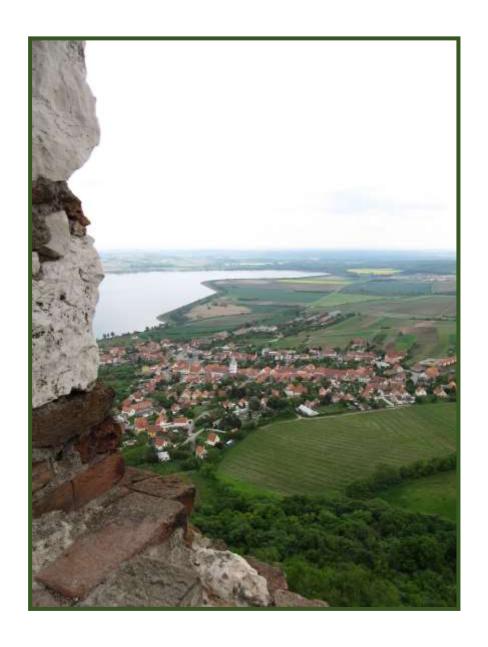
LOWER MORAVA BIOSPHERE RESERVE (Czech Republic)



MANAGEMENT PLAN 2021 – 2025



Introduction

UNESCO worldwide designates biosphere reserves under the Man and the Biosphere (MAB) Programme. Its aim is "to promote the rational use of natural resources and to improve relationship between people and the environment". In practice, it is a matter of finding ways of flexible, dynamic and sustainable protection of natural as well as cultural values, through "reasonable and considerate" daily human activities. As a result, biosphere reserves are sometimes called "living laboratories" or "sustainable management laboratories".

Biosphere reserves, despite their slightly misleading name, should not be limited to the mere protection of nature (and monuments). In our country, as in most countries of the world, both nature and monument protection are ensured, as their only goal, by other, mostly specialized state administration bodies. Biosphere reserves can thus remain more open to the involvement of local governments and local inhabitants, the state administration, representatives of business entities and conservation or development groups, as well as experts in science and social sciences. The focus of their activities is broader and more balanced, and their functioning is more at the level of a "sustainable development agency" than a purely conservation organization or state administration body.

Czech biosphere reserves were established in the geographical and political context of the former Czechoslovakia. The Czechoslovak authorities have been involved in the MAB Program (1971) since its early stages, despite the difficult political situation that followed the country's occupation in 1968. The country's first two biosphere reserves were approved in 1977. There are currently six biosphere reserves (NP Šumava, NP Krkonoše, PLA Křivoklátsko, PLA Třeboňsko, PLA Bílé Karpaty and BR Lower Morava). All, with the exception of the Lower Morava Biosphere Reserve, share the same territory and management with the coinciding national parks or protected landscape areas, although biosphere reserves differ in philosophy from specially protected areas. The biosphere reserves should support those human activities that lead to the rational use of natural resources and sustainable landscape development. While some UNESCO Member States have adopted specific laws on biosphere reserves, in the Czech Republic, as in many other countries, there is no reference in national legislation to MAB Programme or biosphere reserves.

The Lower Morava Biosphere Reserve, like all other biosphere reserves in the world, was established as a "reserve" for the preservation of biological and cultural heritage. Its prudent management can ensure the necessary protection of the area in a way to ensure its lasting value and at the same time that the protection of its natural resources brings long-term material and social benefits to all. The coordination platform of the public benefit company then ensures that the people who live and carry out their activities in the given area and for whom nature protection is one of the priorities fulfilled through the sustainable use of the landscape are actively involved.

This management plan was therefore prepared according to the motto: "We have nature and the territory where we live, borrowed from our children. Let's do everything so we can give it to them in the same or better condition."

January 2021

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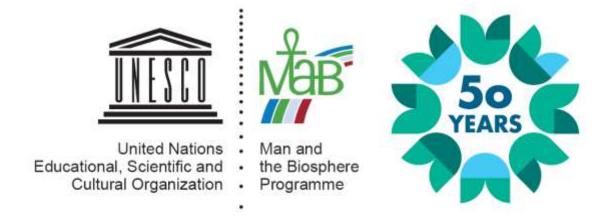
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Our vision is a world where people are conscious of their common future and their interactions with the planet, and act collectively and responsibly to build thriving societies in harmony within the biosphere.

The MAB programme and its World Network of Biosphere Reserves (WNBR) serve this vision through biosphere reserves and beyond.

Our mission for the period 2015–2025 is to:

- Develop and strengthen models of sustainable development through the WNBR;
- Communicate experiences and lessons learned, and facilitate the global diffusion and application of these models;
- Support evaluation and high-quality management of biosphere reserves, strategies and policies for sustainable development and planning, and accountable and resilient institutions;
- Help Member States and stakeholders to achieve the Sustainable Development Goals by sharing experiences and lessons learned related to exploring and testing policies, technologies and innovations for the sustainable management of biodiversity and natural resources and mitigation and adaptation to climate change.



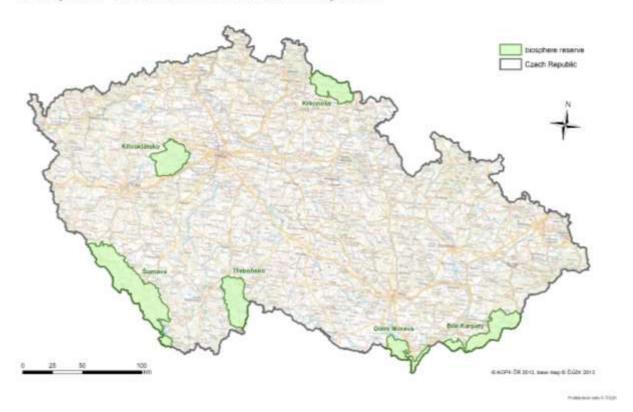
1. Lower Morava Biosphere Reserve

1.1. Regional context

The Lower Morava Biosphere Reserve was created by extension of then already existing Pálava BR, declared in 1996, which fully overlapped with the Protected Landscape Area (PLA) of the same name. The nomination process was marked by a conflict over the mission, vision and governance structure of the future biosphere reserve, between local stakeholders and nature conservation authorities that proposed the extension. Consensus was eventually reached and UNESCO approved the newly proposed area in 2003. The area of the biosphere reserve has grown from 83 km² to 349 km² and the body responsible for coordination of the biosphere reserve has taken the form of an NGO – public benefit company.

There are six biosphere reserves in the Czech Republic (as of 2020) (Krkonoše National Park, Křivoklátsko Protected Landscape Area, Šumava National Park, Třeboňsko Protected Landscape Area, White Carpathians Protected Landscape Area and Lower Morava BR).





1.1.1. Location

The Lower Morava Biosphere Reserve is located in the south-eastern tip of the Czech Republic on the borders with Austria and Slovakia.

The area is situated on the border between Central European deciduous forests and Pannonian steppes. Important habitats located in the BR include limestone ridges, primary and secondary dry grasslands, thermophilic oak forests, floodplain meadows and floodplain forests (hard and soft wood)

with the occurrence of unique plant and animal species. Vineyards and other agricultural land, with numerous villages and towns, dominate the cultural landscape. There are also a number of aquatic ecosystems in the form of historic and new ponds, rivers Dyje and Morava, fragments of original pools, wetlands, etc.

The Lower Morava Biosphere Reserve represents a variety of different natural values with sites of great cultural importance. The natural mosaic is complemented by numerous archaeological sites or the Lednice-Valtice area as a historic, man-made landscape from the 19th century (recognized as a UNESCO World Heritage Site since 1996).

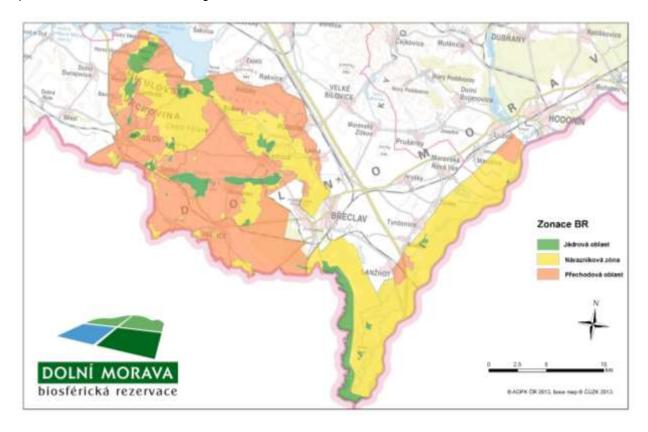


There are many layers of nature and monument protections in the biosphere reserve, such as specially protected areas, areas listed as Natura 2000 and others. There are 31 national specially protected areas, including the Pálava Protected Landscape Area; one world heritage site; two zones of cultural monuments, two Ramsar sites (wetlands of international importance); two nature parks and various other institutes.

BR includes three "micro-regions", each of which represents a unique potential for natural and cultural development. BR has approximately 20,000 permanent residents with more than a million visitors each year.

1.2. Zonation

The territory of the Lower Morava Biosphere Reserve, like any other biosphere reserve, is divided into three types of functional zones. Core Area - is an area designated only for the protection of biological diversity. Buffer zone - is an area surrounding the core areas, protecting them against external influences. It is used for activities related to nature protection and ecological practices, including environmental research and education, recreation, ecotourism, etc. The rest of the biosphere reserve is a transition zone, or so-called area of cooperation - the most important zone with regular economic activities or other uses of the landscape and natural resources, with particular emphasis on the promotion of considerate management.



1.2.1. Core areas

The core areas have legislative protection under the Nature and Landscape Protection Act. They meet the long-term goals of nature protection and are managed on the basis of approved protection plans by state administration bodies (National Nature Momument (NNM) Calendar of Ages, National Nature Preserve (NNP) Děvín, Kotel Soutěska, NNP Tabulová, Nature Monument (NM) Anenský vrch, NM Růžový kopec, NM Kočičí skála, Nature Preserve Turold, Nature Preserve (NP) Sv. Kopeček , NP Milovická stráň, NNP Křivé jezero, NM Jezírko Kutnar, NM Květné jezero, PR Šibeničník, NM Kienberg, NP Liščí vrch, NP Skalky u Sedlece, NNP Lednické rybníky, NPP Pastvisko u Lednice, NPP Rendez-vous, NP Františkův rybník, NNP Cahnov-Soutok, NNP Ranšpurk, NP Stibůrkovská jezera, NP Skařiny, western part of the Soutok game preserve.

1.2.2. Buffer zones

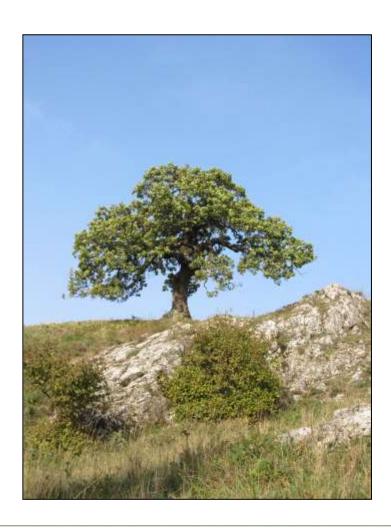
The buffer zones usually surround the core area or are located separately if they are significant for the biodiversity within the biosphere reserve. Their management is usually governed by approved Forest management plans or follow the Nature and Landscape Protection Act.

1.2.3. Transition area

Land use in the transition area is regulated by local and regional spatial planning or by an approved nature protection management plan, if located within the current boundaries of the Pálava Protected Landscape Area,

1.2.4. Potential for zonation revision

The zonation in the Lower Morava Biosphere Reserve is based on the existing system of protected areas. However, in the case of a BR it should not be purely a gradational nature protection zonation, as is the case with "classic" reserves, but rather a functional spatial division, which aims to enable the biosphere reserve to fulfil all three of its basic functions. Considering this the Lower Morava BR has certain limits. Therefore, in cooperation with colleagues from the partner Austrian Wienerwald BR, we have been since 2010 trying to find a workable solution that would improve the functioning of the zonation. However, the process is still ongoing because negotiations with local actors are long-term and we are avoiding a forced solution. In the meantime, the zoning in the form approved in 2003 is still valid.



2. Basic information about BR Dolní Morava

Year of designation: 2003

Main types of ecosystems: floodplain deciduous forests, fields, meadows, water bodies, vineyards

Main habitats and types of land cover:

Forests (39.05%), Arable land (36.53%), Vineyards (6.18%), Water

bodies (3.34%), Fruit orchards (3.21%)

Bioclimatic zone: temperate continental

Position (latitude and longitude): 48 ° 46'34,42 "N 16 ° 48'50,04" E (central point)

Total area (ha): 34 900 ha

Zonation: Core areas: 2,695 ha

Buffer zones: 15,804 ha

Transition area: 16,401 ha

Altitude: 148 - 550 meters above sea level

2.1. Protection of natural values in the Lower Morava Biosphere Reserve

Except the national park, all categories of specially protected areas (SPAs) recognized by Czech nature protection legislation are represented in the Lower Morava Biosphere Reserve. Large scale SPAs are represented by a Protected Landscape Area (PLA) and small SPAs encompass National Nature Preserves (NNP), Nature Preserves (NP), National Nature Monuments (NNM) and Nature Monuments (NM), Natura 2000 etc. Many interesting protected species can be found in each of these areas. According to the legislation, the state nature protection authorities are responsible for nature protection in the Lower Morava BR area.

2.1.1. Protected landscape area (PLA) is a category designed to protect larger areas or entire geographical regions with a harmonious landscape, characteristic relief and a significant proportion of natural or semi-natural ecosystems. Preserved monuments of historical settlements are also important aesthetic values of such landscapes. The economic use of these areas is carried out according to the graded protection zones in order to maintain and improve their natural condition and to preserve and create optimal ecological functions of these areas. Each PLA is managed by an individual governmental authority.

Palava Protected Landscape Area

The Palava Protected Landscape Area was designated in 1976. It is located in an agriculturally intensively used landscape and with an area of 83 km² it is one of the smallest PLAs in the Czech Republic. The species composition of plants and animals living in the PLA is very diverse. On its territory, you can find dry rock grasslands, xerophilous shrubs and thermophilic oak groves, loess oak

groves with species-rich herbaceous undergrowth or Pannonian oak groves. The natural conditions of this area have enabled the occurrence of many species of plants that do not grow elsewhere in the Czech Republic. At the foot of the limestone ridge of the Pavlovské vrchy hills, in the Dyje river floodplain, hard meadows with summer oak and narrow-leaved ash have been preserved, apart from a few small floodplain meadows. In the southern part of the PLA, on the banks of the Nesyt pond, there are remnants of halophytic vegetation. There are four national nature preserves, one national nature monument, five nature preserves and four nature monuments within the Palava Protected Landscape Area.

2.1.2. National Nature Preserve (NNP) has the strictest protection regime out of all small scale specially protected areas. It provides protection for unique natural ecosystems of national and international importance, linked to natural relief and typical geological structure. The aim of conservation is to preserve or improve the condition of these ecosystems and their internal processes. The basic protective conditions are laid down by law and prohibit all activities that could adversely affect natural development. Economic exploitation is excluded, except for activities that maintain the stability of individual ecosystems. The NNP is established by a decree of the Ministry of the Environment.



Lednice ponds - important ornithological locality and historical pond system,

Cahnov - Soutok - remnants of the original floodplain forest, left to spontaneous development

Ranšpurk - a fragment of the old floodplain forest, left to spontaneous development

Děvín-Kotel-Soutěska - rock, steppe and forest ecosystems on limestone, important geological site.

Krivé jezero Lake - a preserved part of the Dyje floodplain and a significant bird nesting place.

Slanisko u Nesytu - salt marshes with remnants of halophytic vegetation

Tabulová, Růžový vrch and Kočičí kámen - steppe thermophilic flora and fauna on a limestone base

2.1.3. Nature Preserve (NP) is intended for the protection of only regionally or locally significant ecosystems. It has similar basic protection conditions as a national nature preserve and is declared by a generally binding regulation by the relevant Regional authority and the PLA administration.

Liščí vrch - steppe communities in the agricultural landscape

Milovická stráň - forest ecosystems of thermophilic oaks and steppe communities

Holy Hill - rock and steppe ecosystems on limestone

Šibeničník - limestone cliff with rocky and meadow steppes

Turold - important geological, steppe and rocky site with caves

Františkův rybník - a pond with reeds and thermophilic lawns on the sand

Skariny - an important forest, ornithological and mycological site

Stiburkovska jezera Lakes - floodplain meadows and dead branches of the Morava River

2.1.4. National Nature Monument (NNM) is usually located on a smaller area (maximum of several hectares). The aim of protection is to preserve mostly only one natural object such as a geological formation (cave, geological profile), a mineralogical site, a locality with rare and endangered species, or a highly man - made aesthetic value (historically valuable landscape, arboretum, etc.) . Ministry of the Environment through a generally binding regulation designates the NNM.

Rendezvous - thermophilic forest stands on sands and mycological habitat

Pastvisko u Lednice - wetland ecosystem and important nesting place for waterfowl

Kalendář věků (Calendar of Ages) - World Geological and Archaeological Site



2.1.5. Nature monument (PP) - this category, the most extensive in the Czech Republic, is similar to a national nature monument, but only with regional significance. It protects parts of ecosystems, geological formations or sites with rare species of organisms. As well as nature reserves, it is established by the relevant regional authority and the PLA administration.

Kocici skala - an isolated limestone rock surrounded by farmland

Kienberg - steppe heath with thermophilic species and important paleontological site

Růžový kopec - remains of meadow steppes and steppe heath surrounded by agricultural landscape

Anenský vrch - steppe heath with shrubs in agricultural landscape

Kutnar - floodplain pool with unique communities of cyanobacteria and algae

Květné jezero - floodplain pond with fragments of floodplain forest

Kamenice u Hlohovce - a former limestone quarry with xerothermic plant communities

Janičův vrch - flooded limestone quarry with rock, water and wetland communities

Na cvičišti - a former military training ground with broad-leaved dry lawns in a mosaic with shrubs

Kameníky - a cleared pasture with dry steppe lawns and shrubs

Skalky u Sedlece - pasture with semi-natural dry grasslands and sub-Pannonian steppe grasslands

Úvalský rybník - floodplain valley of a small watercourse with a pond

2.1.6. Natura 2000

Natura 2000 is a system of sites protecting endangered species and natural habitats in the European Union. It includes Special Protection Areas a.k.a. Bird Areas (established according to Bird Directive) and Sites of Community Importance a.k.a. sites of European importance (designated according to Habitats Directive for species and habitat protection). The aim of Natura 2000 is, among other things, to create a harmony between the interests of nature protection and management in the relevant locations. There are three Bird Areas (Pálava, Lednice Ponds and Confluence - Tvrdonicko) and 17 Sites of Community Importance (Bezručova Alley, Děvín, Klentnice - St. George's Church, Lednice - chateau, Milovický Forest, Niva Dyje, Paví kopec, Rendezvous, Rybniční zámeček, Skalky u Sedlece, Slanisko u Nesytu, Soutok - Podluží, Stolová hora, Studánkový vrch, Svatý kopeček u Mikulova, Turold and Úvalský rybník) on the territory of the Lower Morava Biosphere Reserve. The area of the Natura sites covers approximately 220 km², which is approximately 63% of the total area of the biosphere reserve, while some sites are simultaneously included in both categories. (www.natura2000.cz).

2.1.7. Ramsar Convention on Wetlands

The Convention on Wetlands, which are of international importance primarily as waterfowl habitats, better known as the "Ramsar Convention" (1971, Ramsar, Iran), aims to protect and enable sensitive

use natural resources and thus ensure the global protection of all types of wetlands. There are two Ramsar Wetlands in the Lower Morava Biosphere Reserve (Lednice Ponds and Dolní Podyjí Wetlands). In total, they cover over 121 km², which is more than 34% of its total area. (www.ramsar.org).

2.2. Protection of cultural values in the Lower Morava Biosphere Reserve

2.2.1. Lednice-Valtice Cultural Landscape - UNESCO World Heritage Site

The Lednice-Valtice area (LVA) is located in the center of the Lower Morava Biosphere Reserve and makes up almost 41% of its total area. It is unique not only in the way that architectural, biological and landscape components have been formed here for centuries, but also in its area of 143 km², on which the Liechtenstein family has planned an impressive number of diverse cultural and natural landscape elements. The realization of their landscape plan began in the 17th century with the creation of alleys connecting the town of Valtice with other parts of the estate. This continued throughout the 18th century with the construction of a network of paths and scenic trails, transforming nature in the style of English artists and architects of the Renaissance. At the beginning of the 19th century, the concept of an English landscape park was applied. The basis of the landscape composition consists of two castles, Lednice and Valtice. Baroque and romantic elements intertwine throughout the landscape, which gives it a very specific character.

The site was inscribed on the World Heritage List at the 20th meeting of the World Heritage Committee in Mérida on December 7, 1996.



Management Plan of the Lower Morava Biosphere Reserve 2021 - 2025

2.2.1.2. Site management of the Lednice-Valtice area

The Lednice-Valtice area was declared a monument zone by a decree of the Ministry of Culture No. 484/1992 Coll. and in 1996, it was inscribed on the UNESCO World Heritage List for its universal values.

Thanks to a grant from the South Moravia Regional Office, the staff of the Lower Morava Biosphere Reserve in 2007 prepared the first WHS Management Plan, the elaboration of which is mandatory for all UNESCO monuments. The management plan of the Lednice-Valtice Area (MP LVA) was approved by the Interdepartmental Working Group for LVA (Working Group) and was sent by the Ministry of Culture to the UNESCO World Heritage Center in Paris.

Lower Morava Biosphere Reserve, p.b.c. was subsequently entrusted with the function of Site - manager (coordinator) of the UNESCO WHS. The creation of this post was approved by a resolution of the Working Group for LVA. The proposal to integrate the coordinator's institute into the monument's management system was part of the overall design of the organizational structure for the management and direction of further protection and development of the LVA.

The activities of the World Heritage Site Coordinator include:

- 1. Implementation of goals set in the WHS Management Plan
- 2. Cooperation with important stakeholders (landowners, administrators, state administration bodies, institutions, entrepreneurs, etc.) in the place, coordination of interests in the territory in order to ensure a harmonious relationship between development interests and interests in the protection of monuments,
- 3. Design and direction of priority projects aimed at preserving and interpreting the values of LVA as UNESCO World Heritage Site
- 4. Advice on proposed development plans and activities aimed at preserving the values of the monument
- 5. Interpretation, promotion of the monument (working with the media, updating the website, presentation of the monument at the local, national and international levels, workshPBC, conferences)
- 6. Monitoring and updating of monitoring indicators, periodic reports and management plan

The management plan is updated depending on the financial support granted by the Ministry of Culture of the Czech Republic from the Support for UNESCO Monuments program.

2.2.2. Monument zones

It is possible to declare a settlement or its part, historical environment or part of the landscape, which show significant cultural values, as a monument zone. There are urban monument zones, village monument zones and landscape monument zones declared in the Czech Republic, (https://www.mkcr.cz/pamatkove-zony-265.html). There is one urban and one landscape monument

zone located in the Lower Morava Biosphere Reserve. Monument care in the Biosphere Reserve is the responsibility of state Monument Care Department.

2.2.2.1. Urban monument zone

The Ministry of Culture of the Czech Republic declares the urban monument zone by specific decrees on part of a town that is of historical significance. The Valtice Municipal Monument Zone, located on the territory of the Lower Morava biosphere reserve, was declared in 1990.



2.2.2.2. Landscape monument zone

It is a specific type of protected area, which has natural, cultural and historical values, crucial for the designation of protection of the area. For this reason, the protection of landscape monument zones is under the responsibility of Monument Care Department in accordance with the Monument Act No. 20/1987 Coll., which entered into force on 1 January 1988. The values of respective landscape are the priority for the selection and designation of landscape monument zones, (Kuča et al. 2015). The Lednice-Valtice area was declared a landscape monument zone in 1992.

2.3. Economy in the Lower Morava Biosphere Reserve

2.3.1. Agriculture

Agriculture is the main economic activity in the Lower Morava Biosphere Reserve. The size of agricultural holdings is relatively large and most of the arable land in the biosphere reserve is leased

and managed by large companies in an industrial manner. Current labour productivity in agriculture is very high compared to the past and continues to grow, as fewer people, with better and more efficient technologies farm large fields (the Czech Republic generally has the largest continuous units of agricultural land in the EU). The national and European subsidy conditions rather force farmers to plant monocultures of rape, maize and sunflower, predominately for industrial purposes. Environmental incentives, as pre-set, are not interesting for farm managers due to financial and organizational reasons. Partial changes in national agricultural policy have brought some improvement in recent years, in line with changes in EU agriculture policy. Increasingly, measures to improve the biodiversity of the cultural landscape are being used, such as greening, ie. agricultural practices with a focus on climate and the environment, which include, for example, crop diversification, maintaining the level of permanent grassland, reducing erosion, or establishing areas of ecological interest.

2.3.2. Viticulture

The area of the biosphere reserve is located in the Mikulov and Slovácko wine-growing sub-areas and the Velke Pavlovice wine-growing sub-area also extends marginally here. Viticulture and wine production have historically been among the most important activities, which, moreover, compared to other areas of agriculture, have seen a significant shift towards sustainable production. At present (2020) there are approximately 18 000 ha of vineyards in the Czech Republic, of which approximately 2 150 ha are located in the Lower Morava Biosphere Reserve (i.e. more than 6% of the total area). The greening of vineyards has become commonplace, and over the last fifteen years, almost all commercial operations within the biosphere reserve have switched from "conventional" to integrated or organic production. The reasons are very pragmatic. Such vineyards are more resistant to diseases caused by the climate. In addition, the government has introduced interesting financial incentives for integrated and organic viticulture, and there is still a great demand in the market for high-quality integrated and organic wines. Integrated or organic wines can be sold at a higher price and demand is much higher than supply.

2.3.3. Forestry

Forests make up the largest share of land cover in the Lower Morava Biosphere Reserve (39%). The forested area on its territory has not changed for a long time and the age structure of the stands remains balanced. All forests in the biosphere reserve are managed in a sustainable manner in accordance with individual decennial Forest Management Plans based on Czech legislation (especially Act No. 289/1995 on forests and Act No. 114/1992 Coll. On nature and landscape protection). Nature conservation authorities give approval to these management plans. Most of the forests in the Biosphere Reserve are owned by the state and managed by the Forests of the Czech Republic, a state enterprise, one of the key stakeholders operating in the Lower Morava Biosphere Reserve. Already in 2007, an agreement was reached between the Forests of the Czech Republic and the nature protection authorities to keep a certain number of reserved trees, left after harvesting in order to preserve the living conditions of insects and birds, and this agreement is still observed.

Forestry in the biosphere reserve serves as an example of sustainable production and management of natural resources. The state enterprise Forests of the Czech Republic holds a PEFC (Program for the Endorsement of Forest Certification) certificate.

The issue of forestry is connected with the discussion about the declaration of new protected areas in floodplain forests at Soutok in the southern part of the BR. This area has been managed by sustainable forestry for more than 120 years. The quality of the environment in this area has attracted the attention of nature conservation authorities, which have declared a double layer of the Natura 2000 network. The lengthy debate on further enhanced protection divided the stakeholders into two groups. One group questions the need to create additional conservation institutes and favours contractual protection and proper justification for possible changes in forestry, as such an approach is based on traditional knowledge and is also based on expert research. The second group seeks to designate additional protected areas, regardless of traditional sustainable management. The situation has not yet been resolved and the problem has become a political issue. The only way out is a broad discussion without any excesses between the polarized parties. Representatives of the Lower Morava Biosphere Reserve are generally inclined to believe that biodiversity at Soutok area should be maintained through a consensus on sustainable management, founded on unbiased scientific knowledge of the current state of the area and without any unnecessary administrative burdens.



2.3.4. Renewable energy

The Lower Morava Biosphere Reserve is located in the warmest part of the Czech Republic, therefore solar power plants have become relatively common, also thanks to the former massive financial support of the Czech government. Despite the fact that renewable energy is desirable, the public does not perceive the "solar industry" very well, because it occupies valuable arable land, and not very coherent government financial support has made overall energy more expensive. Serious frauds related to solar energy production, have also been investigated in the past, which also do not contribute to its popularity with the public. However, in connection with the new EU policy in the field of renewable sources, further development of solar power plants can be expected, especially with the use of roof areas of industrial buildings and the use of so-called brownfields. However, the limiting factor may be the existence of large-scale conservation institutes (especially the PLA and the World Heritage Site), covering majority of the BR area.

The use of wind energy in the biosphere reserve is not a viable option due to the large-scale protection of its landscape character. These measures appear to be justified, as wind farms on the adjacent Austrian side of the border, appear to be adversely affecting the visual landscape character of the southern part of the biosphere reserve.

The face of the biosphere reserve landscape is not suitable for the generation of hydro energy, yet there is a small river hydroelectric power plant near the village Bulhary. However, the construction of other hydroelectric power plants is not expected in the future either.

2.3.5. Mining and quarrying

The area of the biosphere reserve has been known for oil and gas deposits for more than a hundred years. These raw materials have been mined in the region since the end of the 19th century. When carried out in accordance with legislation and the latest standards, oil and gas extraction does not pose a serious threat to the environment. The largest regional mining company, MND, a.s., is another key stakeholder involved in the biosphere reserve, and is leading the trend in quality control in this sector. A new survey is underway to explore potential new potential resources in the biosphere reserve. Great emphasis is placed on the elimination of old environmental burdens caused by oil mining in the past century.

2.3.6. Tourism

The area of the biosphere reserve includes the Lednice-Valtice area, a UNESCO World Heritage Site, so it was already a tourist attraction before its designation. More than 500,000 people a year visit the village of Lednice itself. The trend is stable and slowly rising, as the preferences of Czech tourists are shifting from foreign holidays to domestic ones. A rapidly growing trend has been recorded in wine tourism in combination with cycling. New "wine and cycle paths" have been marked, new bicycle rentals have been opened, and wine producers, accommodation and catering providers have also

made positive changes to the level of service provision. The new spa tourism, which has historically not existed in the area of the biosphere reserve, has also made a significant breakthrough.

2.4 Support for science, research and education

The Lower Morava Biosphere Reserve is often used as a study area by scientists from various disciplines, as it is home to many endangered species of plants and animals and a place with many historical monuments. Research and education play an important role in the work of the biosphere reserve. The main partner in this area is Mendel University in Brno, which is also involved in the management of the biosphere reserve through its representatives.

At present, most of the biosphere reserve projects involve Mendel University to varying degrees. The university is also planning relevant projects so that, if possible, the biosphere reserve is included as a partner. Thus, joint activities include projects implemented in the region and beyond that raise awareness of pressing environmental, communal and social issues.



Thanks to its close relationship with Mendel University, the Lower Morava Biosphere Reserve has become a sought-after partner at regional and international level. Mendel University plays an important role in the life of the Lower Morava Biosphere Reserve by:

- 1) Helping to fulfil the "logistical function of the Biosphere Reserve".
- 2) Providing scientific data, contributing to reliable management decision-making in the Biosphere Reserve and adapting traditional knowledge for modern use
- 3) Acts as an ambassador and promoter of the philosophy of the MAB Programme

Biosphere Reserve staff and their scientific partners strive to demonstrate that biosphere reserves can be active agents in the conservation of nature and landscapes and in the search for limits to sustainable use of natural resources.

Experts from the Faculty of Horticulture support the Lower Morava Biosphere Reserve by consulting in the functions of the LVA Site Manager - World Heritage Sites. They help to maintain the Liechtenstein tradition in the management of the area. Their expertise is particularly valuable in situations where there are conflicting interests represented by different institutions, whether from the state nature conservation or conservation authorities. In the case of LVAs, traditional historical knowledge is not easily transferable, because when it is used it is usually criticised by the 'opposing interest group'. An example is the restoration projects of historic tree alleys.

Other partners in the field of support for science, research and education include Masaryk University in Brno, Palacký University in Olomouc, Charles University in Prague and the Catholic University in Ružomberok.



3. Organizational structure of BR Dolní Morava, o.p.s.

After the designation of the Lower Morava Biosphere Reserve, a difficult process of agreeing and refining the view on the management of its territory took place. Gradually, a majority regional opinion was established that it would be advisable to test in practice whether the Man and Biosphere Programme could be implemented in the conditions of the cultural landscape of South Moravia in a different model than through the state administration. A Public Benefit Company (PBC) was chosen as the optimal form of legal entity to take responsibility for implementing the ideas of the Man and the Biosphere Programme. The establishment of the Lower Morava Biosphere Reserve, o.p.s. came on 31 August 2004, when the company was registered in the register of public benefit societies at the Regional Court in Brno. This was the first time in the Czech Republic that the responsibility for the management of a biosphere reserve was assumed by a non-governmental organization and not by a state nature conservation authority. The founders of the company were: the Forests of the Czech Republic, MND, a. s., the Ministry of the Environment of the Czech Republic, the District Chamber of Commerce of Breclay and the Czech Union for Nature Conservation.

The Ministry of the Environment of the Czech Republic, which continues to declare its interest in supporting the Lower Morava Biosphere Reserve as an interesting and necessary project, however, for its own systemic and organizational reasons, withdrew from the PBC in 2012 and continues to participate in the activities in the biosphere reserve as a partner.

The management of the Lower Morava Biosphere Reserve is based on the equal involvement of local governments, business entities, NGOs and the scientific community. Until 2011, one of the PBC bodies was the Scientific Council. Since 2012, in connection with the amendment of the Act on Public Benefit Corporations, the Scientific Council and its function was replaced by the inclusion of Mendel University in Brno in the PBC structures, with the role of substantive and scientific review of all activities and projects of the BR.

The basic organisational structure of the PBC was determined by the Memorandum of Incorporation, the Articles of Association and the Rules of Procedure prescribed by the Act on Public Benefit Corporations. The founders agreed that the performance and management of PBC must be built on a professional foundation and a long-term development vision. It was determined that PBC activities would be designed and guaranteed by a small, flexible team of in-house staff. The PBC is headed by a Director, also as the statutory representative of the company, with an additional staff member, the Project Manager - Deputy Director. The staff team can be expanded if necessary and funding is secured.

The nine-member **Management Board** is composed of representatives of the following entities:

- Forests of the Czech Republic, state enterprise
- Czech Union for Nature Conservation
- Mendel University in Brno
- Voluntary Association of Municipalities of the LVA Region
- District Chamber of Commerce of Breclav

- Voluntary Association of Municipalities of the Podluží Region
- MND, a.s.
- District Chamber of Agriculture in Breclav
- Voluntary Association of Municipalities of the Mikulov Region

Another body of the PBC is the **Advisory Board**, which is composed of six members:

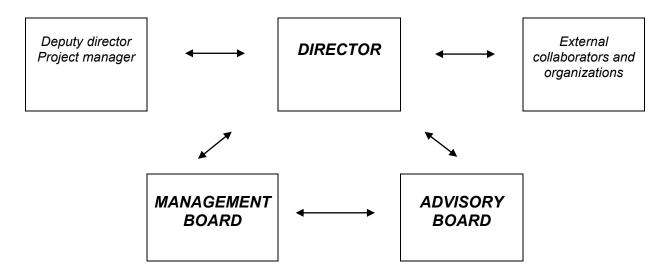
- MND, a.s.
- Forests of the Czech Republic, state enterprise
- Czech Union for Nature Conservation
- Mendel University in Brno
- District Chamber of Commerce in Břeclav
- joint representative of the municipalities of all three regions

ORGANIZATIONAL CHART OF THE COMPANY

REGISTERED OFFICE: ZÁMECKÉ NÁM. 69, 691 44 LEDNICE

IDENTIFICATION NUMBER: 269 38 171

LEGAL FORM: PUBLIC BENEFIT COMPANY



The director is the statutory representative of the company.

Each biosphere reserve is required to submit an Peridoc review report to the MAB Programme Secretariat every ten years. The report is intended to enable the International Coordinating Council of the MAB (ICC MAB) to review how a biosphere reserve is meeting the criteria of the Statutory Framework, and in particular its three main functions. The Lower Morava Biosphere Reserve submitted its first activity report in 2014. In its subsequent assessment, the ICC MAB concluded that the Lower Morava Biosphere Reserve met all criteria and further recommended that its organisational structure be used as a model for biosphere reserve governance based on stakeholder participation. This was the first time that any Czech BR was officially declared a model for the World Network of Biosphere Reserves.

4. Activities of BR Lower Morava

Lower Morava BR, PBC provides the following services:

- organizational, institutional, material and personnel support for the activities of the Lower Morava Biosphere Reserve (hereinafter referred to as "BR") as part of the UNESCO World Network of Biosphere Reserves,
- participation in activities related to the BR, including coordination of these activities between state administration bodies, interest and territorial self-government bodies, interest associations, educational and scientific institutions, business entities, the public and other entities,
- participation in mediation and provision of advisory, financial and coordination services related to BRs and their development in accordance with UNESCO rules on the World Network of Biosphere Reserves.
- ensuring the creation, development and continuous updating of an open information database
 on BRs and on scientific, business and development activities related to the territory or existence of BRs,
- participation in the publication of publications and proceedings, including information and methodological publications, printed, electronic, film and multimedia, and their presentation, dissemination and sale.
- Participation in education and training in the spirit of sustainable living, in particular the protection of nature and landscape and the rational management of natural resources,
- operating a public information office,
- participation in the organisation and organisation of scientific conferences, talks and training sessions and exhibitions on BR,
- setting up and managing demonstration sites,
- ensuring international cooperation in matters relating to BR and the World Network of Biosphere Reserves,
- supporting and promoting activities aimed at the economic and demographic development of the BR and the region,
- providing mediation and facilitation services in disputes and conflicts related to the existence and activities of the BR.

The company provides services of general interest under equal conditions to support all entities and activities aimed at the development of the BR territory in accordance with the terms and conditions of the Man and Biosphere Programme.

4.1 Contribution of the Lower Morava Biosphere Reserve to the World Network of Biosphere Reserves

The Lower Morava Biosphere Reserve frequently consults with other BRs in the World Network of BRs on internal and external matters. Thus, the Lower Morava Biosphere Reserve cooperates and exchanges experiences with representatives of other BRs directly within the EuroMAB, ArabMAB, AfriMAB and others (Sweden, Canada, Austria, Slovenia, Germany, Georgia, Yemen, Chile, etc.), because neither of the Czech BRs nor the Czech representatives of the MAB Programme have long been interested in cooperation with the Lower Morava Biosphere Reserve.

The Lower Morava Biosphere Reserve has prepared together with its partners an interpretive tool - an interactive map of biosphere reserves around the world. The map for education and presentation of biosphere reserves is available at www.dolnimorava.org.

Biosphere reserves and their experiences are regularly presented at EUROMAB conferences through power-point presentations or posters and printed materials in English.

Active involvement of the Lower Morava Biosphere Reserve in the exchange of information within the World Network of Biosphere Reserves is one of its priorities.



4.2 Membership in the International Model Forests Network

A model forest is a geographical area representing the values of forests and landscapes and approaches to their use in a given place. The first Model Forest was established in Canada in the early 1990s in response to intense forest management conflicts. It demonstrated the possibility of

collaborative solutions to issues when all stakeholders are involved in landscape management. The Model Forest is built on three basic aspects:

- (a) Landscape large area representing a wide range of values, including ecological, economic, social and cultural interests.
- b) Partnership neutral forum welcoming voluntary participation by all stakeholder representatives.
- **c) Sustainability s**takeholders are committed to the conservation of values and sustainable management of natural resources in the landscape.

Model Forest Czech Republic (MF CR) brings together areas using sustainable management practices and encourages participation of all stakeholders to manage the landscape on a participatory basis. It was admitted to the International Network of Model Forests (www.imfn.net) in 2017 and as of 2020 brings together five territories in the Czech Republic, Forest Park Masaryk Forest Křtiny and the Lower Morava Biosphere Reserve.



MF CR is the first model forest created in the Czech Republic, inspired and linked to the idea of the International Model Forests Network, originated in Canada. The Model Forest Czech Republic is composed of several territories, model properties with long-standing traditions and experience in sustainable management. MF CR offers a space for the development of existing partnerships as well as the creation of new partnerships where people from different socio-cultural and economic backgrounds will work together to manage and value the values of the forest and the whole landscape so that these values can be preserved and developed for future generations.

The Lower Morava Biosphere Reserve provides administrative facilities for the Model Forest Czech Republic (https://www.modelovyles.cz).

5. SWOT analysis of the Lower Morava BR

Strengths	Weaknesses	Opportunities	Threats
Experience of employees and cooperating partners	Lack of stable and independent core funding	Supporting founders and other stakeholders	Lack of an independent core funding source
International prestige within UNESCO	External communication and PR	Improving environmental awareness of the population	Economic recession impacting the founders
Management's ability to recruit diverse stakeholders for BR ideas and MAB philosophy	Lack of funding to co- finance projects and participation in certain types of projects	Provision of services for the business sector, especially assistance in the development of the concept of "Green Marketing" of companies and the application of the BR DM Certificate	Adverse public finance developments
Relative autonomy and independence from the "single, strong, right interest"	Inability to obtain the support of the regional government for its involvement in BR	Attractiveness, - natural and cultural-historical value of the BR area	Too much dependence on subsidies and the capacities of founders
Communication with founders and strategic partners	Inability to enforce the Czech Republic's commitments under the MAB Programme (Lima Action Plan, etc.)	Potential for extension of the Lower Morava BR to the territory of whole micro- regions	Lack of interest of the state administration in BR and the MAB Programme
Flexibility to find projects suitable for the region and beyond		Revitalisation and implementation of TSES projects and LVA Management Plan	Repeated media attacks
History of the company, a large number of comprehensively realized projects		Cooperation with micro- regions and the South Moravian Region	
		Development programmes and export of know-how	
		Promoting EU investment in sustainable development e.g. renewable energy or organic farming	

6. Strategy of Lower Morava BR project design

The long-term development strategy for the Biosphere Reserve has been from the very beginning focused on addressing the serious problems of the landscape. The principles for the design and elaboration of design plans of the Lower Morava Biosphere Reserve, p.b.c. and for regular activities on its territory and beyond have simple rules, resulting from the basic documents of the company. The strategy is based on priorities agreed by stakeholders and includes the following strategic objectives:

- active preparation and subsequent implementation of projects financed from national, structural, European funds. Priority focus on nature conservation and on addressing the impacts of climate change.
- Extension of the organisational structure of the Lower Morava Biosphere Reserve, p.b.c. in connection with a significant strengthening of activities in the preparation and implementation of projects
- cleaning up the landscape of anything dangerous (old environmental burdens, war munitions, etc.)
- increase the landscape's habitat diversity, protect it from water and wind erosion and improve its hydrological conditions
- improve erosion protection and biodiversity in agricultural landscapes through the creation of natural features
- revitalisation of wetlands, creation of pools, revitalisation of decommissioned rivers and their floodplains, restoration of floodplain meadows with a diverse plant community, and removal of deposits in ponds to improve the landscape's retention capacity
- respect the expertise and responsibility of traditional landscape professions, promote interdisciplinary discussion and exchange of information, support primary producers in their efforts to use natural resources wisely (farmers, foresters, fishermen, hunters, fishermen, etc.)
- cooperation with municipalities, entrepreneurs, universities, schools, scientific institutes and other institutions
- promotion of cultural and folklore uniqueness of the area, improvement of the functionality of the tourist infrastructure
- promotion of sustainable development. Perception of nature conservation as an integral part of a healthy lifestyle.

The selected topics have been and are being discussed at the BR Management Board meetings and submitted to the specialists for review. The resulting project proposals are included in the annual activity plan after approval by the Management Board. The securing of financial resources, the commissioning and drafting of project documentation and subsequent implementation follows this. Successful projects are used for further education and inspiration in the form of professional seminars, excursions and publications.

7. Areas of focus of the Lower Morava BR management

The management of the Lower Morava Biosphere Reserve is focused on six priority areas, which emerged from discussions with stakeholders and were subsequently approved by them. These areas are:

- (a) Project preparation and implementation
- b) Protection of natural and cultural diversity
- c) Establishing models of good landscape management and finding methods for sustainable development of society and sustainable use of natural resources
- d) Improving the condition of landscape in areas threatened by erosion and drought
- e) Research and education
- (f) Partnership cooperation



7.1 Project preparation and implementation

7.1.1 Project preparation

- a) Searching for suitable themes and areas for project implementation
- b) Preparation of own projects for PPK, OPIE, LIFE, or other programmes with the possibility of using the maximum amount of support.

- c) Preparation and administration of projects for other entities (municipalities, cities, private sector, ...)
- d) Communication with potential partners on their involvement in the projects under preparation, both at national level and abroad.
- e) Communication with owners, tenants, administrators about the possibility of implementing
- f) Communication with nature conservation authorities (regions, AOPK, ...) about the possibility of implementation

7.1.2 Project implementation

- a) Administration and implementation of own projects
- b) Administration and supervision of the implementation of projects of other entities

Outcome	Action	Output	Indicators
Preparation and implementation of projects	Preparation of projects	Searching for suitable themes and territories to implement projects	Number of suitable themes and areas identified for BR implementation.
		Preparation and administration of projects for other entities (municipalities, cities, private sector,)	Number of projects ready to be administered by BR.
		Preparation of own projects for Program for Landscape Care, OP Environment, LIFE, or other programmes with the possibility of using the maximum amount of support.	Number of projects ready for implementation by BR.
		Communication with potential partners about their involvement in upcoming projects, both nationally and abroad.	Number of partners
		Communication with owners, tenants, administrators about the possibility of implementation	Number of approvals issued for implementation
		Communication with nature protection authorities (regions, AOPK,) about the possibility of implementation	Number of approvals issued for implementation
	Implementation of projects	Administration and implementation of own projects	Number of exceptional and monumental trees and other landscape features BR has been involved in protecting.
		Administration and supervision of the implementation of projects of other entities	Number of landscape restoration projects in which BR has participated.

7.2 Protection of natural and cultural diversity

7.2.1 Protection and management of the area

- a) Effective use of the opportunity to participate in administrative procedures.
- b) Initiation of the creation, useful modification and evaluation of existing or forthcoming legislation establishing protected areas or dealing with landscape management.
- c) Participation in the assessment or preparation of management plans and concepts for individual protected areas or monument conservation zones.
- d) Preparation, modification and approval of biosphere reserve zoning using the latest knowledge and international recommendations.
- e) Removal of old ecological burdens and ecological damage, prevention of ecological damage in the landscape.
- (f) Participation in landscape programmes and measures leading to the improvement of the state of the landscape.



7.2.2 Protection and restoration of the gene pool

a) Support and development of professional and systematic care of the gene pool in the biosphere reserve (e.g. regional varieties of stone-fruits, vines, selected species of trees in forests, rare plants and animals).

- b) Initiation and development of conservation and restoration programmes for selected habitats and management aimed at preserving and restoring the habitat and biological diversity of the cultural landscape.
- c) Initiating the protection of exceptional and monumental trees and other landscape features.
- d) Encouraging the restoration of landscape structure using available grants.

Outcome	Action	Output	Indicators
Protection of natural and cultural diversity	Protection and management of the area	Effective use of the opportunity to participate in administrative proceedings.	Number of administrative proceedings in which BR is involved.
		Initiating the creation, purposeful modification and evaluation of existing or forthcoming legal norms establishing protected areas or dealing with landscape management.	Number of legal amendments initiated by the BR.
		Participation in the assessment or preparation of management plans and concepts for individual protected areas or monument conservation zones.	Number of management plans and concepts for individual protected areas or monuments conservation zones in which BR participates.
		Preparation, modification and approval of BR zonation using the latest knowledge and international recommendations.	Functional zonation of BR in accordance with the criteria of the MAB Programme.
		Elimination of old environmental burdens and ecological damage, prevention of ecological damage in the landscape.	Number of old environmental burdens and ecological damage removed, number of activities aimed at preventing ecological damage in the landscape.
		Participation in landscape programmes and measures leading to landscape improvement.	Number of landscape programmes and measures leading to landscape improvement in which BR participates.
	Protection and restoration of the gene pool	Support and development of professional and systematic care for the gene pool in the BR (e.g. regional varieties of stone-fruits, vines, selected tree species in forests, rare plants and animals).	Number of activities aimed at supporting and developing professional and systematic care of the gene pool in the BR territory, in which the BR participates.
		Initiation and development of programmes for the protection and restoration of selected habitats and management aimed at preserving and restoring the habitat and biological diversity of the cultural landscape.	Number of programmes for conservation and restoration of selected habitats and management aimed at conservation and restoration of habitat and biodiversity of cultural landscapes in which BR participates.
		Initiation of protection of exceptional and monumental trees and other landscape features	Number of exceptional and monumental trees and other landscape features BR has been involved in protecting.
		Promoting the restoration of the landscape structure using available subsidies.	Number of landscape restoration projects in which BR has participated.

7.3 Creating models of good landscape management and finding methods for sustainable development

7.3.1 Regional planning

- a) Cooperation in the development of various stages of spatial planning documentation.
- b) Participation in discussions on regional development strategies and sustainable development of dominant economic activities in the biosphere reserve area, especially for agriculture, fisheries and fishery, hunting, forestry and mineral extraction.
- c) Participation in negotiations and in the elaboration of development strategies in the field of tourism at local and regional level.

7.3.2 Cooperation with local people and businesses

- a) Cooperation with local authorities in the implementation of measures for the protection and improvement of nature and landscape.
- b) Deepening contacts with individual municipalities and ensuring that residents are informed.
- c) Supporting business activities that are in line with the mission of the biosphere reserve.

Outcome	Action	Output	Indicators
Creating models of good landscape management and finding methods for sustainable development	Regional planning	Cooperation in the development of various stages of spatial planning documentation.	Number of spatial planning documents in the preparation of which BR participates
		Participation in negotiations on the region's development strategies and sustainable development of the dominant economic activities in the BR territory, especially for agriculture, fishing and fishery, hunting, forestry and mineral extraction.	Number of meetings in which BR participates
		Participation in meetings and in the elaboration of development strategies in the field of tourism at the local and regional level.	Number of meetings in which BR participates
	Cooperation with local people and businesses	Cooperation with local authorities in the implementation of measures to protect and improve nature and the landscape.	Number of measures for the protection and improvement of nature and landscape in which BR participates
		Deepening contacts with individual municipalities and ensuring that residents are informed.	The number of public information events.
		Support business activities that are consistent with BR's mission.	Number of entrepreneurial activities that are consistent with BR's mission that BR has supported

7.4 Research and education

7.4.1 Research and monitoring

- a) Initiate and participate in the coordination of basic scientific, socio-economic and other research and monitoring.
- b) Establish and update databases of research and monitoring data and information.
- c) Close cooperation with scientific and research institutes, universities, schools and scientific and professional staff.



7.4.2 Education, training and awareness raising

- a) Initiate, coordinate and personally participate in the education, training and awareness of local residents, visitors, school children and student youth.
- b) Working with the media and mass media to ensure qualified and objective information about the activities of the PBC and partner entities in the Biosphere Reserve and to promote the ideas of the MAB Programme.
- c) Cooperation with tourist information centres.
- d) Active participation in ensuring the sustainability of the Lednice Castle Multifunctional Centre (MCZL) project in Lednice and the fulfilment of its mission in education, training and awareness-raising.

Outcome	Action	Output	Indicator
Research and education	Research and monitoring	Initiating and participating in the coordination of basic scientific, socio-economic and other research and monitoring.	Number of research and monitoring activities in which BR participates
		Establishing and updating databases of research and monitoring data and information.	A functional and up-to-date database
		Close cooperation with scientific and research institutes, universities, schools and scientific and professional staff.	Number of scientific and research institutes, universities, schools and scientific and professional staff with whom BR cooperates.
	Education, training and awareness-raising	Initiating, coordinating and personall participation in the education, training and outreach of local residents, visitors, school children and student youth.	Number of events in which BR participates
			Number of media outputs focused on qualified information about the activities of the LM BR and partner entities in the BR territory and promotion of the ideas of the MaB Programme
		Cooperation with tourist information centers (TIC).	Number of TICs that BR cooperates with.
		Active participation in ensuring the sustainability of the Multifunctional Centre of Lednice Castle (MCLC) and the fulfilment of its mission in education, training and awareness.	Number of MCLC events in which BR participates.

7.5 Partnership cooperation

- a) Participation in the creation of a new and modern Czech National MAB Committee using foreign experience.
- b) Collaboration with partners at all levels to implement the ideas of the Lima Declaration and the Lima Action Plan into the everyday practice of biosphere reserves in the Czech Republic and to ensure active national support for the MAB Programme through the state administration.
- c) Cooperation with the MAB Programme Secretariat in Paris and partner biosphere reserves within the World Network of Biosphere Reserves and its sub- and thematic networks.
- d) Establishment of appropriate partnerships with selected biosphere reserves and entities managing World Heritage Sites (WHS) of neighbouring countries (Slovakia, Austria) and with selected biosphere reserves and WHS worldwide.

- e) Support and active participation in cooperation with adjacent border areas of Austria and Slovakia.
- f) Cooperation within the Model Forest Czech Republic and the International Model Forests Network.

Outcome	Action	Indicator
Partner cooperation	Participation in the creation of a new and modern National MAB Committee using foreign experience.	Restored and operational Czech National MAB Committee
	Collaboration with partners at all levels to implement the ideas of the Lima Declaration and the Lima Action Plan into the normal practice of biosphere reserves in the Czech Republic and to ensure active national support for the MAB programme through the state administration	Number of Czech National MAB Committee activities in which BR participates.
	Cooperation with the MAB Programme Secretariat in Paris and partner biosphere reserves within the World Network of Biosphere Reserves and its sub- and thematic networks	Number of activities of MAB headquarters and partner BRs in which LM BR participates
	Establishment of appropriate partnership relations with selected biosphere reserves and entities managing sites included in the World Heritage List (WHS) of neighbouring countries (Slovakia, Austria) and with selected biosphere reserves and WHS worldwide.	Number of BRs with which the LM BR has collaborated.
	Support and active participation in cooperation with adjacent border areas of Austria and Slovakia	Number of international projects in which BR participates.
	Cooperation within the International Model Forests Network	Number of activities implemented within the Model Forests in which BR participates.

All of the above activities will be carried out with funds that PBC will receive from its own professional activities, from grants, from foundations, from its own business activities, from sponsorship donations and from active participation in regional, international and other projects. The funds raised will be used to provide services of general interest in accordance with the mission of the BR. This action plan has been prepared as part of the long-term strategy of the Lower Morava Biosphere Reserve and will be used as a basis for the preparation of annual action plans.

8. Tasks for the Lower Morava BR arising from the Lima Action Plan (2016-2025)

The Lima Action Plan, adopted in 2016, includes activities that will contribute to the effective implementation of the objectives contained in the MAB Strategy 2015-2025. Both the MAB Strategy 2015-2025 and the Lima Action Plan 2016-2025 are based on the continuity of the Seville Strategy and the World Network of Biosphere Reserves Framework Statutes and are built on the results of the evaluation of the implementation of the Madrid Action Plan for Biosphere Reserves (2008-2013).

In line with its vision and programmatic objectives, the Lima Action Plan places a strong emphasis on societies thriving in harmony with the biosphere to achieve the Sustainable Development Goals, and to implement the 2030 Agenda for Sustainable Development, both within and outside biosphere reserves, through the global dissemination of sustainability models developed in biosphere reserves.

MAB National Committees should prepare their strategies and action plans using the MAB Strategy and the Lima Action Plan as key references. These should then be based on national and regional circumstances and needs, from which common ground would be derived for the implementation of the Lima Action Plan at the global level. The objectives, actions and outputs for which the BRs, including the Lower Morava BR, are responsible, are as follows:

Outcome	Action	Outputs	Responsibility*	Performance indicators
A1. Biosphere Reserves (BRs) recognized as models contributing to the implementation of Sustainable Development Goals (SDGs)	A1.1. Promote BRs as sites that actively contribute to achieving the SDGs	BRs have made measurable contributions in support of the achievement of the SDGs that can be replicated and scaled up	Member States, National Authorities, BRs	Number of BRs with specific initiatives or activities contributing to SDG targets BR concept used in national development agendas
and Multilateral Environmental Agreements (MEAs)	A1.2. Promote BRs as sites that actively contribute to implementing MEAs, including the Aichi Biodiversity Targets	BRs managed and supported with a focus on ensuring their successful contributions to MEA implementation	MAB Secretariat, Member states, National MAB Committees, National Commissions for UNESCO, BRs	Number of BRs with initiatives or activities contributing to MEA implementation, including the Aichi Biodiversity Targets"
	A1.3.Establish alliances at local, regional, international levels for biodiversity conservation and benefits to local people, taking into consideration the rights of indigenous people	MAB and BRs have established or joined alliances for biodiversity conservation and benefits to local and indigenous people	Member States, National and subnational Authorities, National MAB Committees, National Commissions for UNESCO, and BRs.	Number of BRs with alliances for conservation and development
	A1.4. Use BRs as priority sites/observatories for climate change research, monitoring, mitigation and adaptation, including in support of the UNFCCC COP21 Paris Agreement	BRs used as priority sites and as observatories for ecosystembased climate change action	Member States, National Authorities, MAB National Committees, National Commissions for UNESCO and BRs	Number of climate change-related projects implemented in BRs, Number of national climate change strategies acknowledging the role of BRs

A1.5. Promote green/sustainable/socia I economy initiatives inside BRs	Sustainable development initiatives established that are inclusive and environmentally integrative. Labels for products and services developed that reflect the BR objectives	BRs Business sector	Number of BRs promoting green/sustainable/soci al economy initiatives, Number of economic initiatives implemented in the BR
A1.6. Undertake research and ensure the long-term conservation of the socio-ecological systems of BRs including restoration and appropriate management of degraded ecosystems	Socio-ecological systems in BRs are well conserved and maintained	Member States, MAB National Committees, National Commissions for UNESCO, BRs	Number of countries with national legislation to maintain the socio-ecological systems of core areas and buffer zones of BRs. Surface areas of restored ecosystems

Outcome	Action	Outputs	Responsibility*	Performance indicators
A2. Open and participatory selection, planning and implementation of BRs.	A2.2 Ensure processes for selecting, designing, planning, and nominating BRs are open and participatory, involving all concerned stakeholders, taking into account local and indigenous practices, traditions and cultures, and based on sound science.	BR nomination files and BR management plans produced and implemented through participatory approaches, considering local and indigenous practices, traditions and cultures, and based on sound science.	Member States, National and Subnational Authorities, MAB National Committees, National Commissions for UNESCO, BRs	Number of national guidelines and/or policies for the process leading to nomination of BRs
	A2.3. Ensure processes for implementing, managing, monitoring and periodic review of BRs are open and participatory and take into account local and indigenous practices, traditions and cultures	BR management structures, plans and review reports produced and implemented through participatory approaches, considering local and indigenous practices, traditions and cultures and participants	Individual BRs, MAB National Committees, National Commissions for UNESCO	Number of BRs where the new processes are evident in management structures, plans and periodic review reports
	A2.4. Ensure that BRs have clear communication plans and mechanisms to implement these	BR communication plans and mechanisms that ensure communication between BR managers and both stakeholders and MAB networks are developed.	Individual BRs, MAB National Committees, National Commissions for UNESCO	Number of BRs with a Communication Plan. Number of BRs with a formal external communication mechanism
A3 Integration of BRs into relevant legislation, policies and/or programmes complemented by support for the functioning of BRs	A3.1 Recognise BRs in legislation, policies and/or programmes at national and/or subnational levels	BRs integrated into national and regional development, territorial planning, environment and other sectoral legislation, policies and/or programmes	ČMember States, National and Subnational Authorities, MAB National Committees, BRs	Number of Member States whose national legislation refers to BRs. Number of references to BRs in policies and/or programmes

Outcome	Action	Outputs	Responsibility*	Performance indicators
A4 Research, practical learning and training opportunities that support the management of BRs	A4.1. Establish partnerships with universities/research institutions to undertake research, especially UNESCO Chairs and Centres	Partnerships established, maintained, and reinforced. Capacity building events organized.	BRs, MAB National Committees, Partner universities, research institutions, etc.	Number of strategic and functional partnerships. Number of publications. Number of training and capacity building events
and sustainable development in BRs	A4.2. Establish partnerships with educational and training institutions, especially UNESCO Chairs, Centres and Associated schools, to undertake education, training and capacity building activities aimed at BR stakeholders, including managers and rights holders, taking into account the SDGs	Partnerships established, maintained, and reinforced. Education and training courses and programmes implemented	BRs, MAB National Committees, National Commissions for UNESCO, Educational and training institutions including those involved in the Global Action Programme (GAP) on ESD	Number of partnerships. Number of training events and programmes at national and BR levels
	A4.3 Provide adequate research infrastructure in each BR	Research activities undertaken and research outputs generated that inform BR management and increase knowledge	BRs, MAB National Committees, National Commissions for UNESCO	Number of research outputs generated that are applicable to management and training
	A4.4. Identify, and disseminate good practices for sustainable development, and identify and eliminate unsustainable practices in BRs	Good and unsustainable practices identified through research, and lessons learned shared to inform BR management	BRs, MAB Committees, National and subnational authorities. Partner universities, research institutes, private enterprises, etc.	Number of good practices identified. Number of unsustainable practices eliminated
	A4.5. Encourage managers, local communities and other BR stakeholders to collaborate in designing and implementing projects that inform the management and sustainable development of their BR	Collaborative research projects undertaken. Results of research integrated in management plans	BRs, national and subnational authorities, Research institutions	Number of BRs with collaborative research projects Number of development actions informed by research

Outcome	Action	Outputs	Responsibility*	Performance indicators
A5. Financial sustainability of BRs	A5.1. Develop a business plan for each BR including, generation of revenues and effective partnerships with potential funders	BR business plan developed	BRs, MAB National Committees, National Commissions for UNESCO, National and subnational Authorities	Number of BRs with business plan
	A5.2. Implement the BR business plan to produce revenues	BR business plan implemented	BRs, National authorities, other stakeholders	Proportion of BR budget generated by BR Number of BRs with sustained funding
A6. The effective functioning of the World Network of Biosphere Reserves, with all BRs complying with its Statutory Framework	A6.1. Implement an effective periodic review process as defined in the Statutory Framework	Periodic review process implemented in line with the Statutory Framework	National and subnational Authorities, BRs, MAB National Committees, National Commissions for UNESCO	Number of BRs that comply with Statutory Framework on the basis of periodic review reports submitted on time
	A6.2. Apply adaptive management processes in BRs	Adaptive management processes applied by BRs	BRs, National and subnational Authorities	Number of BRs that apply adaptive management principles, as evidenced by periodic review reports
A7 BRs recognized as sources and stewards of ecosystem services	A7.1. Identify ecosystem services and facilitate their long-term provision, including those contributing to health and wellbeing	Actions to facilitate the provision of ecosystem services from BRs implemented	Member States, National and subnational Authorities, BRs	Quality and quantity of ecosystem services provided by BRs, as indicated in periodic reviews
	A7.2. Implement mechanisms for the equitable payment for ecosystem services (PES)	Equitable PES mechanisms in BRs implemented	Member States, National and subnational Authorities, and BRs	Number of BRs where PES schemes are implemented
	A7.3. Implement programmes to preserve, maintain and promote species and varieties of economic and/or cultural value and that underpin the provision of ecosystem services	Initiatives with these goals or that include these goals among others implemented	BRs, Member States, subnational Authorities, other stakeholders	Number of initiatives per BR targeted to improve the status of species of economic and/or cultural value

Outcome	Action	Outputs	Responsibility*	Performance indicators
B.6. Transnational and transboundary cooperation between BRs	B6.1. Create and implement twinning arrangements between BRs in different countries	Operational twinning arrangements established	Member States, National Authorities, BRs, National MAB Committees	Number of twinning arrangements
B.7 An active and Open interdisciplinary network of scientists/ knowledge holders sharing MAB vision and mission	B7.2. Develop a joint research and knowledge exchange agenda for the international networks(t)	Joint research and knowledge exchange agenda developed	Scientists in National MAB Committees, BRs, regional and thematic networks	Quality and content of the joint research agenda. Number of activities undertaken by the network

Outcome	Action	Outputs	Responsibility*	Performance indicators
C3. BRs and regional networks generating their own revenues	C3.2. Promote partnerships to raise funds from external entities with objectives that are compatible with those of the MAB Programme	Partnerships established and funds mobilized for projects that target the application of policies or programmes external to BRs	BRs, groups of BRs, MAB National Committees, regional networks	Number of BRs and regional networks with activities funded through partnerships
C4. Recognition of the MAB Programme as a key partner by private sector	C4.2. Create opportunities for collaboration and partnerships with private sector which are open, accountable and sustainable	Partnerships with private sector established, maintained and/or reinforced	All MAB stakeholders	Number of collaborations and partnerships with private sector

Outcome	Action	Outputs	Responsibility*	Performance indicators
C5. Recognition that the MAB Programme contributes to the delivery of the objectives of national, regional funding programs	C5.1. Create opportunities for projects and activities funded by national and regional funding agencies	Project proposals prepared targeting national and regional funding agencies in line with shared objectives	Member States, National MAB Committees, National Commissions for UNESCO BRs	Number of projects funded by national and regional funding mechanisms
C6. Entrepreneurs and social enterprises contribute to BR activities	C6.2. Create opportunities for entrepreneurs and social enterprises in BRs, including training, incentives and public	Entrepreneurs and social enterprises provided with ideas, partnerships and mechanisms to engage with BRs	BRs Social enterprises, entrepreneurs, academics	Number of businesses and enterprises involved with BRs Number of mechanisms established that connect entrepreneurs to BRs Reduced proportion of public funding in BR budgets
C7. Recognition of BRs nationally and internationally	C7.1. Undertake an analysis of a strengthened global BR brand, and establish this, with associated national guidelines	Global BR brand established with associated national guidelines	MAB Secretariat, National MAB Committees, National Commissions for UNESCO	Official launch of the brand and guidelines
	C7.2. Use the brand in products and services in line with national guidelines	BR brand used in marketing of goods and services in line with national guidelines	BRs, MAB Secretariat, National Authorities, National MAB Committees Business sector Social enterprises	Number of products and services that carry the BR brand
C8. Enhanced synergies between BRs	C8.1. Encourage joint promotion and marketing of BR products and services among BRs and beyond	Information exchanged on the availability of goods and services in BRs and joint schemes implemented	National Authorities, BRs, Business sector	Number of joint marketing schemes established. Number of products and services available in the framework of these schemes

Outcome	Action	Outputs	Responsibility*	Performance indicators
D1. Full availability of MAB documents, data, information and other material	D1.1. Implement the open access policy adopted by the ICC in 2014	Open access established to MAB documents, data, information and other materials	MAB Secretariat, Networks, Member States, National Authorities, MAB National Committees, National Commissions for UNESCO, BRs	Online availability of documents data and other materials. Number of countries implementing the open access policy
D2. Increased awareness of all aspects of the MAB Programme	D2.2. Implement the communication action plan	Communication and action plan implemented	MAB Secretariat, National Authorities, and MAB National Committees, BRs, regional networks	Visibility of MAB as measured by: Number of visitors to MAB and BR web sites. Number of downloads of MAB related documents. Number of MAB related references in international media
D3. Broader Engagement and outreach	D3.1. Use social media and other novel information and communication technologies	Social media and other novel information and communication technologies in place and operational	National Authorities, All MAB stakeholders	Number of MAB stakeholders who use social media and other technologies Average number of posts, blogs, documents and other activities



Lower Morava Biosphere Reserve 2021