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GIS-Based Reconstruction of the Nové Zámky–Stará Gúta Horse-Drawn Field Railway in Slovakia

Rekonstrukcja polnej kolei konnej na trasie Nové Zámky–Stará Gúta na Słowacji przy użyciu narzędzia GIS

Keywords: horse-drawn field railway, reconstruction, historical maps, GIS

Słowa kluczowe: polna kolej konna, rekonstrukcja, mapy historyczne, GIS

Introduction

On August 20, 1827, the first railway in Hungary was launched. It connected Pest and Kőbánya (today both part of Budapest). It resembled a funicular railway and was a wagonway, namely a horse-drawn railway. In 1836, Law XXV “On Private Enterprises Enriching the Public Wealth and Commerce of the Country” was signed by the king. This was the first law (but only temporary, replaced by two other acts in 1840) in the Kingdom of Hungary devoted to the establishment of a railway network. Among other connections, it ordered to link Budapest and Vienna by rail. The first railway on the territory of today’s Slovakia was the horse-drawn railway between Bratislava and Trnava. It was launched on June 3, 1846 [Miklós 1937, pp. 60, 67]. On November 21, 1850, the first train arrived in Nové Zámky from Bratislava. Shortly thereafter, on April 4, 1851, trains started running on the Nové Zámky–Štúrovo line, thus establishing a direct railway connection between Vienna and Budapest. In 1900, with the opening of the Nové Zámky–Šurany line, a connection with Nitra and Prievidza was established, making Nové Zámky a railway junction. Finally, in 1909, the Nové Zámky–Komárno line was built and on May 10, 1910, it was officially handed over for use [Strba 2018, p. 334; Tunega 2015, p. 146; Miklós 1937, p. 153]. Thus, Nové Zámky became one of the most important railway junctions in the Austro-

Hungarian Empire. That is why the idea of connecting the remote farmyards in the north of Komárno county with this junction was born.

But how to connect such remote places with the “big railway?” At the beginning of the twentieth century, there was no connection between farmyards other than narrow, unpaved muddy dirt roads, which were very distant from main roads or national railways [Third Military Survey of the Habsburg Empire (1:25,000) (1869–1887)]. Only wagons pulled by horses or oxen served as a means of transport. The ideal and at that time also modern solution was to build a narrow-gauge railway network (gauge 760 mm and less), which is much cheaper to build and maintain than standard gauge (1435 mm gauge). The main advantage over road transport was the higher speed (due by better terrain passability) and greater transport capacity. Direct connection between the “big” and “small” railways was ensured by a freight transshipment yard. There was also no need to build massive railway bridges and embankments. In most cases, the existing road bridge and the strengthening of the shoulder of the existing road, were sufficient for the railway tracks to be laid. [Rell 1972, pp. 212–213].

In the past, there were several narrow-gauge field and industrial railways within the present-day district of Nové Zámky and Komárno. This was mainly due to the existence of large fertile fields, sparsely popu-

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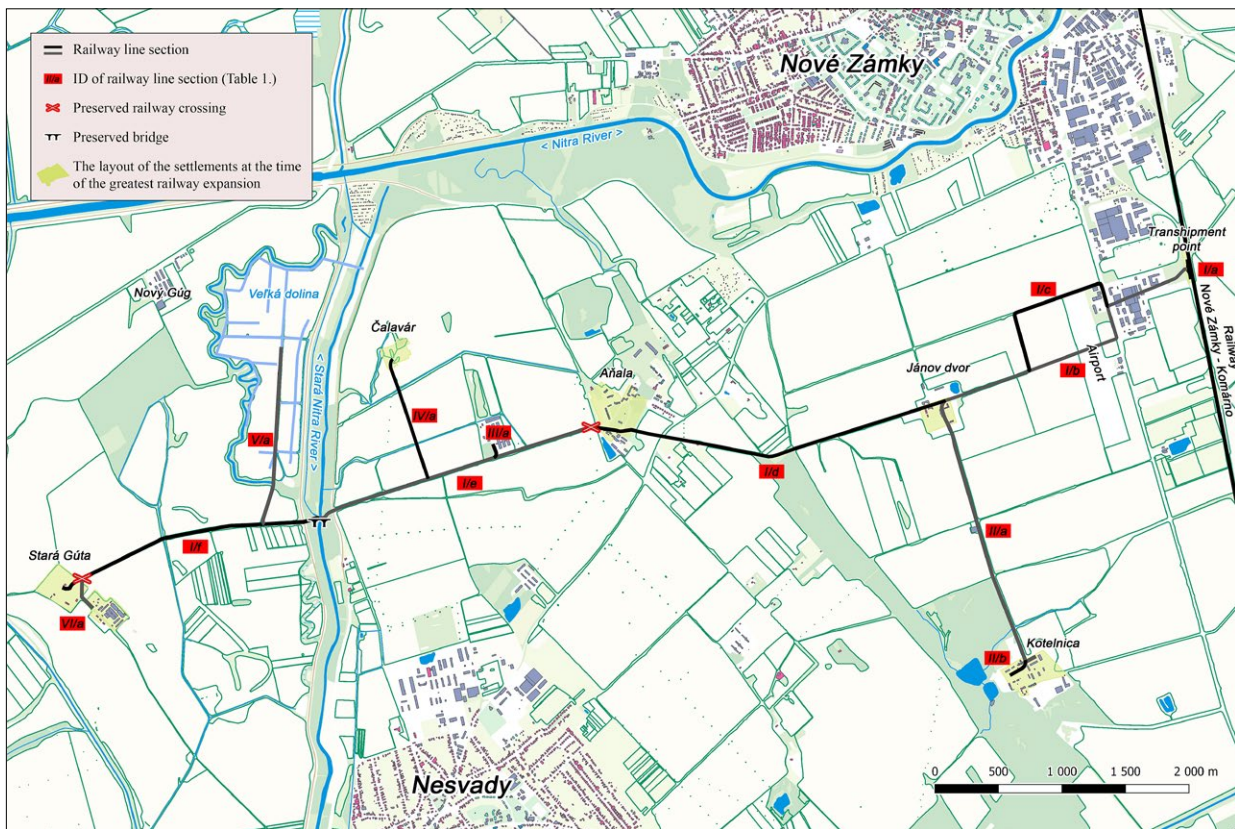


Fig. 1. Reconstruction of the railway line according to historical maps. All variants from different periods of its existence are included; source: ÚGKK SR, map edited by D. Miček.

Ryc. 1. Rekonstrukcja linii kolejowej według map historycznych. Uwzględniono wszystkie warianty z różnych okresów funkcjonowania; źródło: ÚGKK SR, edycja mapy: D. Miček.

lated areas, and the poor condition of the roads. The largest of such narrow-gauge railways in the locality was the Šurany (Nagysurány) field railway established for the needs of a sugar factory, for the purpose of collecting sugar beet from nearby and distant fields and farmyards. Steam and later diesel locomotives ran on the line, several of which can be seen in the Slovak Agricultural Museum in Nitra. Most of them, however, were scrapped [Bosáček 1995; Příbyl 1995; Jahn 1996; Bosáček, Příbyl 1996; surail.szm.sk]. The second most extensive was the horse-drawn field railway was the one connecting Palárikovo (Slovenský Meder / Tótmegyer) and the surrounding farmyards and fields. Two original restored wagons, complete with a life-size carved wooden horse, can be seen right in the village (Fig. 4) [palarikovo.com; mynov Zamky.sme.sk]. The Nové Zámky–Stará Gúta horse-drawn field railway (Fig. 1) is the third largest in the area. But there were more. All the mentioned railways in their largest extents are plotted in the Military Survey of Hungary of 1941 [Military Survey of Hungary (1941)].

Research and execution

This horse-drawn field railway disappeared in the early 1970s. In the following period the rails and sleepers were removed. Today they are nowhere to be found anywhere along the entire former extent of the line, ex-

cept for two fragments of railway crossings that are still preserved (Fig. 5). The removal of the basic infrastructure of the railway caused the places it ran through to become overgrown with vegetation and, at first glance, almost completely blend into the surrounding terrain.

Nevertheless, if we compare today's landscape and the historical maps on which this railway line is plotted, it allows us to identify the places through which it ran. Many of its remains can still be found in the field. These are mainly wide strips overgrown with massive vegetation that line farm tracks and separate plots of land (Fig. 2).

Part of the reason why the railway has fallen into oblivion is that we know of almost no archival records that speak of it. Exceptions to this are many historical maps and Record 6265 of the Main Forest Office from 1939 located in the Esztergom Bishop Archive [Árpási 2016]. Also, there are no known photographs of the railway. There are only analogous photographs of other horse-drawn field railways from the territory of present-day Hungary [Source photo 1–4].

In Slovakia, almost no attention is paid to the issue of horse-drawn field railways. One exception is the reconstruction in the village of Palárikovo, where there are two wagons with a wooden horse and an information board with inaccurate data (Fig. 4). Otherwise, there are only a few mentions on the Internet. Much more attention is paid to forest railways in



Fig. 2. Identification of railway location based on terrain deformations on the current orthophoto map. The cutout in the frame shows a view of the site from the ENE direction; source: ÚGKK SR, map edit and photo by D. Miček.

Ryc. 2. Rozpoznanie lokalizacji linii kolejowej na podstawie deformacji terenu na aktualnej ortofotomapie. Wycinek przedstawia widok obszaru ze strony wschodniej i północno-wschodniej; źródło: ÚGKK SR, edycja mapy i fot. D. Miček.

Slovakia, some of which have been preserved and are still used by tourists (Čierny Hron Railway in Čierny Balog [Bílek, Zeithammer 2009; Šlechta 2009; Příbyl 1998], Historical Forest Zig Zag Railway in the Museum of the Kysuce Village in Nová Bystrica–Vychylovka [Žilíník 1993; [Žilíník 1996; Šlechta 2012]). The only functional field railway (motor-driven) is the Nitra field railway located in the grounds of The Agricultural Museum in Nitra (it is the transferred Želiezovce field railway and fragments of various other narrow-gauge railways from all over Slovakia, e.g., from Šurany, or Korytnica) [Vontorčík, Pavelka 1997; Bosáček, Příbyl 1996; spmnitra.sk].

Much more has been written about the horse railways in Hungary than about those in Slovakia. There is an extensive and information-rich website on narrow-gauge railways, which also covers horse-drawn railways (kisvasut.hu). Several printed texts in Hungarian dealing with this phenomenon could be tracked down.

We used a free GIS application—QGIS—to reconstruct the position of the railway. The basic starting point for locating the railroad's former location was an analysis of historic Austro-Hungarian and then resulting Czechoslovak and Hungarian military maps, and historic and current orthophotomaps, which gave us insight into several versions of the railroad's overall extent at different points in time [Unangst 2023, pp. 77–79; Gogová, Chrastina, Bešina 2022, p. 81;

Jiao, Heitzler, Hurni 2022, p. 1]. The source of these maps was the GeoData CZ/SK plugin for QGIS from OpenGeoLabs and contributors. Historical maps are georeferenced in this application, but they are not accurate enough. Therefore, the recorded position of the railway line with the current orthophotomap was compared, where the assumed field relics are mostly very visible [zbgis.skgeodesy.sk – Ortofoto]. Nevertheless, a field survey was also carried out over several days to verify the assumed position of the railway line in the field and to find some material remains of the railway (Fig. 2). Incidentally, even fewer remains of the railway can be found on the available LIDAR map than on the orthophotomap [zbgis.skgeodesy.sk – LIDAR; zbgis.skgeodesy.sk – Orthophoto]. The verified sections of the railway line were marked with lines in the GIS environment. In several cases it was no longer possible to find any remains of the railway in the field, mainly because at present, as in the past, there is arable land in these places and with the disappearance of the railway, these places have been ploughed up and aligned with the surrounding terrain. In a few cases the remains of the track are not visible even in areas without significant agricultural activity (Fig. 2). In such cases, the verified parts of the track were connected with an airline, considering its most probable possible location.

Almost the entire area of the railway (in all its historical forms) was covered on foot or by bicycle, except for



Fig. 3. Ordinary wagon type J233 / "lóré," reconstruction in Palárikovo; photo by D. Miček.
Ryc. 3. Wagon zwyczajny typu J233 / „lóré”, zrekonstruowany w miejscowości Palárikovo; fot. D. Miček.

those that for various reasons are not open to the public—an airport area, the area between the former transshipment point and Komárno road (company premises), or private fenced plots (Aňala and Aňalské záhrady). Today, however, we would look in vain for the remains of the railway in these places; everything has been built up or otherwise adapted to the new use of the land. According to the current land register, all other plots under the former railway are the property of the Trnava Archdiocese (which is the successor of the former Archbishopric of Esztergom from the Hungarian Kingdom period, to which the land originally belonged), or its ecclesiastical legal entity *Fundatio Ecclesiae Sancti Ioanni Baptistae* [zbgis.skeodesy.sk – *Kataster*].

The reconstruction (Fig. 1) subsequently became part of a multimedia presentation created by using Google My Maps [Moubarek Sadou, Tchouamou Njoya 2023, p. 8]. In addition to the reconstruction of the location of the railway, its characteristics, and a description of the farmyards through which it passed, the presentation also includes the location and description of landmarks within the railway's reach. The presentation is available online in the Slovak language at the following link: <https://bit.ly/railwayNZ>

Basic information about the railway

The railway was built in 1911 as part of the Hungarian Royal State Railways (Magyar Királyi Államvasutak).

Initially, it connected the “big railway” in Nové Zámky and the farmyards in Jánov dvor, Kotelnica, Aňala, the Veľká dolina area and the Stará Gúta farmyard. Later, the line to Čalavársky majer was added (Fig. 1) [Árpási 2016]. It was also used to transport people, for example children to school, locals used it to shorten their journey to the town to the doctor, to the shops, or to the markets. It was also used to supply the homesteads with commodities from the town that the inhabitants were unable to grow or produce locally.

In 1939, after the annexation of the southern regions of Czechoslovakia by the Kingdom of Hungary (First Vienna Award), the Archdiocese of Esztergom, as the owner of the railway before 1918, had it re-surveyed [Kulík 2013, p. 249; Palárik, Hasarová 2020, p. 457]. According to document 6265, the width of the crown of the lower structure was 2.30 m with a gravel bed 20 cm thick. The rails were steel, 65 mm high and 7 m long with a weight of 7 kg/m. The gauge between the rails was 600 mm. The sleepers were 15 × 20 × 100 cm with a maximum mutual distance of 80 cm. The smallest curve radius on the track was R=15 m. The highest average gradient was below 10‰, except for the approach to the bridge over the Old Nitra River, where the gradient was 19‰ due to the river embankments. There were twenty-nine crossings on the railway. According to this document, the total length of the railway in 1939 was 16,097 m. Included in this figure are the various short branch lines and the four-



Fig. 4. Presentation of the no-longer-existing horse-drawn railway in Palárikovo; photo by D. Miček.
Ryc. 4. Prezentacja nieistniejącej już kolei konnej w miejscowości Palárikovo; fot. D. Miček.

track station mentioned in the document [Árpási 2016]. However, these sections are not depicted on any available map.

In addition, there are reports from other horse-drawn field railways (Sládkovičovo) that there were also mobile rails that were temporarily stacked in places where harvesting was underway. No information about whether such mobile rails were also used on the Nové Zámky—Stará Gúta railway was found [ponvagli.sk].

Fleet of vehicles

The horse-drawn carriages on the narrow-gauge railways in the Kingdom of Hungary were called *lóré* by the Hungarian-speaking population. This word is taken from the German *Lore*, the source of which is the English “lorry” [Hungarian Etymological Dictionary; Interpretive Dictionary of the Hungarian Language]. The word was probably domesticated because *ló* means horse in Hungarian.

The type of designation of such wagons is “J233.” Their design was very simple. The chassis was made of metal profiles riveted together. Two axles were fitted to the chassis, which were positioned outside the center of the chassis. Directly above the wheels there was a wooden cargo body with metal elements. The sidewalls were hinged. On one side of the wagon there was a short platform with a handrail and a crank control for the spindle brake (this platform caused the axles to

not be in the middle of the wagon’s body) (Fig. 3). The production of the wagons was still ongoing before the First World War and so the wagons were self-repaired and remodeled in various ways during their lifetime. In particular, the shape of the wooden part was changed over time [Felek 2008; Source photo 1–4].

According to Imrich Árpási, the drive on the railway was initially taken care of by the “engine” [Árpási 2016]. However, he does not specify what kind of motor drive it was, but considering the year 1911, it could have been a small steam, petrol, or gasoline locomotive. Horses replaced the locomotive (if indeed there was one) probably in 1914 due to the outbreak of the World War and the need for a locomotive in a more strategically important role. However, this railway is mentioned in available sources only as a horse-drawn railway. Because it was still in service in the early 1870s, and its route was last altered and extended in the 1950s, one might suppose that a small engine locomotive might have been present at least in this latter period. However, this contradicts Jozef Juhász’s claim that in the early 1970s a horse-drawn wagon took children to school in Kotelnica on this line [Juhász 2020].

In the Esztergom Bishop Archives, there is record 6265 of the Main Forest Office from 1939, which describes the wagons of this railway: The wooden box cars were 2 m³. They had openable side walls and spindle brakes (Fig. 3). The weight of one wagon was 450 kg and its maximum load capacity was 1500 kg.

Section	Length (m)	Description	Note
I/a	161	transshipment point in Nové Zámky	On all maps with a railway plotted, with minor layout changes on maps: Topografická 25000 (1955); Topografická 10000 (v2) (1964)
I/b	2330	from transshipment point to Jánov dvor	In that form until the end of World War II. It's on the maps: III. vojenské mapování – 1:75000, mapový list 4860; Military Survey of Hungary (1941)
I/c	1350	detour around Nové Zámky airport	It was created after World War II due to the expansion of the airport. It replaces 986 m of section I/b. It's on the maps: Topografická 25000 (1955); Topografická 10000 (v2) (1964)
I/d	2810	from Jánov dvor to Aňala	Unchanged throughout the entire life of the line, except for approx. 100 m at Aňala station. The change is plotted on the map: Topografická 25000 (1955)
I/e	2220	from Aňala to bridge over the Stará Nitra river	Throughout the railway existence without change.
I/f	2090	bridge over the Stará Nitra river to Stará Gúta	Throughout the railway existence without change, except the last approx. 20 m in the station Stará Gúta. The change is plotted on the map: Topografická 25000 (1955); Topografická 10000 (v2) (1964)
II/a	2210	railway branch line to Kotelnica	Unchanged throughout the entire life of the line, except for the last 94 m, see section II/b.
II/b	179	extension of the railway branch line Kotelnica	Plotted only in the map: Topografická 10000 (v2) (1964)
III/a	117	railway branch line between Aňala and junction to Čalavársky majer	Emergence after World War II. First time plotted on a map: Topografická 10000 (v2) (1964)
IV/a	975	railway branch line to Čalavársky majer	Emergence after World War II. First time plotted on a map: Topografická 10000 (v2) (1964)
V/a	1380	railway branch line to area Velká dolina	Later shortened to 286 m. It is plotted along this length on the following maps: Topografická 25000 (1955); Topografická 10000 (v2) (1964)
VI/a	265	railway branch line to breeding station in Stará Gúta	Plotted only in the maps: Topografická 25000 (1955); Topografická 10000 (v2) (1964)
Total	16087		

Tab. 1. Overview of railway sections according to the map (Fig. 1.); by D. Miček.
Tab. 1. Zestawienie odcinków linii kolejowej na mapach (ryc. 1); oprac. D. Miček.

The maximum permitted speed on the line was 12 km/h [Árpási 2016].

According to sources relating to other horse-drawn railways, one horse could pull one to three loaded wagons, which was much more efficient than the horse or ox cart used until then on a dirt road. It is not known how many wagons were used on this railway [ponvagli.sk]. Nor are any of the wagons known to have been preserved.

Settlement, farm, and technical units

Railway transshipment point – Nové Zámky

This field railway started in town Nové Zámky with a short railway transshipment point, which connected the narrow-gauge horse-drawn railway with the “big railway” on the Nové Zámky–Komárno line (Fig. 1) [III. vojenské mapování – 1:75000]. The transshipment point was located next to this railway line in a position northeast of the present dilapidated area of the former meat factory.

On the northern side of the ferrying yard stood a guard house, the same as those along the whole line. It was probably built at the same time as the “big railway”

in 1909 [III. vojenské mapování – 1:75000; Tunega 2015, p. 146]. Between the northern end of the crossing and the guard house there was a road connecting the former Bajč, Somor and Esztergom roads [III. vojenské mapování – 1:75000].

By terrain research we found that, today there is almost nothing left of the transshipment point. The rails, sleepers and other parts of the transshipment point were removed when in the first half of the 1970s a railway siding to the Elektrosvit, Tesla (now Osram) and Slovlik (now Novofruct) companies was built in this location [Zák. topograf. 1:10000 (1990)]. This was also the end of the existence of this horse-drawn dirt railway, as without a transshipment point, its primary function—connecting outlying farmyards with the “big railway”—also ceased to exist.

Farmyard – Jánov dvor

Jánov Dvor (also János puszta on old maps, approximate translation into English is “John’s farmyard”) first appears on the Third Military Survey under the name “Jánosy major.” In 1906 it is named differently on the cadastral map for the only time, as “Új major” (“New



Fig. 5. Preserved railway crossing at farmyard Aňala; photo by D. Miček.
Ryc. 5. Zachowany przejazd kolejowy w obrębie gospodarstwa Aňala; fot. D. Miček.

Farmyard”) [Third Military Survey of the Habsburg Empire (1:25000) (1869–1887); Érsekújvár Nyitra vármegyei rendezett tanácsú város kataszteri térképének másolata az 1904. évi mérnöki nyilvántartás szerint].

The railway ran parallel along the then northern boundary of the site and continued towards farmyard Aňala (Fig. 1) [Third Military Survey of the Habsburg Empire (1:25000) (1869–1887)]. The former location of the track in the field was easily identified, as it is today lined with trees and emergent vegetation. There is also an unpaved farm track (Fig. 2).

In the north-northwest direction from the house with an L-shaped plan there was a connection to the branch to the farmyard Kotelnica. Between this house and the building, the ruins of which are still preserved in the ground, the track stretched further in an east-southeast direction (Fig. 1, 2) [III. vojenská mapování – 1:75000]. These two buildings are the oldest buildings of this farmyard, they can be found already in the Third Military Survey [Third Military Survey of the Habsburg Empire (1:25000) (1869–1887)].

Farmyard – Kotelnica

Kotelnica (also Ellető puszta on old maps), as well as the nearby village Bajč and the town of Hurbanovo belong to the warmest area of the Slovak Republic. For this reason, there has been a farmstead with a well here since at least the beginning of the nineteenth century [Second Military Survey of the Habsburg Empire

(1819–1869)]. At the turn of the nineteenth and twentieth centuries, a larger farmstead was built here with buildings in the shape of a regular quadrangle, first recorded on the cadastral map of Bajč from 1889 [Bajcs Komárom vármegyei kisközség kataszteri térképének másolata az 1889. évi részletes felmérés szerint]. This buildings is still largely preserved today. Most of the buildings have been rebuilt several times. Today the buildings are mostly in poor technical condition.

A 2,210 m long railway branch line (Fig. 1) led here. Later, it was extended by another 179 m long branch line (Table 1).

During the socialist period, Kotelnica was named “State Property of Kotelnica” [Topografická 10000 (v2) (1964)]. In addition to the cultivation of agricultural crops, cattle breeding was also significant here. In 1953, in cooperation with the nearby Research Institute of Thermophilic and Special Plants in Sesíleš (part of the town of Hurbanovo), the experimental cultivation of cotton plants according to the Soviet model began [www.vtedy.sk].

From the 1940s until 1979, a primary school with Hungarian as the language of instruction was also established in Kotelnica [bajc.sk].

Farmyard – Aňala

Aňala (Fig. 1) (also Anyala puszta on old maps) was the largest settlement on the railway. Today it is a part of the town of Nesvady. The first written mention of it dates

to 1239 [Prokopp 1966, p. 130]. After being sacked by Ottoman troops in 1554, Aňala ceased to exist. It was restored at the beginning of the eighteenth century as a farmyard and property of the Archdiocese of Esztergom [www.nesvady.sk; Second Military Survey of the Habsburg Empire (1819–1869); Third Military Survey of the Habsburg Empire (1:25000) (1869–1887)]. Subsequently, Aňala grew into a large farm, under socialism named as “State Property of Aňala.” Today there is a vacant lot where some eleven buildings have disappeared and next door, in the still functioning farm area, a large brick granary building, a long wooden barn and several smaller brick buildings dating from the railway period survive [Topografická 10000 (v2) (1964)].

Farmyard – Čalavár

The now-defunct farmyard Čalavár (Fig. 1) (also Čelavár, Čelevár and Csalavár on old maps) appears for the first time on the Third Military Survey [Third Military Survey of the Habsburg Empire (1:25,000) (1869–1887)]. Through field research it was found out that it was built on a sand dune, and to this day there is a large sand hole on the site—a remnant of sand mining. The area was used for poultry farming [Topografická 25000 (1955)]. It probably replaced the nearby farmyard Nagy Anyala (Big Aňala) and the earlier Schäfer haus (Shepherd’s House), which stood 310 m to the northeast [First Military Survey of the Habsburg Empire (1782–1785); Second Military Survey of the Habsburg Empire (1819–1869)]. In the 1960s, a 975 m long railway branch line led here (IV/a on Table 1) [Topografická 10000 (v2) (1964)].

Field research uncovered found the ruins of at least two brick buildings, bare concrete power line poles and the remains of an irrigation canal. It was not possible to ascertain the exact time of the demise, but topographical maps from 1990 no longer show the buildings or the name of the site [Zák. topograf. 1:10000 (1990)]. It is probable that the farmyard disappeared under socialism.

Farmyard and breeding station – Stará Gúta

The farthest place where the railway reached was the court of Stara Guta (Fig. 1) (also Ógúta, Ó-Guta puszta, Pustatina St. Guta on old maps, Old Guta in English). The first written mention of it dates to 1268. The settlement disappeared during the Turkish wars. The population moved to the right bank of the Váh River and founded the present-day town of Kolárovo (Gúta) [slovensko.sk]. The Stará Gúta farmyard appears for the first time on the Second Military Survey 1810–1869 [Second Military Survey of the Habsburg Empire (1819–1869)].

In the 1950s a large pig breeding station was built to the southeast of the farmyard. Along with the breeding station, a new branch line of the railway was established. The length of this branch line was approximately 265 m (VI/a on Table 1). It started about 30 m before the border of the Stara Guta area [Topografická 25000

(1955)]. Remains of the railway crossing on the access road to the farmyard can still be found here (Fig. 1).

It probably disappeared shortly after the revolution in 1989. To this day there are five inhabited houses, one of which is a large new building. Others are very neglected.

On the oldest of the houses, just at the entrance to the farmyard a commemorative plaque with the text “Built by Vasary Kolos Cardinal Prince Primas (of Esztergom) 1898” was found [Halis, Hoffmann 1896, pp. 51–52].

Bridge

By examining the terrain, a bridge was found (Fig. 1) with a metal beam structural system mounted on two reinforced-concrete pillars. The roadway is made of wooden beams. The bridge probably dates to 1911, the time of the railway’s construction. The bridge approaches, lined with concrete pillars, originally with metal railings, are also preserved, although considerably deformed. Before the railway was built, the older bridge stood in approximately the same spot. [Naszvad Komárom vármegyei nagyközség kataszteri térképének másolata az 1905. évi mérnöki nyilvántartás szerint; Third Military Survey of the Habsburg Empire (1:25000) (1869–1887)].

Later, the bridge was modified, and several concrete panels were placed on its wooden roadway. In the past, the bridge was reinforced with two additional wooden piers, only one of which is still standing.

Water canal system – Velká dolina

There is a fragmentarily preserved system of small water canals between the dead branch of the Nitra River and the Stará (old) Nitra River (Fig. 1). On old maps also labeled as Velká dolina, Nagy Lapos (Great Valley), or Úval. It was a work built for the needs of the cultivation of wetland crops. At least in 1938–1941, a 1,380 m long branch of the horse railway led to the center of the area. In the 1950s and 1960s this branch was shortened to 286 m (V/a on Table 1). A cowshed stood at the end of the shortened branch. [III. vojenské mapování – 1:75000; Military Survey of Hungary (1941); Topografická 25000 (1955); Topografická 10000 (v2) (1964)].

Field research confirmed the existence of one long central and three short side channels. There is still a dirt road and a concrete bridge (possibly from the 1950s or 60s) where the railroad tracks used to be. A single iron horseshoe was found during the surface field research.

Conclusion

This railway has not existed for about fifty years. Its fate was finally sealed at the beginning of the 1970s, when the direct connection with the “big railway,” and thus its entire significance, disappeared [Štátna mapa odvodená 1:5000 (1980)]. At that time, it was already at least ten years outdated with its technology.

It is striking how few remains of this railway still survive. However, many relics are illegible only at first glance. Several remains of the railway can still be seen

in the terrain. Especially the places where the line ran, but also some buildings related to the railway and the bridge over the Stará Nitra River.

The only direct tangible remains are two level crossings (in 1939 there were twenty-nine) have been preserved in the terrain on the road connecting Aňala and Stará Gúta (Fig. 5). According to eyewitnesses, rails were still present in some sections of the line in the 1980s. From the body of the railway embankment, nothing clearly identifiable has been preserved on the surface. If anything has survived, it is only under fifty years of dirt and dust accumulation.

This railway has been modified, extended, and shortened several times. If we were to measure all its former components and add up the lengths of their most extensive historical forms, we would obtain (considering the lower accuracy of old military and topographical maps) a figure close to 16,087 m (Table 1).

The tourist potential of the line from Nové Zámky to Stará Gúta, if the railway had been preserved, would be zero today, as it would de facto lead from nowhere

to nowhere. However, the places through which the railway ran are usable for the establishment of an information cycle route. Dirt roads still lead through these places, which are easily passable in good weather and the terrain is easy. After the installation of two to four information boards, the cycle route could connect the towns of Nové Zámky and Nesvady.

The research and presentation of this phenomenon is of great importance because it is publicly little known, scientifically poorly documented, materially almost completely extinct, but typical for the flat and fertile areas of southern Slovakia type of freight transport. Considering that this railway was still functional fifty years ago (even though it was already obsolete), it is striking that it is hardly known today. The same is true of other railways of this type in the area. There are still people alive today who remember its existence, and they should be the target of further investigation by researchers. Only they can provide us with memories and information that cannot be found in any archive.

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Abstract

The phenomenon of horse-drawn field railways is typical for the fertile plain areas of the former Kingdom of Hungary. In the territory of present-day Slovakia, they were built mainly in the southern areas of western Slovakia—the districts of Nové Zámky and Komárno. Their primary function was to transport agricultural commodities from the fields to the towns. Secondly, they were also used for transporting people and supplying remote farms. The greatest expansion of this type of transport was registered in the first half of the twentieth century. This study answers the questions “What was it?” and “What did it look like?” through the reconstruction of a no-longer-existing railway line that connected the town of Nové Zámky with several farmsteads in the cadaster of Nové Zámky and Nesvady. This research was based on the analysis of available historical map sheets and field research. The result is a presentation in the form of a multimedia map containing a reconstruction of this route together with descriptions of the associated realities.

Streszczenie

Fenomen polnej kolei konnej jest typowy dla obszarów żyznych równin dawnego Królestwa Węgier. Na terenie obecnej Słowacji koleje te były budowane przeważnie na obszarze zachodniej Słowacji – w powiatach Nové Zámky i Komárno. Ich główną funkcją był transport towarów rolniczych z pól do miast. Były one również używane do transportu pasażerów i do zaopatrywania odosobnionych gospodarstw. Największy rozwój tego środka transportu zarejestrowano w pierwszej połowie XX w. Artykuł odpowiada na pytania: „czym były?” oraz „jak wyglądały?” poprzez rekonstrukcję nieistniejącej już linii kolejowej, która łączyła miasteczko Nové Zámky z wieloma gospodarstwami w gminach katastralnych Nové Zámky i Nesvady. Badanie oparto na analizie dostępnych map historycznych oraz badaniach terenowych. Wynikiem badań jest prezentacja w formie mapy multimedialnej zawierającej rekonstrukcję przedmiotowej trasy z opisem otaczającej ją rzeczywistości.