RECREATIONAL POTENTIAL OF RADOŠINKA MICROREGION: LANDSCAPE – ARCHITECTURAL PROPOSAL OF THE CYCLO ROUTE

Mária Bihuňová, Branislav Králik

Institute of Landscape Architecture, Faculty of Horticulture and Landscape Engineering, Slovak University of Agriculture in Nitra, Tr. A. Hlinku 2, 94976 Nitra, Slovakia

https://doi.org/10.11118/978-80-7509-904-4-0232

Abstract

Nitra region consist mostly of agricultural landscape with non forest vegetation, water features and forests. The plain landscape has a great potential for the recreational cycling activities – which could lead to the tourism development of the region and extension of the recreational infrastructure. There are several cycle roads, connecting Nitra with its surrounding – villages and cities – cycle roads are established mostly along the river Nitra and in the agricultural landscape. Former railway lines have hidden potential for the widening the accessibility of the landscape for the inhabitants and tourists. Chosen area is located in Nitra region, in the basin of Radošinka stream. The Radošinka stream connects 30 municipalities into the Radošinka NGO microregion. The main idea of our landscape - architectural proposal was to connect the municipalities with the greenway and offer citizens faster and healthier way for movement between the municipalities and possibility for everyday recreational use. There are also several former railway stations, which could be used as recreational and educational centres.

Key words: tourism development, recreational equipment, landscape architecture, Nitra

Introduction

Greenways are linear open spaces, in urban or rural environment intended only for non-motorized vehicles in order to increase the health of environmental life. The theory of greenways was developed in 1995 by Fábos and Ahern (1996) at the University of Massachusetts. Firstly, was this concept defining as: ecological corridors, possibility for recreation activities, connected cultural and natural values. The first serious attempt at green roads in Europe was in 1997, when the European Green Roads Association (EGWA) was founded.

Cycling brings a number of benefits for the society, including strengthening of mental and physical health, reducing emissions and the economy of target areas (Mikulka et.al., 2021). The fact remains that the construction of cycle paths is one of the most effective forms of investing in the entire society scale. They improve health and lengthen average length cyclists lifes, produces less emissions, dust and noise and are primarily associated with leisure entertainment (Martinek and Klučka, 2019). The typology of recreational cyclists by Martinek and Klučka (2019) is as follow: 1. long-distance cyclists, 2. off-road cyclists, 3. families with children, 4. Leisurely cyclists, 5. more capable recreational cyclists, 6. sport-recreational cyclists.

Martinek and Klučka (2019) describe successful marketing of cycling routes based on safe infrastructure of cycle routes, their locations, quality of the infrastructure, including orientation sign-and sports infrastructure around the route. Another criterion is the difficulty of the route, length and superelevation. Attractiveness is also key factor on the route or in its vicinity.

Good interpretation of the locality, its history and related historical monuments (Čibik et al., 2019), landscape values or current potential helps visitors to discover and better understand the culture and society. Their journey becomes something more than just a tour for attractions (Ptáček et.al., 2004). The most significant cultural and historical elements in our landscape, are considered small sacral objects as roadside crosses, shrines, statues and small chapels (Tóth et al., 2021) and calvaries (Lančarič and Bihuňová, 2011), which became a characteristic elements of slovak landscape and regional specifics. Tóth et al. (2014) recommended to strengthen the environmental education as a long term measure and support the recreational infrastructure.

Material and methods

Chosen area is located in Nitra region, in the basin of Radošinka stream. The locality belongs to the Danubian Lowland, which is an important agricultural area of Slovakia. All municipalities are mainly engaged in agricultural production. The Radošinka stream connects several municipalities into the Radošinka NGO microregion (a total of 30 municipalities). There are several symbolic monuments (various art and sculptural works), which connect the municipalities. The stream Radošinka is

followed by railway line, which has not been used since 2003, but the railway stations in the villages still remained in quite good condition.

There is still a railway station in each village remaining the former railway line. Eight stations are made of bricks and built in the same architectural style: cladding on the corner of buildings, a round window, cornices and a gable roof. The station in the village of Behynce is just a simple shelter and the station in the Lahne industrial zone was demolished in 2021. Four stations are currently privately owned and serve as family houses. Veľké Ripňany station is nowdays a community center.

The Paper presents the landscape-architectural proposal of the revitalisation of former railway line in Radošinka micro-region. The proposal was based on detailed field research, literature review and discussions with the representatives of the villages.

Results

The main idea of the design was to connect the municipalities of the microregion and thus offer citizens faster way of moving between municipalities. The second main aim was to offer possibility for recreational activities for dwellers and tourists by cyclin in the modest landscape, which is a unique way to explore the landscape and possibility to learn something.

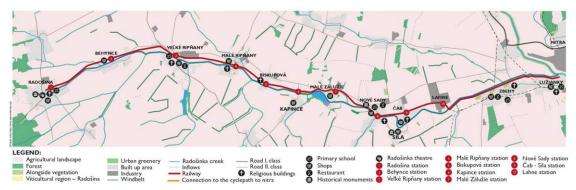


Fig. 1: Landsacpe-architetural proposal of cyclo route (Králik, 2022)

There have been designed special panels, which could be used as a puzzle structure put on the existing railways, which create safe surface for the cyclists. This idea have been developed by experts who have collaborated with Slovak University of Technology in Bratislava. The panels are made of recycled materials, mostly tires and recycled components, coated with an anti-slip layer. These parts are stored on existing rails, without the need for specialized major interventions. Connected panels will build comfortable ecological cycle path (Macko, 2021).

The cyclo path has recreational and education part. Two educational and interactive lines have been proposed – each one with different topic: Railways in Slovakia and Radošinka microregion.

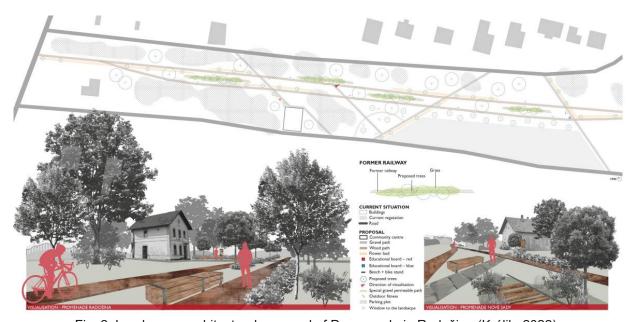


Fig. 2: Landscape architectural proposal of Promenade in Radošina (Králik, 2022)



Fig. 3: Equipment proposal and topics of educational boards (Králik, 2022)

Discussion

The revitalisation of the brownfield areas could bring urban environment and landscape new values and various utilisation. The most famous revitalisation of the former railway is High Line in New York, which revitalization has started in 2004 and recently is used as a public park (Outdolf and Darke, 2017). The same function has Promenade Plantée in Paris, starting at Bastille leading to the Pois de Vincennes. It was the world's first elevated park walkway. The Park am Gleisdreieck, the most popular park in Berlin (Germany), is located on a former railway area around the traffic junction. Another successful examples of redeveloping abandoned railway stations and tracks into museums are Union Station Terminal in Cincinnati and the NC Transportation Museum in North Carolina, United States (Zang, 2020).

The transformation of the former railway lines into to cycle path is a great opportunity how to make landscape accessible, how to promote the local natural and cultural uniqueness and how to offer the dwellers of the villages and tourists possibility for recreation and ecological transportations.

Agricultural landscape was primarily used for food production, currently is more open to the public as a recreational phenomenon with unique value (Supuka et al., 2019).

On the other hand, growing popularity of cycling brings negative effects, especially on natural ecosystems – mostly noise, visual and seasonal disturbances, waste (Mikulka et al, 2021). Also the conflicts between the cyclist, pedestrians and car traffic could occur (Flekalová, 2015).

Conclusion

The landscape architectural proposal of the revitalisation of the former railway lines in Microregion Radošinka, which connect the villages with direct connection to Nitra city could be a great way how to support local communities, widen the recreational possibilities of the dwellers and the tourist and offer the friendly way, how to learn something about the history of the railways in Slovakia and landscape – cultural values of involved villages. New trends of road construction, gaining the information, experience the landscape could be applied during the reconstruction.

References

Čibik, M., Tóth, A., Štěpánková, R. (2019). Integration of the historical watermill into a sustainable periurban riverfront redesign. In Public recreation and landscape protection - withsense hand in hand?. Brno: Mendel University in Brno, pp. 212-216

Fabos, J.G., Ahern, J.F. (1996). Greenways: The Beginning of an International Movement. Amsterdam: Elsevier Science, 1996, 491 p., ISBN 978-0444824646

Flekalová, M. (2015). Rekreační využití území. Brno: MENDELU, 2015.160 p. ISBN 978-80-7509-211-3

Lančarič, Š., Bihuňová, M. (2011). Renewal proposal of he calvary in Humenné. In *Settlement - park - landscape : revitalisation of green urban open spaces with consideration to changing environment*. Nitra : Slovak University of Agriculture, 2011, pp. 252-263, ISBN 978-80-552-0540-3

Macko, O. (2021). Ako vytvoriť cyklotrasy zo starých koľajníc. On line . Available: https://touchit.sk/ako-vytvorit-cyklotrasy-zo-starych-kolajnic/367828 14.4.2023

Martinek, J., Klučka, P. (2019). Recreation and Cyclotourism. In: Životné prostredie, 2019/3, Vol 53, P. 153 – 157

Mikulka, O., Drimaj, J., Plhal, R., Homolka, M., Kamler, J. (2021). Cycling and its influence on animal behaviour. In: *Public Recreation and Landscape Protection - with Environment Hand in Hand... Conference Proceedings, Brno: MENDELU, 2021. P. 117 – 120.*

Outdolf, P., Darke, R. (2017). Gardens of the High Line. Elevating the nature of modern landscapes. Timber Press 2017. 319 p., ISBN 978-1-60469-699-8

Ptáček, L., Barták, R., Bergmann, P., Chadimová, Z., Klvač, P., PLachá, K., Ružička, T.,Žampová, O. (2004). Interpretace místního dedičství. Brno: Nadace Partnertnerství, 2004, 88 p., ISBN 80-239-2068-5

Supuka, J., Bihuňová, M., Totkovič, M. (2019). Recreation Potential and Tourism Zoning in Slovakia. In: Životné prostredie 2019/53, Vol.3, pp. 131 – 138

Tóth, A., Bihunová, M., Halajová, D. (2021). Cultural and Natural Values of Small Sacral Objects and Sites in Everyday and Exceptional Slovak Landscapes. In: Public Recreation and Landscape Protection - with Environment Hand in Hand?, Brno: MENDELU, 2021, pp. 113-116. ISBN 978-80-7509-779-8

Tóth, A., Bihunová, M., Halajová, D., Štepánková, R. (2014). Towards an Inclusive Approach to Recreation and Landscape Protection. In: *Public Recreation and Landscape Protection - with Environment Hand in Hand?*, *Brno: MENDELU*, 2014, pp. 335-339. ISBN 978-80-7375-952-0

Zang, Ch., Dai, S., Xia, H. (2020). Reuse of Abandoned Railways Leads to Urban Regeneration: A Tale from a Rust Track to a Green Coridor in Zhangjiakou. In: Urban Rail Transit, 2020/6, pp.104 − 115, □ DOI: https://doi.org/10.1007/s40864-020-00127-2

Acknowledgement

This paper is an outcome of the educational projects: KEGA 004SPU-4/2023 KR:EK:IN; 2020-1-SK01-KA203-078379 LeLa - Learning Landscapes (Erasmus+) and BIN SGS02_2021_013 RelmaGine: Research and Implementation of Green Innovations in Landscape Architecture (Norway Grants)

Souhrn

Území se nachází v Podunajské nížině (Nitranský kraj), která je významnou zemědělskou oblastí Slovenska. Všechny obce se proto zabývají především zemědělskou výrobou. Potok Radošinka spojuje jednotlivé obce do mikroregionu Radošinka (celkem 30 obcí) - okresy Nitra a Topoľčany. Na znamení soudržnosti jednotlivých obcí vznikla v jednotlivých obcích řada symbolických památníků

(různých uměleckých děl). Na vodní tok navazuje stará železniční trať, která se od roku 2003 nepoužívá. V každé obci, kterou prochází, je železniční stanice. Na celé trati je 10 železničních stanic. Krajinářsko-architektonické řešení propojuje obce mikroregionu pomocí cyklostezky, která vede podél bývalé železniční trati. V každé obci jsou zastávky s odpočívadly, vybavené odpočinkovým mobiliářem a informačními tabulemi o historii železnice na Slovensku a zajímavostech jednotlivých míst.

Contact:

Mária Bihuňová

E-mail: maria.bihunova@uniag.sk

Open Access. This article is licensed under the terms of the Creative Commons Attribution 4.0 International License, CC-BY 4.0 (https://creativecommons.org/licenses/by/4.0/)

