

Прегледни научни рад *Review paper* doi 10.7251/STP1813496P

ISSN 2566-4484



# THE POSSIBILITY OF REVITALIZATION AND PURPOSE ALTERATION OF SCHOOLS IN CRNA TRAVA MUNICIPALITY

Ana Momčilović-Petronijević, *ana.momcilovic.petronijevic@gaf.ni.ac.rs*, University of Niš, Faculty of Civil Engineering and Architecture Mila Cvetković, *cvetkovic.mila93@gmail.com*, University of Niš, Faculty of Civil Engineering and Architecture Aleksandra Ćurčić, *ajkiro94@gmail.com*, University of Niš, Faculty of Civil Engineering and Architecture

#### Abstract:

Large migrations in the postwar period have mostly influenced stagnation, and demographic depopulation of the rural territory of Crna Trava. The fate of the village was also shared by educational institutions, there were around 20 them in this municipality. Along with the loss of basic educational functions, the care of the local government for this type of institutions stops. The majority of schools was torn down or is in a very bad condition, and the existing ones are still working with a small number of students. This paper analyses the problem of regeneration of existing buildings that are decaying and losing their purpose. The focus is on examining the possibilities of converting these buildings into some other appropriate purpose in order to save the important historical and architectural material, to create conditions for small business development, cultural events, etc. In general, the institutional capacity of the village would be increased, and thus the conditions of life would be raised to a higher level.

Keywords: schools, Crna Trava, migration, education, revitalization, reintegration

# MOGUĆNOST PRENAMENE ŠKOLSKIH OBJEKATA - STUDIJA SLUČAJA, OPŠTINA CRNA TRAVA, JUŽNA SRBIJA

### Apstract:

Izražena migraciona kretanja u posleratnom periodu u najvećoj meri su uticala na stagnaciju i delimično ili čak potpuno demografsko pražnjenje ruralnog prostora opštine Crna Trava. Sudbinu sela dele i obrazovne ustanove, kojih je na teritoriji opštine bilo oko dvadeset. Gubljenjem osnovnih funkcija obrazovanja, prestaje i briga lokalnih samouprava o objektima ovog tipa. Većina školskih objekata je porušena ili je u lošem stanju, dok samo manji broj njih radi sa veoma malim brojem učenika.

Rad se bavi problemom regeneracije objekata koji propadaju i ostaju bez svoje funkcije. U fokusu je ispitivanje mogućnosti prenamene objekata u odgovarajuće sadržaje, čime bi bio sačuvan vredan istorijski i arhitektonski materijal, stvorili uslovi za razvoj male privrede, uslužnih delatnosti, kulturnih manifestacija i slično. Generalno, bio bi uvećan institucionalni kapacitet sela, a samim tim uslovi života podignuti na viši nivo.

Keywords: škola, Crna Trava, migracija, školstvo, revitalizacija, , reintegracija

## **1. INTRODUCTION**

Crna trava is a municipality located in southern Serbia, near Bulgarian border. Once famous for its builders, who made impressive buildings all around Serbia, this area today has another label. Nowadays, Crna Trava is one of many municipalities with a distinctively negative demographic structure, a municipality which disappears.

The geographical location of this region, the absence of any kind of production, and the impossibility of employment, make the young people from this place move to larger cities.

With this migration, the population is decreasing and its structure is changing. Although the educational system in this municipality has quite a long history, due to a very small number of children in Crna Trava, only few schools are open with a small number of pupils.

The school buildings are losing their primary function so they are left to a total decay. This paper shows a historical overview of the educational system and schools in this area. It also shows the current state of educational buildings in the Crna Trava municipality. A drastic decrease in the number of children in schools is indicated, and thus the loss in educational purpose of these objects. Would the purpose alteration of these schools at least have the effect of reducing the negative demographic picture and somewhat returning the population to the village? Would, by increasing the institutional capacity of the village by reintegration of abandoned educational facilities, improve the living conditions in the village? Since low quality of life is one of prime reasons for inhabitant migrations from small villages to big cities, would revitalization of these schools create the climate for a temporary or even permanent population recovery?

## 2. THE ANALYSED AREA

In the south-east of Serbia, 66 kilometers from Leskovac as a center point of the Jablanica district, in the upper and middle basin of the Vlasina river, surrounded by the Grdelica gorge and a valley of Južna Morava in the west, the Suva Planina mountain in the north, the Bulgarian border in the east and the Verdenika mountain and the Vlasina lake in the south, there lies a wide mountain region with the area of 312 km2, named Crna Trava [1]. It belongs to the Jablanica district and it's one of the smallest municipalities in the border zone. The neighbouring municipalities are Babušnica, Vlasotince, Leskovac, Vladičin Han and Surdulica.

Its geographic position makes it isolated from the main roads. The only important communication is its road connection to Leskovac through Vlasotince, and to Vladičin Han through Surdulica, which is, later, connected to the Belgrade-Skoplje motorway.

Crna Trava is a mountainous area with a long history of the settling tradition. According to the population census from 2001, there were 2563 inhabitants located in 25 villages and even more districts - settlements that now hold less than a few households. The census conducted in 2011 provided devastating information. There are only 1663 inhabitants in this municipality [2].

A bit over two thirds of the total number of inhabitants are people living in rural areas. Most of the settlements, which are otherwise fragmented, scattered and compact, with a very unfavourable demographic structure of the population, have fewer than 200 inhabitants. According to the number of people living here, only a few rural settlements stand out in a positive sense: Gradska, Preslap, Darkovce, Krivi Del and Zlatance.



Figure 1. Geographic position of Crna Trava and the picture of municipality [3][4]

## **3. POPULATION**

The census was carried out in various time periods, based on which we can carry out demographic and economic analysis of the development of the village. Periods are divided into those that took place before and after the Second World War:

- Censuses that include a period from 1878. to 1931. and
- Censuses that include a period from 1948. to 2011. [5][2]

Year	1878.	1884.	1890.	1895.	1900.	1905.	1910.	1921.	1931.	Change in pop. from 1878.
Number of inhabit.	8864	9044	1128 4	1009 8	1477 0	1206 5	1353 7	1082 5	1265 1	+42.7%

Table 1. Population according to the census from 1878 to 1931

Year	1948.	1953.	1961.	1971.	1981.	1991.	2002.	2011.	Change in pop. from 1948.
Number of inhabit.	13614	12902	12319	9672	6366	3789	2563	1663	-87,8%

Table 2. Population according to the census from 1948 to 2011

Population is an indicative indicator of the negative development of this municipality. The analysis, so far, shows that the municipality of Crna Trava, in the second part of XX century, was affected by unfavorable demographic tendencies. In the period between 1948 and 2002 a drastic decrease in population occurred (81.2%) on a municipality level, and by the year of 2011 population decreased by 87.8%. In urban areas this percentage is 72.2% and in rural 82.8%. The decline in the number of people in the period between the last two censuses is about 35%, which is a very worrying fact. The main factor in reducing the number of inhabitants is the mass migration of the population caused by a one-sided industrialization process, an unbalanced development policy (neglecting mountainous areas) and poor infrastructure (primarily road), or even the absence of it, and minimal, and in some places no institutional content. To a large extent, there is a negative population growth, which has been in the tendency of decline since the 1960s.

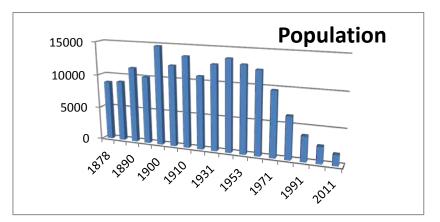


Figure 2. Migrations in the period from 1878 to 2011 in the area of Crna Trava municipality, based on Table 1 and 2

Aging, reduction in the number of inhabitants and migration of the young population are factors that have influenced the reduction of the number of fertile population, the decline in the birth rate and the increase in the mortality rate.

	Population		Percentage		
	1991.	2011.	1991.	2011.	
0-7 (0-9)	204	66	5,4	4,0	
7-18 (10-19)	347	103	9,2	6,2	
18-60 (20-50)	2039	759	53,8	45,6	
over 60	1199	735	31,6	44,2	

Table 3. Change in the age structure of the population in the last 20 years, based on [5]i[6]

The age structure of the population is extremely unfavorable. Proportionally, the majority of the population is over 60 years old, with as much as 44.2%. Youth participation (15-30 years old) according to the 2011 census is 11,72%. Compared to the 2002 census, this population contingent was reduced by 40% [3].

According to the data from the last census in 2011, there were 1,663 inhabitants in the whole territory of the municipality of Crna Trava. Some residents live in other places and are registered in this municipality, which additionally reduces the number of enumerated residents. A part of the elderly population is spending only summer months in this area, and during the winter they reside in the cities with their relatives. If this information is taken into account, the actual picture of the number of inhabitants will be even worse.

### **3.1. POPULATION PROJECTION**

Municipalities, therefore, are characterized by small settlements of predominantly agrarian type, with very unfavorable demographic structure of the population. Among them there is a large number of settlements in which individual districts have been extinct and some have completely disappeared.

For the sake of illustration according to the 2002 census, there were 122 inhabitants in Brod, which is a decrease of 90.6% compared to 1948. According to this trend of declining population, in the coming period, Brod will probably become an uninhabited place. For now, out of a total of 28 districts, even 11 of them do not have a single inhabitant [5].

The analyses related to the population projection for other places according to the socalled tendency projection would give approximately the same results that could be characterized as particularly unfavorable, practically disastrous. Crna Trava has the most favorable position in this area. Here, because of the existence of primary and secondary schools, the vicinity of the post office, the health center, the pharmacy, as well as the available trade facilities, the largest number of inhabitants lives exactly here. According to the population projection, in 2015 there are 1409 inhabitants on the territory of the entire municipality [7]

## 4. HISTORY OF EDUCATION IN CRNA TRAVA

The first written documents referring to the cultural needs of the inhabitants of this region, as well as the existence of cultural institutions - schools, only originated from the beginning of the XIX century [8]. Jovan Hadži Vasiljević [9] wrote about the advanced school at the beginning of the XIX century, then it is mentioned in the magazine "Prosvetni glasnik" ("Educational Gazette"), "Učitelj" ("The Teacher"), "Leskovački glasnik" ("The Leskovac Gazette") [8]... From these, and many other papers it can be concluded that until the liberation from the Turks, and even later, the school in Crna Trava was an important center of literacy and culture of the entire wider area.

In 1867 the magazine "Srpstvo" wrote about the development of "modern education in Serbia" in Crna Trava. A book, called "Educational and political conditions until the Serbian - Turkish wars in 1876-78" mentions Crna Trava as one of the places in Serbia where new Serbian school started to develop long before 1870 [8].

According to the "Chronicle of the Church in Crna Trava" first schools in this area were private, and according to the magazine "Srpstvo", issued on 15.04.1888., the official opening of first schools took place in: Crna Trava (20.10.1867.) and Ruplje (late 1867). [10]. In the report of military administration of Leskovac a school in Dobro Polje was mentioned in 1878. According to Jovan-Hadži Vasiljević, the school in Crna Trava was opened in 1830. In 1890. Tihomir Đorđević, staying with associates in Crna Trava wrote that school was formed in 1836. and the one in Ruplje in 1860. In the report of the head of the district of Leskovac from 1878, a list of schools from the Crna Trava region that worked during Ottoman domination was given:

- The school in Crna Trava: works in a private building, in one room, without classes. The school has 15 students [11].
- The school in Ruplje: located in a small room in a private, straw house, without furniture. There are 20 students [11].
- The school in Dobro Polje: worked in one of the rooms in a church, but it's closed now.

In January 1881 in the Serbian Parliament, a "Rulebook on the Construction of School Buildings" was adopted, according to which no existing village school was able to work. The rulebook stipulated, among other things, the following: the school must be built by the municipality according to the drawing, the building must be made of hard material, erected in a pleasant place, outside wetlands, roads and kafanas (a type of a restaurant or tavern), in a place with drinkable water and a large plot. Classrooms must be built with thick walls, and the biggest classroom has to have the area of 70 m2 and the volume of 270 m3. In addition to the school building, it is necessary to build a flat for teachers, a shed for storage, the land for the teacher to cultivate, etc. [5].

Because of this law, first schools with satisfactory architecture and hygiene conditions were built. The elementary school in Crna Trava, the construction school, the school in Brod, Mlačište district, are some of buildings that were built with educational function as their primary purpose.

In the territory of the municipality until 1941 there were the following schools: [5]

Reg.				
No.	Place	School name	Starting date	
1.	Crna Trava	"Kralj Petar I"	1863.	
2.	Ruplje	"Car Dušan"	1867.	
3.	Brod	"Princ Tomislav"	1910.	
4.	Mlačište	"Kralj Aleksandar"	1920.	
5.	Dobro Polje	"Mrnjavčevići"	1920.	
6.	Darkovci	"Sveti Sava"	1920.	
7.	Jabukovik	"Stefan Nemanja"	1920.	
8.	Gornje Gare	"Kralj Petar I Osl."	1922.	

Table 4. School names by districts with the year of beginning of work, according to [5]

A few school were occasionally opened during this period:

- In Preslap, from 1905 in a private building and from 1909 in a newly built school
- In 1931 in Kozilo
- In 1933. in Gradska
- In 1934 in Čuka, Gornje Gare, Jabukovik and Krivi Del,
- In 1935 in Zlatanac and Jovanovce[1]

Therefore, as much as 17 schools existed in this area, before the Second World War. The number of students in schools was different depending on the circumstances. According to statistics, in every school in municipality, the highest number of pupils was school year 1945/46 because that year the students who stopped school due to World War II also enrolled. In other periods, the largest number of enrolled students was school

year 1961/62. 1764 pupils, and the smallest in 2008/09 - 69 students, or 3.91% compared to the school year 1961/62 [5].

		School year 1961/62.		School ye	School year 2000/01.			
No.	Elementary school	I-IV	V-VIII	Total	I-IV	V-VIII	Total	Total
1.	Brod	68	98	166	1	-	1	Closed
2.	Crna Trava	47	147	194	26	46	72	44
3.	Zlatanci	63	-	63	1	-	1	Closed
4.	Jovanovci	32	-	32	Closed			Closed
5.	Čuka	27	-	27	Closed	-	-	Closed
6.	Obradovci	79	-	79	Closed	-	-	Closed
7.	Todorovci	34	-	34	Closed	-	-	Closed
8.	Ruplje	68	92	160	Closed	-	-	Closed
9.	Pavličine	36	-	36	Closed	-	-	Closed
10.	Dobro Polje	40	51	91	Closed	-	-	Closed
11.	Kozilo	19	-	19	Closed	-	-	Closed
12.	Krstićeve	18	-	18	Closed	-	-	Closed
13.	Sastav Reka	-	79	79	4	5	9	5
15.	Krivi Del	69	-	69	8	-	8	3
16.	Gornje Gare	68	-	68	Closed	-	-	Closed
17.	Darkovce	140	55	195	Closed	-	-	Closed
18.	Gradska	114	89	203	12	23	35	14
19.	Kalna	72	61	133	1	-	1	1
20.	Preslap	71	-	71	2	-	2	Closed
21.	Mlačište	46	-	46	Closed	-	-	Closed
Total		1092	627	1764	55	74	129	69

Table 5. The number of students in schools from 1961 to 2009

The mass migration of the population from this area has caused the closing down of most schools so that their basic functions - education and upbringing are realized irrationally because of the small number of pupils, in six schools. Today's educational web consists of 5 elementary schools, of which one is in the biggest settlement - Crna Trava (Elementary school "Aleksandar Stojanović") and the rest (4 schools) are separate departments in Sastav Reka, Gradska, Krivi Del and Kalna [3].

	-	
	2010.	2011.
Elementary school registration	5	4
High school registration	182	175

Table 6. The enrollment rate in elementary and secondary school [3]

Technical school (High school) in Crna Trava includes a student dormitory and complete accompanying contents (kitchen, gym, etc.). It also has a pre-school with two educational groups (18 children) [3]. Except for a small number of facilities which kept their function, the rest of the buildings that previously had educational role, are now abandoned. The interest of the local government and the authorities as well as their relation to these facilities is evident by insight into the state of the facilities in the field: the facilities are in a very bad condition, on the border, in the near future, to be totally demolished.

## 4.1. REVIEW OF SOME SCHOOLS

### 4.1.1. Elementary school in Crna Trava

Due to previously mentioned law on building educational facilities, in 1886 in Crna Trava, the first school with two classrooms was built, but was demolished in 1915 by Bulgarians. At the same spot, in 1921 a new school was built, with 4 classrooms, 2 offices and a hallway. Unfortunately, this school was burned, also by the Bulgarian army, on 20th of April, 1944. Thus, in 1944, 543 elementary school students in Crna Trava continued their education in private buildings converted to this purpose [1].

In 1949 a new school was opened for the purpose of elementary education. The building had 6 classrooms, 324 m2, with three offices, a large hall, two apartments for teachers and a courtyard [8].



Figure 3. The school in Crna Trava today, photo A.Momčilović Petronijević

Today's school is a two-storey building. It includes eight classrooms, offices and a library. Some of the rooms are, considering the number of students, used by a bicycle club "Orlovac".

## 4.1.2. Technical School in Crna Trava

In 1920/21 in addition to the primary school, Crna Trava also got the Technical School for the improvement of masonry, which was renamed the State construction-craft School in 1930 by the decision of the then Ministry of Trade and Industry [8]. By forming this school, the primary school in the city got its full development.

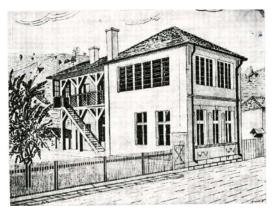


Figure 4. Ex masonry school in Crna Trava [12]

Masonry school tradition in Crna Trava lasts for almost one century. Between the two world wars, Crna Trava, among other schools, was almost without a single craft school. After the end of the First World War, by the decision of the Ministry of Trade and Industry, on 5 September 1919, a new masonry-stonecutting workshop was organized, and it worked from 1920 to 1925.



Figure 5. Technical school today, photo A.M.Petronijević

In 1927 a new school was opened, and it was operating during school years 1927/28 and 1928/29. In 1930 the state masonry school started but unfortunately it was closed in 1941. After the Second World War, the masonry craft school was renovated, and in

September 1948 it became a secondary technical school. The masonry educational center in Crna Trava is currently located in the Milentije Popović Memorial-school (Milentije Popović was born in Crna Trava). The memorial school is an architectural complex that includes a student dormitory, classrooms, offices, a library, a gym and open field for sports activities. The useful space of the building is 5,400 m<sup>2</sup> and the same size is open and the area for rest and recreation of students [13].

### 4.1.3. The school in the Brod district

The school building in Brod was finished in 1909 and it was covering the area of 120 m2. It included one classroom (50 m2), two hallways, a dining room, an office, a tworoom apartment for a teacher and a basement that was used as a storage room. In April 1944 this school was burned to the ground. On the foundations of the old building two classrooms and an office were built. One more classroom was added in 1949 along with the teacher's apartments. Due to the increase in the number of students in 1957, three more classrooms and sanitary facilities were added. Prior to this extension, the problem of lack of space was solved by teaching in other districts in private homes [5].

After the reconstruction of the Saint Pantelejmon church in Brod, which is located near the school, wealthy individuals started the initiative for reconstruction of the school and for its new role as accommodation facilities. Inside the school borders were also monk cells, a dining room, workshops, etc. Unfortunately, this idea was dismissed, and the school was completely demolished in the meantime.



Figure 6. School in Brod today, source http://www.crnatravaprojekt.co.rs/index.php?option=com\_content&task=view&id=23& Itemid=37, accessed may 2009

### 4.1.4. The school in the Mlačište district

The school in Mlačište was opened in 1920. It also included the teacher's apartment. The organized charity made it possible for a new facility to be built, which included three classrooms, a hallway, two apartments for teachers and an office. This school was unfortunately closed in 1978 because of the small number of students [14].



Figure 7. Old school in Mlačište (on the left) and school today (on the right), photo J. Momčilović



Figure 8. Abandoned schools - Jovanovci district, photo J. Momčilović

Other schools in the Crna Trava municipality are similar to these, by the size and the content.

## **5. CONCLUSION - SOLUTION PROPOSAL**

The continuation of such a highly depopulating tendency can only be stopped by the joint action of interested groups for the development of areas: experts, authorities and the local community.

Municipality development program [3][4], research of economic development, tradition and natural predisposition, point to the following activities in the future: agriculture, forestry, water exploitation, small business, hunting and fishing, services and tourism.

Revitalization of schools could bring new educational content for each of these activities. For example, in the agriculture area, where the accent is on "biological cattle breeding" and production of healthy food, these facilities could be used for accommodation for seasonal workers, warehouses, stocks, purchase stations, etc. In the

domain of small business, purpose alteration could clear space for new sections such as purchase, processing and packing of honey, purchase stations for herbs, forest fruits, mushroom dryers. In the domain of services, new restaurants or shops could be opened. In the hunting domain, which has long tradition in this area, it could be a new hunting lodge. When it comes to cultural events purpose alteration could open up activities such as art colonies, music colonies, schools in nature, or even blueberry and mushroom days. Revitalization of these schools would also contribute to tourism that has almost disappeared from this area, as new mountain cottages and huts.

One more season for revitalization would be preservation of education history in the form of historical and architectural material.

Revitalization examples, although a few, almost always bring positive results. As mentioned, one of the rooms in the school in Crna Trava was given to a bicycle club "Orlovac", which is known for incredible results in and outside Serbian borders. The club uses this room as office space. Some of the classrooms in the technical school were repurposed into a masonry museum, where visitors could learn something about building techniques in this area, old tools which were used and objects that were built.



Figure 9. A positive example of a partial purpose alteration - the school in Crna Trava and district Zlatanci, phto J. Momčilović

In the elementary school in Zlatanci, one of the rooms is used as a local community office, and one more is used by the club of beekeepers and as a restaurant, which is opened during the summer.

In the school in Mlačište, the teacher's accommodation space is changed into a shop, but this shop is unfortunately closed because of the very expensive rent.



Figure 10. Mlačište - ex shop, photo J. Momčilović

The reintegration of school buildings that are decaying and losing their functions and changing them would increase the institutional capacity of the village that is otherwise in the majority of the settlements below the lowest level, which would raise the living conditions to a higher level and create a real base in the beginning to reduce and stop depopulation, and then for return, temporary or permanent, as well as for restoring certain contents, and then the villages themselves.

Acknowledgment: This research is supported by the Ministry of education, science and technological development of the Republic of Serbia for the project cycle 2011-2017, within the framework of the project TR36042 – "Optimization of architectural and urban planning and design in function of sustainable development in Serbia"

Dedication: I would like to express my gratitude for the creation of this work to my father, Jovan.

### LITERATURE

- R. Kostadinović, "Crna Trava i Crnotravci", Opštinski odbor saveza boraca Crna Trava, Leskovac, p. 548, 1968.
- [2] Popis stanovništva, domaćinstava i stanova 2011. u Republici Srbiji. Stanovništvo. Starost i pol – podaci po opštinama i gradovima. Knjiga 2, Republički zavod za statistiku Beograd 609 str. 2012, Dostupno na: http://pod2.stat.gov.rs/ObjavljenePublikacije/Popis2011/Starost%20i%20pol-Age%20and%20sex.pdf
- [3] Strateški plan Opštine Crna Trava Strategija održivog razvoja 2013-2018 Opštine Crna Trava, Crna Trava, 70 p, 2012.
- [4] Strateški plan opštine Crna Trava 2006 do 2010. god 45 str
- [5] S. Stanković, "Brod, selo kod Crne Trave", Beograd, 2006.
- [6] Popis stanovništva, domaćinstava i stanova 2011. u Republici Srbiji. Stanovništvo. Uporedni pregled broja stanovnika 1948, 1953, 1961, 1971, 1981, 1991, 2002 i 2011. Podaci po naseljima, Knjiga 20, Republički zavod za statistiku, Beograd 198 str. 2012. Dostupno na: http://pod2.stat.gov.rs/ObjavljenePublikacije/Popis2011/Knjiga20.pdf

- [7] Demografska statistika 2015., Republika Srbia, Republički zavod za statistiku, Beograd, 390 str, 2016., dostupno i na http://pod2.stat.gov.rs/ObjavljenePublikacije/G2016/pdf/G20164001.pdf
- [8] R. Kostadinović, "Vek i po postojanja", OŠ Aleksandar Stojanović Crna Trava, Crna Trava, 126, 1972. god
- [9] J. Hadži Vasiljević, "Prosvetne i političke prilike u južnim srpskim oblastima u XIX veku (do srpsko – turskih ratova1876 – 78)", Beograd, 1928. god
- [10] D. Dimitrijević, "Crna Trava i njeni građevinari", Beograd, p. 174, 1985. god
- [11] V. Stojančević, "Leskovac i leskovačka nahija u 19. veku (1804 1878)", Leskovac, 1987. god
- [12] S. Simonović Monka, "Pečalbarstvo i neimarstvo crnotravskog kraja", SIZ kulture opštine Crna Trava, pp 431, 1983. god
- [13] http://tehnickaskolacrnatrava.nasaskola.rs/strana/85/Licna-karta-mkole/ pristupljeno 30. 10. 2017.
- [14] S. Stojković, "Mlačište", Leskovac, 2004.