



Analysing Data on Protected Areas

International goals



The OECD reports indicators on terrestrial and marine protected areas for countries across the world.

It applies a harmonised methodology to data from the World Database on Protected Areas.



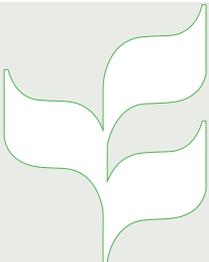
By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on best available scientific information.

Sustainable development goal 14.5



Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species.

Sustainable development goal 15.5



By 2020, at least 17 per cent of terrestrial and inland water areas and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved [...]

Aichi Target 11 of the Convention of Biological Diversity

Methodology

THE WORLD DATABASE ON PROTECTED AREAS

The OECD indicators are derived from the World Database on Protected Areas (WDPA), a geospatial database of terrestrial and marine protected areas.

The WDPA is managed by United Nations Environment and the World Conservation Monitoring Centre (UNEP-WCMC) with

support from the International Union for Conservation of Nature (IUCN) and its World Commission on Protected Areas (WCPA).

The WDPA is updated monthly. It contains information on more than 200 000 protected areas.

MANAGEMENT CATEGORIES

The World Database on Protected Areas includes information on management objectives (IUCN categories I-VI). It also records if protected areas have been designated using national, regional (e.g. the European Natura 2000 networks) or international (e.g. Ramsar sites) frameworks.

- **Ia** Strict natural reserve
- **Ib** Wilderness area
- **II** National park
- **III** Natural monument
- **IV** Habitat/Species management area
- **V** Protected Landscape/Seascape
- **VI** Protected area with sustainable use of natural resources
- No IUCN category and regional or international designations.

AREA CALCULATION

Protected areas regularly overlap. Naively adding up their reported areas makes protected areas seem larger. These overlaps are accounted for in the OECD indicator. Where areas with different IUCN categories overlap the category that comes first in the list above is attributed to the overlapping areas. In order to assign protected areas to countries and to the

terrestrial and marine domains, a harmonised terrestrial and marine boundary dataset created by the European Commission's Joint Research Centre is used. This is adapted from FAO GAUL (2015) for terrestrial boundaries and VLIZ Exclusive Economic Zones, v9 (2016) for marine boundaries.

DATA ACCESS AND COVERAGE

The OECD indicator is available via the statistical portal stats.oecd.org and includes absolute (km²) and relative (as share of land/EEZ areas) protected area extents from 1950 to the present day, disaggregated by:

- Country
- Terrestrial/marine domain
- Management objective

Terrestrial protected areas

Pristine wilderness or lived-in landscapes? This chart gives an overview of how protected areas are used in different countries.

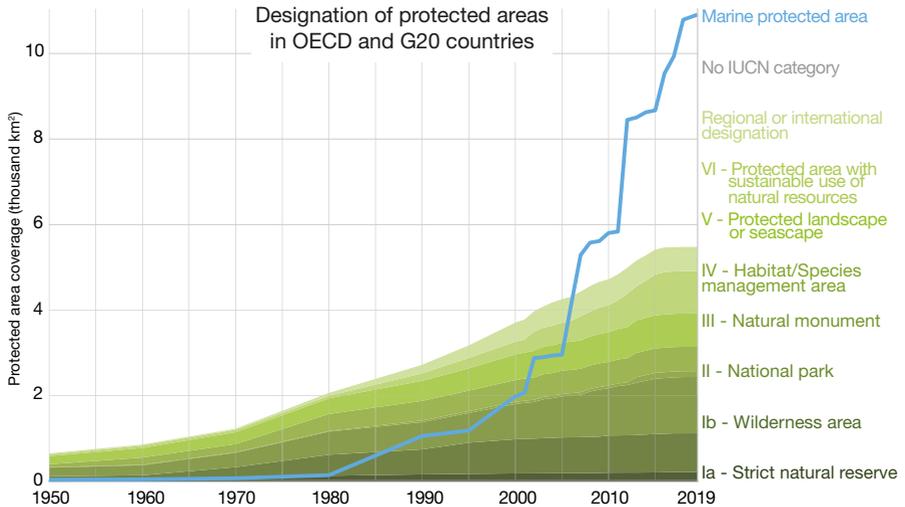
Terrestrial protected areas are shown as a share of the total land area.

In countries like Poland, Germany, Slovenia and the United Kingdom, the majority of protected areas are nationally designated as IUCN category V, which is primarily concerned with landscape conservation, whereas, Chile, Colombia, Finland, Sweden and the United States mostly use protected area designations to protect wilderness areas, national parks and other highly natural areas.

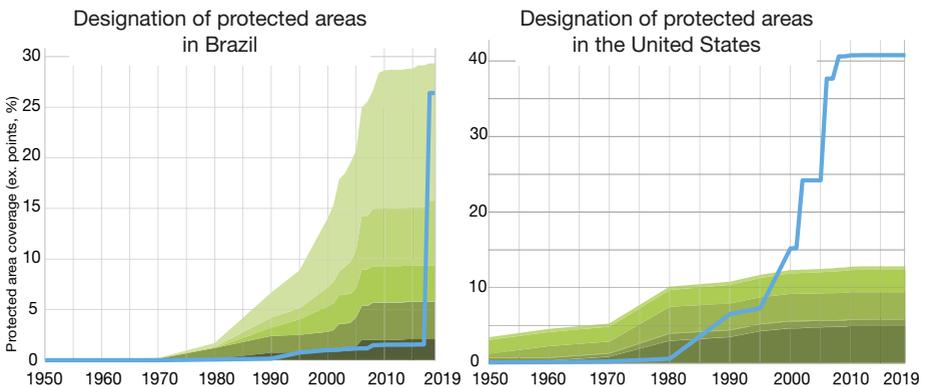


Historical patterns

Between 1970 and 2015, new terrestrial protected areas were designated at a consistently high rate. Designation of marine protected areas was slow until 2000. Since then, they increased by more than 10 million square kilometers, which is approximately the size of Canada.



Historical data can give an overview of individual countries' approaches. Brazil, for example, designated most protected areas quite recently and favours the use of mixed-use designations. The United States figure shows the recent expansion of its national marine protected areas.



Source: OECD calculations based on March 2019 version of WDPA

Interpretation and limitations

The World Database on Protected Areas is the most comprehensive global database on protected areas. However, it is neither complete nor perfectly accurate, depending on country submissions.

- The indicator does not reflect the effectiveness of these areas, nor whether or not they are suitably located. Studies of the biodiversity outcomes of protected areas show mixed results.
- IUCN management categories indicate the management objectives, which activities are likely to be permitted in the area and the likely naturalness of the ecosystems. However, they are not a normative hierarchy – one type of objective should not be considered better or more suitable than another outside of the local context.
- Protected areas are occasionally recorded as points which increases the risk that protected areas will be double-counted or attributed to the wrong domain.
- Results may differ from summaries published elsewhere because of differences in the definitions of terrestrial and marine areas, the country baselines used, the definition of a country (e.g. which overseas territories are included), areal calculation technique used, how protected areas recorded as points are treated, time lag between national or regional data and updates to the WDPA, different treatment of a particular type of protected area designation and whether that meets the definition of a protected area. The WDPA also includes data from non-governmental data providers which may not be included in national databases.

Next steps

On-going OECD work seeks to:

- Measure coastal protected areas and marine no-take zones;
- Combine the information on protected areas with other geospatial datasets to show sub-national summaries (by state or region); and indicators by land cover or ecosystem type.

The OECD reports a detailed account of countries' terrestrial and marine protected areas.

It applies a harmonised methodology to data from the World Database on Protected Areas.

Browse the data at stats.oecd.org covering over 100 countries with historic series since 1950.

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