

PRESS RELEASE

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UN: Invest in healthy lands to cut billion-dollar costs of human-made droughts

Sustainable land and water management for drought pays off, says new report

Riyadh, Saudi Arabia — As droughts fuelled by human destruction of the environment are projected to affect 3 in 4 people by 2050, investing in sustainable land and water management is essential to reduce their costs, which already exceed \$ 307 billion per year globally, according to a new report launched at the Conference of the Parties (COP16) of the United Nations Convention to Combat Desertification (UNCCD) earlier today.

Drawing on a wealth of evidence and case studies from countries all around the world —like Chile, India, Jordan, Kenya, Spain, and Tunisia— the report makes the economic and business case for nature-based solutions (NbS) to drought. That is, for practices that restore ecosystem functions and soil health to enhance water flow, storage, and supply in support of human wellbeing —for example, reforestation, grazing management, and the management, restoration and conservation of watersheds.

The report, *'Economics of drought: Investing in nature-based solutions for drought resilience – proaction pays,'* is co-authored by the Economics of Land Degradation Initiative (ELD), the United Nations University Institute for Water, Environment and Health (UNU-INWEH), the United Nations Convention to Combat Desertification (UNCCD) and financially supported by the German Federal Ministry for Economic Cooperation and Development, the International Drought Resilience Alliance (IDRA) and the European Union.

“Managing our land and water sustainably is essential to unlock economic growth and build resilience for communities that are becoming locked into cycles of drought around the world,” said UNCCD Deputy Executive Secretary Andrea Meza. “As talks for a landmark COP decision on drought are underway, the report calls on world leaders to recognize the outsized, and preventable, costs of drought, and to leverage proactive and nature-based solutions to secure human development within planetary boundaries.”

Urbanization, deforestation, surface water and groundwater overdraft, and climate change are altering land cover and depleting freshwater reserves, meaning that drought is not only caused by the lack of rain, but also by the way we treat our land and water resources. Thus, the risk of water shortages as well as cyclical droughts

and floods can be managed through adequate policies, incentives, and investments in our natural capital.

The publication underscores that the long-term economic costs associated with droughts and related disasters are greatly underestimated. Especially, because costs typically escalate within and across borders due to the knock-on effects of drought on sectors like energy and health, as well as the wider economy.

The estimated costs of implementing measures as set out by countries in their national drought and related plans amount to a fraction of the costs of drought every year.

The triple dividend of natural-based solutions

An economy that respects natural systems instead of undermining them could generate up to US\$10.1 trillion annually in business value and create up to 395 million jobs by 2030. Tripling investment in Nature-based Solutions up to 2030 could generate 20 million additional jobs.

“Proactive drought management is an ecological and societal imperative. It is also a significant economic opportunity”, said German Parliamentary Secretary for the Ministry for Economic Cooperation and Development (BMZ), Niels Annen. “Every dollar invested in nature-based solutions not only reduces drought impacts, but can generate benefits of up to US\$27 - including higher farmer incomes, value chain resilience, and reduced long-term economic costs. We must urgently act to rethink how we value land and relearn how to manage land sustainably.”

Nature-based solutions to drought yield a triple dividend: they reduce loss and damage from drought; increase the income of land and water users, and generate co-benefits for climate, nature and sustainable development more broadly. Most of these dividends –including food and water security— can be enjoyed regardless of the occurrence of drought, making nature-based solutions a no-regret option.

Recommendations

The report offers a series of recommendations to realize the potential of sustainable land and water management at landscape scales. For example, it points out the need to embed nature-based solutions in national drought management plans; ensure land tenure and water rights; and strengthen local governance, which is essential to implement changes on the ground.

“The economic cost of drought extends beyond immediate agricultural losses. It affects entire supply chains, reduces GDP, impacts livelihoods, and leads to hunger, unemployment, migration, and long-term human security challenges; effective management and investment in nature are crucial to mitigate these effects,” said the Director of UNU-INWEH and one of the lead authors of the report Kaveh Madani. “The report provides invaluable insights into an opportunity sector that has been generally overlooked by public and private investors. Investment in natural capital is one of the most effective strategies for creating sustainable livelihoods and economic prosperity in harmony with nature while mitigating the impacts of droughts and climate change, especially in the developing economies of the Global South,” noted Madani.

In terms of finance, the report highlights the potential of public-private partnerships; the need to repurpose harmful subsidies; as well as the role of impact data collection and monitoring in attracting investments from the private sector.

Finally, it calls for a whole-of-society approach to proactive drought management, whereby authorities work hand-in-hand with farmers, landowners, businesses, civil society, and academia, to build the resilience of communities, economies and ecosystems to drought.

“Unsustainable land and water management practices and other human actions that increase the frequency and intensity of droughts must be replaced by pre-emptive, anticipatory action in favour of our survival. Well-planned, timely investments in such actions are imperative,” says the report.

QUOTES

Governmental entities

Kenya Drought Coordinator at National Drought Management Agency (NDMA)

Henry Parkolwa:

“Nature-based solutions are the most efficient and effective approaches to drought risk management in addressing crises of desertification, land degradation, drought, ecosystem services and biodiversity loss and to create a sustainable and equitable future for humanity.”

Australia’s Minister for the Environment The Hon. Tanya Plibersek MP

“Nature needs to be factored into economic and business decisions. To make good decisions, we need to understand, measure and report on our economic dependence

on nature, our impacts on nature and the value of ecosystems services that our communities and economies rely upon.”

Non-profits

CEO of the Nature Conservancy Jennifer Morris

"We celebrate the visionary leaders in cities around the world like Cape Town and São Paulo who have embraced Nature-Based Solutions (NBS) to enhance resilience to drought in cost-effective ways that deliver multiple benefits. For instance, Cape Town is restoring its unique fynbos ecosystem, creating jobs, and securing the equivalent of two months' water supply for the system—at just one-tenth the cost of conventional engineering solutions."

CEO of India Climate Collaborative, a council of philanthropies for climate, Shloka Nath

"Investing in land restoration and nature-based solutions to combat drought is critical. The climate crisis is intertwined with the biodiversity and water crises, and is aggravating socio-economic risks faced by farmers. This is a critical opportunity to acknowledge the interconnected risks vulnerable groups deal with, and support holistic, community-driven solutions. Through this, we can collectively enhance agricultural resilience, protect water resources, and foster sustainable economic growth. We call on stakeholders across India and beyond, including philanthropists, to prioritise these solutions for an equitable, sustainable future."

Companies

Pablo García, CEO Almedrehesa, Spain

Drought is one of the greatest threats to the productive systems of our territory, and of the entire Mediterranean basin, especially for agricultural systems, and even more so for rainfed crops. However, I believe that, like any challenge, it is also an incentive for new holistic landscape restoration approaches, which will allow us to respond to a demand for sustainable products that is undoubtedly growing in European markets and around the world. Regenerative agriculture is the new commitment of many companies to contribute to the society challenges through their supply chains.

Ryan Gellert, CEO, Patagonia

The 4 Returns Framework, contributing to the Economics of Drought report, offers a science-based, long-term initiative for restoring healthy landscapes. If all sectors of

society can support and adopt this framework, we will protect intact ecosystems vital for a healthy planet and thriving communities.

Jay Albany, CEO, Dirty Clean Food Pty Ltd, Perth, Australia

In Western Australia, we've experienced firsthand the drastic impacts from drought conditions. Perth has just experienced its hottest summer on record. Rainfall in Australia's the Southwest – one of 34 internationally recognised biodiversity hotspots, where half of our 8,000 plant species are found nowhere else – has fallen by 20% since 1970 during the critical May -July period. We believe it is vital to shift agricultural practices to build organic matter in our soils to improve water and nutrient retention, mitigating future drought risk. For every 1% increase in organic matter, our soil can hold up to 30,000 more liters of water per hectare.

NOTES

Launch:

- **In Riyadh:** 3 December 2024, 8:45 AM Riyadh time (GMT+3), Action Dome
- **Online:** [UN Web TV](#)

Side-event 'The Economics of Drought – presentation of the UNCCD Flagship Report:

- **In Riyadh:** 3 December 2024, 15:30h Riyadh (GMT+3), MET-05: 275

Download the full Economics of Drought Report (available in English):

<https://www.unccd.int/resources/publications/economics-drought-investing-nature-based-solutions-drought-resilience>

Media enquiries:

Please contact UNCCD Press Office at press@unccd.int

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[#COP16Riyadh](#)

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About UNCCD

The United Nations Convention to Combat Desertification (UNCCD) is the only legally binding international agreement on good land stewardship. It supports communities and countries in creating wealth and securing nutritious food, clean water and energy through sustainable land management. Through partnerships, the Convention's 197 parties also set up robust systems to proactively manage drought risks. Good land stewardship based on sound policy and science helps integrate and accelerate achievement of the Sustainable Development Goals, builds resilience to climate change, and prevents biodiversity loss.

About ELD:

The [Economics of Land Degradation \(ELD\) Initiative](#) is a global initiative that makes the values of land and its ecosystem services count in decisions with the aim to inform, promote, and scale land solutions for transformative change. Established in 2011 between the UNCCD, EU and Germany, and hosted by GIZ, ELD informed better land decisions with +40 case studies in +30 countries and raised global awareness with numerous flagship reports. In working at the science-policy-practice interface, ELD connects science with policy and business aiming to support decision maker in transforming existing pledges for land to real policy and business action.

About UNU-INWEH

[The United Nations University Institute for Water, Environment and Health \(UNU-INWEH\)](#) is one of 13 institutions that form the United Nations University (UNU), the academic arm of the United Nations. Hosted by the Government of Canada, UNU-INWEH focuses on major sustainability challenges, addressing critical water, environmental, and health issues worldwide. Through research, training, capacity building, and knowledge dissemination, UNU-INWEH is dedicated to resolving pressing global challenges that are of concern to the United Nations and its member states.

About IDRA

[The International Drought Resilience Alliance \(IDRA\)](#) is the first global coalition creating political momentum and mobilizing financial and technical resources for a drought-resilient future. As a growing platform of more than 30 countries and 20 institutions, IDRA draws on the collective strengths of its members to advance policies, actions, and capacity-building for drought preparedness, acknowledging we are only as resilient to drought and climate change as our land is. The work of IDRA is aligned with, and supportive of, the mandate of the United Nations Convention to Combat Desertification (UNCCD), which hosts the IDRA Secretariat.

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