

## 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 15.4.1

Coverage by protected areas of important sites for mountain biodiversity

### Time series

Mountain Key Biodiversity Areas (KBAs) covered by protected areas

### 1. General information on the time series

- Date of national metadata: 24 April 2023
- National data: <http://sdg-indicators.de/15-4-1/>
- Definition: The time series measures the proportion of Key Biodiversity Areas (KBAs) in mountain regions that is covered by protected areas.
- Disaggregation: Not available.

### 2. Comparability with the UN metadata

- Date of UN metadata: July 2024
- UN metadata: <https://unstats.un.org/sdgs/metadata/files/Metadata-15-04-01.pdf>
- The time series is partly compliant with the UN metadata. It is calculated as the percentage of Key Biodiversity Areas covered by protected areas and not the mean percentage of each Key Biodiversity Area that is covered by protected areas.

### 3. Data description

- The data is based on a special evaluation. For the calculation of area under protection, all protected areas except for nature parks and UNESCO-MAB Biosphere reserves are considered. Data on protected areas was downloaded from the Protected Planet webpage. Data on Key Biodiversity Areas was provided by the Nature And Biodiversity Conservation Union (NABU) for Germany. The area of mountain regions is calculated in the same manner like SDG 15.4.2 (<https://sdg-indikatoren.de/public/Meta/15.4.2.pdf>), provided by the Federal Agency for Cartography and Geodesy (BGK). To be as precise as possible, the time series is calculated as the percentage of Key Biodiversity Areas covered by protected areas and not the mean percentage of each Key Biodiversity Area that is covered by protected areas as described in the UN metadata.

### 4. Access to data source

- Data on protected areas:  
<https://www.protectedplanet.net/country/DEU>
- Data on Key Biodiversity Areas (only available in German):  
<https://bergenhusen.nabu.de/forschung/ibas/index.html>

## 5. Metadata on source data

- Metadata on protected areas:  
<https://www.protectedplanet.net/en/thematic-areas/wdpa?tab=Methodology>
- Digital elevation model for Germany (DGM10) (only available in German):  
<https://gdz.bkg.bund.de/index.php/default/digitale-geodaten/digitale-gelandemodelle/digitales-gelandemodell-gitterweite-10-m-dgm10.html>
- Data on Key Biodiversity Areas (only available in German):  
<https://bergenhusen.nabu.de/forschung/ibas/index.html>

## 6. Timeliness and frequency

- Timeliness: Not applicable.
- Frequency: Annual

## 7. Calculation method

- Unit of measurement: Percentage; Hectare
- Calculation:

$$\text{Key Biodiversity Areas (KBAs) in mountain regions covered by protected areas} = \frac{\text{Protected mountain KBA [ha]}}{\text{Total mountain KBA [ha]}} \cdot 100 [\%]$$

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### Time series

Mountain regions, covered by protected areas

### 1. General information on the time series

- Date of national metadata: 24 April 2023
- National data: <http://sdg-indicators.de/15-4-1/>
- Definition: The time series measures the protected area in relation to the total area of mountain regions.
- Disaggregation: Not available.

### 2. Comparability with the UN metadata

- Date of UN metadata: July 2024
- UN metadata: <https://unstats.un.org/sdgs/metadata/files/Metadata-15-04-01.pdf>
- The time series is not compliant with the UN metadata, but provides additional information.

### 3. Data description

- The data is based on a special evaluation. For the calculation of area under protection, all protected areas except for nature parks and UNESCO-MAB Biosphere reserves are considered. Data on protected areas was downloaded from the Protected Planet webpage. The area of mountain regions is calculated in the same manner like SDG 15.4.2 (<https://sdg-indikatoren.de/public/Meta/15.4.2.pdf>), provided by the Federal Agency for Cartography and Geodesy (BKG). To be as precise as possible, the time series is calculated as the percentage mountain regions covered by protected areas and not the mean percentage of each mountain area that is covered by protected areas as described in the UN metadata.

### 4. Access to data source

- Data on protected areas:  
<https://www.protectedplanet.net/country/DEU>

### 5. Metadata on source data

- Metadata on protected areas:  
<https://www.protectedplanet.net/en/thematic-areas/wdpa?tab=Methodology>
- Digital elevation model for Germany (DGM10) (only available in German):  
<https://gdz.bkg.bund.de/index.php/default/digitale-geodaten/digitale-gelandemodelle/digitales-gelandemodell-gitterweite-10-m-dgm10.html>

### 6. Timeliness and frequency

- Timeliness: Not applicable.
- Frequency: Annual

## 7. Calculation method

- Unit of measurement: Percentage; Hectare
- Calculation:

$$\text{Mountain regions covered by protected areas} = \frac{\text{Protected mountain area [ha]}}{\text{Total mountain area [ha]}} \cdot 100 [\%]$$

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### Time series

Mountain regions, covered by effective protected areas

### 1. General information on the time series

- Date of national metadata: 24 April 2023
- National data: <http://sdg-indicators.de/15-4-1/>
- Definition: The time series measures the effective protected area in relation to the total area of mountain regions.
- Disaggregation: Not available.

### 2. Comparability with the UN metadata

- Date of UN metadata: July 2024
- UN metadata: <https://unstats.un.org/sdgs/metadata/files/Metadata-15-04-01.pdf>
- The time series is not compliant with the UN metadata, but provides additional information.

### 3. Data description

- The data is based on a special evaluation. For the calculation of area under protection, only effective protected areas (Core zones of UNESCO-MAB Biosphere Reserve, National Parks, Nature Reserve, Special Protection Area (Birds Directive)) are considered. Data on protected areas was downloaded from the Protected Planet webpage and data on Core zones of UNESCO-MAB Biosphere Reserve have been delivered by the Federal Agency for Nature Conservation (BfN). The area of mountain regions is calculated in the same manner like SDG 15.4.2 (<https://sdg-indikatoren.de/public/Meta/15.4.2.pdf>), provided by the Federal Agency for Cartography and Geodesy (BKG). To be as precise as possible, the time series is calculated as the percentage mountain regions covered by protected areas and not the mean percentage of each mountain area that is covered by effective protected areas.

### 4. Access to data source

- Data on protected areas:  
<https://www.protectedplanet.net/country/DEU>
- FFH Areas:  
<https://geodienste.bfn.de/schutzgebiete?lang=en>

### 5. Metadata on source data

- Metadata on protected areas:  
<https://www.protectedplanet.net/en/thematic-areas/wdpa?tab=Methodology>
- Digital elevation model for Germany (DGM10) (only available in German):  
<https://gdz.bkg.bund.de/index.php/default/digitale-geodaten/digitale-gelandemodelle/digitales-gelandemodell-gitterweite-10-m-dgm10.html>
- Metadata on core zones of UNESCO-MAB Biosphere Reserve and Flora Fauna Habitats:  
<https://geodienste.bfn.de/schutzgebiete?lang=en>

## 6. Timeliness and frequency

- Timeliness: Not applicable.
- Frequency: Annual

## 7. Calculation method

- Unit of measurement: Percentage; Hectare
- Calculation:

$$\text{Mountain regions covered by effective protected areas} = \frac{\text{Effective protected mountain area [ha]}}{\text{Total mountain area [ha]}} \cdot 100 [\%]$$