





## The economic cost of drought – an upcoming report

# Economic cost of drought – Background of the global report

- Costs of increased drought to societies and economies are historically substantially underestimated, persistent knowledge gaps particularly with regards to those costs related to drought that spread across different economic sectors and social actors > very often resulting in momentous inaction when it comes to drought preparedness.
- The costs and risks of increasing drought-related natural hazards are disproportionately borne by poor and rural households.
- Nature-based solutions are very effective and cost-efficient measures to improve the capacities to adapt and become more resilient against drought risks.
- The **UNCCD facilitates** national decision-makers by advocating for proactive, coordinated, and holistic **drought risk management**.
- This report focuses on land-use based drought effects in areas of highly degraded land, supporting the UNCCD agenda in facilitating national drought management.



# Objectives of the global report on the economics of drought

- ➤ Provide evidence for public and private actors at all levels and inform international and national decisions taking processes on policy and investment with actionable insights and recommendations with a focus on sustainable land management and land restoration.
- · Real costs for societies and economies caused by drought in case of inaction.
- Costs and benefits of effective policy and management measures for land-based proactive drought risk management.
- Business cases for proactive drought risk management.
- Pathways (best practices) to enhance drought resilience of soils and land in strongly affected regions through the change in land-use practices (NBS, SLM, restoration).
- Support the agendas of UNCCD, IDRA, UNFCCC

#### **Target audience:**

- 1. Policy makers at country level to inform national strategy processes for proactive drought management (UNCCD national Drought Strategy campaign)
- 2. Finance institutions to address their knowledge gap for investments into NBS



### Partner Institutions

#### **Partners and contributors**

- UNCCD
- European Commission
- German Federal Ministry for Economic Cooperation and Development
- Economics of Land Degradation (ELD) Initiative
- UNU-INWEH
- ✓ CIFOR-ICRAF Africa Regional office/BioVision Foundation
- **✓ IUCN**
- ✓ The Borders Institute
- ✓ WOTR
- ✓ Mulloon Institute
- √ Commonland
- ✓ Diálogo Energía Latinoamericano
- ✓ TNC
- ✓ UCL Davis
- ✓ GIZ





## National studies and their partner institutions

Case Studies			
Land	Regional Characteristics	Institution	Case
Australia	High-scale farming; rural; drylands	The Mulloon Institute	Rehydration (landscape remodelling)
India	Small-scale farming; rural; drylands	WOTR	Watershed restoration and management in agricultural landscapes
Africa (Sahel)	Forest management; woodlands/croplands	ICRAF-CIFOR Africa	Agroforestry
Chile	watershed management; in drylands	Diálogo Energía Latinoamericano	Community restoration, watershed management;
Tunisia	Semi-arid agricultural landscapes, extreme drought effects	GIZ	Agroecological practices in olive production (TBC)
USA/ California	Urban water supply, watershed management	UCL	Water management in industrialized context
Brazil	Urban water supply, watershed management	TNC	Spring restoration and river basin management
Spain	Large-scale Watershed management	Commonland	Restoration of watersheds in urban context



### Main research questions I

- What are the economic costs of droughts now and in the future in case of inaction (for public private investors / both)? accounting specifically for the role of land degradation/climate change?
- Underline the key role of sustainably managed land as a nexus for both UNCCD and UNFCCC narratives and what are the bottlenecks in establishing respective approaches.
- 2. What is the causal biophysical link between land use practices and drought events?
- > What role do intact ecosystems play for drought resilient ("water ready") soils?
- 3. What are suitable, nature-based effective, and efficient response options including policy and economic instruments as well as land restoration and sustainable land management practices to strengthen drought resilience?
- 4. What are the economic and societal costs and benefits (e.g. short-term cost vs. long term gain?) to invest in land for drought resilience, by applying the ecosystems perspective? How do these costs and benefits compare with a business-as-usual scenario (inaction or response, disaster management approach)?



### Main research questions II

- 5. How to finance change: What are funding needs for building drought resilient economies and what are options to close this funding gap? Showing finance pathways Potential repurposing of public investments into NBS.
- **6.Case studies**: Based on concrete cases, show where Nature-based solutions in land management enhance drought preparedness of soils and what framework conditions work in favor/counteract transition and develop business cases to invest in SLM.
- 7. Support action: What **conclusions can be drawn for international policy processes**? What are mechanisms to bring proactive drought smart land management options to scale? What should policy makers and other actors do to embark on transition pathways for proactive drought management?







## Thank you!