

USING THE MINING RAILWAY INFRASTRUCTURE FOR THE TOURISM POTENTIAL

Samir Nuric, Adila Nuric, Midhat Husic, Hamid Husic

***Abstract:** Municipality Banovići is aware of the importance of tourism for its further development, and the potential that allows the development of tourism. The planning process of tourism development in the area of Lancaster enables you to specify the desired achievements, needs and priorities both in the short, medium and in the long term. The planning process must include public, private and NGO sector and establish partnership relations within interest groups. A special segment of tourism which is given special attention is the potential use of coal for the purpose of supplementing the tourist facilities. Since mining town Banovići, with a long mining history, can a lot to offer both domestic and foreign tourists.*

***Keywords:** tourism, mining, railways, museum, steam train*

Introduction

The motives of tourists visiting some of the places vary depending on overcoming specific tourism products. The main motivations for arrival in Banovići are natural tourist values. In addition to the existing infrastructure facilities, is necessary to work on their further development. Missing infrastructure consists of extra accommodation, sports facilities and activities, jogging and biking trails, new access roads, educational camps, informational and educational facilities, places for outdoor picnics and holidays as well as offer for active fun. In accordance with the resources available in the first phase it is necessary to determine those projects with minimal resources can produce the desired effect and meet tourist demand. Current activities are focused on enabling tourist railroads and mining museum [4]. Examples of reuse railroad are more numerous in the world, starting with redevelopment in the park or pedestrian zones or zones for cycling. [1, 5, 6, 7, 8]. One of the nice examples of redevelopment of the railway is the case of New York's "High Line Park" which was created for overpasses freight tracks that are in the 30s of the 20th century built the west side of Manhattan

to 1980 were abandoned and threatened with demolition. A group of local enthusiasts in 1999 launched a campaign for their conversion into a public park which was met with unprecedented approval among citizens and in 2002 he supported the city [7, 12]. As a consequence, most of the saved space in recent years turned into a park (Figure 1).



Figure 1 A part of the park (Source: Website of the park)

Another similar example is Paris green promenade that a length of 4.5 km uses the space of the former railroad tracks from the station Bastille (on whose site is now Opera). The park was built between 1984 and in 1993.



Figure 2 Paris promenade

There is not the end of similar projects. In Chicago, it comes to redevelopment of 4 km long railway premises in Bloomingdale Park or "green road" intended for pedestrians and cyclists (Figure 3), while in Paris thinking about the possibilities reuse of abandoned rail lines circular Le Petite Ceinture which a length of about 30 miles surrounding the city center (Figure 4) [2, 3, 13, 14].



Figure 3 Railways Bloomingdale (source [www. Chicagoreader.com](http://www.Chicagoreader.com))



Figure 4 Railway lines Le Petite Ceinture in Paris (Source: Wikipedia)

Development of mining in Banovici preceded the exploitation of forest resources and the development of the wood industry. Therefore, in 1919 built narrow gauge railway Bukinje-Zivinice, and in 1937 built railroads Zivinice-Radin, enabling the opening of the pit Radin in the Banovici basin. The first national mine was opened in 1938 in underground mine Cubric. With mine rail transport paraded over 100 steam locomotives narrow gauge (Figure 5, 6, 7 and 8).



Figure 5 Steam locomotive series 83



Figure 6 Seam locomotive series 55



Figure 7 Steam locomotive series 25



Figure 8 Locomotive series DHL-740 and DHL- 720 and steam locomotive series 25

Touristic train ‘Ciro’

Banovici municipality, in cooperation with the Brown Coal Mines Banovici plans to build a tourist gauge railway 0.76 m Banovici - Mackovac - Zlaca - Zobik. At the mentioned route of the railway is planned to include four stations. The first will be in the city (Figure 9) or on the starting platform, and the other at picnic Mackovac which represents the first section of the route.

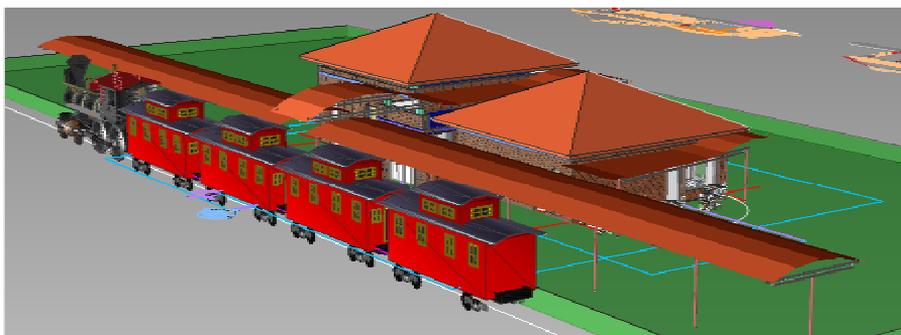


Figure 9 The model of the future train station in Banovici
(Source: Photo Archive municipality Banovici)

The first section of the existing mine railway, which is used as a tourist railway length 2513.96 m, already was put into operation. The Brown Coal Mines Banovici, for the purpose of improving the tourism of the Municipality, ceded part of its transport infrastructure and several buildings. This infrastructure consists of a route section with crossover connection for mining railway, a receive-shipping track, two blind track and platform. The starting position is planned to construct station buildings, museums and other attractions.

It is known that the narrow gauges in the world are a tourist attraction (Switzerland, India, Serbia, etc.) [8, 11]. This was the reason for the formation of the Association of Citizens "Bosnian gauge", which launched the initiative to build the aforementioned tourist railroads. Steam locomotive (Figure 10 and 11) will utilize for towing tourist carriages, which itself is attraction, both because of their age, and uniqueness, because only a few copies of these locomotive can be found in Europe.

The route which will go a tourist railway is situated along the river Oskova, which is a favourite place of rest and recreation. The area planned for relaxation, sport and recreation on the section passing the railroad allows construction of the restaurants and other facilities. The proposed model is multi-utility in order providing good ambient as well as providing opportunities for vacation of the tourists and creation of new jobs.



Figure 10 Train Ciro – in the past

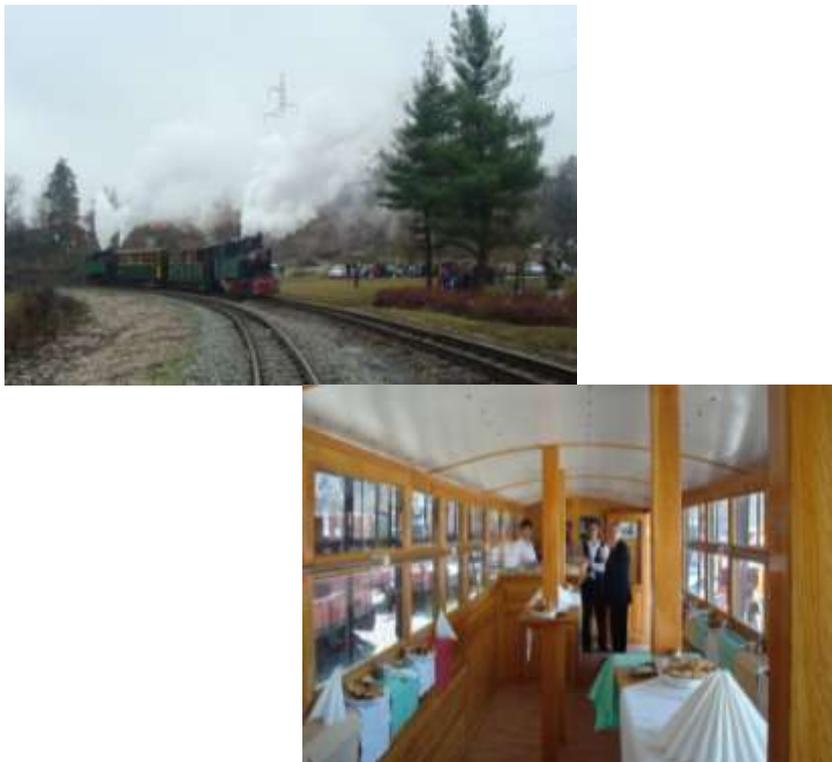


Figure 11 Train Ciro - today

The second stop will be at Mackovac extremely attended the picnic. The natural environment makes this resort an attractive but also the perfect place for fishing. The third station will be built at the hotel "Zlaca" as the second phase of construction of tourist railroad. The final phase is a set of tracks to Zobik, where will be built and station. Zobik is located in the heart of the mountain Konjuh, in the immediate vicinity there are beautiful water cascades, numerous speleological objects, rich flora and fauna, etc. From this holiday resorts, there are viable and marked hiking trails for all mountain Konjuh peaks.

Museum of Mining and Railway Banovici

Industrial and technical memorials can be used as a form of tourist attractions. This is particularly possible in the mining center of Banovici. During the creation and development Banovici, was perfected the technical resources, which are used in railway and in the process of mineral exploitation. For this reason preserved a significant number of old resources of production, machinery, old tools and others. Saved antiques will be presented as museum exhibits in the Museum of Mining and Railways. The planned museum (Figure 12) will be built facility for storing small items and written documentation, and on the plateau will be placed heavy mining machinery like the old excavators, haulers, graders, bulldozers or other machinery that truly symbolizes the image of the mining activities.



Figure 12 The model the future museum of mining and railways in Banovici
Source: Photo Archive municipality Banovici

The importance of opening a mining museum in Banovici is all the greater because this will be the first museum with mining content in Bosnia and Herzegovina. The museum will point to the wealth of Bosnia and Herzegovina, diligence of our people as well as the historical development of mining technology. In addition to exhibition activities, the museum will provide substantial assistance in the investigation, preservation, protection, conservation and restoration of objects which were used in mining from the earliest times to the present [4, 9, 10, 11].

References

- Daly Margo, Dehne Anne, 2003, *Rough Guide to Australia*, pp. 1140-1143, https://books.google.ba/books?id=GLd1AmP8yckC&pg=PA1140&lpg=PA1140&dq=redevelopment+of+mine+railway&source=bl&ots=o42hBOiEZ9&sig=DgRU4f0mnz51U7dclME4At0lW6c&hl=bs&sa=X&ei=Qa8nVdVYwvNSm_qDgA0&redir_esc=y#v=onepage&q=redevelopment%20of%20mine%20railway&f=false
- Greenfield John, *Stalled on the Bloomingdale Trail*, <http://www.chicagoreader.com/chicago/bloomingdale-trail-chicago-park-design-firm/Content?oid=2774444>
- Meinhold Bridgette, *Chicago's Bloomingdale Rail Line to Be a Park in the Sky*, 2009, <http://inhabitat.com/chicago%E2%80%99s-high-line-park-in-the-sky/>
- Studija razvoja turizma općine Banovići*, 2010, Institut društvenih djelatnosti Univerziteta u Zenici
- Italija: Željezničke pruge postaju biciklističke staze*, Portal croenergo.eu (M.P./Energo Media Servis, <http://www.croenergo.eu/Italija-Zeljeznicke-pruge-postaju-biciklisticke-staze-15998.aspx> [last access: 06.04.2015])
- O recikliranju javnih prostora: Dajmo novu atrakciju Kustošiji!*, <http://blog.dnevnik.hr/nepoznatizagreb/oznaka/ciglana>
- Studenti za prenamjenu stare pruge*, <http://www.radiosarajevo.ba/novosti/92212/studenti-za-prenamjenu-stare-pruge>
- Sacramento's gold mine Transit facilities and development at the Downtown Railyards*, 2013, http://www.capitolcorridor.org/rail_advocacy/Downtown%20Railyards%20Sac%20Valley%20Station%20Presentation%20April%202013.pdf
- £1.95m For Redevelopment At Mining Museum Of England*, 2008, <http://www.culture24.org.uk/history-and-heritage/transport-and-industry/art54933>, <http://tooelectricity.org/city-departments/parks-recreation/museums/railroad-museum/>

Coal mining past present and future links with rail development heritage (West Coast/Canterbury, South Island, Posted by NZ Transport Geography,
<http://enzedtransport.blogspot.com/2011/01/coal-mining-past-present-and-future.html>

High line at the rail yards design unveiled,
<http://www.designboom.com/architecture/high-line-at-the-rail-yards-design-unveiled/>

Bloomington Trail Construction Begins Next Week,
<http://www.wickerparkbucktown.info/content-arts/bloomington-trail-construction-begins-monday-wickerpark-bucktown-logansquare>

Chemin de fer de Petite Ceinture,
http://en.wikipedia.org/wiki/Chemin_de_fer_de_Petite_Ceinture

NOTES ON THE AUTHOR

Adila Nuric, associated professor, Faculty of Mining, Geology and Civil Engineering of University of Tuzla, Bosnia and Herzegovina, adila.nuric@untz.ba

Samir Nuric, associated professor Faculty of Mining, Geology and Civil Engineering of the University of Tuzla, Bosnia and Herzegovina, samir.nuric@untz.ba

Midhat Husic, dipl. ecc., Mayor of Banovici, Banovici, Bosnia and Herzegovina

Hamid Husic, Msc of Mining Engineering, Brown Coal Mine Banovici, Banovici, Bosnia and Herzegovina