

SLOVAK MINING ROUTE AND EUROPEAN IRON TRAIL IN SLOVAKIA

Cultural projects for preservation of montanistic and industrial heritage

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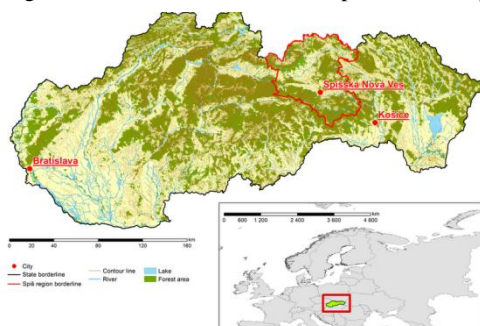
Abstract: European cultural projects for the preservation of both material and spiritual heritage in the mining and metallurgy were in the first years of the third millennium transformed into national projects of Slovakia. Thanks to a broad-based, interdisciplinary cooperation and projects co-financing from multiple sources, it succeeds in implementation not only the process of technical monuments preservation, but also to develop cognitive tourism, geo-tourism and cultural tourism, with a comprehensive utilization of natural, cultural, historical, human and social potential of the territory of Slovakia. Museums play at several levels an important role in this process their research, acquisition, publishing, presentational and culture-educational activities.

Key words: Slovakia, Spiš Region, mining, preservation, cultural tourism, connections and cooperation.

1. Introduction

Slovakia¹ was endowed with great mineral wealth. Ores of precious metals - gold, silver and copper, but also iron, zinc, nickel, cobalt, manganese, antimony, mercury, uranium ores are geologically linked to the area of the Western Carpathians that is an important metallogenetic unit. Mineral wealth became the basis for the development of mining which since the Middle Ages was the source of revenue for the economic prosperity of Slovakia and secured the development of crafts, metallurgy, forestry, coinage and trade, but also for the development of science, culture and social life. Technical and technological levels of mining in Slovakia were high and in conjunction with the craftsmanship of people, such as bell-founders, they were on the top of technology and production facilities in the European and global scale. Perhaps there is no sphere of life of Slovaks that was untouched by the mining, so this area has become to be an important part of identity of the Slovak nation.

Figure 1: Location of the Slovak republic in Europe



Author: Lišková, V. 2013

Preservation of montane heritage in Slovakia is therefore of interdisciplinary importance and **connection, cooperation, interface are the keywords** rendering a wide range of cooperation that has been developed between the state and public administration organisations, professional organisations (museums, archives), civic associations, mining guilds and clubs namely not just on the national but also on international level. The

¹ Slovakia is a picturesque landscape in the heart of Europe with an area of 49 035 km², in which there live of 5.43 million inhabitants. Rugged topography of Slovakia is created with tall mountain ranges, the highest peak in Slovakia is Gerlach having an altitude of 2 655 m above sea level, but also plastic lowlands having the lowest point with 94 m ASL. Some unique landscape elements of Slovakia are the karst areas with characteristic morphology and with lots of caves. Natural mosaic is part of the dense river network, a rich abundance of mineral springs, but also extensive forests. Living nature is presented with a wide variety of rare and endemic species of wildlife fauna and flora. 13 national parks are on the territory of Slovakia.

result is an exceptional diversity of forms of rescue and preservation of the history of mining, technical monuments and traditions, as well as ways of interpretation of the cultural and spiritual heritage in Slovakia. Implementations of cultural projects as **the Slovak mining route, the European iron trail in Slovakia and Upper Hungarian Mining Route are proof that the mining and processing of minerals create** not only an integral part of the history of Slovakia, but they are of great importance in the context of European history as well.

2. The history of mining in Slovakia

Figure 2: Central Europe, ca. 1250



On the territory of contemporary Slovakia² that is situated in the middle of Europe, there existed the mining already in the period before our chronology, before the first written notes, as evidenced by the rich archaeological findings – some articles manufactured from iron, copper and bronze. The actual development of the mining of minerals was up at the time of the Celtic era (350 years B.C.), in the Roma (1st – 4th century A.D.) and Slavic eras (5th – 11th century A.D.), when the first mining settlements near ore deposits were created.

For centuries Slovakia was known with its rich ore deposits. Its location in the context of Hungarian Kingdom predestined its role of the determining economic strength and a source of income for the Hungarian kings and monarchs. The unprecedented development of mining occurred in the 13th century, in particular due to the arrival of colonists from the German countries which had arrived on the territory of

Slovakia already with a rich tradition of mining. Mining cities were formatting while receiving privileges, royal degrees (freedoms of mining) from Hungarian kings (Belo IV in year 1243, Stephen V in year 1271). In the year 1327 also the monarch Charles Robert helped to the mining development with the adjustment of the mining rules (set of the mining rights for well defined commercial minerals – gold, silver, copper, lead, salt, later iron and others).

Slovakia as part of the Hungarian Kingdom belonged to the biggest producers of precious metals in Europe in the middle ages. Copper mined in Slovakia was exported to all over Europe. Adverse events (in particular military-social events) in the 16th and 17th centuries resulted in the decline of mining in Slovakia. On the contrary, in the 18th and 19th centuries there was a significant rise in the ores mining. At the beginning of the 19th century there was extracted a half European production of gold, 1/3 of silver, 1/6 of copper in the Hungarian Kingdom of that there was got 2/3 of gold, silver and copper in the territory of Slovakia.

² Slovakia was part of several government formations during its history. Slavs were settling Slovakia since the 5th century. In the 9th century Slovakia became part of the state known as Great Moravia, from the 10th century it was incorporated into the Hungarian Kingdom for one thousand years, until the beginning of the 20th century (1918). In 1918 the first Czechoslovak Republic arose (1918-1938), then Slovak State (1938-1945), the second Czechoslovak Republic (1938-1993) and in 1993 the Slovak Republic until now.

There are two historically most important autonomous areas of Slovakia of well developed mining – area of so called Lower Hungarian mining sites (Banská Štiavnica, Banská Bystrica, Kremnica, Hodruša, Špania Dolina, Ľubietová, Pukanec, Vyhne, etc.) and the Upperhungarian mining towns (the key cities of Gelnica, Rožňava, Spišská Nová Ves, Smolník, Telkibanya, Rudabánya, in addition to them numerous other mining towns in the regions of Spiš, Gemer and Abov and Borsód Counties).

3. Cultural projects for the conservation of the montane and industrial heritage in Slovakia

The main intention for their implementation is to present the most significant part of the material and the spiritual heritage of mining and metallurgy in Slovakia, to provide information on the most important sites, of mining towns, of existing mining-technical monuments, of out-door mining museums and mining museums, of public-opened objects that are witnesses of the history of mining and are of particular importance from the aspects of the uniqueness or of the unique technical pieces. These relicts after mining operations and processing of raw materials come from various time periods and are usually only some fragments of the original objects. Their authenticity and aesthetic specificity can be used particularly in the cognitive tourism that also means to join their apparent attractiveness with the need of their rescue or recovery.

An important aspect of these projects is to increase the interest of both domestic and foreign visitors in cognitive tourism, geo-tourism and cultural tourism.

By broad cooperation, interdisciplinary linking and joining of institutions at particular implementing and financing of the projects for conservation of industrial mining and montane heritage there arose in Slovakia following projects:

- Slovak Iron Route
- Slovak Mining Route
- Upper-Hungarian Mining Route

Figure 3. Slovak Mining Route, Slovak Iron Route and Upper-Hungarian Mining Route

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3.1 Slovak Iron Route (SIR) (www.zeleznacesta.sk)

SIR was originated as a part of the international project of cognitive tourism **European Iron Trail (EIT)**, which was formed in the early 1990s in Western Europe. It is represented by three Slovak routes approximately 430 km long. Its fundamental objective was to present, in the form of cultural tourism, to visitors the monuments of mining and ironworks traditions of a particular region. Slovak Routes are sought by foreign visitors mainly because in the there was produced past on this territory the 1/3 of the entire production of iron of the whole Hungarian Kingdom. It is implemented under the auspices of the Citizens' Association Slovak Iron Route, based in Kosice, Slovakia.

3.2. Slovak Mining Route (SMR) (www.slovenskabanskacesta.sk)

The project SMR was created with the initiative and cooperating of following institutions: the Association of Miners' Fellowships and Guilds of Slovak Republic, the Ministry of

Economy of the Slovak Republic, Technical University Košice - Faculty BERG, Slovak Technical Museum in Košice, Slovak Mining Museum in Banská Štiavnica, but there also helped some municipalities of towns and villages as well as some mining organizations. The idea was to preserve the still existing mining-technical works and other related facilities and their relicts and make them available to lay and professional public, as far as possible, as part of our cultural heritage.

The aim of this project is the presentation of some important Slovak extraction regions, mining cities and municipalities, mining sites and plants. The project divides the territory of the Slovak Republic according to the historical-geographical issues and by the range of raw materials extracted in the mining regions onto 7 mining regions, among them there is also a mining centre Spiš.

One of the priorities of the project is to increase the interest of cognitive tourism, mainly in the regions after the decline of the mining and industrial production.

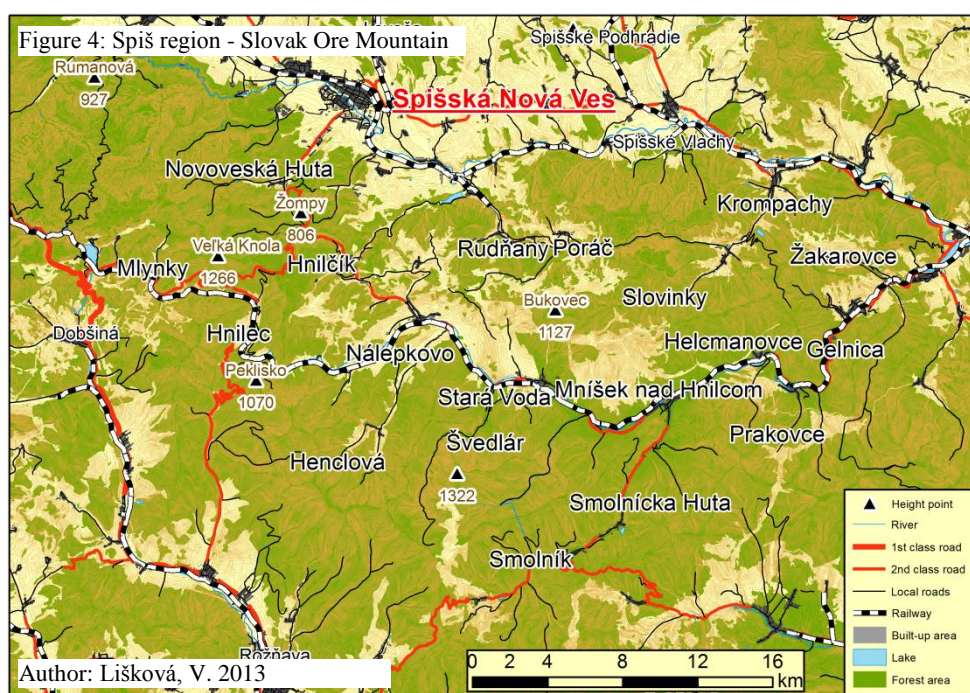
3.3. Upper - Hungarian Mining Route (UHMR)

UHMR is a project of mining tourism, designated to lovers of history and mining in the East of Slovakia and North-East Hungary. It arose as a thought of cross-border cooperation between the Slovak Republic and the Republic of Hungary. Its integrating idea is the existence of some historical links between the Slovak mining towns in the Eastern Slovakia (Gelnica, Smolník, Jasov, Rožňava, Spišská Nová Ves,) and the towns of Telkibánya and Rudabánya in today's Hungary, that once created Association of Upper-Hungarian Mining Towns. The basic itinerary of the route is leading from Košice via Spišská Nová Ves, Gelnica, Smolník, Rožňava to Rudabánya and Miskolc.

All three routes are gradually being built on the initiative of the third – civil - sector, with the support of local self-governments.

4. Region of Spiš – cooperation in the implementation of the projects SIR and SMR in one of the most important mining areas of Slovakia.

Spiš-Gemer Ore Mts. are the most important formation of Slovakia in terms of the ores occurrence and their industrial exploitation. There are more than 2000 ore deposits among them approx. 240 sites were mined. Their mineralization emerges in the Palaeozoic rocks.



The most important localities:

Gelnica (Mária huta, Perlová dolina), Žakarovce, Slovinky, Smolník, Smolnícka Huta, Rudňany, Poráč, Krompachy, Spišská Nová Ves (Novoveská Huta), Hnilč (Roztoky, Bindt, Grétla), Mlynky, Hnilč, Nálepkovo, Henclová, Stará Voda, Švedlár, Mníšek nad Hnilcom, Prakovce, Helcmanovce, Kišovce, Švábovce

4.1. The purposes of the SIR and SMR projects

The aim of these projects is the preservation of technical monuments after mining and metallurgy:

- **mining works, portals and preserved parts of historical tunnels and shafts**
- **relicts of shaft buildings, shafts, and equipments**
- **the former administrative buildings of mining plants**
- **former residential campuses for the employees of mining plants**
- **residues of processing and finishing areas, furnaces and smelting facilities**
- **monuments of water management technology** – mining water dams and distribution channels.

4.2. Institutional preconditions for projects implementation

Preconditions of these projects implementation are connection and cooperation of:

- the local self-governments of cities and municipalities with a mining tradition – integrating of the ideas of the geo-montanistic monuments utilization into developing urban plans of towns and villages,
- non-profit organisations of the third sector,
- mining associations merged in the Association of Mining Associations and Guilds in Slovakia based in Banská Štiavnica; in the region of Spiš there are operating Mining Association located Spišská Nová Ves, Mining Guild Rudňany, Mining Association Slovinky and Mining Association Smolník,
- citizens' associations (CA) of a different type, for example CA Hnilčik for the Present and Future, or newly established Mining Journeymen at Poráč,
- the State's support, in particular from the departments both of culture and of economy, creating a favourable legislative environment and subsidy in the form of grants for the mining technical monuments preservation,
- professional workplaces: Museum of Spiš in Spišská Nová Ves, Slovak Technical Museum in Košice, Mining Museum in Gelnica, Archives in Levoča, Spišská Nová Ves and Banská Štiavnica, historical and research institutes of Slovak Academy of Sciences, Technical University in Košice dealing with this issue,
- private business,
- grant tasks and projects financed from the funds of the European Community,
- international partnerships in the framework of the European Union.

4.3 Outputs and particular results and demonstrations in the region of Spiš

In the area of Spiš region we can find various successful activities, like:

- **Mining open-air museum at Hnilčik with museum exposition** and with both the publicly accessed galleries and system montanistic educational trails (Roztoky, Bindt, valley of Iron brook),
- **Symbolic mining Tower in Spišská Nová Ves** – architectural replica of the extraction tower, sound distributed and bearing the names of 32 of the mining Spiš region mining communities,
- **Educational mining trail at Novoveská Huta** (prepared by the Mining Association Spiš),
- **Centre of the town Smolník declared as historical zone**, the file of burgess houses and other objects from various historical periods, among them the building of Kammerhof – the residence of Comorian Comes and the State Copper Enterprise headquarters, later Chief of the Inspection Office and factory on tobacco products, the Church of St. Catherine building with construction beginnings in 1332, rebuilt after a fire in the year

1800, having in its interior the altarpiece of St. Catherine, the patron of the miners from H. Fuger,

- **Educational montanistic trail in Smolník** (Mining Association Smolník),
- **Educational panels on mining at Mlynky** (local municipality self-government),
- **School model gallery Michal in Spišská Nová Ves**, with exposure of mining technology and mining timbering in the basement of the former Secondary school of mining and geology, (project of renovation and expansion of exposure of the Mining Association Spiš),
- **Reconstructed portals of Cross-gallery and Theresa Gallery in Rudňany** (the Mining Guild Rudňany),
- **Monument to the victims of the mining disasters at Rudňany** (the Mining Guild Rudňany), Exposure of mining archive at Rudňany (the Mining Guild Rudňany),
- Reconstruction of the All Saints Gallery at Poráč drifts (CA Mining Journeymen Poráč),
- **Civic activities at Jakubany** – rescue of an iron furnace,
- **Exposition of Mining in Museum of Spiš.**
(photo gallery: www.muzeumspisa.com)

5. Conclusions

The potential of industrial, in our case montane monuments, of the Spiš region and Slovakia is extensive and diverse, representing various historical periods. As a valuable heritage of our ancestors, it deserves documentation, expert assessment and protection of monuments. One of the forms of rescue having a tendency to the sustainability is the utilization of these witnesses of the past in educational tourism.

The examples mentioned testify that there are numbers of projects using of this above noticed potential with different approaches: cross-border cooperation, transnational and national programmes, both regional development plans and local development plans. An important role in them play some non-profit organisations and also real people in their womb, which are able to create conceptual solutions at the regional level and to find ways of their implementation.

References:

- VEJKÝ, J. ET. AL. Encyklopédia Slovenska, I. zväzok. 1. ed. Bratislava: VEDA, 1977. 617 p.
- MAGOCSI, P. R. Historical Atlas of Central Europe. 2. ed. London, 2002. 274 p.
- KLING, P. KLINGOVÁ, A. Technické pamiatky spojené s banskou a hutníckou činnosťou na Spiši. I. časť – Spišská Nová Ves a okolie. 1. ed. Spišská Nová Ves: s.n., 2008. 172 p.
- KREMPASKÁ, Z. Učebná pomôcka pre predmet geológia, 1. ed. Spišská Nová Ves: Múzeum Spiša, 2004. 40 p.
- KREMPASKÁ, Z. Múzeum Spiša v Spišskej Novej Vsi 1951 – 2011. 1. ed. Spišská Nová Ves: Múzeum Spiša, 2011. 140 p.
- JANČURA, M., DANIEL, J., BALÁŽ, P. Baníctvo mesta Spišská Nová Ves do polovice 19.storočia. Z minulosti Spiša, ročenka Spišského dejepisného spolku v Levoči, XVI. ročník, 2008. p. 195-220
- JANČURA, M., 2010: Baníctvo mesta Spišská Nová Ves, monografia, vyd. Občianske združenie Banický spolok Spiš, Spišská Nová Ves, 274 p.
- JANČURA, M., GREISEL, M., PATERA, L., Podzemná gotika, Ed. OZ Hnilčík pre prítomnosť, pre budúcnosť. 2011. 244 p.
- RYBÁR, P., MOLOKÁČ, M., KOVÁCS, Z. Hornouhorská banská cesta (Felső-magyarországi Bányászati Útvonal, Upper Hungarian Mining Route), monografia, vyd. Körtvélyesi Erzsébet, 2012. 224 p.

Useful contacts: www.muzeumspisa.com, www.slovenskabanskacesta.sk, www.zbsc.eu, www.montanrevue.sk, www.stm-ke.sk, www.muzeumbms.sk, www.spiskanovaves.eu, www.vucke.sk