

SDG Goal 15**Life on land**

SDG Target 15.4 **By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development**

SDG Indicator 15.4.2 **(a) Mountain Green Cover Index; and (b) proportion of degraded mountain land**

Time series **(a) Mountain Green Cover Index**

1. General information on the time series

- Date of national metadata: January 30, 2026
- National data: <https://sdg-indicators.de/15-4-2>
- Definition: The time series measures the share of mountain area classified as green according to the land cover classification adapted for the indicator in the total mountain area.
- Disaggregation: bioclimatic belt, land cover class

2. Comparability with the UN metadata

- Date of UN metadata: April 2025
- UN metadata: <https://unstats.un.org/sdgs/metadata/files/Metadata-15-04-02.pdf>
- The time series is compliant with the UN metadata. The calculation is based on nationally available remote sensing data and geodata.

3. Data description

- The mountain classification data are based on a special evaluation by the Federal Agency for Cartography and Geodesy (BKG). For the identification of mountain areas, data of the digital terrain model (DGM) are used. It provides information on the altitude of the entire country with a resolution of 10 meters. The deposited data of the SEEA-landcover classification come from the Extent Account of the Ecosystem Accounts for Germany. Areas that can be classified as cropland, forest or grassland according to the SEEA land cover classification are counted as green cover.

Nival: Highest altitude zone in the mountains, practically devoid of vegetation.

Alpine: Altitude zone above the tree line but below the nival zone, with herbaceous vegetation.

Montane: Altitude zone below the tree line.

4. Access to data source

- Ecosystem Accounting:
https://www.destatis.de/EN/Themes/Society-Environment/Environment/Environmental-Economic-Accounting/ecosystem-account/_node.html

5. Metadata on source data

- Environmental Economic Accounting: Ecosystem area balance:
https://www.destatis.de/EN/Themes/Society-Environment/Environment/Environmental-Economic-Accounting/ecosystem-account/_node.html#579384
- National Ecosystem Classification for Germany:
<https://www.destatis.de/EN/Themes/Society-Environment/Environment/Environmental-Economic-Accounting/ecosystem-account/Methods/national-ecosystem-classification-5852206219004.pdf>

6. Timeliness and frequency

- Timeliness: t + 24 months
- Frequency: Every 3 years

7. Calculation method

- Unit of measurement: Percentage
- Calculation:

$$\text{Mountain Green Cover Index} = \frac{\text{Areas in the mountains classified as green [ha]}}{\text{Total mountain area [ha]}} \cdot 100 [\%]$$

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Life on land

SDG Target 15.4	By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development
SDG Indicator 15.4.2	(a) Mountain Green Cover Index; and (b) proportion of degraded mountain land
Time series	(b) Degraded mountain area

1. General information on the time series

- Date of national metadata: April 13, 2023
- National data: <https://sdg-indicators.de/15-4-2>
- Definition: The time series measures the proportion of degraded area in mountains in relation to the total mountain area. Areas are considered degraded when they change from green to non-green according to the SEEA classification adapted for the indicator.
- Disaggregation: Not available.

2. Comparability with the UN metadata

- Date of UN metadata: April 2025
- UN metadata: <https://unstats.un.org/sdgs/metadata/files/Metadata-15-04-02.pdf>
- The time series is compliant with the UN metadata.

3. Data description

- The mountain classification data are based on a special evaluation by the Federal Agency for Cartography and Geodesy (BKG). For the identification of mountain areas, data of the digital terrain model (DGM) are used. It provides information on the altitude of the entire country with a resolution of 10 meters. The deposited data of the SEEA-landcover classification come from the Extent Account of the Ecosystem Accounts for Germany. Areas that can be classified as cropland, forest or grassland according to the SEEA land cover classification are counted as green cover.

4. Access to data source

- Ecosystem Accounting:
https://www.destatis.de/EN/Themes/Society-Environment/Environment/Environmental-Economic-Accounting/ecosystem-account/_node.html

5. Metadata on source data

- Environmental Economic Accounting: Ecosystem area balance:
https://www.destatis.de/EN/Themes/Society-Environment/Environment/Environmental-Economic-Accounting/ecosystem-account/_node.html#579384
- National Ecosystem Classification for Germany:
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al-Economic-Accounting/ecosystem-account/Methods/national-ecosystem-classification-5852206219004.pdf

6. Timeliness and frequency

- Timeliness: t + 6 months
- Frequency: Every 3 years

7. Calculation method

- Unit of measurement: Percentage
- Calculation:

$$\text{Proportion of degraded mountain area} = \frac{\text{Degraded mountain area [ha]}}{\text{Total mountain area [ha]}} \cdot 100 [\%]$$