

# Hemp farming development and socioeconomic position of Bačka: example of Odžaci

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## Abstract

Hemp is a very important agricultural crop for Bačka region. For centuries, hemp had been grown in this area and it had a crucial importance not only for the agriculture, but for the industry and trade of this region as well. From uncultivated, poorly inhabited and underdeveloped area in 18th century, Bačka made its way to a promising region in which agriculture and industry represent the backbone of the economic development. Significant number of colonial settlements from 18th century and colonization period during rule of Austro-Hungarian empress Maria Theresa recognized growing hemp as their main opportunities to prosper. Later on, in these settlements, the small manufactories for hemp processing were built which eventually had grown into larger factories for hemp fabric production. The town of Odžaci was one of these settlements. From a small colonial settlement, it became one of the important industrial centres in Bačka region.

**Keywords:** hemp, hemp farming, industry, Bačka, Odžaci

## Introduction

Hemp is an annual plant grown in temperate zones, originating from south-western Siberia (Tomić, et al., 1996). It's mainly present in the Eastern hemisphere. It requires a frost-free season of minimum 130 days, middle summer temperatures and a fertile ground (White, et al., 1964). During a vegetation period, hemp needs 250-350 mm of rainfall (Kišgeci, 1994). There are different sorts of this plant which are accommodated to the climate in which they are grown.

Because it can be grown for illegal purposes, growing hemp is nowadays controversial. Nevertheless, multiple benefits from hemp cultivation have been historically confirmed. Hemp usage was historically recorded in the earliest literate societies. It has been used as a resource in paper production, fabric manufacturing and for medical purposes. One of the most important facts about hemp cultivation in Europe is mentioned in the document of Hiero II, the king of Syracuse, which testifies about the quality of fabrics produced from hemp grown in the Rhône valleys in France (Dubreta, 2006). The hemp farming and processing hemp into fabrics,

hawsers and paper were very important part of European economy from the middle ages until 20th century. Hemp remained significant in industrial suburbs of Europe (Eastern and Central Europe), but in the other parts of developed Europe, comparing to other branches of production such as wood or cotton production, it lost its importance, due to very intensive work effort necessary for its production.

Europe represented a significant hemp farming area even during 20<sup>th</sup> century, so hemp cultivation and processing was maintained through whole century in next countries: Russia, Ukraine, Hungary, Romania, former Yugoslavia (Tomić, et al., 1996; Manić, 2013). In the territory of ex-Yugoslavia, the hemp production was mainly organized in country parts previously belonging to the Austro-Hungarian Empire and it was closely related to historical events in this part of Europe. The hemp production left inerasable mark on the social characteristics of the regions where it took place, especially in Bačka (modern-day Serbia). One of the settlements, having its progress influenced by development of hemp cultivation, is Odžaci – a local administrative

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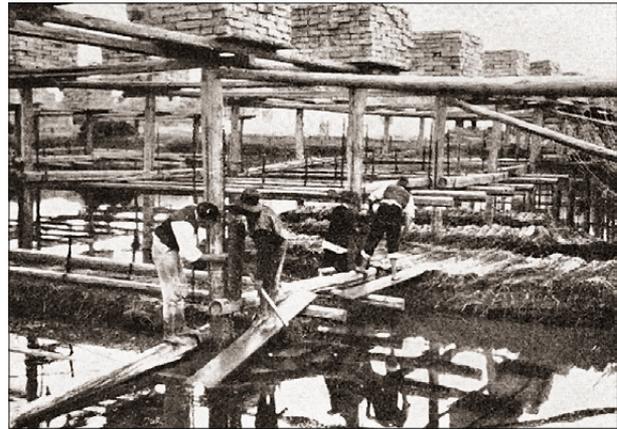
and industrial centre – which owes a great deal for its status to hemp farming and hemp processing.

### Hemp farming as an outcome of geohistorical events in Western Bačka

One of the valuable documented facts about hemp farming in Bačka dates back to the period of Maria Theresa rule. During the period of German population settlement, baron Kotman visited Bačka area for two main reasons: to monitor the colonization and to submit the report about Bačka region. In his report from year 1763, which represents precious written historic-cultural artefact kept in Vienna, Kotman provides a detailed description about Bačka region. This whole region looked considerably different comparing to the current state. Kotman, among other things, writes about soil in Bačka, the settlements, population and economic state. In the conclusion of his writing, Kotman brings forward a couple of principles which encourage further colonization and economic development (Lotz, 1929). The latter refers to the incentive to hemp farming, more precisely hemp farming in Odžaci.

Economic growth of Bačka during 18<sup>th</sup> century is closely related to the interests of Habsburg monarchy. Still in 1768, Maria Theresa raises the question to Economic council about the possibilities of economic improvements of these regions. The council advises to convert the regions to the centres for production of raw materials and semi-finished products (made of flax, hemp, silk, wool), and handcraft development in parallel. This way, under direct control, they would be used as an additional source for the Austrian industry. Soon, as a result of these tendencies and the pace of economy development in general, manufactories in Bačka, relying mainly on the large estate and on the processing of agricultural products, influenced on the separation of agriculture and industry. This led to the creation of a wide network of smaller commercial centres consisting of the next settlements: Apatin, Odžaci, Senta, Bečej, Bačka Palanka, Buljkes, Bezdan, Crvenka, Sivac and others (Mirnić, 1963).

We should not forget that the natural conditions, although visibly different compared to the situation as it is today, played an important role in the hump cultivation. Hemp requires fertile soil rich in nutrients (Kišgeci, 1994). Southwest from Odžaci, the chernozemlike limeless meadow soil and chernozemlike meadow brownized soil spread in notably areas. Chernozemlike limeless meadow soil is fertile and produces good agricultural yield. It is considered as a fertile type of soil because of the deep humus-accumulative horizon and since it contains a lot of humus and has good hydro-physical properties. On the other hand, chernozemlike meadow brownized soil produces aver-



**Figure 1.** Hemp retting in the swamps around the river Mostonga

Source: Lotz, 1964

age agricultural yield and it is also used as agricultural land (Živković, 1972). Finally, one of the phases in the hemp processing procedure is retting, process of separating fibres from the hemp stem by immersing the plant to the water. Such a process required closeness to rivers, swamps or lakes. The whole region of Western Bačka has been strongly influenced by the Danube, which has a long geological process of withdrawal to the west leaving behind numerous backwaters, meanders, lakes and swamps. Mostonga River, which is supposed to represent the Danube's abandoned river channel (Stojanović, 2005), was particularly important in the hemp retting process (Figure 1).

### Historical development of Odžaci and hemp farming

The town of Odžaci was first mentioned in year 1557 or 1558 as a settlement in Bačka, founded by Turks during the war operations in the southern part of the former Kingdom of Hungary (Popović, 1990). The assumptions suggest that even before, somewhere around 1522, a village named Kemend was located here as a part of Bač province, and that it represents in some sense a forerunner of today's settlement (Borovszky, 1909; Iványi, 1895). The settlement was restored in the first part of the 18<sup>th</sup> century (Iványi, 1895), and already in 1733 around one hundred of Serbian and Šokac families lived here. Soon, these families were displaced, so there were only 44 families in year 1743 (Lotz, 1929). The population was mainly engaged in agriculture or animal husbandry. Cereals were mainly cultivated in the fields, and vegetables, grape vines and fruits were grown in the gardens. The most important and the most frequent was wheat, followed by barley, oat, millet and maize (Table 1). Fibre crops are not that common (Andrašić, 1998). Cultivation of hemp in significant quantities is first mentioned after departure of

Serbs and arrival of Germans. Specifically, the project for strengthening of Habsburg monarchy's southern parts was realized by colonization of German population in these regions. The colonization of Odžaci started in 1755 (Lotz, 1929), and already in 1763 three hundred German families lived there (Ivány, 1895).

**Table 1.** The most important agricultural crops in fields of Odžaci (1743-1753) in possession cubulus

Year	Wheat	Meslin	Barley	Oat	Maize	Millet
1743.	157	354	47	30	78	-
1753.	264	-	58	4	8	4

Source: *Andrašić, 1998*

The analysis about the impact of economic activities on the development of Odžaci emphasizes the hemp cultivation. German population, immediately after the colonization started growing cereals, but they also knew how to cultivate hemp. They brought the hemp seeds from their homeland – Goldscheuer on the Rhine River, and hemp perfectly adopted to the natural conditions of Bačka (Lotz, 1929; Scherer, Rakitsch, 1990). The river Mostonga was also very convenient for hemp retting. The main initiator of the hemp farming was aforementioned baron Kotman. Immediately upon the colonization, he reports to Vienna that hemp grows well in Odžaci and that the hemp stem is incredibly high. Kotman further points out that good

quality fabrics can be made here (Lotz, 1929). He also predicts that the economy of Odžaci, and of the entire Bačka region as well, could be improved as a result of hemp cultivation and processing. Therefore, he gathered hemp producers and promised funds for their work (Mirnić, 1963). The population started growing hemp only for clothes made completely from the hemp fibre. The hemp mass production started later on. As a result, the new artisan profiles start to appear: breakers, weavers, spinners etc.

In 1779, after 25 years of colonization and intensive hemp farming, the first Annual fair of Hemp is held in Odžaci. This specialized fair that lasted for seven days, was held every year in the autumn. All hemp from Bačka was transported to Odžaci (Đorđević, 2011). Then, in 1813, the settlement was promoted to market town (Borovszky, 1909; Scherer, Rakitsch, 1990). In order to get promoted to this rank, it was necessary to meet a number of standards. Among other things, Odžaci had to have developed agriculture, manufacture and trade, exhibitions and trade fairs, associations, guilds and settled taxes (Đorđević, 2011). The hemp cultivation had its prominent position in the process of obtaining this status – Rausch family stands out for their trade by selling hemp throughout Europe via Szeged and Pest (Lotz, 1929), there are regular hemp trade fairs, home manufactories for hemp processing existed since 1763 and mills for hemp oil



**Figure 2.** The hemp trade fair

extraction since 1783 (Đorđević, 2011). During 18<sup>th</sup>, 19<sup>th</sup> and 20<sup>th</sup> century, a cart laden with hemp at the time of fairs (Figure 2) and during the purchase (Figure 3) were a common sight of the streets in Odžaci.

During 19<sup>th</sup> century, hemp farming and trade represent a significant part of the Austrian economy. Hemp grown in Vojvodina is very well known. The issue from year 1854 of the press in Slovak language “Slovenske noviny” contains the information on the extent of hemp farming in Austria. Odžaci is in the group of the settlements with the highest annual hemp production together with Prigrevica, Bački Gračac, Futog and Ratkovo (Kišgeci, 1994). The industrialization in the UK clearly contributed to the hemp trade. Machines for spinning and weaving were invented around 1810, but the UK government didn't allow them to be exported, which guaranteed a big volume of production, but also increased import of raw materials such as wool and hemp. This encouraged the hemp trade greatly and aforementioned family from Odžaci found their very prominent place in it (Lotz, 1929). This trade volume resulted in a forming of one of the most important hemp markets in Odžaci, where the prices for hemp fibres were determined (Đorđević, 2011). At the end of 19<sup>th</sup> century the prices were announced in the local magazine “Die Woche”, where in addition to the prices, the production prospects and the state of similar markets in Italy and Germany were published. In average, between 8 and 10 wagons of hemp was sold on the market. The buyers were agents of foreign companies for cordage and rope production (Kišgeci, 1994).

Between the two world wars there were seven hemp processing factories, organized as a family business or as an association of two families (Table 2; Figure 4; Figure 5). The business was arranged so that every hemp processing factory was obliged to sell its product to the authorized hemp collectors (traders), among which there were in Odžaci (Odžaci Museum, inventory number 417). Eventually, hemp ended up in the rope and cordage factory in Odžaci, which was one of the biggest of that kind in the country.

After the Second World War, there was a drastic social change in Serbia, that is, former Yugoslavia, and this change reflected on economic situation in the country. The industry was nationalized. In 1946 Ministry of Industry of People's Republic of Serbia founded the State Administration for hemp and flux, based in Novi Sad, responsible for operational planning and direct management of all hemp industry related affairs in Serbia. It included 201 companies. This institution performed next tasks: raw material procurement, production, distribution, sale and transport planning, as well as increasing and improving of the hemp production (Vojvodina Archive, Fund 222). In this period,



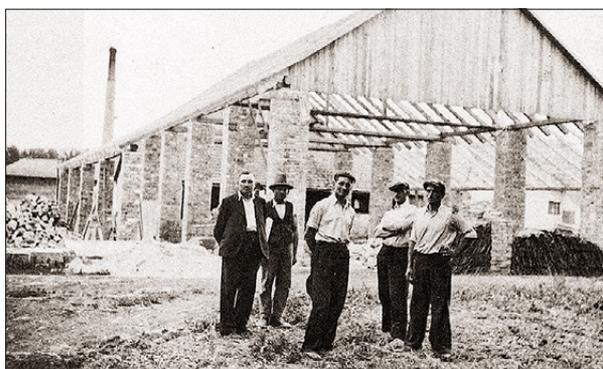
**Figure 3.** Hemp purchase during 1960s

Photo: V. Jovin

**Table 2.** Hemp producing factories in Odžaci between the two world wars

Nº	Hemp producing factory	Foundation year
1	Percy Katharina	1915
2	Treuer Lorenz	1920
3	Schwerer Andreas	1910
4	Ertl and Butter	1925
5	Sutter Franz	1922
6	May and Manz	1928
7	Tuffner and Mink	1914

Source: Odžaci Museum, inventory number 417; Vojvodina Archive, Fund 222, book 40.



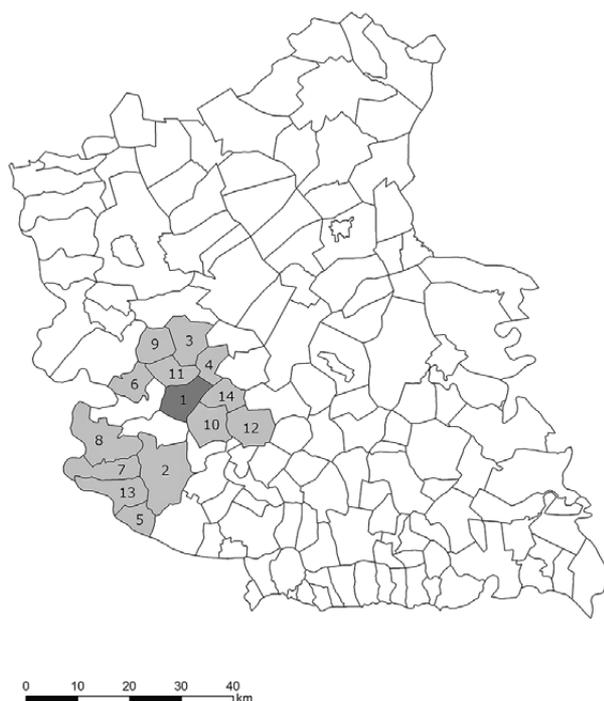
**Figure 4.** Hemp processing factory “Manz and May”

Source: Scherer, Rakitsch, 1990



**Figure 5.** Hemp processing factory “Sutter Franz” workers

Source: Scherer, Rakitsch, 1990



**Figure 6.** Geographical distribution of hemp production plants within "Mostonga" company  
1 – Odžaci; 2 – Bač; 3 – Bački Brestovac; 4 – Bački Gračac;  
5 – Bačko Novo Selo; 6 – Bogojevo; 7 – Bođani; 8 – Vajska;  
9 – Doroslovo; 10 – Ratkovo; 11 – Srpski Miletić; 12 – Pivnice;  
13 – Plavna; 14 - Lalić

Odžaci, once again became an official centre of hemp production, this time because a company "Mostonga" was established here, which brought together 13 hemp

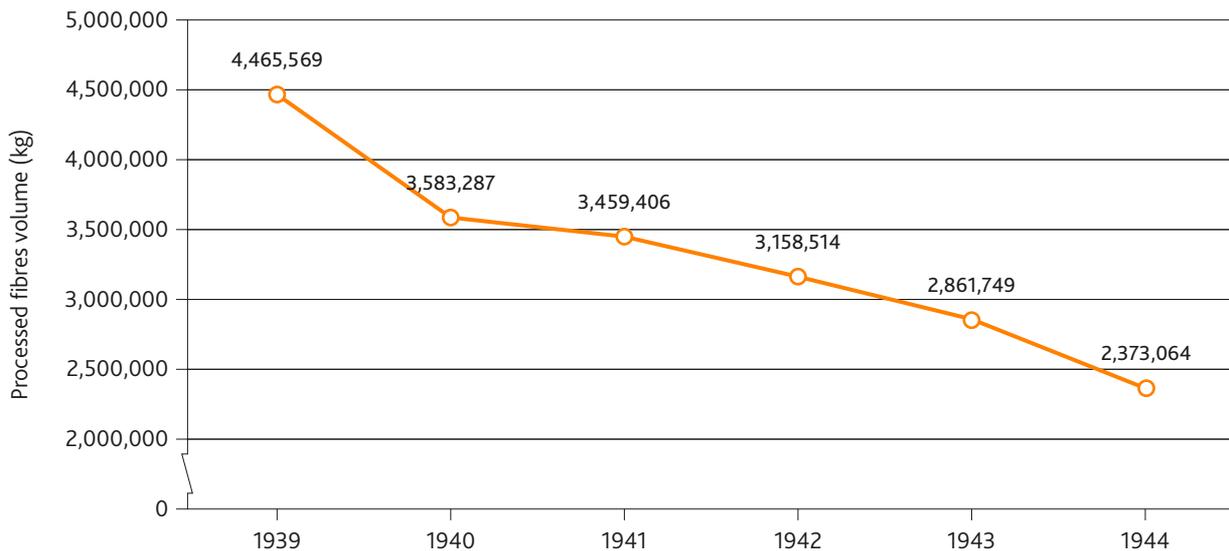
production factories in neighbouring and more distant settlements: Bač, Bački Brestovac, Bački Gračac, Bačko Novo Selo, Bogojevo, Bođani, Vajska, Doroslovo, Ratkovo, Srpski Miletić, Pivnice, Plavna and Lalić (Figure 6).

In 1907, a culmination of centuries long hemp farming in Odžaci occurred as the Factory for processing of hemp fibres was established on the initiative of the Ertl family (Figure 7). In the early nineties of 19<sup>th</sup> century, Brothers Franz and Johann Ertl founded a hemp export company here. During one of his business trips to Szeged, Johann Ertl visited a spinning and cordage factory which inspired him to establish a similar one in Odžaci, an important centre for hemp trade. The production process included: (1) hemp products manufacturing; (2) rope and fabric production; (3) cordage production and (4) the jute spinning mill (Lotz, 1929). Immediately after the establishment, the factory had a total of 239 workers in different departments. First years of business were very successful. The crisis occurred before the First World War, but the recover happened during the war years (History of factory, the material created for company usage, unknown year). In the period from 1937 to 1940, the total number of employees reaches 741, of which 718 are workers and 23 are office employees. During the Second World War, the production didn't stop, but it declined (Figure 8).

The factory was, like all other industry in FPR Yugoslavia, confiscated from their owners based on the resolution of AVNOJ (Anti-Fascist Council for the



**Figure 7.** Spinning and cordage factory in 1928



**Figure 8.** Processed fibres volume (kg) in period 1939-1944

National Liberation of Yugoslavia) and Confiscation Law (Vojvodina Archive, fund 222). The first years after the war were difficult and the work was organized in only one shift due to the lack of operation supplies (Odžaci Museum, inventory number 147). In the decades that followed, the stabilization of social and economic situation resulted in building the new factory. The number of employees grew and reached the number of 2,500 at a time when Odžaci had about 10,000 inhabitants. At the turn of the 20<sup>th</sup> and 21<sup>st</sup> centuries, the factory slowly closes and after almost a century of successful operation, this branch of industry stops operating. The most obvious reasons are man-made fibres dominance on the global market, obsolete technologies used locally, and difficulties in transition.

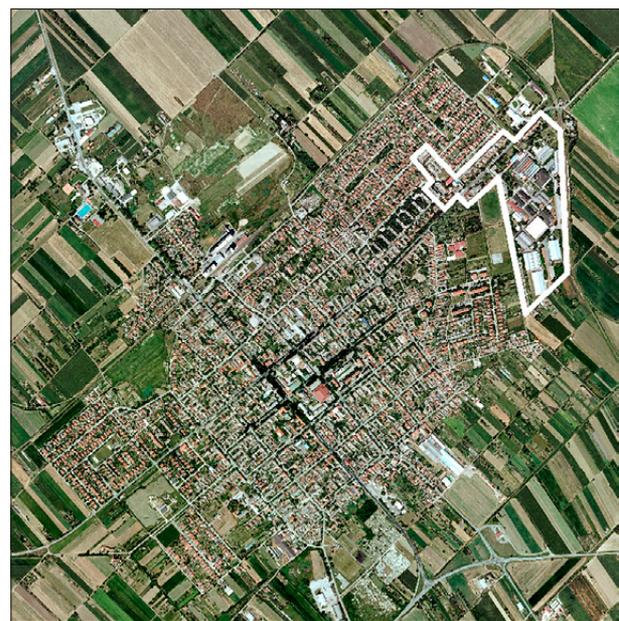
### Influences of hemp farming on morphology of Odžaci

In 19<sup>th</sup> and 20<sup>th</sup> century, the hemp based agriculture and industry had a strong influence on social characteristics of Odžaci, among others, the settlement appearance and its morphology. This primarily relates to the outer scenery and inner scenery and the settlement pattern (Stojanović, 2007).

Morphology is the easiest observable settlement feature, so it attracts the attention of the researchers. The streets layout, position and appearance, squares, orderliness, green areas, size and type of the houses are just some of the elements which are first noticed when encountered with the settlement. Very often these characteristics reflect the economic nature of the region, even though it doesn't look so at first.

The scenery and the pattern of Odžaci were highly influenced by hemp farming during its history. The outer scenery viewed from distance, for example

some of the local or regional roads, can provide relevant information about characteristics of Odžaci and its functions. The size of a church is a reflection of the economic power of the population (Čurčić, 1992), so the economy of a settlement can be observed from the church look and dimensions. The construction of the present church is associated with the hemp farming. Still in 1814 the Register of natural goods has been established where it was noted when the population donated wheat, oat, maize and especially hemp. Almost half of the collected money raised this way was from hemp donation (36,432 guildens). This hemp is known by the term "church hemp". Besides the donations in natural goods, the population was involved in voluntary work – even the children helped. The church con-



**Figure 9.** Parts of Odžaci developed under direct influence of Spinning and Cordage Factory



**Figure 10.** Location of the current industrial zone in Odžaci

struction was finished on October 25th, 1821 by placing the cross on the central Baroque bell tower (Lotz, 1929). The main facade stands out with three towers, the middle being significantly higher than the ones on the side (53m) and it dominates Odžaci's cityscape. The church is long 55m, wide 19.75m (Odžaci files, The Provincial Institute for the Protection of Cultural Monuments documents). The outer scenery of Odžaci in this period was absolutely not consistent with its status and economic power, so the church that was built in this small settlement couldn't be found even in the biggest towns in today's Vojvodina.

As a result of the industrial development from the beginning of 20<sup>th</sup> century, Odžaci has a different and specific scenery in northern part of its territory (Figure 9). After the foundation of hemp fibres processing factory in 1907, the industrial zone was formed, and it is now extending to the chemical industry "Hipol" located on the road to Bački Gračac (Figure 10). Both factory objects and halls (of which the largest number is still preserved) and residential areas were built in parallel. In 1914, one of the factory buildings was transformed into workers apartments. This is how a settlement called Romanija was formed. This is probably one of the most unusual aspects of living in Bačka. The settlement exterior is preserved in the original state almost a hundred years after it has been constructed. On the opposite side of the factory another workers settlement was formed – Petefi colony. The settlement consists of a larger number of single-storey buildings intended for collective dwelling. At the same time, raising new buildings resulted in changing the pattern of the settlement, moving its border further to the northeast.

## Conclusion

From 18<sup>th</sup> until the end of 20<sup>th</sup> century the hemp growing and hemp processing industry are a result of the complex natural and social factors in Bačka region and wider. Natural factors are mainly the natural advantages for hemp growing – fertile soil, plenty of surface waters (hemp retting), favourable climate (the optimal amount of rainfall in the process of hemp maturation). Social aspects, explained in this paper, had an impact on the expansion of this economic activity, but also on its decline.

At the end of 19<sup>th</sup> century, two big hemp fibre users have vanished: sailers and horse harnesses. Even then it could be observed that hemp is declining in importance comparing to other strategic products. However, in spite of everything, this is exactly the time when big factories for hemp processing were raised in Bačka. The hemp industry could not overcome the following events in 20<sup>th</sup> century: appearance of man-made fibres, irresponsible operations and management in the later years (so-called workers' self-management) and wars in early nineties of 20<sup>th</sup> century that resulted in the collapse of Yugoslavia.

Hemp farming lost its economic significance, but its geographical and historical impact that can be witnessed in tangible and intangible evidences cannot be refuted. It represents an important segment of the industrial heritage of this part of Central Europe, and it fully deserves a completely different treatment in the preservation, study and presentation – what represents a new topic of research.

## Acknowledgments

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