

# REGIONAL FACTOR OF SUSTAINABLE DEVELOPMENT OF RURAL SETTLEMENTS OF KALNA AND MINIĆEVO AT THE FOOT OF THE STARA PLANINA MOUNTAIN

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Developmental potential of rural settlements of Kalna and Minićevo should be reviewed in the wider context of the area in which they are located. The natural resources of Stara Planina mountain, as a special purpose area focused on tourism and agriculture, represent the basic components for sustainable development of the mentioned settlements. The heritage of autochthonous, traditional rural architecture and sacral buildings, together with natural resources potentials, represent attractors for the development of a specific form of rural tourism. This research paper presents an analysis of the options for the development of rural tourism in the territory of Knjaževac municipality, aimed at sustainable development of rural settlements of Kalna and Minićevo. The basic idea of the paper is for Kalna and Minićevo to become the centres towards which the population of smaller surrounding villages will gravitate: towards Kalna as a potential tourism centre and towards Minićevo as a transit tourist settlement with accompanying public and other services. The purpose of the paper is not to offer a solution that would completely eliminate economic and demographic changes, but to review different options for the development of rural settlements that could keep up with modern social needs.

**Key words:** rural settlements, Stara Planina mountain, rural tourism, sustainable development.

## INTRODUCTION

The rural settlements of Kalna and Minićevo, in Knjaževac municipality in Timok region, are situated in the territory of the "Stara Planina mountain" Nature Park and tourism region which is suitable for tourist activities from the aspect of developmental possibilities. In this sense, the Stara Planina mountain presents a regional factor of their sustainable development. The settlement selection criterion is based on the geographical position of the aforementioned settlements, but also on the fact that they used to be municipal centres.

The research has included two settlements different in the time they emerged, their functions and positions as they, considering their character, generate different possibilities for the rural tourism development. Minićevo, located in the lower part of Stara Planina mountain, and Kalna, located in the higher part of the mountain, are two diametrically opposite settlements which have different possibilities for development regarding their natural resources and cultural and historical values.

The decrease of agriculturally active population in the territory of Stara Planina mountain requires drafting of new development strategies which could have a positive impact on the economic structure of households in this area. Tourism as an engine of development in the context of modern society can improve the social and economic position of the local population. Stara Planina mountain has specific developmental capacities from the natural and cultural point of view, which can certainly be used for the purposes of a potential tourism offer (Milijić *et al.*, 2009).

The development of tourism in this sense would contribute to a more comprehensive integration of rural settlements in contemporary social trends. This, naturally, relates to the settlements which have appropriate capacities. However, it should be kept in mind that the majority of settlements in this area consist of households populated with old individuals, as well as that many of them have less than 100 inhabitants (Mitrović, 2015).

Tourism in rural areas implies a whole set of activities, services and facilities provided by the local community and population, with the purpose of creating additional income sources. In line with this, capacities and options for

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rural tourism activities are defined by natural, cultural and anthropogenic factors. Depending on these, rural tourism can focus on the development of nature-based activities such as hunting, fishing, mountain climbing etc., or on the development of rural tourism aimed at familiarizing tourists with village life.

This paper analyses the possibilities for the rural tourism development aimed at sustainable development of rural settlements and creation of secondary centres, using the example of settlements Kalna and Minićevo which belong to the territory of Knjaževac municipality. Having in mind that the aforementioned settlements structurally belong to the category of small rural towns, the existence of appropriate infrastructure favours the option of transforming them into economic and administrative centres of surrounding villages.

The contribution of this research paper is defined by the improvement of the existing sustainable development strategies which recognize rural tourism primarily as one of the tools for revitalization and development of rural settlements. The settlements concerned are viewed in this paper as a part of the wider area of Stara Planina mountain which, owing to its natural resources potentials, as a regional resource, can be used from the aspect of development of rural settlements in its territory.

Our research is based on the assertion that sustainable development of rural settlements in Stara Planina mountain can be attained through mutual integration of several settlements on a functional basis, which in turn can enable their coordinated development. Rural tourism development in that sense is used as a starting point, with the idea of integrating a tourist offer, easier entry on the market, and integrating new functions in the settlements.

If we consider the basic determinants of sustainable rural tourism development, the settlements of Kalna and Minićevo have acceptable capacities from the aspect of natural values. The existence of municipal infrastructure is one of the basic parameters, since it enables the rehabilitation or construction of facilities that could satisfy specific contemporary lifestyle needs.

Essentially, the task of this research paper is to indicate the possibility of linking several rural settlements in the goal of common tourist activities. The basic idea of the paper is for Kalna and Minićevo to become the centres towards which the population of smaller surrounding villages will gravitate, which would provide an easier entry in the tourism market and placement of the values of natural, traditional and cultural heritage of this area (Figure 1).

This paper is not aimed at promoting sustainable development at all costs, in case that there are no objective capacities for it. Sustainable development of settlements of Kalna and Minićevo is primarily aimed at rural tourism development aligned with the capacities of individual households, as well as the existing natural, cultural and historical values of the immediate surroundings.

The demographic trends in Knjaževac municipality are characterized by negative birth rate, ranging from 10 ‰ to 15.5 ‰ (Mitrović, 2015). We should also note the distinct trend of migration to larger centres which has a negative impact on the age structure of settlements (Devedžić and Stojilković-Gnjatović, 2015)(Table 1).

Table 1. Number and percentage of population aged 65 and more in the total population according to the 2011 Census

Region	In total	65 years and over	%
South and East Serbia	1563916	303006	19.37

Source: Devedžić and Stojilković-Gnjatović, 2015

A large number of settlements in Knjaževac municipality are in the phase of demographic decline. Knjaževac municipality belongs to those Serbian municipalities which contain the highest number of settlements with the population of 100 or less (Mitrović, 2015). Out of the total of 85 settlements, only one is classified as urban, and 52.1% of population lives there. As far as the rest of municipal population is concerned, 34.4% live in the settlements located in lower hills, and 9.5% in higher mountains (Sibinović and Martinović, 2010).

This research aims to connect Stara Planina mountain villages within the framework of rural tourism activities

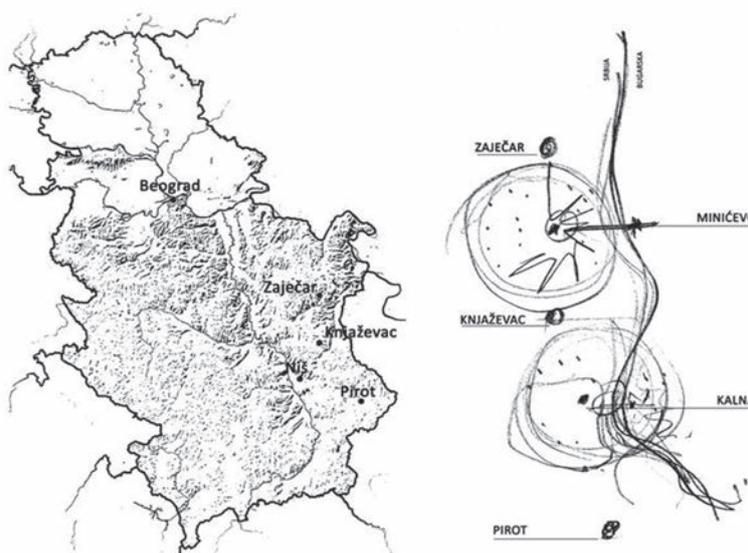


Figure 1. Minićevo and Kalna as gravitation centres

(Source: <http://www.kartasrbije.net/karta%20srbiije.html>; processed by authors)

with the trend of further development. The purpose of the paper is not to offer a final solution which should be followed and which would direct the development of all settlements in the area. The basic idea relates to the establishment of a network of those rural settlements which (economically speaking) have authentic natural, cultural and historical potential for sustainable tourism development.

### RURAL ECONOMY DIVERSIFICATION: TOURISM AS A FORM OF SUSTAINABLE DEVELOPMENT

In this research paper, the diversification of rural economy is formulated from the aspect of tourism development as a form of sustainable development. Agriculture no longer presents a sustainable economic activity, and the size of active agricultural population in the territory of Knjaževac municipality keeps declining every year, which creates a need for discovering new sustainable development models (Table 2). In this context, we should strive to an integrated tourism and agricultural development to enable the retention of active population in these areas. The introduction of new tourism-related activities could, to a certain extent, preserve the agricultural production. Such a practice would simultaneously engender the introduction of new facilities in the villages, with the aim of improving the living conditions of local population.

The development of new activities in rural areas can contribute to the specific increase in income of the local population. Such practice can redefine existing relations, introducing new models in terms of rural development (Knickel *et al.*, 2009).

Sustainable development largely depends on the position of Kalna and Minićevo settlements, but also on immediate vicinity of Stara Planina mountain centre of tourism. Their integration into the tourism offer of the Stara Planina mountain centre can contribute to the improvement of organic farming, primarily in terms of the direct placement of agricultural products to tourists. In this context, the position and degree of infrastructural development of these settlements also implies the existence of certain organizational and technical conditions of the tourism offer of the settlements themselves.

Tourism development is accompanied by general social development, which causes the social, economic and cultural

relationships to have a considerable impact on the direction of its development. Sustainable tourism development in Serbia remains in its initial phase, where its legal framework is being harmonized with EU legislation (Orlović-Lovren *et al.*, 2013). However, such practice does not reflect the real situation (Maksin *et al.*, 2011).

The baseline of sustainable development is provided in Agenda 21 of the UN Charter which generally relates to environmental protection. The Charter is the cornerstone of all European sustainable development strategies. According to this document, economic and social sustainability are the most important segments of sustainable development.

Economic sustainability implies the ensuring of economic baseline at all social strata. Social sustainability, on the other hand, apart from respecting fundamental human rights, also relates to inclusiveness aimed at poverty reduction, i.e. as a support to social and territorial cohesion and increased employment opportunities.

In this context, the strategic development of rural settlements gains specific importance. Ensuring social and economic living conditions in rural settlements, besides its impact on improvement and development of potentials for tourism, can also influence the resolving of the issue of the natural and cultural heritage protection, which is in line with the 2007 Agenda for a Sustainable and Competitive European Tourism, ASCET.

Knjaževac municipality falls into the category of municipalities with the lowest average income in the Republic of Serbia. This average is even below the one for the region of Eastern and Southern Serbia. (Table 3) The high poverty rate in Stara Planina mountain villages goes in favour of the aforementioned claims on the necessity for inclusion of settlements from this area in the contemporary development flows.

The tourism development can contribute to ensuring a relative financial security (Đorđević-Milošević and Milovanović, 2012). The area of Knjaževac municipality can be used in this sense, primarily because it has different options for the development of mountain, natural and rural tourism. Analysed from the aspect of new tourism trends, stationary stay of guests in a single location is no longer dominant. Accordingly, the development of rural tourism in villages gained importance over the last few years.

Table 2. Total agricultural population in the regions of East and South Serbia, 2002-2011

Year Census	Settlement type	Total population	Total agricultural population	Active agricultural population	Percentage of agricultural population in total population (%)
2002	Total	1965611	222288	151488	11,31
	Urban	927697	8414	4292	0,91
	Other	1037914	213874	147196	20,61
2011	Total	1563916	123647	76796	7,91
	Urban	816749	6147	3429	0,75
	Other	747167	117500	73367	15,73

Source: Mitrović, 2015

Table 3. Average income for March 2016 by regions

Region	City of Belgrade	Vojvodina	Šumadija and West Serbia	East and South Serbia	Municipality of Knjaževac
Average income for March of 2016.	79 380	60 566	52 107	54 882	43 423

Source: SORS, 2016

Sustainable rural tourism development has several important criteria that need to be met. Beside natural and cultural factors, human resources and the so-called capital factor are equally important factors in the process of establishing a sustainable rural tourism development.

The capital factor implies a certain level of entrepreneurship, infrastructure, loan accessibility etc., while human resources, on the other hand, primarily relate to the number of inhabitants in the settlements, as well as the level of their technical and other capacities for tourism-related activities. If any of the aforementioned factors are not established, the very concept of sustainability becomes essentially damaged.

The development of Serbian rural areas in the modern society implies contemporary methods by which individual households or whole communities could be revitalized from the aspect of a balanced development of social, economic and spatial factors (Pucar and Josimović, 2010).

In this context, rural tourism could contribute to a balanced relationship between agriculture and other rural activities. Individual rural economy could be initiated as an additional source of income, primarily because this would present a way for individual households for placing their agricultural products.

Of course, rural tourism in Serbia cannot be directly compared to the experiences of other European countries, but Serbia's natural resources potentials could make its tourism offer closer to theirs. This especially relates to the rural settlements in the so-called "priority tourism regions", among which we can certainly highlight the area of Stara Planina mountain (Pucar and Josimović, 2010).

According to the 2011 Master Plan for Sustainable Tourism Development in the Republic of Serbia, the rural tourism development is defined primarily as an economic, social and environmental priority (*Master Plan for Sustainable Tourism Development in the Republic of Serbia, 2011*). The Plan essentially represents a model for diversification of rural economy which can provide financial security to a larger number of households. Accordingly, the number of households largely depends on the tourism offer in the observed area.

Agriculture should not be rejected as an outdated model of rural development. Innovation in terms of entrepreneurial skills in agricultural sector can contribute to the advancement (Ploeg *et al.*, 2000). Rural tourism development in this direction should be used with the aim of improving incentives, for example, organic agriculture.

#### **STARA PLANINA MOUNTAIN AS A SPECIAL PURPOSE AREA**

The Republic of Serbia has numerous possibilities and capacities for the development of different types of mountain tourism (Krunić *et al.*, 2010). According to the Spatial Plan of the Republic of Serbia, the high mountain part of Stara Planina mountain is defined as a primary tourist destination with all-year round tourism offer within the zone of tourism cluster of Eastern and Southern Serbia (*Spatial Plan of the Republic of Serbia 2010–2020*). Accordingly, it is a considerable potential which can be used, from the

aspect of a specific form of tourism-related activities, by the settlements in this area (*Law on Tourism 2009*).

Stara Planina mountain as a nature park covers parts of territories of municipalities of Dimitrovgrad and Knjaževac, as well as of the cities Pirot and Zaječar, and creates a natural border with The Republic of Bulgaria in the east. The largest number of cadastral municipalities, 39 of them to be more precise, belongs to Knjaževac (*Spatial Plan for the Stara Planina Mountain Nature Park and Tourism Region, 2008*).

High percentage of pastures is typical for the agricultural land in the area of Stara Planina mountain (45.2%). Vineyards and orchards are the most valuable agricultural resources. Mountain areas are characterized by the disappearance of agriculture, where depopulation is named as the primary cause for this phenomenon (*Spatial Plan for the Stara Planina Mountain Nature Park and Tourism Region, 2008*).

The lack of developed services in the majority of Stara Planina mountain settlements is also a result of poor demographic situation, as well as a result of economic, technical and infrastructural underdevelopment of the existing rural settlements. Such a situation results largely in the facilities which are removed from contemporary social standards.

The area of Stara Planina mountain is characterized by wooded areas owned by the State (approximately 57.4%). The Spatial Plan identifies the variety of forest, meadows and endemic communities, the majority of which belong to rare species. This area is managed by PE "Srbijašume" and the Hunting Association of Serbia, i.e. eight hunting clubs. As far as hunting is concerned, the area is considered to be underdeveloped due to a low number of small and big game, but also due to the lack of concern for the protection and preservation of rare and endangered species (*Spatial Plan for the Stara Planina Mountain Nature Park and Tourism Region, 2008*).

Regarding the issue of business activities, the Spatial Plan specifies that the area of Stara Planina mountain has entered the transition process, adapting to the needs of modern market. The economic structure is characterised by the decline of social product and the increase of unemployment rate, which are the most important indicators of the current economic stagnation.

On the other hand, the tourism offer of relevant municipalities is underdeveloped and lacks any functional linkages. The tourism development in this area remains at its initial stage. The accommodation facilities are rare or practically non-existent outside of municipal centres. The existing tourism infrastructure in the territory of Knjaževac municipality is limited to a sports centre with a swimming pool, sports grounds in Rgoška banja, ethno centre in the village of Inovo near Kalna, a hotel with a ski trail at Jabučko Ravnište, and a mountain lodge on the Babin Zub peak.

The most important tourism resources in the area of Stara Planina mountain are its natural resources potentials. Owing to a low number of inhabitants, the specific ecosystems have been well preserved. Nature is disturbed minimally, but due to the accelerated decline of agriculture in this region,

the survival of pastures and meadows has been brought into question, because they are slowly being suffocated by weeds.

The cultural properties located in Knjaževac municipality have been well documented and are protected units; however, as such they are insufficiently visible to the modern society. The tourism potential of this cultural heritage may, in this sense, represent a starting point for future tourism development in this area.

The Stara Planina mountain's potential should be observed as a whole. Partial reviews would lead to negative impact of tourism on the nature and environment (Maksin *et al.*, 2011). This is exactly why the analysis of the options for development of rural settlements in this area was researched through the aspect of tourism development in Stara Planina mountain (Milijić *et al.*, 2009).

### RURAL SETTLEMENTS OF KALNA AND MINIĆEVO AS CASE STUDIES

The changes in economic activities, settlement hierarchy and the introduction of new functions are the main characteristics of the transition process. Thus, it is necessary to identify a model for sustainable development of the analysed settlements which could take the role of secondary centres of tourism development in the Stara Planina mountain region.

After reviewing the available capacities for rural tourism development in the framework of this research, Minićevo and Kalna have been defined as logistics centres with the necessary contents of public and other services. By offering technical, infrastructural and administrative support to smaller neighbouring villages, they would take a role of secondary centres in relation to Knjaževac, Zaječar and Pirot as urban settlements.

Kalna is potentially the secondary tourism centre and a place for accessing the high-mountain tourism complex of Jabučko Ravnište – Golema Reka in the territory of Knjaževac municipality. In this context, the rural settlements in the gravitation area of Kalna can be important for the development of organic farming as an essential segment of sustainable rural development.

Minićevo does not have that significant tourism potential, but, on the other hand, its position is suitable for developing transit tourism towards Stara Planina mountain from the direction of Zaječar towards Kadibogaz border crossing, excursion sites in the low mountain parts of Stara Planina mountain and Tupižnica, mainly in summer. For this reason, the development of Minićevo is mainly oriented towards the improvement of production on small and medium-sized farms with the aim to supply the tourism offer of Stara Planina mountain and also to supply other markets.

The rural settlements located in hilly and mountain areas of Stara Planina mountain are attractors for the development of specific forms of tourism. The potentials of smaller settlements generate a functional entity which establishes a common direction for economic development. A coordinated development and joint goals, on the other hand, enable complementary sustainable development of a wider area of Knjaževac municipality.

The relevance of this research has been defined by the transition period which initiates the introduction of new activities aimed at potential economic sustainability of rural settlements in the analysed area. The transition phase defines an ideal framework for the establishment of a specific development model.

The rural settlements with the economic development potential in the form of existing infrastructure and the solutions for use of space, according to this paper would be classified as future tourist villages. The value of their natural and cultural heritage would make them an important part of the wider area of Stara Planina mountain as a tourist attraction (*Spatial Plan of the Republic of Serbia 2010-2020*). The settlements which should be noted in this regard are Potrkanje, Petruša, Ošljane, Jelašnica, Bučje, Ravna, Koželj (gravitating towards Minićevo) and Balta Berilovac, Aldina Reka, Ravno Bučje, Donja Kamenica, Gornja Kamenica (gravitating towards Kalna) (Figure 2).

As far as the protected natural areas in Knjaževac municipality are concerned, we should highlight "Draganište" nature reserve as a representative of alpine spruce community and "Golema reka" as an example of preserved mountain beech forests, protected by law since 1981. When listing natural potential, we should also name springs located mostly in mountain ranges more than 1,600 meters above sea level, which can be attractive as natural phenomena (*Spatial Plan for the Stara Planina Mountain Nature Park and Tourist Region, 2008*).

According to the Spatial Plan for Stara Planina mountain, Knjaževac municipality is characterised by a certain number of unregistered units and individual, traditionally constructed buildings in some settlements, but also by two archaeological sites. This heritage can become a part of a tourism offer.

The Spatial Plan for Stara Planina mountain identifies villages in mountain areas as preserved traditional units and cultural heritage sites. The rural settlements have mostly kept the autochthonous values and applied materials, justifying their role as attractors for the development of specific types of rural tourism (i.e. ethno-villages).

As far as the preservation of traditional rural architectural heritage is concerned, special attention should be paid to villages of Balta Berilovac (Knjaževac), Topli Do and Gostuša (Pirot) which could be important for tourism as ethno-units in the wider area of Stara Planina mountain. The establishment of concept of an ethno-village as a museological form can present this traditional heritage to the modern society.

A presentation of the local community's historical development can be important for understanding the cultural significance of these settlements in the wider context of Stara Planina mountain. Especially when having in mind the fact that there are few ethno-parks in Serbia organized in line with the generally accepted principles that objectively present vernacular architecture (Marić *et al.*, 2010). The expansion of the so-called ethno-villages most often presents a misuse of this concept, degrading the cultural heritage, primarily through the use of inadequate building materials.



Figure 2. Knjaževac tourist map

(Source: <http://www.toknjazevac.org.rs/wp-content/uploads/2015/01/Karta-Balta-Berilovac-1.jpg>)

On the other hand, the cultural and historical resources located in Knjaževac municipality mostly belong to the heritage of sacral architecture. The most important cultural monuments in the analysed territory include the monasteries of Holly Trinity in Gornja Kamenica (15th century), Church of Our Lady in Donja Kamenica (14th century), and the monastery of Suvodol near Minićevo built in the 13th century. However, we should also mention other important cultural monuments that are not located in the municipality, but in its immediate surroundings, such as the Monastery of St. George in Temska near Pirot, built in the 11th century.

The smaller rural settlements, such as Ravna, have important historical monuments dating back to the Roman period (Figure 4). The diversity of cultural and historical heritage favours this paper's assumption that by uniting several settlements at a functional level, in this case the tourism development, we can achieve a coordinated economic development.

The aforementioned natural and cultural heritage potentials of Stara Planina mountain sites can represent the cornerstone for future tourism development, while giving Kalna and Minićevo the role of recipients. Hence, tourism as a secondary branch of economy can trigger the economic development, which would primarily be reflected in individual agricultural production. In this way, the households would be able to place their agricultural products to tourists who decide to try the local healthy food.

The geographical position of Kalna and Minićevo settlements is such that they are physically located in the midst of many settlements, having the diverse natural, historical and cultural resources. Good road infrastructure additionally contributes to the settlements to become economic and administrative centres (Simonović, 1970).

Minićevo belongs to the category of clustered settlements. According to its spatial and geographical characteristics, it represents an important link between smaller rural settlements and larger centres, such as Knjaževac. The location of the settlement, near the Kadibogaz border



Figure 3. (on the left) Mountain lodge in village of Dojkinci, Pirot

(Source: <http://www.juznasrbija.info/lat/turizam/na-staraj-planini-kod-dojkina-najbolji-planinarski-dom-u-srbiji.html>) and

Figure 4. (on the right) Remains of roman baths in Ravna village, Knjaževac

(Source: <https://ssl.panoramio.com/photo/50846652>)

crossing in Bulgaria, makes it unique from the aspect of road connections to both countries, which can be important in the context of further development and advancement of tourism.

The cross-border link to Bulgaria and the improvement of tourism in this area can contribute to sustainable local rural development. In this context, the Spatial Plan for the Stara Planina Mountain identifies the specific intergovernmental agreements signed between Serbia and Bulgaria as examples of positive practice in the field of economic development and cultural cooperation between the two countries (e.g. "West Stara Planina Mountain" Project).

The rehabilitation of the former army border post and its transformation into a mountain lodge in Dojkinci village near Pirot, funded by the programme for intergovernmental Serbian-Bulgarian cooperation, is another example of the best practice. The lodge is a base intended for nature enthusiasts and encourages the perseverance in efforts aimed at future improvement of alpine tourism in this area (Figure 3).

Until 1965, Minićevo was the centre of municipality, so it occupied a very important economic and administrative position. Its location between two larger urban settlements makes it a potential secondary centre and a hub for numerous smaller villages in Knjaževac municipality. The potential for sustainable development of the settlement is evident precisely in the possibility for strengthening its position as a secondary centre in the network of settlements, which would improve the living standard and the needs of local population considerably.

On the other hand, Kalna has also been a centre of municipality consisting of 14 settlements until 1965. In 1963, uranium was discovered in the village of Grabovnica, near Kalna, and it was considered that this discovery would launch an economic revival of this area. The infrastructure underwent great improvements, and considerable efforts were invested in the construction of public facilities and workers' colonies. The construction of the mine and the adjoining settlement was halted after only two years, which caused demographical movements and migrations mostly towards Knjaževac and Zaječar, as larger centres.

As far as tourist facilities are concerned, a ski-tourist centre was built in 2011 in Kalna, at Jabučko Ravnište to be more precise, and there are plans for its further development in the form of new facilities. The newly built hotel, however, remains an only example, so the relevant development is slow-going.

When compared to Minićevo, Kalna is another extreme. According to the 2011 Census, the population of the settlement was 289 people. This is practically a dying village. However, its good infrastructure and facilities can be used for a potential settlement revival. Its location, between Pirot and a newly constructed winter tourism centre in Stara Planina mountain, can be important for its future position of a secondary tourism centre.

Through exploitation of Stara Planina mountain's natural resources for the purposes of rural tourism, Kalna could become a reception centre for nature and sport enthusiasts,

as a kind of alternative to the existing hotels in Jabučko Ravnište. We can conclude that the tourism development in Kalna and Minićevo can partially initiate the economic development of these settlements, but it is not practically possible for it to become the main engine of that economic development. The main development criterion remains defined by human resources, which additionally excludes the practically dying villages from contemporary development possibilities.

Kalna as a potential secondary tourism centre should also have an accommodation capacity to support the accommodation capacity of the Stara Planina mountain resort. It should also have a single information-tourist base (visitor information centre) that would include the rural settlements in the gravitation area of Kalna and certain public and other services that would primarily meet the needs of the local population (e.g. post office, health centre, different commercial contents, etc.). Regardless of its different position and concept of sustainable development as a transit tourism centre, it is necessary for Minićevo to have the same contents, primarily because it is a part of an international transit direction.

## CONCLUSION

Sustainable development of rural settlements in mountain areas has a specific spatial and environmental significance. The configuration of the terrain mostly limits developmental options of these areas, and tourism, in this sense, represents an acceptable form aimed at encouraging the development of different economic activities, primarily because it can be adapted to the needs of local population.

The contemporary concept of sustainable development of rural settlements in mountain regions is primarily based on the achievement of an acceptable relationship between the living standard and economic activities of local population. The market for placement of local products can be created if this is taken into consideration. The creation of conditions for rest and relaxation and representation of local natural and cultural heritage remain, to a certain degree, a secondary element (Maksin *et al.*, 2011).

In practice, it is impossible to completely stop the depopulation of rural areas. However, the tourism development can improve the social and economic circumstances of individual households. The concept of tourist activities in rural settlements of Kalna and Minićevo is defined in a secondary sense as a support to the existing capacities, e.g. the newly constructed hotel complex at Jabučko Ravnište.

The rural settlements of Kalna, Minićevo and those similar to them, have lost their rural character, making them economically undefined. The loss of their central role has also contributed to an additional reduction in population, not forgetting migrations towards city centres and the negative birth rate trends. In this context, tourism can contribute to the establishment of the economic cohesion of the analysed settlements.

The research advocates the launching of a strategy for the development of rural settlements in mountain regions. Since such settlements belong mostly to the preserved traditional

communities, the features of autochthonous architecture can be an attractive part of the tourism offer. The concept of development of the settlement of Kalna is defined by the immediate vicinity of the tourism centre in Stara Planina mountain, which can contribute to the development of tourism offer of this settlement in the function of a secondary tourism centre. Minićevo, on the other hand, should base its concept of sustainability on a transit and inter-state connectivity with Bulgaria, as a transit tourist settlement, thus providing the possibility to consider the overall potentials of Stara Planina mountain on both sides of the Serbia-Bulgaria border.

In this paper we have reached a conclusion that sustainable tourism development represents a good form of economic revival of the analysed settlements, which will literally change their character by establishing the features of secondary village centres as administrative and economic hubs. This development model, in a certain way, can stop the negative trend of economic stagnation.

## REFERENCES

- Devedžić M., Stojilković-Gnjatović, J. (2015) *Demografski profil starog stanovništva Srbije*. Beograd: RZS. [Devedžić M., Stojilković-Gnjatović, J. (2015) *The demographic profile of the older population in Serbia*. Belgrade: SORS].
- Djordjević-Milošević S., Milovanović J. (2012) *Održivi turizam u funkciji ruralnog razvoja*. Beograd-Vršac-Budimpešta: Fakultet za primenjenu ekologiju Futura, Univerzitet Singidunum. [Djordjević-Milošević S., Milovanović J. (2012) *Sustainable Tourism for Rural Development*. Belgrade-Vršac-Budapest: Faculty of Applied Ecology Futura, University Singidunum].
- Master plan održivog razvoja ruralnog turizma u Srbiji (2011) Program Ujedinjenih nacija u Srbiji [Master Plan for Sustainable Tourism Development in the Republic of Serbia (2011) United Nations programme] [available at: <https://futurehospitalityleaders.files.wordpress.com/2012/11/master-plan-odrzivog-razvoja-ruralnog-turizma-u-srbiji.pdf>, accessed 7<sup>th</sup> Jun 2016].
- Marić, I., Manić, B., Bajić, T. (2010) Pojam etno-sela i njegov značaj za razvoj turizma u Srbiji, in Pucar, M. and Josimovic, B. (eds.) *Održivi razvoj banjskih i turističkih naselja u Srbiji*. Beograd: IAUS, special editions, No. 64, pp. 141-158. [Marić, I., Manić, B., Bajić, T. (2010) The concept of ethno-village and its importance for the development of tourism in Serbia, in Pucar, M. and Josimovic, B. (eds.) *Sustainable development of spas and resorts in Serbia*. Belgrade: IAUS, special editions, No. 64, pp. 141-158.].
- Marić, I., Niković, A., Manić, B. (2010) Kulturno nasleđe, prirodne vrednosti i novi programi u funkciji razvoja turizma ruralnih područja, in Pucar, M. and Josimovic, B. (eds.) *Održivi razvoj banjskih i turističkih naselja u Srbiji*. Beograd: IAUS, special editions, No. 64, pp. 159-184. [Marić, I., Niković, A., Manić, B. (2010) Cultural heritage, natural values and new programs in the development of tourism in rural areas, in Pucar, M. and Josimovic, B. (eds.) *Sustainable development of spas and resorts in Serbia*. Belgrade: IAUS, special editions, No. 64, pp. 159-184.].
- Maksin M., Pucar, M., Milijić, S., Korać, M. (2011) *Održivi razvoj turizma u Evropskoj uniji i Srbiji*. Beograd:IAUS. [Maksin M., Pucar, M., Milijić, S., Korać, M. (2011) *Sustainable development of tourism in the European Union and Serbia*. Belgrade: IAUS.].
- Mitrović M. (2015) *Sela u Srbiji, promene strukture i problemi održivog razvoja*. Beograd: RZS. [Mitrović M. (2015) *The villages in Serbia, changes in the structure and problems of sustainable development*. Belgrade: SORS].
- Milijić, S., Banićević, D., Krnić, N. (2009) Strategic Evaluation of Economic feasibility of Mountain Tourist Region Development – Case Study of Stara Planina, *SPATIUM*, No. 19, pp. 56-68.
- Orlović-Lovren V., Crnčević T., Milijić S. (2013) Tourism development in Serbia: On the way to sustainability and European integration, *SPATIUM*, No. 30, pp. 47-53.
- Pucar, M., Josimović, B. (2010) *Održivi razvoj banjskih i turističkih naselja u Srbiji*. Beograd: IAUS, special editions, No.64. [Pucar, M., Josimović, B. (2010) *Sustainable development of spas and resorts in Serbia*. Belgrade:IAUS].
- Prostorni plan Republike Srbije od 2010–2020. godine (2010) Službeni glasnik Republike Srbije 88/2010. [*Spatial Plan of the Republic of Serbia 2010-2020* (2010)].
- Prostorni plan područja posebne namene Parka prirode i Turističke regije Stara Planina (2008) Službeni glasnik Republike Srbije 115/08. [*Spatial Plan for the Stara Planina Nature Park and Tourist Region Area* (2008)].
- Ploeg, J.D., Renting, H., Brunori, G., Knickel, K., Mannion, J., Marsden, T., Roest, K., Sevilla-Guzmán, E., Ventura, F. (2000) Rural Development: From Practices and Policies towards Theory, *Sociologia Ruralis*, Vol 40, Number 4, pp. 391-408.
- Sibinović, M., Martinović, M. (2010) Teritorijalno - demografske promene Opštine Knjaževac, *Demografija*, volume 7. [Sibinović, M., Martinović, M. (2010) Territorial - demographic changes in Municipality Knjaževac, *Demografija*, volume 7.]
- Simonović, Đ. (1970) *Centri zajednice sela u Srbiji – seoske varošice i seoske čaršije*. Beograd: IAUS, GK. [Simonovic, Dj. (1970) *Centres of village communities in Serbia - large villages and small rural towns*. Belgrade: IAUS].
- Statistical office of the Republic of Serbia (SORS) (2016) *Report, Statistics of employment and earnings, earnings per employee in the Republic of Serbia, by municipalities and cities in March 2016*. Belgrade:SORS.
- Knickel, K., Brunori, G., Rand, S., Proost, J. (2009) Towards a Better Conceptual Framework for Innovation Processes in Agriculture and Rural Development: From Linear Models to Systemic Approaches, *The Journal of Agricultural Education and Extension: Competence for Rural Innovation and Transformation*, Volume 15, Issue 2, pp. 131-146.
- Krnić, N., Milijić, S., Đurđević, J. (2010) Razvoj planinskog turizma u Srbiji i zemljama u okruženju, *Arhitektura i urbanizam*, No. 29, pp. 3-9. [Krnić, N., Milijić, S., Đurđević, J. (2010) The development of mountain tourism in Serbia and neighboring countries, *Arhitektura i urbanizam*, No. 29, pp. 3-9.]
- Tourism Act/Zakon o turizmu* (2009) Službeni glasnik Republike Srbije 36/2009.

Received May 2016; accepted in revised form June 2016.