





Spotlight on rangelands

Background note for multi actor dialogue: "Advancing international action for rangeland restoration"

16/11/2020

Key messages

- 1. Strengthen global knowledge on rangeland degradation and restoration, ecological techniques and socioeconomic processes for rangeland restoration, and the cost of rangeland degradation to society
- 2. Improve access to, and scaling up of, validated good practices for rangeland restoration and sustainable management at scale
- 3. Increase national commitment and capacity to strengthen governance of rangelands and to implement mechanisms that strengthen land tenure for pastoralists and other rangeland communities
- 4. Strengthen investment by private and public actors in rangelands as biodiverse, food-producing ecosystems, that support multiple ecosystem services that are home to significant global cultural heritage

Restoring rangelands to achieve land degradation neutrality

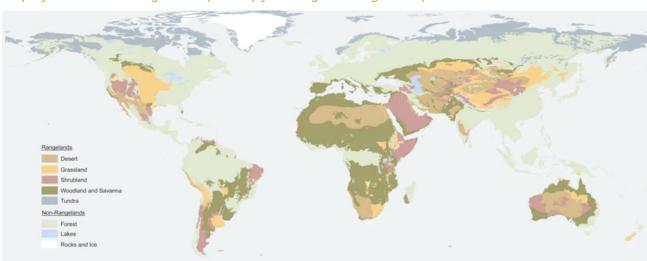
Land degradation has affected an estimated 24% of land globally (3.5 billion hectares) over the past 25 years, affecting more than 1.5 billion people around the globe, most of whom live in developing countries. This has created global interest in restoration, driven partly by the opportunity to mitigate the impact of climate change and loss of biodiversity while reducing poverty. **One hundred and twenty four countries have committed to setting national targets for Land Degradation Neutrality** (LDN) in line with their commitments to the United Nations Convention to Combat Desertification (UNCCD) and SDG Target 15.3ⁱ. The global landscape restoration community have also pledged to bring 150 million hectares of degraded and deforested land into restoration by 2020 and 350 million by 2030ⁱⁱ under the umbrella of Forest Landscape Restoration (FLR).

Investments in FLR will make a major contribution to achieving LDN in many countries. However, **countries** with significant rangeland areas have expressed concern over the lack of attention to rangeland degradation in current restoration initiatives. Most analyses of land degradation find that rangelands (or grasslands) are affected at least as much as, if not more than, other areasⁱⁱⁱ. Yet it is rare to find rangeland restoration actions demonstrating progress on the ground.

Many reasons have been suggested for the neglect of rangelands, including arguments that they are too remote, they are not productive, and their people are disconnected from society. Many of these reasons have been dismissed in recent years, as new evidence on the value of rangeland ecosystems has been reported and as rangeland communities have become better represented in national and international affairs iv. While rangelands can be challenging environments to work in, neglecting them is contrary to the principles of the sustainable development goals and other international commitments. Countries cannot achieve their targets for LDN if rangelands are excluded from restoration planning and investments.

The global distribution of rangelands

Rangelands are places of inspiration and beauty that cover more than a third of all the land on earth. Rangelands include savannah, prairie, steppe, pampas and mountain pastures: ecosystems that harbour a wealth of biodiversity while supporting the livelihoods of millions of people, including many of the worlds' livestock keepers. Rangelands are highly diverse, grass-dominated landscapes that are shaped and defined by their close association with grazing ungulates and the notion of 'ranging'. Rangelands can include annual and perennial grasslands, shrub and dry woodlands, savannah, tundra, and deserts. However, many other ecosystems can be found within the rangelands, including wetlands, riparian forests, woodland patches, oases and others. Sometimes these ecosystems within rangelands are of particularly high value that are seasonally essential to overall functioning of the rangelands and to the resilience of rangeland communities.



Map of the world's rangelands (Society for Range Management)

The majority of the rangelands are home to livestock keeping populations, known collectively as pastoralists but often referred to as herders, shepherds, ranchers, and by many other names. Pastoralists have managed the rangelands for centuries, mimicking nature by using tools such as livestock herding and controlled burning to carve out thriving livelihoods in a climate of uncertainty.

Rangelands are central to pastoral livelihoods and provide human and livestock populations with food, fodder, shelter and water. They make a significant contribution to global protein supply, particularly in countries that face some of the highest levels of protein deficiency and malnutrition. **Rangelands provide a number of high value ecosystem services that benefit society, including climate regulation and water supply**, although there is a tendency to under value and underestimate some of these services. The majority of the world's rangelands (over 75%) are classified as drylands, where one third of the world's total soil carbon is stored, and up to 70 tonnes/ha of additional soil carbon could be stored through improved management^v.

Two definitions of rangelands

"Land on which the indigenous vegetation (climax or sub-climax) is predominantly grasses, grass-like plants, forbs or shrubs that are grazed or have the potential to be grazed, and which is used as a natural ecosystem for the production of grazing livestock and wildlife"vi.

"Land carrying natural or semi-natural vegetation which provides habitat suitable for herds of wild or domestic ungulates".

Rangeland degradation

Land degradation, biodiversity loss and climate change are major threats to the rangelands and to the livelihoods of rangeland populations. Rangeland degradation reduces productivity, which weakens livelihood opportunities, increases exposure to risk, and exacerbates poverty. Land degradation in rangelands can lead to a significant losses of soil organic carbon and accelerate the release of greenhouse gases to the atmosphere, contributing to climate change.

Neglect of rangelands in restoration actions could add to the risks that rangelands face, for example as protection and restoration of other areas pushes the expansion of crop farming into rangelands. Conversion of rangelands to crop farming is already a major factor in land degradation. Afforestation in misguided pursuit of restoration targets also threatens rangelands and can have damaging economic and social consequences.

The absence of effective institutional mechanisms and clear institutional mandates to govern the rangelands contributes to their misuse in many countries. For example, in several countries there is a conflict of policy and management objectives between ministries responsible for livestock, biodiversity, wetlands, woodlands, and other natural resources in the rangelands. With the current momentum on landscape restoration, continuing misperceptions of rangelands as 'wastelands' in some countries leave them vulnerable to appropriation for large-scale tree planting and other land use changes. Land use change contributes to biodiversity loss and reduced ecosystem function, increased vulnerability to climate change, and in some cases undermines the resource rights of rangeland users.

Advancing rangeland restoration

A limited number of documented rangeland restoration actions provide preliminary lessons that can encourage further action. Experiences show the importance of adapting ecological restoration to the context of the rangelands and focusing on people-centric approaches that enable, or re-enable, informed grazing management at scale, often within communal governance systems. The following recommendations have been highlighted^{viii}:

- Work within existing legal frameworks and local norms to strengthen governance of rangeland resources;
- Strengthen institutions for cross-sectoral management of the diverse natural resources of rangelands to improve decision-making;
- Improve the use of science-based evidence for designing and evaluating interventions;
- Generate wider support for advancing sustainable development in the rangelands;
- Leverage appropriate private investments that enable sustainable rangelands management;
- Emphasise policy implementation and improve monitoring and evaluation of policy effectiveness.

Building momentum for rangeland restoration will require concerted action between national governments, rangeland users, private investors, scientists and others. Several recent intergovernmental decisions have created the opportunity for progress, including <u>UNEA4 Resolution L17</u> on "Innovations in Sustainable Rangelands and Pastoralism", the <u>United Nations Decade on Ecosystem Restoration</u> (2021-2030), and the <u>International Year on Rangelands and Pastoralists</u> (2026, recently endorsed by the FAO Committee on Agriculture). However, achieving the Sustainable Development Goals by 2030 requires more immediate action to accelerate progress.

Current attention to delivering LDN targets creates one entry point for increased action on rangeland restoration. The UNCCD is the only multilateral agreement that explicitly focuses on drylands but to date has not adopted an explicit decision rangeland restoration. Considering the importance of rangeland restoration

for LDN attainment, and the risk of transgressing LDN principles if rangelands are neglected, the UNCCD has a stake in elevating understanding of the opportunities and threats to rangeland restoration. **Restoration of the rangelands provides one of the most significant opportunities for delivering not only the goals of the UNCCD, but simultaneously contributing to reverse biodiversity loss and mitigating and adapting to climate change. This is arguably one of the most important and least addressed synergies between the three Rio Conventions.**

Preliminary recommendations for enhanced global action to restore the world's rangelands in line with national voluntary targets for LDN:

- 1. Strengthen global knowledge on rangeland degradation and restoration, ecological techniques and socioeconomic processes for rangeland restoration, and the cost of rangeland degradation to society
- 2. Improve access to, and scaling up of, validated good practices for rangeland restoration and sustainable management at scale
- 3. Increase national commitment and capacity to strengthen governance of rangelands and to implement mechanisms that strengthen land tenure for pastoralists and other rangeland communities
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There is a compelling argument for countries to take concerted action to increase rangeland restoration. This will align strongly with, and contribute to the aims of, existing commitments, including UNEA Resolution L17, the International Year of Rangelands and Pastoralists, and the United Nations Decade of Ecosystem Restoration. Many national and international non-state actors stand ready to support efforts to restore and sustainably manage the rangelands and will be encouraged and enabled by renewed commitment at the international level, which will act as a catalyst for increased and more effective investment on the ground.

¹ As of October 2020: https://www.unccd.int/actions/ldn-target-setting-programme

ii Bonn Challenge : https://www.bonnchallenge.org/

^{III} Bai, Z. G. et al. (2008). 'Proxy global assessment of land degradation', Soil Use and Management, 24, pp. 223–234. Le, Q. B., Nkonya, E. and Mirzabaev, A. (2015). 'Biomass productivity-based mapping of global land degradation hotspots', in Economics of Land Degradation and Improvement - A Global Assessment for Sustainable Development. doi: 10.1007/978-3-319-19168-3_4.

^{iv} **McGahey, D. et al. (2014).** Pastoralism and the Green Economy: a natural nexus? Nairobi: IUCN and UNEP. Available at: http://cmsdata.iucn.org/downloads/wisp_green_economy_book.pdf.

^v **Center for International Forestry Research (2010)**. The Dry Forests and Woodlands of Africa. Edited by Emmanuel N. Chidumayo and Davison J. Gumbo.

vi Allen, V. G. et al. (2011). 'An international terminology for grazing lands and grazing animals', Grass and Forage Science, 66(1), pp. 2–28. doi: 10.1111/j.1365-2494.2010.00780.x.

vii Pratt, D. J. and Gwynne, M. D. (1977). Rangeland Management and Ecology. New York, Robert E. Krieger Pub. Co., Inc. viii Davies, J. et al. (2015). Homing in on the Range: Enabling Investments for. Sustainable Land Management. Nairobi. Available at: http://cmsdata.iucn.org/downloads/technical_brief___investing_in_slm_2.pdf.