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COMMITTEE ON FORESTRY

WORKING GROUP ON DRYLAND FORESTS AND AGROSILVOPASTORAL SYSTEMS

Fourth Session

Ulaanbaatar, Mongolia, 7 - 10 July 2025

Transforming dryland forests for achieving land degradation neutrality

Executive Summary

Dryland forests — covering over 1.1 billion hectares globally — are vital for supporting biodiversity, regulating climate, preventing desertification, and sustaining the livelihoods of nearly 2.5 billion people, many of whom reside in some of the most vulnerable regions. Dryland forests are vital components in climate adaptation strategies, acting as natural buffers against drought, offering ecological, climatic, and social resilience. However, these ecosystems continue to face escalating threats such as land degradation, which affects more than 70 percent of drylands, according to the Global Land Outlook 2.[1]

To address this situation, the fifteenth session of the Conference of the Parties (COP15) of the United Nations Convention to Combat Desertification (UNCCD) in its Decision 3/COP.15[2] encouraged parties to commit to and implement voluntary land degradation neutrality (LDN) targets, also emphasizing integrated restoration approaches. This decision is aligned with efforts under the United Nations Decade on Ecosystem Restoration (2021–2030) aiming for restoring over 30% of degraded ecosystems and enhanced resilience. Transforming dryland forests is essential to meet national LDN targets, contribute to Target 2 of the Kunming-Montreal Global Biodiversity Framework, reach climate targets and deliver co-benefits under the Paris Agreement. This transformation requires landscape-scale interventions that combine forest and rangeland restoration, sustainable value chains, climate-smart land management and inclusive models of land governance.

This document highlights practical approaches and tools that support the transformation of dryland forests to contribute effectively to LDN. It also outlines the progress made by the Dryland Sustainable Landscapes Impact Programme (DSL-IP) in supporting LDN in dryland forests and agrosilvopastoral systems.

[1] https://www.unccd.int/resources/global-land-outlook/glo2
[2] https://www.unccd.int/sites/default/files/2022-10/3_cop15.pdf

Suggested actions by the Working Group

The Working Group may wish to invite Members to:

a. continue highlighting the important role of dryland forests and agrosilvopastoral systems in the implementation of national LDN targets, NDC and the GBF targets; and

b. continue supporting the national Forest Resources Assessment (FRA) monitoring and data collection efforts, increasing the attention given to data from pastoral and agrosilvopastoral systems, and the support provided to countries in strengthening their capacities for data gathering, monitoring, and co-creation of knowledge on the dynamics and sustainability of dryland ecosystems.

The Working Group may wish to invite FAO to:

a. continue the effort on documenting, implementing, promoting, monitoring and disseminating best practices that enhance ecosystem resilience and socio-economic benefits in dryland regions; and

b. encourage its Members to contribute to the collection of the national practices, to be presented to the 28th Session of the Committee on Forests, by:

   (i) providing local case studies on ecosystem restoration, productive landscapes and integrated management systems;

   (ii) providing guidance on the development of the recommendation addressing the potential LDN indicators at national level; and

   (iii) nominating an advisory group for the report, considering regional representation.

Queries on the substantive content of the document may be addressed to:

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I. Introduction

1. The United Nations Convention to Combat Desertification report, The Global Threat of Drying Lands,[3] launched at UNCCD 16th session of the Conference of the Parties in Riyadh, reveals that 77.6 percent of the Earth's land became drier between 1990 and 2020, with 4.3 million km² of humid areas turning into drylands. Currently, 40.6 percent of land is arid—a largely irreversible shift—with projections showing a further 3 percent loss by 2100 if emissions continue uncontrolled. This permanent climatic change severely impacts agriculture, economies, and communities, for example, contributing to a 12 percent decline in Africa's Gross Domestic Product (GDP) from 1990 to 2015

2. Forests, woodlands and trees outside forests[4] are key for the ecological dynamics of drylands. In total, trees are found on 2 billion hectares of drylands – 32 percent of the total dryland area[5] – contributing to biodiversity, soil stability, and climate resilience. In the Miombo-Mopane woodlands of southern Africa, which cover large parts of Angola, Mozambique, Tanzania, Zambia and Zimbabwe, provide fuelwood, wild foods, and grazing resources, while also sequestering carbon and supporting regional climate regulation.

3. Land degradation, which is hard to reverse, affects approximately 20-35 percent of drylands worldwide[6]. This is due to risks from water scarcity, climate change, mismanagement, deforestation, conversion of land, invasive species and population pressure. Deforestation in tropical dry woodlands is pervasive, with over 71 Mha lost since 2000.[7] Furthermore, climate change and unsustainable land use have contributed to the degradation of over 12 percent of drylands, leaving millions of people to face food insecurity and poverty.[8]

4. Desertification, land degradation, and drought disproportionately affect poor rural dryland communities, including small-scale farmers, youth, Indigenous Peoples, and especially women. In the Sahel, where up to 90 percent of its inhabitants depend on agriculture, land degradation has led to declining yields and forced migration.[9] Women, despite producing up to 80 percent of food in developing countries, own less than 20 percent of land, limiting their ability to adapt.[10] These inequalities demand inclusive, gender-responsive approaches to achieve LDN.

5. UNCCD estimates that an investment of USD 210 billion is required for drought-related measures between 2016 and 2030[11]. The total financing for the forest pathways needs to increase fourfold by 2050 to allow the world to meet climate, biodiversity and LDN targets, requiring around USD 203 billion per year by 2050.[12]

6. Strengthening drylands monitoring systems and data gathering needs to be prioritized in addressing the challenges and trade-offs. In this context, the ongoing assessment on the decarbonization potential of silvopastoral systems has improved the understanding of the carbon footprint on drylands. Equally relevant is the global FRA Remote Sensing Survey (RSS) 2025, through which new information on agroforestry and pastoral systems is being collected.

7. Agroforestry supports LDN by improving soil health, reducing erosion, and enhancing water retention. The Working Group recognized silvopastoralism as a key activity in its 2022-2024 workplan[13] and has continued to prioritize it in the 2024-2027 multi-year workplan. This focus offers a

[3] https://www.unccd.int/sites/default/files/2024-12/aridity_report.pdf
[4] https://doi.org/10.1038/s41467-023-37880-4
[5] https://openknowledge.fao.org/server/api/core/bitstreams/4db91cfa-6a0d-4e40-82ce-a7d2297c6a6c/content
[6] CGIAR, Global Strategy for Resilient Drylands. https://storage.googleapis.com/cgiarorg/2024/11/CGIAR_2030-GDSRD_Strategy-web.pdf
[7] https://doi.org/10.1038/s41893-022-00886-9
[8] https://www.nature.com/articles/s41467-020-17710-7
[9] https://capacity4dev.europa.eu/library/land-degradation-and-agriculture-sahel-africa-causes-impacts-and-recommendations-0_en?utm_source=chatgpt.com
[10] https://www.donorplatform.org/wp-content/uploads/2024/10/20241005_women-led-DRAFT_V6.pdf
[11] https://www.unccd.int/sites/default/files/2024-12/20241202_Economics-Drought-Web.pdf
[12] https://doi.org/10.4060/cb9360en
[13] https://www.fao.org/3/cc8326en/cc8326en.pdf

valuable opportunity to demonstrate the contribution of agroforestry in advancing the achievement of LDN at the national level.

8. Turning the tide requires mobilizing meaningful investments, co-producing knowledge, and generating enabling environments towards participatory planning, management and governance systems. The recent COP16 Decisions 19/COP.16[14] on Agricultural lands and 29/COP.16[15] on rangelands and pastoralists, along with the Rangelands Flagship Initiative, offer new ways of collaboration for the Working Group with UNCCD, particularly about developing guidance and support for country Members.

II. Enabling environments and drylands transformation at scale: the Drylands Sustainable Landscapes Impact Program

9. Endorsed by the Global Environment Facility (GEF) in 2020, the Sustainable Forest Management Impact Programme on Dryland Sustainable Landscapes (DSL-IP), aims to scale up sustainable management to prevent and reverse land degradation, desertification, and deforestation in drylands forests and agrosilvopastoral systems. With USD 104 million in grant funding and USD 810 million in co-financing, the programme is led by FAO and partners[16] and operates in 11 countries across Africa and Central Asia, including Angola, Botswana, Burkina Faso, Kazakhstan, Kenya, Malawi, Mongolia, Mozambique, Namibia, Tanzania and Zimbabwe. Throughout the years, the DSL-IP has also worked beyond its direct geographic scope providing technical support and capacity development opportunities in Algeria, Eritrea, Ethiopia, Jordan, Kyrgyzstan, Lebanon, Rwanda, South Sudan, Tajikistan, Tunisia, Turkmenistan, Uzbekistan, Yemen and Zambia.

10. The DSL-IP promotes the application of tailored tools and methodologies such as the Integrated Landscape Assessment Methodology (ILAM). ILAM reveals complex dynamics at the landscape level—including land management options, land degradation trends, and social behaviours—while maximizing the engagement of national and local stakeholders. ILAM integrates data from multiple sources and levels to generate meaningful and evidence-based information. [17]

11. Building on evidence from the ground, the DSL-IP developed the Sustainable Landscape Production Framework (SLPF).[18] SLPF integrates sustainable land management, crop & tree diversification, and green value chains to enhance productivity, improve livelihoods, and strengthen the resilience of landscapes and communities. The framework leverages three FAO flagship programmes and approaches: Farmer Field Schools, Forest and Farm Facility, and Community Seed Banks. Additional approaches, such as the "One Country Champion, One Core Theme" also helps countries achieve their LDN Targets by prioritizing specific areas of expertise aligned with their national priorities. With the backing of technical knowledge hubs, the approach empowers countries to pilot and refine context-specific solutions that directly address the challenges of water scarcity, deforestation, and land degradation. The DSL-IP has also established Regional Exchange Mechanism (REM) in Central Asia and Africa (and soon in Latin America) to facilitate South-South Collaboration (SSC), peer learning, transboundary coordination, and technical support across countries.[19]

12. The DSL-IP works closely with an increasing number of Forest and Farm Producer Organizations (FFPOs) to ensure that lessons learned and successful approaches sustained beyond the lifespan of individual projects. The DSL-IP also leverages the convening power of the COFO Working Group to scale up good practices and support their integration into national strategies. The DSL-IP works with the Working Group to strengthen enabling environments and scaling up proven solutions,

[14] https://www.unccd.int/sites/default/files/2025-03/19-cop16.pdf
[15] https://www.unccd.int/sites/default/files/2025-03/29-cop16.pdf
[16] The DSL-IP is led by FAO in partnership with the International Union for Conservation of Nature (IUCN), the Centre for Development and Environment (CDE) of the World Overview of Conservation Approaches and Technologies (WOCAT), the Worldwide Fund for Nature (WWF) and the World Bank (WB)
[17] https://www.fao.org/in-action/dryland-sustainable-landscapes/news-and-events/news-detail/achieving-land-degradation-neutrality--integrating-data-for-a-holistic-assessment-to-achieve-better-planning-and-decision-making/en
[18] https://www.fao.org/in-action/dryland-sustainable-landscapes/knowledge-mgmt/slpf/en
[19] https://www.fao.org/in-action/dryland-sustainable-landscapes/how-we-work/en

laying the groundwork for resilient landscapes, thriving communities, and sustained progress toward LDN.