



United Nations
Convention to Combat
Desertification

Alliance
International Drought
Resilience Alliance



UNCCD
COP16
Riyadh | 2024

EMBARGO: 2 December, 3:00 PM Riyadh time (GMT +3)

Confirm local time here: <https://bit.ly/3Vf1F7h>

The Atlas is available for media preview at <https://bit.ly/4g2VvPF>

Selected maps: <https://bit.ly/3CK4oz7>

Landmark World Drought Atlas Reveals Systemic Nature of Hazard Risks, Underlines Need for National Plans, International Cooperation

Atlas launched as UNCCD Member States, meeting in Riyadh, Negotiate Drought Resilience Efforts

Riyadh, Saudi Arabia — As record-breaking droughts are becoming a new normal around the globe, the UN Convention to Combat Desertification (UNCCD) and the European Commission Joint Research Centre (JRC) launch the most comprehensive global publication on drought risks and solutions as an urgent wake-up call for world leaders and citizens.

The World Drought Atlas depicts the systemic nature of drought risks for both specialist and non-specialist audiences. Through dozens of maps, infographics, and case studies, it illustrates how drought risks are interconnected across sectors like energy, agriculture, river transport, and international trade and how they can trigger cascading effects, fueling inequalities and conflicts and threatening public health.

Co-produced with Cima Research Foundation (Italy), Vrije Universiteit Amsterdam (The Netherlands), and the UN University Institute for Environment and Human Security (Germany), its publication comes as UNCCD's 197 member states, meeting in Riyadh, negotiate how to build humanity's resilience to harsher droughts.

Droughts are one of the world's most costly and deadly hazards and are on track to affect 3 in 4 people globally by 2050. However, many countries and sectors are still failing to prepare for them through the right actions, policies, investments, and incentives.

"The World Drought Atlas challenges governments, business leaders, and policy makers at all levels to radically rethink how they make decisions and manage drought risk," said UNCCD Executive Secretary Ibrahim Thiaw. *"I call on all nations, and in particular the Parties to the UNCCD, to take the findings of the Atlas seriously. At UNCCD COP16, Parties could change the course of history towards drought resilience. Let us seize the moment with the knowledge that the Atlas provides a path for a more resilient future for all."*



United Nations
Convention to Combat
Desertification



UNCCD
COP16
Riyadh | 2024

The Atlas underscores the need for national drought plans and international cooperation to keep communities, economies, and ecosystems afloat in the face of harsher events. Additionally, it offers guidance for proactive and prospective drought management and adaptation across sectors and governance levels.

Drought impacts are typically less visible, and attract less attention, than sudden events like floods and earthquakes. That is particularly true for the effects on ecosystems, which tend to be neglected in national drought plans despite their crippling impacts on economies and communities. But fast-onset droughts, known as flash droughts, more intense droughts—and more readily apparent impacts—are also becoming commonplace.

HIGHLIGHTS FROM THE ATLAS

Impacts of human-made droughts

The World Drought Atlas explains how worsening drought risks are linked to human activities and then delves into the impacts of drought in five key areas—water supply, agriculture, hydropower, inland navigation, and ecosystems.

Droughts can reduce hydropower generation, leading to higher energy prices or power outages, and can disrupt international trade due to low water levels that hinder inland waterway transportation, as seen with the Panama Canal.

On the nature front, the Atlas notes that while droughts pose a threat to ecosystems, greater biodiversity can mitigate drought impacts, meaning that promoting biodiversity is important to build drought resilience and vice versa.

The food-land-water nexus is another major focus of the Atlas, since agriculture accounts for around 70% of freshwater use globally, and is also seriously impacted by drought.

The publication explores how the agricultural products that reach our plates through global supply chains can worsen the effects of droughts and create water-stress in the countries where they are produced through virtual water transfers. Small-scale farmers and marginalized groups are particularly vulnerable due to disparities in water access and resources needed to build resilience to drought.

The Atlas also shows how drought risks are interconnected and why their effects span across sectors. Countries reliant on hydropower for electricity, for instance, may face power outages during droughts. If this happens during a heatwave, it can result in hospitalizations and deaths as people cannot use fans or air conditioning to cool their homes.

Lessons from recent droughts



United Nations
Convention to Combat
Desertification

Alliance
International Drought
Resilience Alliance



UNCCD
COP16
Riyadh | 2024

The Atlas features 21 case studies from around the world, underscoring that no country—whatever its size, GDP, or latitude—is immune to drought and all can better prepare for it.

For example, the publication highlights impacts and lessons learned from recent droughts on the Great Plains of the US, in the city of Barcelona in Spain, and in the Yangtze River basin in China and explores drought impacts across the Central American Dry Corridor, the Indian subcontinent, and the Horn of Africa. Other case studies highlight the particular needs, resources, and perspectives of Indigenous communities when it comes to preparing for drought.

Droughts have increased by 29% since the year 2000 due to climate change and the unsustainable management of land and water resources. The UN considers human-made drought an emergency on a planetary scale, but notes that drought risks can be tackled with the right actions, policies and investments.

How to build drought resilience

The Atlas describes concrete measures and pathways to manage, reduce, and adapt to systemic drought risks; underscores the co-benefits of these actions for different sectors; and showcases best practices from different regions.

The measures highlighted in the Atlas fall into three categories: governance (e.g. early warning systems, microinsurance for smallholder farmers, pricing schemes for water usage); land-use management (e.g. land restoration and agroforestry); and the management of water supply and use (e.g. wastewater reuse, managed groundwater recharge and conservation.)

As highlighted by the Atlas, the Secretariat of the UNCCD, its Communities of Learning and Practice, the International Drought Resilience Alliance (IDRA), the European Commission Joint Research Centre, the regional and global networks and partner institutions listed in the publication, and communities themselves can develop and provide the necessary knowledge, tools, and support to transform science into policy and policy into drought resilience action today

“The Atlas is a powerful new resource to build political momentum for proactive drought risk management ahead of UNCCD COP16 in Riyadh. We already have the knowledge and tools to build our resilience to harsher droughts. It is now our collective responsibility, and in our best interest, to take action for a drought-resilient future,” sums up the Secretary of State of Environment of Spain, which co-chairs the International Drought Resilience Alliance (IDRA) together with Senegal.

QUOTES:



United Nations
Convention to Combat
Desertification



UNCCD
COP16
Riyadh | 2024

CIMA Research Foundation: *“The World Drought Atlas brings together experts and practitioners across disciplines and borders to create a comprehensive tool for understanding and visualizing drought’s multifaceted impacts while proposing sustainable solutions. This collaborative effort serves as a model for political action, underscoring that collective engagement is crucial for building resilient and adaptive societies”*, said Lauro Rossi, Program Director at CIMA Research Foundation, one of the coordinators of the Atlas.

Marthe Wens, senior drought researcher at the Institute for Environmental Studies of Vrije Universiteit Amsterdam: *“Human activities are driving or exacerbating droughts and their impacts on society. This is clearly depicted in the Atlas, and based on scientific literature and using examples from around the world. It also means that through our management of land and water we have the ability to reduce drought impacts and increase our systems’ resilience.”*

Shen Xiaomeng, Director of UNU-EHS: *“The World Drought Atlas underscores the urgent need to rethink how we perceive and address drought risks in our interconnected world. It challenges us to go beyond temporary fixes and imagine systemic and dynamic solutions that not only reduce risks comprehensively, but also prioritize the most vulnerable.”*

Hugo Morán, State Secretary of Environment of Spain, which co-chairs the International Drought Resilience Alliance (IDRA): *Droughts are one of the greatest challenges of the 21st century. Climate change and the unsustainable management of land and water resources has made them more frequent and intense, affecting communities and ecosystems. UNCCD COP16 is a unique opportunity to strengthen the technical, political and financial conditions to address droughts and the World Drought Atlas represents a key instrument to support these efforts.’*

NOTES

Launch:

- **In Riyadh:** ‘Ministerial Dialogue on drought resilience: From Geneva to Riyadh and beyond, enhancing global and national policy instruments for a proactive drought management approach’. **15 h Riyadh (GMT+3), Main Committee Room**
- **Online:** [UN WebTV](#)

Full Global Drought Atlas available soon in English on the UNCCD website: <https://www.unccd.int/resources/publications/world-drought-atlas>

Media enquiries: press@unccd.int, cc gpallares@unccd.int and terrycollins1@gmail.com

Social media:

[@UNCCD](#)



United Nations
Convention to Combat
Desertification



UNCCD
COP16
Riyadh | 2024

#UNCCDCOP16 (Primary)

#COP16Riyadh (Secondary)

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 the European Commission's Joint Research Centre:

The Joint Research Centre (JRC) of the European Commission plays a key role at multiple stages of the EU policy cycle by providing independent, evidence-based science and knowledge, supporting EU policies to positively impact society. The JRC works closely with other Commission departments, EU institutions and agencies, as well as with scientific partners and policy organisations in Europe and internationally, offering scientific expertise and competences from a wide range of scientific disciplines.

About CIMA Research Foundation

CIMA Research Foundation is an international center of excellence dedicated to the study and management of weather-related risks. Founded in Italy in 2007, CIMA is a research organization that combines scientific research, applied technology, and capacity development into disaster risk reduction. Widely recognized for its innovative contributions to early warning systems and risk assessment, CIMA collaborates with international organizations like the UN system, the World Bank, the European Commission, and national governments, providing scientific and technical support for projects in vulnerable regions, including Africa, South America and the Caribbean, Southeast Asia, and the Mediterranean. Through its interdisciplinary approach that integrates technical and social sciences, CIMA bridges the gap between research and practical application. Its scientifically grounded and actionable solutions address real-world challenges with evidence-based strategies.

About Vrije Universiteit Amsterdam:

Vrije Universiteit (VU) Amsterdam is a unique university in the Netherlands with faculties in the humanities, STEM, social sciences, and medical sciences. The Institute for Environmental Studies (IVM) is part of VU. IVM is the oldest environmental research institute in the Netherlands (est. 1971), and currently one of the world's leading institutes in sustainability science. IVM works at the forefront of current scientific and societal debates to contribute to a more sustainable planet. Through multi-, inter- and transdisciplinary solution-oriented research, IVM researchers aim to understand the world's complexity and provide ways forward. They study hydrological and climate processes, and how these processes lead to risks and opportunities for society, the economy, and the environment.



United Nations
Convention to Combat
Desertification

Alliance
International Drought
Resilience Alliance



UNCCD
COP16
Riyadh | 2024

The Drought Risk group of IVM is developing new methodologies and policy-relevant results on the topics of drought risk analysis and drought adaptation.

About UNU-EHS:

United Nations University is the global think tank of the United Nations. The Institute for Environment and Human Security (Bonn, Germany) focuses on advancing human security and well-being by reducing current and future risks from environmental hazards and climate change. Its main areas of work are risk & adaptation and transformation. <https://unu.edu/ehs>

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.

END