# **SO3-1 Trends in the proportion of land under drought over the total land area**

## **Drought hazard indicator**

Hazard refers to a drought event caused by a natural hydrometeorological deficit which has the potential to impact exposed and vulnerable populations and ecosystems. This section is pre-filled with default information derived from the Global Precipitation Climatology Centre (GPCC) Monitoring Product v6. Keep the default national estimates or, in the event of data and capacity, replace them with national data.

### **SO3-1.T1: National estimates of the land area in each drought intensity class as defined by the Standardized**

### **Precipitation Index (SPI) or other nationally relevant drought indices**

Provide the area affected by meteorological drought hazard on an annual basis, using the Standardized Precipitation Index (SPI), drought intensity classes (defined by the World Meteorological Organization 2012) or another drought index in use at country level. The unit of measurement for the SO3-1 indicator is spatial extent (km²) expressed as the proportion (percentage or %) of the total land area of the country under each drought intensity class in each reporting year.

|  |  |  |
| --- | --- | --- |
|  | **Drought intensity classes** |  |
| **Mild drought (km2)** | **Moderate drought (km2)** | **Severe drought (km2)** | **Extreme drought (km2)** | **Non-drought (km2)** |  |
| **2000** |  |  |  |  |  |  |
| **2001** |  |  |  |  |  |  |
| **2002** |  |  |  |  |  |  |
| **2003** |  |  |  |  |  |  |
| **2004** |  |  |  |  |  |  |
| **2005** |  |  |  |  |  |  |
| **2006** |  |  |  |  |  |  |
| **2007** |  |  |  |  |  |  |
| **2008** |  |  |  |  |  |  |
| **2009** |  |  |  |  |  |  |
| **2010** |  |  |  |  |  |  |
| **2011** |  |  |  |  |  |  |
| **2012** |  |  |  |  |  |  |
| **2013** |  |  |  |  |  |  |
| **2014** |  |  |  |  |  |  |
| **2015** |  |  |  |  |  |  |
| **2016** |  |  |  |  |  |  |
| **2017** |  |  |  |  |  |  |
| **2018** |  |  |  |  |  |  |
| **2019** |  |  |  |  |  |  |
| **2020** |  |  |  |  |  |  |
| **2021** |  |  |  |  |  |  |

### **SO3-1.T2: Summary table for land area under drought without class breakdown**

Provide the total area under drought, i.e., the sum of the area under all drought intensity classes in the table above, as well as the proportion of the total land area under drought, on an annual basis.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Total area under drought (km²)** | **Proportion of land under drought (%)** |  |
| **2000** |  |  |  |
| **2001** |  |  |  |
| **2002** |  |  |  |
| **2003** |  |  |  |
| **2004** |  |  |  |
| **2005** |  |  |  |
| **2006** |  |  |  |
| **2007** |  |  |  |
| **2008** |  |  |  |
| **2009** |  |  |  |
| **2010** |  |  |  |
| **2011** |  |  |  |
| **2012** |  |  |  |
| **2013** |  |  |  |
| **2014** |  |  |  |
| **2015** |  |  |  |
| **2016** |  |  |  |
| **2017** |  |  |  |
| **2018** |  |  |  |
| **2019** |  |  |  |
| **2020** |  |  |  |
| **2021** |  |  |  |

## **Qualitative assessment:**

Provide a qualitative assessment of the indicator. However, please note that due to the effect of natural climate variability on the occurrence of droughts, any observed changes or trends in the proportion of land under drought over this short time frame should be interpreted with caution.

## **General Comments**

Provide any additional comments you deem relevant.

# **SO3-2 Trends in the proportion of the population exposed to drought**

## **Drought exposure indicator**

Exposure is defined in terms of the number of people who are exposed to drought, as calculated from the SO3-1 indicator data.

### **SO3-2.T1: National estimates of the percentage of the total population within each drought intensity class as well as the total population count and the proportion of the national population exposed to drought regardless of intensity.**

Provide a count of the total population and the percentage of the total population within each drought intensity class on an annual basis.

In addition, report the total population exposed to drought, i.e. the sum of the population exposed to all drought classes, as well as the proportion of the national population that is exposed to drought, on an annual basis. This table is pre-filled with default population estimates derived from the WorldPop dataset. Keep the default national estimates, or, in the event of data and capacity, replace them with national data.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Mild drought** | **Moderate drought** | **Severe drought** | **Extreme drought** | **Exposed population** |  |
| **Reporting Year** | **Total Population** | **Population Count** | **%** | **Population Count** | **%** | **Population Count** | **%** | **Population Count** | **%** | **Population Count** | **%** |  |
| **2000** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2001** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2002** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2003** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2004** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2005** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2006** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2007** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2008** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2009** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2010** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2011** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2012** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2013** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2014** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2015** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2016** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2017** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2018** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2019** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2020** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2021** |  |  |  |  |  |  |  |  |  |  |  |  |

### **SO3-2.T2: National estimates of the percentage of the female population within each drought intensity class.**

Provide a count of the total female population and the percentage of the female population within each drought intensity class on an annual basis.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Mild drought** | **Moderate drought** | **Severe drought** | **Extreme drought** | **Exposed female population** |  |
| **Reporting Year** | **Total Population** | **Population Count** | **%** | **Population Count** | **%** | **Population Count** | **%** | **Population Count** | **%** | **Population Count** | **%** |  |
| **2000** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2001** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2002** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2003** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2004** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2005** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2006** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2007** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2008** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2009** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2010** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2011** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2012** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2013** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2014** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2015** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2016** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2017** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2018** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2019** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2020** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2021** |  |  |  |  |  |  |  |  |  |  |  |  |

### **SO3-2.T3: National estimates of the percentage of the male population within each drought intensity class.**

Provide a count of the total male population and percentage of the male population within each drought intensity class on an annual basis.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Mild drought** | **Moderate drought** | **Severe drought** | **Extreme drought** | **Exposed male population** |  |
| **Reporting Year** | **Total Population** | **Population Count** | **%** | **Population Count** | **%** | **Population Count** | **%** | **Population Count** | **%** | **Population Count** | **%** |  |
| **2000** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2001** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2002** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2003** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2004** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2005** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2006** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2007** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2008** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2009** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2010** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2011** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2012** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2013** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2014** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2015** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2016** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2017** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2018** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2019** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2020** |  |  |  |  |  |  |  |  |  |  |  |  |
| **2021** |  |  |  |  |  |  |  |  |  |  |  |  |

## **Qualitative assessment**

### **Interpretation of the indicator**

Provide a qualitative assessment of the indicator. However, please note that due to the effect of natural climate variability on the occurrence of droughts, any observed changes or trends in the proportion of land under drought over this short time frame should be interpreted with caution.

## **General Comments**

Provide any additional comments you deem relevant.

# **SO3-3 Trends in the degree of drought vulnerability**

## **Drought Vulnerability Index**

Vulnerability refers to the conditions determined by physical, social, economic and environmental factors or processes which increase the susceptibility of an individual, community, assets or systems to the impacts of hazards, such as drought. For the purpose of reporting, we consider three components of vulnerability: social, economical and infrastructural.

### **SO3-3.T1: National estimates of the Drought Vulnerability Index**

Assess your country’s vulnerability to drought as represented by the Drought Vulnerability Index and as explained in the Good Practice Guidance for SO3. This table contains options to report on tier 1 – the total country-level Drought Vulnerability Index (DVI) value, and tiers 2 and 3 – on the vulnerability of male and female populations to drought. This section is pre-filled with a default value derived from the global DVI dataset of the European Commission Joint Research Centre. Keep the default national estimate, or, in the event of data and capacity, replace it with national data.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | **Total country-level DVI value (tier 1)** | **Male DVI value (tiers 2 and 3 only)** | **Female DVI value (tiers 2 and 3 only)** |  |
| **2000** |  |  |  |  |
| **2001** |  |  |  |  |
| **2002** |  |  |  |  |
| **2003** |  |  |  |  |
| **2004** |  |  |  |  |
| **2005** |  |  |  |  |
| **2006** |  |  |  |  |
| **2007** |  |  |  |  |
| **2008** |  |  |  |  |
| **2009** |  |  |  |  |
| **2010** |  |  |  |  |
| **2011** |  |  |  |  |
| **2012** |  |  |  |  |
| **2013** |  |  |  |  |
| **2014** |  |  |  |  |
| **2015** |  |  |  |  |
| **2016** |  |  |  |  |
| **2017** |  |  |  |  |
| **2018** |  |  |  |  |
| **2019** |  |  |  |  |
| **2020** |  |  |  |  |
| **2021** |  |  |  |  |

## **Method**

The DVI is a composite indicator, incorporating social, economic and infrastructural components that reflect the vulnerability of a country’s population to drought. The three tiers of vulnerability assessment (Tiers of VA) recommended in the Good Practice Guidance on SO3 represent increasing levels of methodological complexity and data requirement for the calculation of the DVI:

**Which tier level did you use to compute the DVI?**

* Tier 1 Vulnerability Assessment ⓘUses at least one factor per vulnerability component, represented by country-level data.
* Tier 2 Vulnerability Assessment ⓘUses more than one factor per vulnerability component, where the factors are represented by country-level data, with the inclusion of sex-disaggregated data (where applicable)
* Tier 3 Vulnerability Assessment ⓘUses more than one factor per vulnerability component, where factors are represented by subnational data (which may be gridded or for administrative regions), with the inclusion of sex-disaggregated data (where applicable).

|  |  |  |  |
| --- | --- | --- | --- |
| **Social Factor** | **Which factors did you use per vulnerability component at national level?** | **Select all the factors for which data were available at subnational level using the check boxes provided** |  |
| **Literacy rate (% of people aged 15+)** |  |  |  |
| **Life expectancy at birth (years)** |  |  |  |
| **Population aged 15-64 (%)** |  |  |  |
| **Government effectiveness** |  |  |  |
| **Refugee population (%)** |  |  |  |
| **Other (Please specify)** |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Economic Factor** | **Which factors did you use per vulnerability component at national level?** | **Select all the factors for which data was available at sub-national level using the check boxes provided** |  |
| **Proportion of the population below the international poverty line** |  |  |  |
| **GDP per capital** |  |  |  |
| **Agriculture % of GDP** |  |  |  |
| **Energy consumption per capital** |  |  |  |
| **Other (Please specify)** |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Infrastructure Factor** | **Which factors did you use per vulnerability component at national level?** | **Select all the factors for which data was available at sub-national level using the check boxes provided** |  |
| **Proportion of the population using safely managed drinking water services** |  |  |  |
| **Total renewable water resources per capital** |  |  |  |
| **Cultivated area equipped for irrigation (%)** |  |  |  |
| **Other (please specify)** |  |  |  |

## **Qualitative assessment**

### **SO3-3.T2: Interpretation of the indicator**

If the DVI was calculated at national level using national data, i.e. not using the default data, select the dominant change observed in the DVI. Please also provide any further comments on these changes.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Change in the indicator** | **Comments** |  |
|  SO3-3 (default DVI) SO3-3 (country DVI) | *Available only for SO3-3 Country DVI* |  | Remove |
|  |  IncreasingDecreasingNo Change |  | Remove |

## **General Comments**

Provide any additional comments you deem relevant.

# **SO3 Voluntary Targets**

List any target relevant to this strategic objective that your country has set, and indicate the expected year of achievement and level of application (e.g. national, subnational).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Target** | **Year ⓘ****Expected year of achievement or actual year (if already achieved). It must be later than 2018.** | **Level of application** | **Status of target achievement** | **Comments** |  |
|  |  | NationalSubnational | AchievedOngoingExtended or postponedNot achievedPartially achievedSpecify actual percentage (%) achievement |  | Remove |
|  |

### **General Comments**

Provide any additional comments you deem relevant.