The frequency of drought is increasing worldwide. Droughts have been estimated to cost US$35 billion per year and affect about 1.5 billion people, contributing to loss of livelihoods, poverty, and food and water insecurity. As much as 83% of these losses are in the agriculture sector and disproportionately affect the poorest people, through food insecurity, malnutrition, loss of livelihoods, and erosion of assets.

The increase in drought is often attributed to climate change, yet evidence suggests land degradation also plays a significant role in drought. Land degradation changes soil properties (e.g. reducing water storage capacity) and surface/soil hydrological processes (e.g. increased runoff, reduced infiltration and soil moisture). Meanwhile, large-scale land degradation also impacts atmospheric processes and therefore results in local and regional anomalies in rainfall and temperature. Both pathways can result in increase in drought severity and/or occurrence. When degraded land is restored, soil properties and hydrological processes can be rehabilitated, leading to lower risk of drought and a reduction in vulnerability.

The standard drought narrative assumes that drought is a natural event, and therefore an inevitable occurrence. While some regions are undoubtedly at risk of natural drought, many droughts are amplified or entirely caused by human activities (anthropogenic drought). These anthropogenic droughts may be reduced or avoided through appropriate actions. Furthermore, when anthropogenic factors are removed, the severity of natural droughts can be reduced.

Ecosystem restoration is rarely included in public drought management plans and investments, yet evidence shows that restoration actions can significantly increase the amount of water retained in ecosystems. Opportunities to mitigate drought through ecosystem restoration are being missed due to a combination of weak understand, institutional gaps, and sectoral inconsistencies.
**Nature based solutions to drought**

IUCN, with the support of the Austrian Development Agency, is supporting public and nongovernment partners in Burkina Faso, Georgia and Kenya to integrate ecosystem restoration actions into drought management. Nature based Solutions (NbS) to drought complement other actions in drought cycle management, i.e. actions to prepare for, respond to, and recover from drought. They will include actions to restore ecosystem functions and reverse land degradation, for example through agroecological approaches and landscape restoration, guided by the IUCN NbS Standard. The initiative supports countries to deliver national targets for Land Degradation Neutrality under the UN Convention to Combat Desertification and to fulfil their obligations under the Sendai Framework on Disaster Risk Reduction.

**Human Factors**
- Land degradation reducing water storage capacity and infiltration, soil moisture and groundwater recharge. Atmospheric dynamics (e.g., changed timing, location and/or reduced amount of precipitation).

**Natural Factors**
- Precipitation deficiency (amount, intensity, timing). High temperature, high winds, low relative humidity, greater sunshine, less cloud cover.

**Drought**
- Economic, environmental and social impacts. Human costs.

**Reduction in the availability of water**
- Soil water deficiency. Reduced stream flow and recharge of water bodies and aquifers. Reduced wetlands and habitats.

**Increased demand for water**

**Evidence on NbS-drought options is validated and mobilized**

**Partner institutions have the capacity to implement NbS drought**

**NbS are prioritised in drought management planning**

**Outcome: Public drought management policies integrate ecological restoration actions**

**Outcome: ecosystem restoration is carried out to enhance hydrological function and mitigate drought**

**Impact: reduced drought hazard and exposure through ecological restoration**

**Project Design**

**Societal challenge:**
- [disaster risk, food insecurity, water insecurity, human health]

**Human Wellbeing**
- Reduced drought risk contributing to food and water security, nutrition, socio-economic development (reduced migration and conflict etc.)

**Biodiversity**
- Increased soil biodiversity, increased above ground biodiversity, enhanced ecosystem function (reversing desertification)