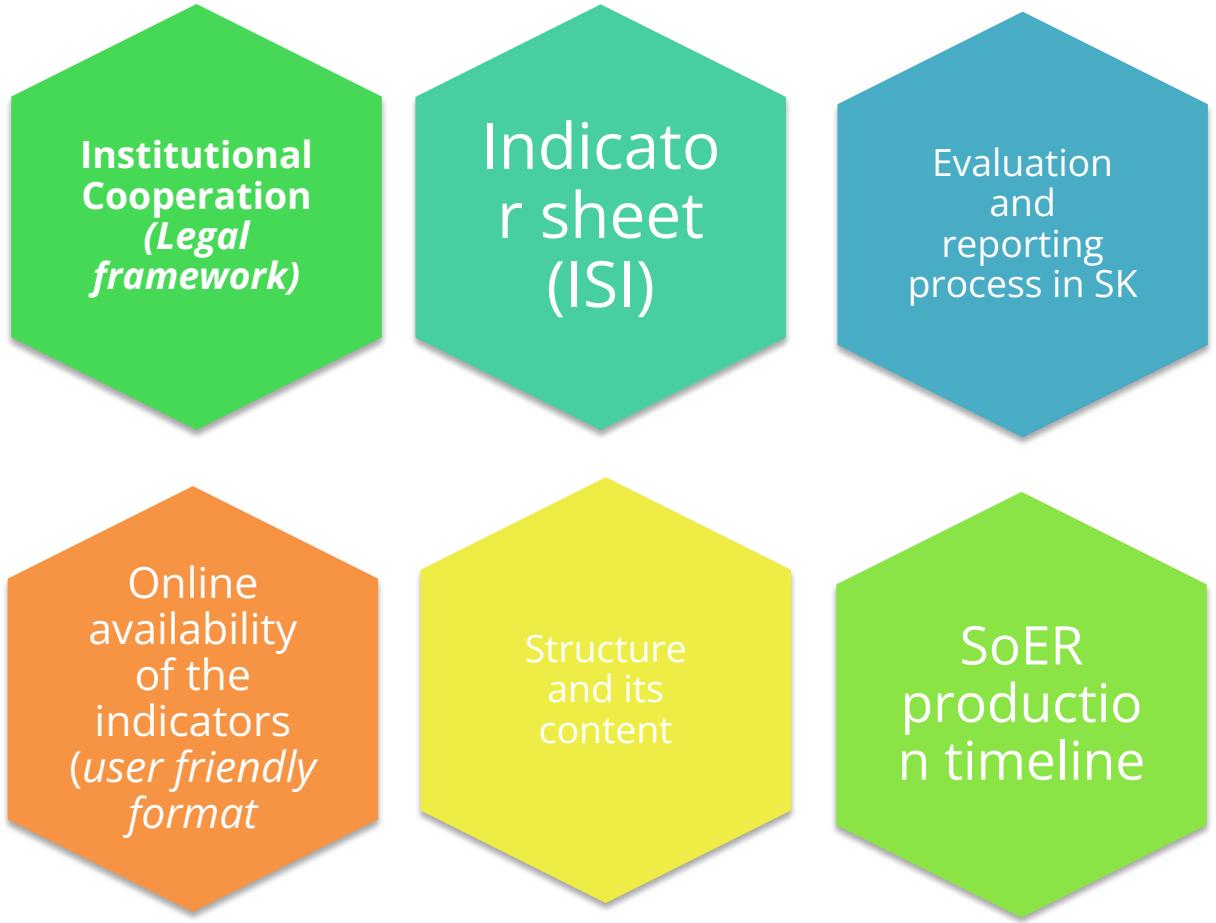
# Country visit: *Lesson learned and good practices*


Republic of Moldova

# Lessons learned



# Lesson learned

- Roadmap for the environmental reporting process, inclusive implementation of the regional set of environmental indicators, SOER and indicator based assessments + Country Brief
- Served as the ground for creating the National Working Group for SoER and its plan of activities

## Legal framework for the development and publication of the SOER SK

# Act 205/2004 Coll. on the collection, storage and dissemination of information on the environment as amended (section 7)

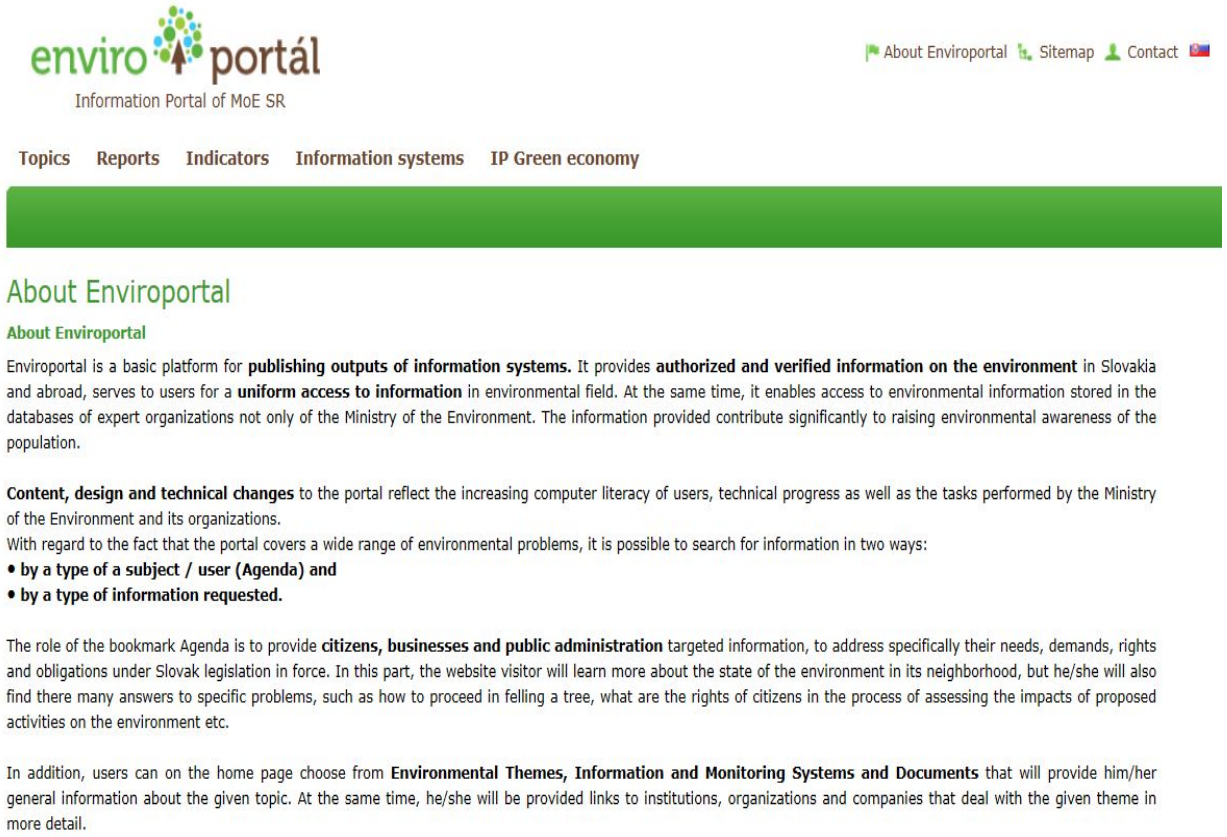
- *The report must **particularly include data** on the state of the environment and the **causes and consequences** of the said state, as well as **data on trends** of its development and on **measures to protect** and improve the environment, including international cooperation.*

# Theme of the year

- Emphasizing an issue by setting up the “Theme of the Year”
- E.g. 2017 – *“Health and Environment” SK*

# https://www.enviroportal.sk/

## *Environmental information portal*



enviro portál
Information Portal of MoE SR

About Enviroportal | Sitemap | Contact

Topics | Reports | Indicators | Information systems | IP Green economy

### About Enviroportal

**About Enviroportal**

Enviroportal is a basic platform for **publishing outputs of information systems.** It provides **authorized and verified information on the environment** in Slovakia and abroad, serves to users for a **uniform access to information** in environmental field. At the same time, it enables access to environmental information stored in the databases of expert organizations not only of the Ministry of the Environment. The information provided contribute significantly to raising environmental awareness of the population.

**Content, design and technical changes** to the portal reflect the increasing computer literacy of users, technical progress as well as the tasks performed by the Ministry of the Environment and its organizations.
With regard to the fact that the portal covers a wide range of environmental problems, it is possible to search for information in two ways:
- **by a type of a subject / user (Agenda) and**
- **by a type of information requested.**

The role of the bookmark Agenda is to provide **citizens, businesses and public administration** targeted information, to address specifically their needs, demands, rights and obligations under Slovak legislation in force. In this part, the website visitor will learn more about the state of the environment in its neighborhood, but he/she will also find there many answers to specific problems, such as how to proceed in felling a tree, what are the rights of citizens in the process of assessing the impacts of proposed activities on the environment etc.

In addition, users can on the home page choose from **Environmental Themes, Information and Monitoring Systems and Documents** that will provide him/her general information about the given topic. At the same time, he/she will be provided links to institutions, organizations and companies that deal with the given theme in more detail.

enviro portál
Information Portal of MoE SR

About Enviroportal | Sitemap | Contact

Topics | Reports | Indicators | Information systems | IP Green economy

**Indicator sets**
- Key indicators
  - Air
  - Climate change
  - Water
  - Rocks
  - Soil
  - Flora, Fauna and Nature protection
  - Waste
  - Material flows
  - Noise
  - Economic instruments
  - Environmental management and audit
- Green growth indicators

PDF Print

### Greenhouse gas emissions

Last update of indicator 30.01.2019

**Indicator definition**

The indicator represents the evolution of total greenhouse gas emissions compared to reduction targets, and the evolution of the GDP ratio in constant prices to total $CO_2$ emissions.

**Units**

Gg

Metadata

**Related policy documents and targets**

**Key question**

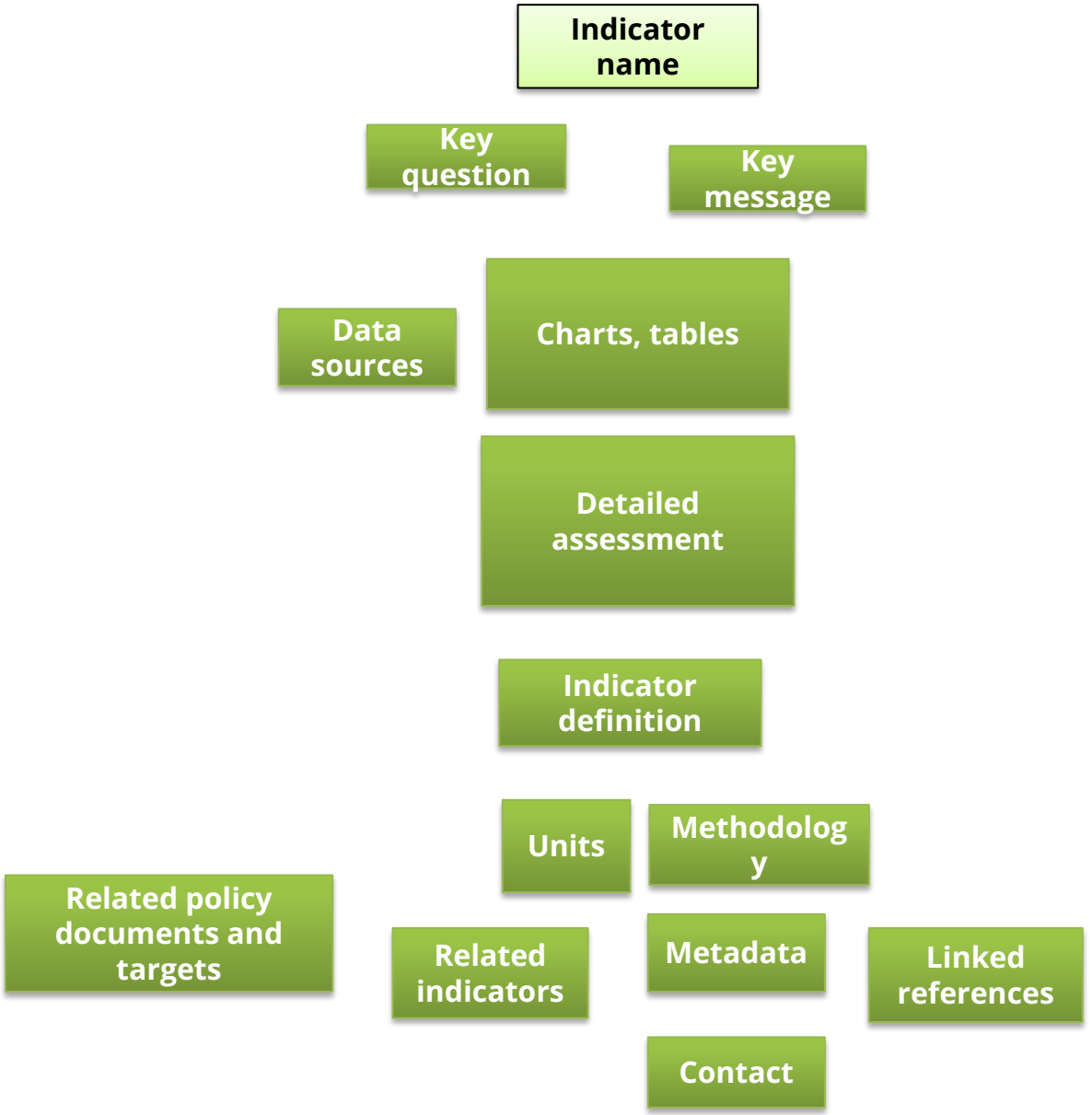
**Have been the reduction objectives of greenhouse gas emissions met and the productivity of carbon dioxide increased?**

**Key messages**

- Greenhouse gas emissions over a longer-term horizon decreased (in comparison of 2015 with 1990 by 44.58%). Until 1996, emissions were decreasing considerably. In the course of 1996–2008, emissions were roughly at the same level. After years 2008, 2009 affected due to the economic recession, a more moderate increase in emissions was recorded that originated by the economic recovery. In a year-on-year comparison (2014 – 2015), greenhouse gas emissions recorded an increase of 1.45%.
- Since 2000, $CO_2$ emissions have had a slightly decreasing trend. In 2015, compared to 2000, $CO_2$ emissions decreased by 17.2%, while GDP increased by 82.3%. As $CO_2$ emissions are decreasing while GDP is growing, we can speak of absolute decoupling, which represents a positive trend. In a year-on-year comparison, productivity in 2015 increased compared to the previous year by 5.05%.

| Change since 1990 | Change since 2000 | Last year-on-year change | Progress in achieving of concrete defined objective |
|---|---|---|---|
| ☺ | ☺ | ☺ | ☺ |
| A decrease in greenhouse gases was recorded. | Quantity of greenhouse gas emissions decreased and $CO_2$ productivity increased. As $CO_2$ emissions are decreasing while GDP is growing, we can speak of absolute decoupling, which represents a positive trend. | Greenhouse gas emissions increased in a year-on-year comparison, but only very slightly. | SR fulfils its international obligations, and there is an assumption of their fulfilment also in the following years. |

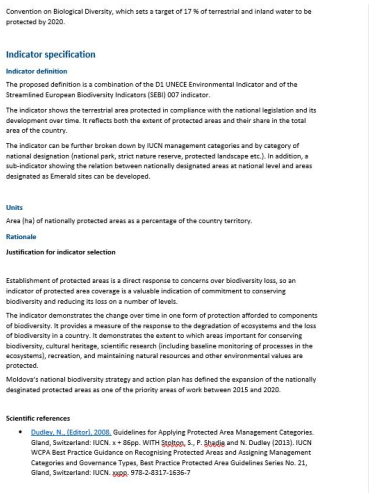
# Indicator Sheet of SK served as example to define Moldova's template (sections)



# Example of D1 Indicator production using similar sheet

- Key questions and messages;
- State and trend analysis with illustration (graphics, maps);
- Detailed Assessment

- Indicator specification and metadata (indicator definition, units);
- Rationale (justification for indicator selection, scientific references);
- Policy context and targets (context description, targets, related policy documents).



Convention on Biological Diversity, which sets a target of 17 % of terrestrial and inland water to be protected by 2020.

## Indicator specification

**Indicator definition**

The proposed definition is a combination of the D1 UNECE Environmental Indicator and of the Streamlined European Biodiversity Indicators (SEBI) 007 indicator.

The indicator shows the terrestrial area protected in compliance with the national legislation and its development over time. It reflects both the extent of protected areas and their share in the total area of the country.

The indicator can be further broken down by IUCN management categories and by category of national designation (national park, strict nature reserve, protected landscape etc.). In addition, a sub-indicator showing the relation between nationally designated areas at national level and areas designated as Emerald sites can be developed.

**Units**

Area (ha) of nationally protected areas as a percentage of the country territory.

**Rationale**

**Justification for indicator selection**

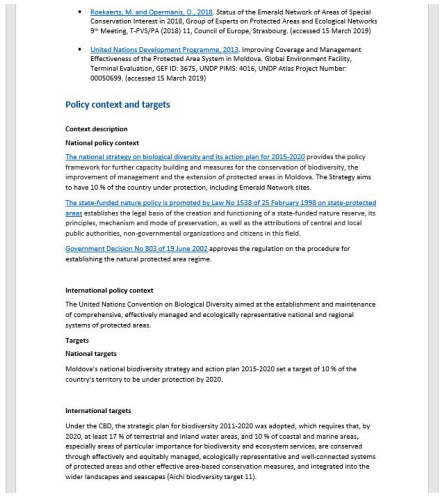
Establishment of protected areas is a direct response to concerns over biodiversity loss, so an indicator of protected area coverage is a valuable indication of commitment to conserving biodiversity and reducing its loss on a number of levels.

The indicator demonstrates the change over time in one form of protection afforded to components of biodiversity. It provides a measure of the response to the degradation of ecosystems and the loss of biodiversity in a country. It demonstrates the extent to which areas important for conserving biodiversity, cultural heritage, scientific research (including baseline monitoring of processes in the ecosystems), recreation, and maintaining natural resources and other environmental values are protected.

Moldova's national biodiversity strategy and action plan has defined the expansion of the nationally designated protected areas as one of the priority areas of work between 2015 and 2020.

**Scientific references**

- Dudley, N., (Editor), 2008. Guidelines for Applying Protected Area Management Categories. Gland, Switzerland: IUCN. x + 86pp. WITH Stolton, S., P. Shadie and N. Dudley (2013). IUCN WCPA Best Practice Guidance on Recognising Protected Areas and Assigning Management Categories and Governance Types, Best Practice Protected Area Guidelines Series No. 21, Gland, Switzerland: IUCN. xxpp. 978-2-8317-1636-7



- Roekaerts, M. and Opermanis, O., 2018. Status of the Emerald Network of Areas of Special Conservation Interest in 2018, Group of Experts on Protected Areas and Ecological Networks 9th Meeting, T-PVS/PA (2018) 11, Council of Europe, Strasbourg. (accessed 15 March 2019)
- United Nations Development Programme, 2013. Improving Coverage and Management Effectiveness of the Protected Area System in Moldova. Global Environment Facility, Terminal Evaluation, GEF ID: 3675, UNDP PIMS: 4016, UNDP Atlas Project Number: 00050699. (accessed 15 March 2019)

## Policy context and targets

**Context description**

**National policy context**

The national strategy on biological diversity and its action plan for 2015-2020 provides the policy framework for further capacity building and measures for the conservation of biodiversity, the improvement of management and the extension of protected areas in Moldova. The Strategy aims to have 10 % of the country under protection, including Emerald Network sites.

The state-funded nature policy is promoted by Law No 1538 of 25 February 1998 on state-protected areas establishes the legal basis of the creation and functioning of a state-funded nature reserve, its principles, mechanism and mode of preservation, as well as the attributions of central and local public authorities, non-governmental organizations and citizens in this field.

Government Decision No 803 of 19 June 2002 approves the regulation on the procedure for establishing the natural protected area regime.

**International policy context**

The United Nations Convention on Biological Diversity aimed at the establishment and maintenance of comprehensive, effectively managed and ecologically representative national and regional systems of protected areas.

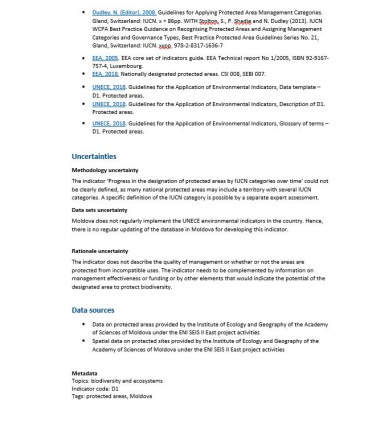
**Targets**

**National targets**

Moldova's national biodiversity strategy and action plan 2015-2020 set a target of 10 % of the country's territory to be under protection by 2020.

**International targets**

Under the CBD, the strategic plan for biodiversity 2011-2020 was adopted, which requires that, by 2020, at least 17 % of terrestrial and inland water areas, and 10 % of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes (Aichi biodiversity target 11).



- Dudley, N. (Editor), 2008. Guidelines for Applying Protected Area Management Categories. Gland, Switzerland: IUCN. x + 86pp. WITH Stolton, S., P. Shadie and N. Dudley (2013). IUCN WCPA Best Practice Guidance on Recognising Protected Areas and Assigning Management Categories and Governance Types, Best Practice Protected Area Guidelines Series No. 21, Gland, Switzerland: IUCN. xxpp. 978-2-8317-1636-7
- EEA, 2005. EEA core set of indicators guide. EEA Technical report No 1/2005, ISBN 92-9167-757-4, Luxembourg.
- EEA, 2018. Nationally designated protected areas. CSI 008, SEBI 007.
- UNECE, 2018. Guidelines for the Application of Environmental Indicators, Data template – D1. Protected areas.
- UNECE, 2018. Guidelines for the Application of Environmental Indicators, Description of D1. Protected areas.
- UNECE, 2018. Guidelines for the Application of Environmental Indicators, Glossary of terms – D1. Protected areas.

## Uncertainties

**Methodology uncertainty**

The indicator 'Progress in the designation of protected areas by IUCN categories over time' could not be clearly defined, as many national protected areas may include a territory with several IUCN categories. A specific definition of the IUCN category is possible by a separate expert assessment.

**Data sets uncertainty**

Moldova does not regularly implement the UNECE environmental indicators in the country. Hence, there is no regular updating of the database in Moldova for developing this indicator.

**Rationale uncertainty**

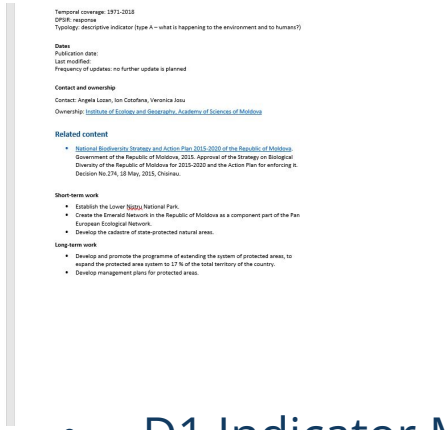
The indicator does not describe the quality of management or whether or not the areas are protected from incompatible uses. The indicator needs to be complemented by information on management effectiveness or funding or by other elements that would indicate the potential of the designated area to protect biodiversity.

## Data sources

- Data on protected areas provided by the Institute of Ecology and Geography of the Academy of Sciences of Moldova under the ENI SEIS II East project activities
- Spatial data on protected sites provided by the Institute of Ecology and Geography of the Academy of Sciences of Moldova under the ENI SEIS II East project activities

**Metadata**

Topics: biodiversity and ecosystems
Indicator code: D1
Tags: protected areas, Moldova



Temporal coverage: 1971-2018
DPSIR: response
Typology: descriptive indicator (type A – what is happening to the environment and to humans?)

**Dates**

Publication date:
Last modified:
Frequency of updates: no further update is planned

**Contact and ownership**

Contact: Angela Lozan, Ion Cotofana, Veronica Josu
Ownership: Institute of Ecology and Geography, Academy of Sciences of Moldova

## Related content

- National Biodiversity Strategy and Action Plan 2015-2020 of the Republic of Moldova. Government of the Republic of Moldova, 2015. Approval of the Strategy on Biological Diversity of the Republic of Moldova for 2015-2020 and the Action Plan for enforcing it. Decision No.274, 18 May, 2015, Chisinau.

**Short-term work**

- Establish the Lower Nistru National Park.
- Create the Emerald Network in the Republic of Moldova as a component part of the Pan European Ecological Network.
- Develop the cadastre of state-protected natural areas.

**Long-term work**

- Develop and promote the programme of extending the system of protected areas, to expand the protected area system to 17 % of the total territory of the country.
- Develop management plans for protected areas.

**Related policy documents**

- National Biodiversity Strategy and Action Plan 2015-2020 of the Republic of Moldova. Government of the Republic of Moldova, 2015. Approval of the Strategy on Biological Diversity of the Republic of Moldova for 2015-2020 and the Action Plan for enforcing it. Decision No.274, 18 May, 2015, Chisinau.
- Convention on Biological Diversity. United Nations, 1992.
- Aichi Biodiversity Targets of the Convention on Biological Diversity. UN CBD, 2011. Strategic plan 2011-2020.

## Methodology

**Methodology for indicator calculation**

It is necessary for this indicator to have a database of all nationally protected areas in the country, including name of the protected area, date of establishment, protection regime in accordance with national legislation (and relevant international requirements), size and digital boundaries.

To break down results by IUCN management category, it is necessary for each protected area to be characterised according to the type of management applied, following the IUCN guidelines.

To assess the (spatial) complementarity between Emerald site designation and nationally protected areas, two datasets are necessary (to be overlaid): (1) spatial delineation of nationally protected areas; and (2) spatial delineation of Emerald sites (only candidate and officially designated Emerald sites to be considered).

The percentage of protected areas can be calculated by the formula:

Share of protected areas (%) = [total area of protected areas in hectares or km²/total area of the country in hectares or km²] × 100.

Protected area coverage can be calculated nationally and by sub-national administrative unit of terrestrial and/or marine area.

**Methodology for gap filling**

No methodology for gap filling has been specified.

**Methodology references**

- The law on natural areas protected by the state (1998) provides the legal framework for 12 different categories of protected areas in Moldova. Seven different national designation types (scientific reserve, national park, natural monument, nature reserve, landscape reserve, resource reserve, multifunctional management area) correspond to the IUCN protected areas management categories, while three designation types are applied at the local scale (dendrological parden, zoological garden and landscape monument). In addition, two international designation types are implemented for Biosphere reserves and Ramsar sites.



**Nationally designated protected areas of the Republic of Moldova**

**Key messages**

In 2018, the share of protected areas was 11.1 % of the total territory of Moldova. The country met already the national target of 10 % of the its territory to be protected areas but much effort is needed to meet the Aichi biodiversity target 11 of the Convention on Biological Diversity, which sets a target of 17 % of terrestrial and inland water to be protected by 2020.

**What progress has been made with regard to the national designation of protected areas as a tool for biodiversity conservation?**

**Figure 1- Change in the number and size of nationally designated protected areas in the Republic of Moldova (1971-2018)**




**Data sources:**

Data on protected sites provided by the Institute of Ecology and Geography of the Academy of Sciences of Moldova under the ENI SEIS II East project activities

(please delete the below table from the text once you have added it into the webpage next to the chart)

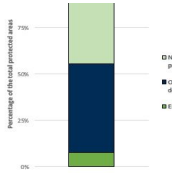
| | Number of sites | Area (ha) |
|---|---|---|
| 1971 | 1 | 5177 |
| 1991 | 2 | 6868 |

| Year | Wetlands of International Importance | Landscape reservations | National park | Scientific reserves | Biosphere reserves | Natural reservatios | Other protected areas |
|---|---|---|---|---|---|---|---|
| 1971 | 0 | 0 | 0 | 5177 | 0 | 0 | 0 |
| 1991 | 0 | 0 | 0 | 6868 | 0 | 0 | 0 |
| 1992 | 0 | 0 | 0 | 12510 | 0 | 0 | 0 |
| 1993 | 0 | 0 | 0 | 18542 | 0 | 0 | 0 |
| 1998 | 0 | 34200 | 0 | 18542 | 0 | 8009 | 2891 |
| 2000 | 4379 | 34200 | 0 | 18542 | 0 | 8009 | 2891 |
| 2003 | 64379 | 34200 | 0 | 18542 | 0 | 8009 | 2891 |
| 2005 | 79934 | 34200 | 0 | 18542 | 0 | 8009 | 2891 |
| 2013 | 79934 | 34200 | 33792 | 18542 | 0 | 8009 | 2891 |
| 2018 | 79934 | 34200 | 33792 | 18542 | 14771 | 8009 | 2891 |

The national designation types of protected areas varies considerably in the country. The protected area system of the Republic of Moldova is dealing with 12 different management categories from national parks to zoos. Ramsar sites make up the largest proportion of protected area (42 %), followed by landscape reservations (18 %) and national parks (17 %). Scientific reserves (10 %) and biosphere reserves (8 %) are also widely applied management categories in the country.

Management categories of the nationally designated protected areas in the country still are not aligned with the International Union for Conservation of Nature (IUCN) management categories. Information on the overall objectives of various management categories is not available, except for international designations such as Ramsar sites and biosphere reserves. A Global Environment Finance (GEF)-United Nations Development Programme (UNDP)-funded project has resulted in – among others things – a technical recommendation for the aligment of the national designation types with the IUCN management categories, but so far the implementation of this recommendation is still pending (UNDP, 2013).

**Figure 4 - The (spatial) complementarity between European Emerald designation (Emerald Network) and national designations by share of all protected areas (2018)**




**Data sources:**

Data on protected sites provided by the Institute of Ecology and Geography of the Academy of Sciences of Moldova under the ENI SEIS II East project activities

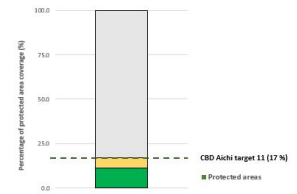
Roekaerts, M. and Opermanis, O., 2018. Status of the Emerald Network of Areas of Special Conservation Interest in 2018, Group of Experts on Protected Areas and Ecological Networks 9th Meeting, T-PVS/PA (2018) 11, Council of Europe, Strasbourg. (accessed 15 March 2019)

(please delete the below table from the text once you have added it into the webpage next to the chart)

| Designation type | Area (ha) |
|---|---|
| National designation (only) | 947 688 |
| Overlap Emerald/National designation | 1 015 380 |
| Emerald (only) | 169 230 |

| | | |
|---|---|---|
| 1992 | 3 | 12510 |
| 1993 | 4 | 18542 |
| 1998 | 306 | 63632 |
| 2000 | 307 | 68011 |
| 2003 | 308 | 128011 |
| 2005 | 309 | 143564 |
| 2013 | 310 | 177356 |
| 2018 | 311 | 192129 |

**Figure 2- Share of protected areas of the territory of the Republic of Moldova (2018)**




**Data sources:**

Data on protected sites provided by the Institute of Ecology and Geography of the Academy of Sciences of Moldova under the ENI SEIS II East project activities

Roekaerts, M. and Opermanis, O., 2018. Status of the Emerald Network of Areas of Special Conservation Interest in 2018, Group of Experts on Protected Areas and Ecological Networks 9th Meeting, T-PVS/PA (2018) 11, Council of Europe, Strasbourg. (accessed 15 March 2019)

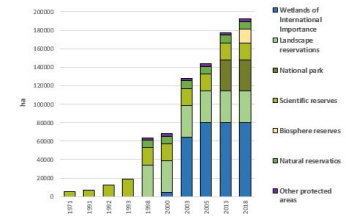
(please delete the below table from the text once you have added it into the webpage next to the chart)

| | km2 |
|---|---|
| Protected areas | 2970 |
| Total area of the country | 32890 |

The protection of biodiversity through the development of protected areas has been implemented in Moldova since 1971. In the beginning, only a small portion of the country's territory was under protection. However, starting from early 1998 Moldova has been establishing the legal framework for developing and expanding the protected area network across the country. Although the total number of protected areas has not changed substantially over time, the area of nationally designated protected sites has been remarkably expanded from 664 700 ha in 1998 to 192 100 ha in 2018, through expanding their boundaries. This corresponds to 5.8 % of the country's territory today. In 2018, Moldova had 311 protected sites.

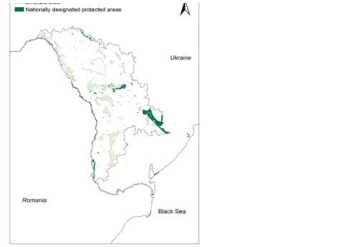
Despite all efforts, the designation of protected areas is not a guarantee of biodiversity protection. Therefore, beyond this quantitative analysis, specific information on site management and quality would help to complete the assessment of the effectiveness of the protected areas' management.

**Figure 3 - Progress in protected areas by nationally designated types in the Republic of Moldova (1971-2018)**




**Data sources:**

Data on protected sites provided by the Institute of Ecology and Geography of the Academy of Sciences of Moldova under the ENI SEIS II East project activities




IMPORTANT NOTETO THE PUBLISHER: FURTHER LAYOUT WITH THE MAP NEEDS TO BE COMPLETED IN ACCORDANCE WITH THE EEA MAP TEMPLATE

**Data sources:**

The map has been produced by the EEA based on the spatial data on protected areas provided by the Institute of Ecology and Geography of the Academy of Sciences of Moldova under the ENI SEIS II East project activities .

The European Environment Agency, jointly with the Council of Europe and by means of financial support from the EU Neighbourhood Partnership Programme, has been supporting the process of developing the Emerald Network in the country since 2017. During 2017-2018, Moldova included 52 new sites in the Emerald Network of the Bern Convention. In 2018, the total area of the protected sites included into the Emerald network was about 169 230 ha.

Taking into account the total area designated in the nationally protected area system and Emerald sites, about 11.8 % the territory of the Republic of Moldova is under protection. This surpasses already the national target of the 10 % of the territory of the Republic of Moldova to be covered by the protected areas. However, much effort is needed to meet the Aichi biodiversity target 11 of the

- D1 Indicator MD – Protected Ares

# *SoER - integrated inter-sectoral assessment process*

***involves of a large group of specialists from different fields:***

-politicians,

- public workers,
- national and international experts,
- scientists,
- researchers,
- professors from relevant institutions,
- specialists from NGOs
- business,
- civil society.

***Participatory process aims: increase the credibility, legitimacy and relevance of the information presented in the report.***

European Environment Agency

European Environment Agency

European Environment Agency