a role to play in accelerating efforts to address land degradation by overcoming shortcomings in assessing the extent of degradation in the region, including using AI-powered tools and improved satellite remote sensing technology. Effective low-cost and low water-consumption techniques for land restoration are also needed.

Addressing land degradation in the GCC requires a proactive and holistic approach. By focusing on mitigating key pressures, implementing active and passive restoration methods, and fostering collaboration, GCC countries can reclaim their land resources. Sustainable land management will not only improve land and water security but also contribute to biodiversity conservation, climate resilience, and long-term socioeconomic stability.

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