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Slađana Đorđević

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OPPORTUNITIES FOR SUSTAINABLE DEVELOPMENT OF RURAL SETTLEMENT AREA OF THE TIMOK VINEYARDS

Bojana Mihajlović¹, Ivana Manić¹, Miroljub Miličić¹, Tijana Đorđević¹, Ljiljana Mihajlović¹, Stefan Denda¹

¹Faculty of Geography, University of Belgrade, Belgrade, Serbia

ABSTRACT

Space of the Timok vineyards with rural communities in its geospatial coverage has exceptional natural resources with a range of characteristics in terms of environmental, cultural and anthropogenic values. Regardless of the prominent potential, development restrictions in this area are numerous. Empirical research shows that over the past decade have survived numerous inherited and generated new problems of ecological and socio-economic status of rural settlements. The cumulative effect of these processes on the local level as advanced environmental degradation and negative habitation demographic trends, which is at the regional and national level deeper and more complex development problems.

Keywords: sustainable development, Timok vineyard, rural settlements

1. INTRODUCTION

Vineyard - crop farming area of of Negotin province extends into the lower part of the highland part of the municipality Neogotin (spatial plan of municipality Negotin¹⁰). Extreme specificity of this regions is the developed grape growing which binds to Timok settlements. The most important wine-growing villages in this region are: Rajac, Rogljevo, Tamnic, Crnomesnica, Aleksandrovac, Braćevac, Kovilovo, Veljkovo, Smedovac, Štubik and a part of the agricultural area Mokranje and Recka. In this area an exceptional value have a stone cellars¹¹, whose construction began in the 60s of the XIX century and which are used for the production and storage of wine and present unique monumental complex and are located in the villages Rajac Rogljevo, Smedovac and Štubik.

2. OPPORTUNITIES FOR SUSTAINABLE DEVELOPMENT OF RURAL SETTLEMENT AREA OF THE TIMOK VINEYARDS

"Pivnice" (wine Cellars) in the Rajac, Rogljevo, Smedovac and Štubik¹² are categorized as cultural - historical sites of great importance, which affects their tourist value [4]. They were constructed near the vineyards, built of stone¹³ and partly buried

¹⁰ Просторни план општине Неготин (Сл. лист општине Неготин, бр. 16/2011).

¹²Stubik (rural areas), Štubik, [7].

¹¹Experts from the Institute for Protection of Cultural Monuments use the term brewery, which was used during the write operation, while locals often use the term "pimnice".

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¹³ Wine cellars, built in the second half of the eighteenth and early nineteenth century were of poor materials. Stone cellars were built in the second half of the nineteenth century. For the construction of

in the ground. In them are located vats, barrels and tools. S. Pavlovic and B. Mihajlovic (2014) according that the census from 1863th, some households in the Rajac had two or three cellars. The same authors sad that — in the wine cellars between the two world wars and after the Second World War, during the autumn and part of winter, carried the social life of the village, and today only families who have a a workforce can sustain vineyards. The vineyards are mostly cleared and converted into arable land, or land plots for sale [4]. Although only conservation work can solve the sustainability of these units in the original condition [1], they were not taken, and increase of public interest in these objects threatens the integrity of the whole, as without the contemporary accession on protection can have negative consequences.

In these recognizable villages with wine cellars lately is being developed more rural tourism. Since the once the main source of income for the inhabitants of this area were selling products, today, substantial income to residents is from wine tourism¹⁴. "In order to popularize wine tourism in Serbia, project "Wine Routes" is realized.

In terms of natural features, this area is characterized by wealth in the forest areas (forest area in the municipality of of Negotin 408.67 km²) [6] and a wealth in the flora and fauna, the Danube river and the coast, mountains Deli Jovan and Midžor, river courses of Timok, Vratna, Zamna, the river of Jasenica and Sikolska river with "prerast" (stone bridge), canyons and waterfalls, high quality agricultural land, suitable climate conditions. In the wide area, there are numerous sites that are protected by the state, which include "Prerast" on the river of Zamna, "prerast" on the Vratna river as natural monuments and protected natural resources -general nature reserve Bukovo (forests), Waterfall of Sikolska river - Rocks of Mokranj. In this area there are numerous speleological objects. In The Spatial plan of municipality of Negotin was suggested area of the Danube (930-845 km) to obtain international protect status (Negotinska Krajina).

From natural disasters in the environment are typical landslides at a few locations, and cover an area of 1.85 km² Their spatial distribution is different in cadastral municipalities: Cacak (60.83 ha), Jasenica (47.73 ha), Rogljevo (17.90 ha) etc. Condition of the overall system of protection against natural disasters in the municipality of Negotin is not satisfying, especially in relation to the spatial aspects of risk management [6].

Vineyard - crop farming area of Negotin province have well connected traffic. Road traffic system in the municipality of Negotin consists existing 1st priority roads _, no. 24 and No. 25, and the second priority roads no. 248, 248a, 249, 254, 278, 260 and 106a [6]. Existing local roads are poor and like connection to touristic attractions in offer, they are verry bad. All local roads require reconstruction and maintenance. The most typical example is the local road (248) which connects Negotin and rural

ale was first used oak, then mud and straw, and since 1860 the sandstone and brick. Wine cellars are built masters of Macedonia, including the distinguished Master Kosta [4].

¹⁴ The term wine tourism, is used in viticulture (viticulture) and tourism, where both have a share in the regional economy, environment and way of life [2].

settlement Rajac (via Kobišnica) length of 25 km. The current situation is extremely bad with cracks, no horizontal and vertical signals. This time exceeds six times over the railway line without signaling. At these crossings are frequent traffic accidents. A great danger in this road cause aggravating weather conditions with snow and ice, due to inadequate maintenance [5].

Rail traffic in this area is over one track railway (Nis) - Crveni Krst - Zajecar - Prahovo Pristaniste, approximately 37.7 miles lenght, with the official positions Prahovo Pristaniste, Prahovo, Negotin, Kobišnica, Mokranje, Veljkovo, Rogljevo, Rajac, Crnomasnica and Tamnič. The railway is in poor condition and is not electrified. Water traffic is present due to the waterway of Danube river.

In all settlements is a specific problem of infrastructure systems, particularly the evacuation of waste water. Water infrastructure in this area is not developed sufficiently. Villages usually have a so-called rural water supply systems and pumps and wells. In the field of hydro power is the most important hydroelectric system "Derdap". In this area, there is potential for greater use of renewable energy through small hydro power plants, solar and geothermal energy, biomass and wind energy [5]. Most settlements have no solving issues relating to waste disposal, which is a serious ecological problem. The waste is usually disposed at illegal dumps, or be burned. This can cause a large environmental problems. Because of that, the resolution of this problem is necessary.

3. SUSTAINABLE TOURISM - DEVELOPMENT OPPORTUNITY WINEGROWING - FIELD CROPS REGIONS OF NEGOTIN PROVINCE

Needs to find a specific space and new ways of presenting tourism products resulted the offer based on wine growing and winemaking. Sales of wine to visitors is the basis of business success of many small wineries. Wine tourism includes the processes, phenomena and relationships arising from the interest of visitors to the production and consumption of wine, a way of life, culture and traditions of wine regions [4]. One of the main reasons for the development of tourism in this area is the existence of a wine cellars in Rajac and Rogalj. This area has a specific ambient and it's destined for tourism development. In recent years more and more tourists are interested in visiting this location. More frequent visits are during the spring and summer months. That tourism could be developed to a significant extent, it's necessary to provide communal and traffic rehabilitation and education of local residents and wine makers.

One of the preconditions for further development of these settlements is revitalization of wine cellars, and incentives recovery of viticulture. For the development of tourism in this area, important are village events (eg Event for the holiday of St. Trifun in Rajac).

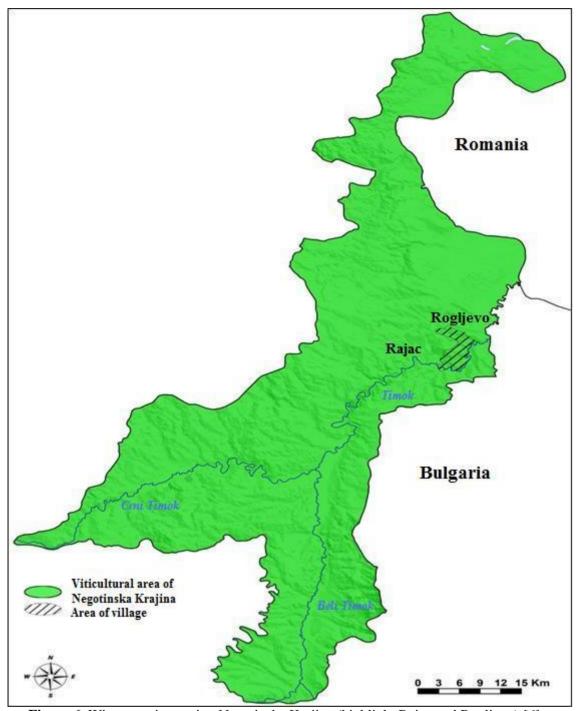


Figure 6. Wine-growing region Negotinska Krajina (highlight Rajac and Rogljevo) [6]

4.ENVIRONMENTAL PROTECTION MEASURES AND DEVELOPMENT OF THE TIMOK WINE REGIONS AND VILLAGES

Environmental protection measures are:

- 1. preparation of spatial planning documents;
- 2. Master Plan in line with similar destinations in the region;
- 3. preparation of local development strategies based on the territorial approach;
- 4. regulation of infrastructure;
- 5. measures for the conservation and protection of surface and groundwater and their reserves, quality and quantity;
- 6. strict protection and control sources of water supply;
- 7. protection of land, particularly high-quality, of all forms of pollution;
- 8. preservation of cultural and monumental heritage;
- 9. support in development and promotion of organic food;
- 10. organization of settlements;
- 11. Restoration of wine cellars;
- 12. increasing environmental awareness of tourists;
- 13. restoration of traditional rural households and
- 14. promotional activities.

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