

# STATE OF THE ENVIRONMENT REPORT – SLOVAK REPUBLIC

2018

**25**<sup>th</sup> anniversary of annual reports





# LANDSCAPE PROTECTION, CREATION AND MANAGEMENT

### KEY QUESTIONS AND KEY FINDINGS

#### What are the rural and urban population shares?

In 2018 the SR had 2 890 settlements. Of this number, 140 were towns or cities and 2 750 villages. The majority of the population (53%) had their permanent address in towns rather than rural areas (47%).

# What is the trend in the financing of the Village Renewal Programme?

The subsidies fluctuate. In 2018 approved subsidies from the Environmental Fund totalled EUR **799 864.17**. The total drawn amount within the framework of the VRP was EUR **767 233.20**. The total average subsidy per applicant was EUR **4 790**.

#### What is the share of natural areas in Slovak towns?

In 2018, 8 Slovak towns were selected for an investigation into the status of natural areas according to urban biodiversity indicators. The city of Pezinok has the highest share of natural areas, with over 30% of the city's territory

being natural area.

## Describe the composition of the Slovak Monuments Fund and its status.

In 2018 there was another increase in the total number of both immovable (and movable) cultural monuments. 9 990 immovable national cultural monuments (NCM) and 15 169 movable NCM were registered. Taking a long-term viewpoint (since 1993), the number of immovable NCM has grown by 44.6%, while in the medium term (since 2005) there has been an increase of 29.3%, and year-on-year of 1.4%. Over 25% of immovable monuments show a disturbed or desolate structural-technical status. Over the long term this status has fallen only minimally (by 0.8%), while in the medium-term horizon it has even slightly increased and has remained practically unchanged year-on-year.

# What is the number of registered environmental burdens?

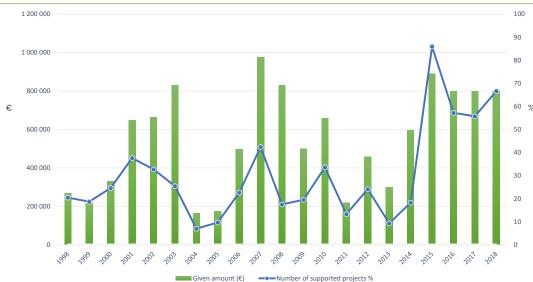
As of 2018, the Environmental Burdens Information System registered 882 probable environmental burdens, 313 confirmed and 805 already remediated environmental burdens, 113 localities in part A of the register and also in part C of the register, and 122 localities in part B of the register and also in part C of the register.

#### CARING FOR THE URBAN AND RURAL ENVIRONMENTS

Its natural conditions predetermine the SR to a situation in which part of its population is and will remain tied to the rural environment. In 2018, 47% of the population lived in rural areas. The trend in the population living in urban areas has shown a slight decrease, from 56% in 2005 to 53% in 2018, with more women living in urban areas (52%) than men. Of the **2 890 settlements** found in the SR, 2 750 are rural municipalities (95%) and **140 towns or cities** (5%). Of the total area of the SR by individual region types, the greatest share (59.0%) is primarily rural, while 36.8% are transitional regions and the lowest share (4.2%) is predominantly urban regions.

**Over the 21** years of activity of the Village Renewal Programme (VRP), 13 110 applications have been submitted from municipalities and 933 from microregion associations, while subsidies have been provided for **3 574 projects** (3 287 municipalities and 287 MR) with a total value of EUR **11 625 041**.

In 2018 VRP support reached a total of EUR **767 233.20** and the total average subsidy per applicant was EUR **4 790**.



#### Chart 037 I Trend in allocated VRP subsidies

Source: Slovak Environment Agency

Since 1990, every two years ARGE announces a competition for the **European Village Renewal Award**. The national version of this event is the **Village of the Year** competition, which the SR has been organising since 2001.

The municipality of **Oravská Polhora** progressed to the European competition as the winner of the national Village of the Year 2017 competition. Based on its extraordinary results, Oravská Polhora won the **European Village Renewal Award** for its comprehensive, sustainable development of a village of exceptional quality.

In 2018 there were 140 towns and cities in the territory of the SR. Of this total number, 68 have populations of under 10 000, 62 have populations of between 10 000 and 50 000, 8 have populations of between 50 000 and 200 000 and 2 have populations of over 200 000, while 12.32% of the population of the SR lived in them in 2018. The highest percentage (23.6%) of urban inhabitants lived in towns and cities with populations between 10 000 and 50 000.

In 2018 the Urban Development Concept of the Slovak Republic to 2030 was adopted, a framework document aimed at assessing the current status of urban development and proposing generally beneficial and applicable principles and a comprehensive set of measures for systemic changes to the current status, which will strengthen the role of cities in the overall development of the SR. This issue is also part of the Envirostrategy 2030, pursuant to which land-use planning will ensure a balanced relationship between the needs of the population, economic activity and the environment. Elements of territorial systems of ecological stability will be protected. An integrated concept of landscape protection based on the European Landscape Convention will be developed. The characteristic forms of the landscape will be

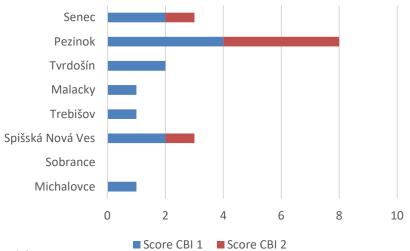
preserved and revitalized in accordance with their historical and natural contexts.

The quality of the environment is closely linked to the level of conservation and maintenance of natural and urban ecosystems. Hence one important role of cities is to protect and sustain biodiversity in their immediate surroundings and in the surrounding country. Avoiding and phasing out fragmentation of natural areas, while promoting and strengthening the connectivity of natural and seminatural areas, are key ways to maintain and enhance urban biodiversity.

In 2018 the determination of the share of natural areas pursuant to **urban diversity indicators** continued with the analysis of **another 8 urban areas** (Michalovce, Sobrance, Spišská Nová Ves, Trebišov, Malacky, Tvrdošín, Pezinok and Senec). Greenery mapping was performed using the European Earth Observation Copernicus programme's socalled Street Tree Layer as the data source. 2 indicators were monitored - Indicator 1: Share of natural areas in the city (CBI 1) and indicator 2: Determination of the connectivity of ecological networks (CBI 2).

Based on the results obtained when determining the values of the CBI 1 and CBI 2 indicators, the city of Pezinok had the highest share of natural areas. It contains two relatively large sites of European importance with a total area of 2 190.66 ha (CBI 1-30.11%, CB 2-1561.36 ha), giving it the highest score of 4 (assessment pursuant to the City Biodiversity Assessment Manual): Kuchynská hornatina with its 7 habitats of European importance and 5 species of European importance and Homolské Karpaty with its 8 habitats of European importance and 14 species of European importance. On the other hand, the town of Sobrance contains natural areas of alluvial streams covering 5.5 ha, or only 0.51%.

#### Chart 038 | CB| 1 and CB| 2 assessment indicators



Source: Slovak Environment Agency

**Score (pursuant to CBI 1)** for the share of natural areas in a town: 0 points: < 1.0%; 1 point: 1.0%-6.9%; 2 points: 7%-13.9%; 3 points: 14.0%-20%; 4 points: > 20.0%

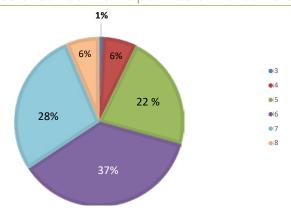
**Score (pursuant to CBI 2)** for determining the connectivity of ecological networks as a means of combating fragmentation: 0 points: < 200 ha; 1 point: 201-500 ha; 2 points: 501-1000 ha; 3 points: 1001-1500 ha; 4 points: > 1500 ha

In 2018 the consumption of drinking water in urban areas was 52% of the total consumption in the SR. The average consumption of drinking water in urban areas has been declining since 2001. Compared to 2001 the consumption of drinking water in urban areas had decreased by 49.7% in 2018. Bratislava held first place in the consumption of drinking water in 2018 with its consumption of 32 326 000 m³, or 15.5% of the total consumption in the SR. This was followed by Trnava (1.9%) and Hlohovec (1.1%), with consumption of over 1%. The consumption of the other 137 urban areas was under 1%. The lowest values were measured in the urban areas Šaštín-Stráže (0.08%), Gabčíkovo and Gbely (0.09%).

**Recalculated per inhabitant**, the spa town of **Dudince** had the **highest consumption of** drinking water (925.5 l/person/day) and **Košice** the **lowest** (6 l/person/day).

Slovak towns and cities are working to improve the efficiency of waste management in addition to reducing the generation of municipal waste, building a network of collection sites, building composting facilities and improving and extending the separate collection system. In 2018 only 9 urban areas in the SR addressed all 8 categories of sorted waste (paper and cardboard, glass, textiles, plastics, metals, biowaste, drinks cartons, batteries and accumulators), 39 towns 7 categories and most towns (51) 6 categories.

#### Chart 039 I Number of categories of sorted municipal waste in urban areas of the SR (2018)



Source: Slovak Environment Agency

Dust, noise, vibrations and emissions caused by traffic significantly affect the quality of the environment in urban areas. One of the major objectives of urban strategies is the modernization and construction of infrastructure for non-motorized transport - the **cycling network** (dedicated cycle

paths and traffic lanes). The city of  $\check{Z}$ ilina increased the length of its cycle paths from 8.69 km in 2013 to 12.3 km in 2018, the city of Trnava from 11.16 km to 19.93 km and the city of Nitra from 8.75 to 15.3 km.

#### **LAND-USE PLANNING**

The basic land-use planning document for the SR is the Land-use Development Concept for Slovakia 2001, which was updated in 2010. At regional level, all self-governing regions have valid land-use plans that they update when needed in accordance with the Building Act. Since 2006, every year the Ministry of Transport and Construction of the SR has supported municipalities by providing subsidies

for the processing of land-use planning documentation for municipalities pursuant to Act No 226/2011, on the provision of subsidies for the processing of land-use planning documents.

**Subsidies** for 71 municipalities totalling EUR **610 000** were approved for **2018**.

Table 011 I Status of land-use planning documentation by region

Region	Total number of municipalities	Number of approved plans of municipalities and cities, their amendments and supplements			
			2016	2017	2018
Bratislavský	73	13	9	8	14
Trnavský	251	30	49	47	45
Trenčiansky	276	23	28	26	32
Nitriansky	354	26	31	20	19
Banskobystrický	516	26	31	25	23
Žilinský	315	37	44	36	27
Prešovský	665	53	58	61	39
Košický	440	14	25	41	40
Total	2 890	222	275	264	239

Source: Ministry of Transport and Construction of the SR

#### MONUMENT FUND

In 2018 there was another **increase** in the total number of immovable (and movable) cultural monuments compared to 2017.

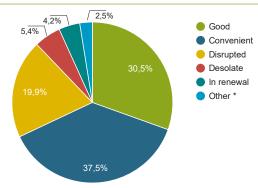
As of 31 December 2018 **9 990 immovable national cultural monuments (NCM)** were recorded in the SR, an increase compared to 2017 of 34 NCM. These are composed of 16 963 **monument buildings** (an increase of 236). There were **15 169 movable NCM** (an increase of 41), of which 98% are of a sacral character. Movable NCM consist of 34 934 monument articles (an increase of 200).

Literary sources put the number of **castles** in the SR at around 300. At present the 9 990 immovable NCM include 102 **castles** and 438 **mansions**. The following were recorded as part of monument buildings **(MB)** forming the NCM in 2018:

- 578 manor houses and mansions (+3)
- 102 castles (+1)
- 81 monasteries (+1)
- 1 634 churches (+5)
- 943 people's houses (+4)
- 2 374 burgher houses (-3)
- 388 palaces and villas (+2)
- 29 wayside sculptures (shrines)
- 12 wayside crosses and pillars (+2)
- 491 plaques and sites (-8)
- 76 cemeteries (in addition to cemeteries at churches) (+6)
- 289 graves (both individual and collective) (-1)\*
- 69 tombs

Note: The numbers in brackets show the change in the number of MB compared to the preceding year. \* graves include all registered graves, not only military ones.

#### Chart 040 | Structural-technical status of immovable NCM (2018)



Source: MB SR

Note: The "Other" category (2.54%) consists of MB in a different status (physical extinction, restoration of the loss of historical values, AG-not presented or KP missing for a long time).

The structural-technical status of MB has not changed over the past 5 years (a statistically insignificant percentage). The causes for the persistent number of sites in a bad status primarily relate to their inappropriate use, respectively in their absence of use.

In addition to protection for individual monuments/sites, the monument fund **is also protected in a blanket manner** in monument areas: **monument reservations** (MR-28) and **monument zones** (MZ-82). In 2018, 2 MZ were added: Martin - Malá Hora a Hostihora monument zone and Pezinok monument zone.

#### WORLD HERITAGE

**World Heritage** (WH) is a unique value that transcends national boundaries and is important for current and future generations of all mankind. Its permanent protection is of the utmost importance to the international community as a whole. The culmination of efforts to create protection for cultural and natural heritage was the adoption of the Convention on the Protection of the World Cultural and Natural Heritage at the UNESCO General Conference in Paris in 1972, ratified by the Slovak Republic on 15 November 1990.

#### Localities included in the World Heritage List

The WH List of 2018 included **1 092 localities** all over the world, of which 845 were cultural, 209 natural and 38 mixed, located in the **167 member** states of the Convention.

The WH List includes a total of **seven localities in the SR**, namely:

#### as part of cultural heritage

- Vlkolinec folk architecture reserves, the local part of Ružomberok, including the buffer zone (Cartagena, 1993)
- Levoča, Spišský hrad and the Associated Cultural Monuments (Spišská Kapitula, Spišské Podhradie, the Church of the Holy Spirit in Žehra), (Cartagena, 1993); extension to include the area of the monument reservation Levoča – historic town-centre of Levoča and the works of Master Paul in 2009, including the buffer zone
- Historic Town of Banská Štiavnica and the Technical Monuments in its Vicinity (Banská Štiavnica, Hodruša-Hámre, Štiavnické Bane, Banská Belá, Voznica, Vyhne, Banský Studenec, Počúvadlo, Kopanica, Kysihýbel,

- Antol, Ilija; especially 23 artificial reservoirs tajchy), (Cartagena, 1993)
- **Bardejov Town Conservation Reserve -** including the buffer zone, including the Jewish suburb (Cairns, 2000)
- Wooden churches of the Slovak part of the Carpathian Mountain Area (wooden churches - Hervartov, Tvrdošín, Leštiny, Kežmarok, Hronsek - including the bell tower, Bodružal, Ladomírová, Ruská Bystrá) and their buffer zone (Quebec, 2008).

#### as part of natural heritage

- Caves of Aggtelek Karst and Slovak Karst (Berlin, 1995), to which was added in 2000 Dobšinská Ice Cave including Stratenská cave and Psie diery cave as a single cave system at the peak of Duča (Cairns, 2000),
- Ancient and Primeval Beech Forests of the Carpathians and Other Regions of Europe (Christchurch, 2007; extension in 2011 and 2017); joint locality of 12 European countries with a total of 82 components. There are 4 localities in Slovakia: Stužica-Bukovské vrchy, Havešová, Rožok and Vihorlat.

# DKKO Leštiny DKKO Leštiny Vikolinec Dobšinska Ice Cave DKKO Hervartov DKKO Hervartov DKKO Hervartov DKKO Hervartov DKKO Hervartov DKKO Ruská Bystra Sites listed under world natural heritage Sites proposed to the world cultural heritage Sites proposed to the world cultural heritage

#### Map 013 I World cultural and natural heritage

Source: Slovak Environment Agency

DKKO - Wooden churches of the Slovak part of the Carpathian Mountain Area

#### **GEOPARKS**

In 2018 three geopark areas were operated in Slovakia, which were awarded the title "Geopark of the Slovak Republic" in 2016. These were:

- Banskoštiavnický
- Banskobystrický
- the cross-border Slovakia-Hungarian Novohrad Geopark (NNG) with the international name Novohrad-Nógrád UNESCO geopark, which became a member of

the European Geopark Network (EGN) and the UNESCO Global Geopark Network (GGN) in 2010.

In addition, activities were developed in several potential areas of Slovakia that could lead to the creation of other geoparks in the future, such as in the Little Carpathians and Zemplin areas.

#### **ENVIRONMENTAL BURDENS**

The collection of data and the provision of information on environmental burdens in the territory of the SR is provided by the **Information System of Environmental Burdens** (IS EB). At the end of 2018 there were **1765 localities registered** in the IS EB (2 000 registration letters because some of the localities are in 2 parts of the register), while in **part A of the register** (**probable environmental burdens**) there

were 882 localities, in part B of the register (environmental burdens) there were 313 localities, in part C of the register (rehabilitated and reclaimed localities) there were 805 localities, in part A of the register and concurrently in part C of the register there were 113 localities, in part B of the register and concurrently in part C of the register there were 122 localities.