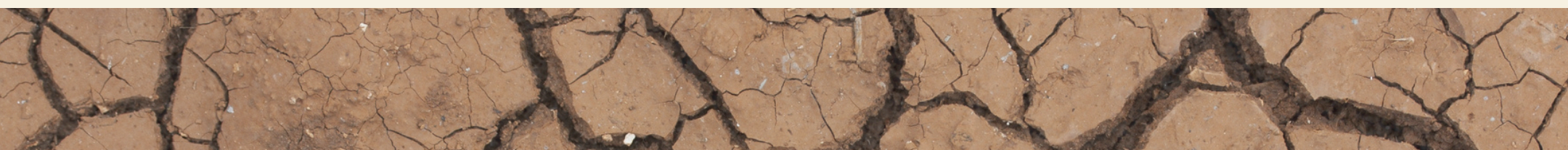


# AGROECOLOGY AND DESERTIFICATION



## DROUGHT AND LAND DEGRADATION

- Between 2015 and 2019, **100 million hectares** (equivalent to twice the size of Greenland) **of healthy and productive land were degraded.**
- Up to **40% of all land area** worldwide are **already considered degraded**
- 98 countries are affected by drought, 15 of which experienced severe or extreme droughts (UNCCD).
- Since 2000, **the frequency and duration of droughts has increased by 29%**, compared to the two previous decades.
- Prolonged meteorological droughts can lead to hydrological droughts (declining water levels in rivers, reservoirs, and lakes), further worsened by intensive water use (e.g. for crop irrigation).
- From 2000 to 2019, **over 1.4 billion people (of which 160 million children) were affected by drought.**
- By 2050, **up to 216 million people may be forced to migrate** due to drought, water scarcity, declining land productivity, and rising sea levels.



# IMPACT OF DESERTIFICATION ON FOOD SYSTEMS

**Degraded or dry land loses its capacity to sustain plant and animal life** (including crops and livestock) and fulfill its ecosystem functions.

Desertification, the most extreme form of land degradation in drylands, affects every continent. **With 44% of the world's cultivated systems in drylands, desertification is a severe threat to global food security and livelihoods.**

The impacts of desertification on food systems are numerous:

- Yield losses
- Poor water quality
- Biodiversity loss
- Increased food insecurity



# IMPACT OF INTENSIVE AGRICULTURE ON LAND DEGRADATION

Human activities such as **deforestation, mining, fossil fuel extraction, unsustainable natural resource management, and intensive agricultural practices** (e.g., overgrazing, over-cultivation, excessive tilling, and monocropping) are **responsible for desertification and land degradation**.

In turn, degraded soils and poor yields push farmers to increase the use of synthetic inputs or look for more fertile land through deforestation and expropriation of local communities.

Impacts of intensive agriculture:

- **Soil health depletion**
- **70% of global freshwater** used for agricultural purposes
- **80% of global deforestation** caused by agriculture
- **1/3 of global GHG emissions** due to agricultural systems



# AGROECOLOGY'S BENEFITS FOR LAND DEGRADATION NEUTRALITY

**Agroecology**, including agroforestry, is a **sustainable solution** to protect our land and ensure soil health.

- Based on **locally-adapted knowledge** and **on field-level innovations**, agroecology addresses both land degradation and its impacts on agricultural productivity.
- Agroecology **promotes soil regeneration, diversified crops and livestock production, and reduced dependency on external (synthetic) inputs**, supporting both the land and the local communities.



**Adopting the Principles and Elements of agroecology over the long term reduces sensitivity to drought and improves the resilience of food and farming systems.**

# UNCCD COP 16

Established in 1994 after the Rio Earth Summit, the **United Nations Convention to Combat Desertification (UNCCD)** is one of the three UN treaties known as Rio Conventions (along UNCBD and UNFCCC).

The Conference of the Parties (COP) is the main decision-making body and is composed of 196 countries and the European Union.

The **UNCCD Science-Policy Interface (SPI)** was established at COP11 in 2013 and works to translate scientific findings and assessments into policy-relevant recommendations.

While **COP 14** (2019, Delhi) **included agroecology in the political recommendations** as one approach to tackle land degradation (Decisions 20 and 23), agroecology was **absent in the discussions during COP 15**.

**COP 16** will take place in **Riyadh (Saudi Arabia)** from **2 to 13 December 2024**, and will be the **first UNCCD COP held in the Middle East and North Africa region**, which is primarily affected by desertification, land degradation and drought. **Agrifood Systems Day** will be observed on the **5th**.

