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## Assessing drought risk to track progress in drought adaptation, mitigation and management at the global scale

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Droughts are known to be one of the most damaging and costly natural hazards as a result of their large spatial scale, creeping nature and long duration. They have widespread primary and secondary impacts, and as such, proactive drought management is crucial to mitigate those impacts. In order to do so, it is crucial to understand the drought risk – i.e. the characteristics of the drought hazard, who or what is exposed to the drought hazard, and who (or what) is vulnerable to the effects of drought. Drought mitigation is one of five strategic objectives under the United Nations Convention to Combat Desertification (UNCCD) 2018-2030 Strategic Framework, under which a monitoring framework and a range of indicators was agreed by country Parties to the UNCCD.

Here we present new guidance created to help Parties to the UNCCD report on their progress towards Strategic Objective 3 'To mitigate, adapt to, and manage the effects of drought in order to enhance resilience of vulnerable populations and ecosystems'. Progress is monitored using three indicators, capturing the three fundamental components of risk: drought hazard, exposure to drought and vulnerability to drought. The three indicators, as agreed by Parties to the UNCCD, are:

- Trends in the proportion of land under drought over the total land area,
- Trends in the proportion of the total population exposed to drought, and
- Trends in the degree of drought vulnerability.

Acknowledging the need for global applicability, the methods recommended to calculate these three indicators balance state-of-the-art science with relative simplicity, whilst also meeting the requirements set out in official UNCCD Decisions, guidelines of the World Meteorological Organization, and where possible utilising datasets used for other reporting activities (e.g. the Sustainable Development Goals). The methods for each indicator are illustrated using contrasting case studies, highlighting the flexibility of the approaches recommended, as well as opportunities for the future of national reporting on drought risk.