LIVESTOCK AND TOURISM DEVELOPMENT AS A CONSERVATION CONCEPT OF THE SPECIFICITY OF RURAL AREA IN THE MUNICIPALITY OF PETROVAC ON MLAVA

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Abstract

Of the total area that the municipality owns, agricultural areas represent the most valuable natural potential and it provides the conditions for a diversified agricultural production. Agricultural land occupies 74.1% of the total area, but the utilization rate is modest (30%) due to the long-term decline in livestock and the emigration of the working-age population. The tourist potentials of the municipality were not fully activated, so the tourist and catering activity maintained a relatively low share in the structure of the social product.

The rural area of the municipality represents a significant (but still unused) resource not only for conventional food production, but also for the development of sustainable organic livestock production, processing industry, forestry, water management, trade, tourism, hunting, fisheries beekeeping, etc. The analysis shows that, in the future, the development of livestock and tourism should be the backbone of the rural development of the municipality of Petrovac on Mlava.

Key Words: Petrovac on Mlava, agricultural resources, livestock development, tourism development
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Introduction

The development of agriculture is influenced by a number of factors, which are usually systematized in three basic groups: natural, demographic and economic. It is very difficult to quantify the impact of individual groups of these factors, whose role and significance change in

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certain phases of socio-economic development of a particular country (Ševarlić et al., 2008).
The main characteristic of the decades-long state of agriculture in Serbia is the economic devastation and the continuous reduction of the income of agricultural producers. In varying intensity and modalities this is manifested through the extraction of surplus value from agriculture mainly for the benefit of three sectors: industry, trade and banking (Mekić & Novaković, 2012).

Food safety and quality have a decisive impact on the placement of agricultural and food products on the domestic and global market (Popović et al., 2017).

Due to this situation, domestic cattle production is in an unfavorable position. The livestock fund in Serbia is particularly impoverished, since the beginning of the 1990s, it fell from two to three percent annually, and now it reached the historical low (Mekić & Novaković, 2013).

The aim of this paper is to point out the situation, problems and prospects of development and improvement of livestock production. The opportunity of rural tourism development has been analyzed in the municipality of Petrovac na Mlavi as a specific rural area.

The geographical location of the municipality and other general characteristics important for the development of livestock production

The town of Petrovac on Mlava is located in the valley of the Mlava River, 114 km away from Belgrade. In the town, there is an important crossroad that leads towards the Morava valley and the Mlava valley towards the Danube. Petrovac on Mlava is located on one of the most important routes within the Danube Region that connects Bor, Zagubica and Petrovac on Mlava from one side, with Pozarevac and Belgrade-Niš highway, on the other side. The geographical position of the municipality of Petrovac on Mlava indicates that it belongs to a moderately continental climatic zone.

The fauna in the Mlava region does not deviate much from other areas. All kinds of wheat and corn grow here and arable land takes up an area of 33,744 hectares. This is a typical fruit-growing region that hides a huge potential for the production of high-quality fruit brandies, primarily plum brandy. The territory of the municipality of Petrovac on Mlava occupies
an area with remarkable and diverse natural characteristics that best reflect numerous springs, streams, rivers, forests, the breathtaking northwest slope of Homolje Mountains, the fertile plain of Stig and the rich valley of Mlava with beautiful landscape and soil where anything can grow. It occupies an area of 655 square kilometers where 34 settlements have 41,220 residents in 10,300 households.

Spatial organization of the Municipality was formed under the influence of natural conditions, primarily relief, geological and climatological characteristics. In the area of the town of Petrovac na Mlavi are most fertile agricultural land, settlements and industrial infrastructure.

**Economic resources**

During the previous millennium, the municipality of Petrovac on Mlava had the status of underdeveloped area, which identified it as a municipality with underdeveloped economic structure, incomplete infrastructure, social conditions and the unfavorable demographic tendencies.

The underlying features of the underdevelopment originate primarily from an underdeveloped economic structure. High participation in the formation of a social product has a primary sector, and significantly smaller secondary and tertiary.

Petrovac on Mlava is known in the Republic as a municipality that has a large number of residents temporarily working abroad who have investment potential. This is why small business is given great importance. Agricultural areas represent the most valuable natural potential that provides the conditions for a diversified agricultural production. Agricultural land occupies 74.1% of the total area, but the utilization rate is modest (30%) due to the long-term decline in livestock and the emigration of the working-age population. In the following period, in order to make more efficient use of further improvements, it is necessary to undertake numerous measures for land improvement. The main task will be to make more efficient use of agricultural resources, irrigation and modification of agricultural production in favor of the production of raw materials that can be processed on-site or in other factories, as well as development of fruit production, expanding orchard cultivation and increasing their yields, as well as more intensive development of livestock production and increasing yields from meadows.
and pastures. Tourist potentials of the municipality are not maximally activated, and the tourism and catering industry maintained a relatively low share in the structure of GDP. The ownership structure is dominated by a private sector whose share is constantly increasing. The forests in Podhomolje are waiting for tourists to discover and visit, the river Mlava is one of the few rivers that are largely unpolluted and represents a true paradise for the developing fishing and hunting tourism. The challenge that this untouched nature provides offers the opportunity to attract lovers of rural tourism and healthy food. In the municipality area, there are significant deposits of coal, sand, gravel and small reserves of building materials.

Agricultural resources in Petrovac on Mlava

In the municipality of Petrovac on Mlavi, according to official data from the agricultural census conducted by the Statistical Office of the Republic of Serbia in 2012, 5,896 households use agricultural land. Most of them have arable land and gardens; the most commonly grown are corn for grain (4,907), followed by wheat and corn - 3,753 households. Some of the agricultural households produce alfalfa - 2,120, clover - 1,756 and oats (532 of them). Most households are family households (99.9%) and the rest are legal entities. A total of 764 households combine agriculture and livestock production (pigs and poultry), while 786 specialize in cereals, but most of them produce different combinations of crops and livestock (1.105).

Natural conditions and environment. - The municipality has a slope towards south-eastwest. The relief of the terrain as a pedogenic factor has a significant impact on agriculture in the municipality of Petrovac. The whole area can be divided into three parts:

- Relief of a river valley with an altitude of 103 m up to 160m;
- The relief is slightly stratified with an altitude of 160m up to 300m;
- Highland relief with an altitude of 300m up to 940m. River valleys in the area of the municipality of Petrovac belong to the type of narrow river valleys whose width ranges from 30 m to 2,000 m.
- There are three basic types of river valleys in the municipality:
  - very narrow valleys of torrent streams and rivers where the width ranges from 30 to 60 meters, where alluvial-deluvial soils were formed;
  - river valleys from 60 to 250 meters, where alluvial lands were formed;
- the valley of the Mlava River, with a width of 250 to 2,000 meters, in which the lower coastal and higher parts differ.

The developed hydrographic network consists of quality water, mostly preserved from pollution. Three mini reservoirs Busur, Korenica and Ždrelo have been built, the main purpose of which is to regulate torrential floods and flood protection. On the tenth kilometer from Petrovac on Mlava towards Zagubica, there is a source of thermomineral water whose temperature is 40°C and it belongs to a group of oligomineral, sulphide homeotherms. Due to its specific physical and chemical characteristics water can be used for therapeutic purposes as an alternative treatment for chronic diseases (rheumatism, psoriasis, chronic eczema, and the consequences of trauma conditions after bone fractures).

The useful properties of irrigation water have not been used because the existing duct network has a single-purpose drainage function.

The area of Petrovac municipality is under the influence of moderate-continental climate, with pronounced seasons; the mean annual air temperature is 11.1 °C; the coldest month is January with a mean temperature of -0.6 °C; the hottest month is July with a mean temperature of 20.6 °C. The area belongs to arid lands, where every year, in the period of intense vegetation, there is a lack of soil moisture. The average temperature during the vegetation period (April-September) is 17.3 °C. This area is characterized by annual rainfall of 632.5 mm.

Meadows and pastures are quite good, especially in the mountains and its slopes. Therefore, in this region, livestock farming should be developed.

The most important natural resource of the Municipality is a land fund characterized by geomorphological homogeneity, high potential fertility and water flow. The diversity of the purpose of use and a large number of users of agricultural land is the most important factor for the development of the Municipality. The effects of future economic development will depend on the correlation of all users of agricultural land according to the manner and structure of use and according to the forms of ownership.

The territory of the municipality is 65,500 ha, agricultural land covers 72.9% (47,700 ha), while 65.80% of the population is engaged in agriculture as a main activity. Agricultural areas represent the most valuable natural potential that provides the conditions for a diversified agricultural production. They occupy 72.9% of the total area, but the
utilization rate is modest due to the long-term decline in livestock and the emigration of the working-age population. In the following period, in order to make more efficient use of further improvements, it is necessary to undertake numerous measures for land improvement.

**Indicators of agricultural development**

The utilized agricultural land is 28,221 ha, which makes 72.9% of the total area of Petrovac on Mlava municipality. Irrigated land takes up to 78 ha, most of which is superficial irrigation. Land drainage is done on 3,093 ha.

**Growing crops.** - As it was mentioned above, climate and land conditions in the territory of Petrovac on Mlava are extremely suitable for the production of fruits and grapes. 1,175 ha are orchards, of which the most prevalent are plums 733 ha, followed by apples with 132 ha, and then pears with 71 ha, cherries 44 ha, peaches 24 ha, apricots with 20 ha, while nuts and hazelnuts are planted on 95 ha, whereas berries are slightly present on only 1 ha. Vineyards are planted on 149 ha.

**Livestock fund.** - The municipality of Petrovac has facilities to accommodate 3,944 cattle, 4,685 pigs, 3,231 chickens and 2,225 other livestock. The number of livestock that can be reared in the municipality is 27,395. According to the 2012 census, there is 8,820, of which 4,949 are cows, followed by 64,558 pigs, of which 7,226 are sows, 19,644 sheep, 2,377 goats, 300,855 poultry which are predominantly chickens, 9,324 beehives and 58 horses. 17 agricultural farms are engaged in fishing, and the total area under the fishponds is 13.2 ha (Popović, 2014).

Cattle production is the most important branch of livestock production, and the largest number of producers raises domestic spotted cattle of Simmental type, for dual production meat and milk. Holstein breed is also present but in fewer numbers. Sheep production is retained in households that have their own pasture for summer grazing and the possibility of producing sufficient amounts of hay for the winter period. The most commonly reared breeds are Württemberg, Île-de-France and Pramenka half-breeds, mainly for the production of meat, and rarely for the production of milk.

Conditions for livestock production and quality of animal feed are favorable. The development of this industry to a large extent is
conditioned by the possibilities of product placement on domestic and foreign markets (Mekić & Novaković, 2012).

**Mechanization, equipment and facilities.** - Equipment and mechanization is not at enviable level, and in particular, it should be noted that a significant part of agricultural machinery has become obsolete. In the territory of the municipality of Petrovac on Mlava, according to the 2012 agricultural census, there are 1919 one-axle and 6354 two-axle tractors and 663 combines. From all of the above, it can be concluded that the agro-technical equipment of agricultural farms in the territory of the municipality of Petrovac on Mlava is not satisfactory.

In the municipality of Petrovac a large number of livestock buildings and facilities was built for the accommodation of 3,944 cattle, for accommodation 4,685 pigs, for the accommodation of 3,231 chickens and 2,225 for the accommodation of other livestock.

**The structure of agricultural farms.** - There are 5910 agricultural farms in the municipality of Petrovac on Mlava, which process 28221 ha. 905 households use less than 1 ha, 1034 households use 1-2ha, 2021 households use 2-5ha, 1374 households use 5-10ha, 449 households use 10-20ha, 63 households use 20-30ha and 30 households use 30-50ha. Number of livestock units was 27395, of which there are 8820 cattle, 64,558 pigs, 19,644 sheep.

**Production of agricultural products.** - Since the land on the territory of Petrovac on Mlava municipality is not contaminated, there are very favorable conditions for the development of organic agricultural production, but this advantage is not sufficiently exploited. Most organic products are marketed on the Belgrade market. Wheat yields range from 2.65-3.46t / ha (on average 2.96t / ha), corn from 2.67-4.46t / ha, (on average 3.56t / ha) and sunflower at an average of 1.36t / ha.

**Agricultural cooperatives and farmers' associations.** - In the territory of Petrovac on Mlava, there are five agricultural cooperatives active: "7. Juli" Veliko Laole, "Ranovčanka" Ranovac, "Petrovac" Petrovac na Mlavi, "Dragoševo" Oreškovica and "Kamenovac" Kamenovo. There are also eight other associations that are very active: Association of beekeepers "Mlava" from Petrovac on Mlava, whose membership includes a large number of well-known beekeepers from the territory of our municipality, the Association of fruit and wine growers Petrovac on
Mlava, where there are prominent producers of wine and strong alcoholic beverages, primarily fruit brandy, Association of sheep and goat breeders, "Mlavski pastiri" Association of cattle breeders and milk producers, "Mlava", a special place among the associations is occupied by five women's associations, namely: "Violet" from Petrovac, "Kalina" from Kamenovo "Stamničanke" from Stamnica "Zlatne ruke" from Kladurovo and "Starčevljanke" from Starčevo. All associations are extremely active and participate in all agricultural manifestations in the territory of this municipality, but also represent this region even beyond its borders. In the Mlava region, the cattle fund is constantly declining. Livestock breeding, as the most important branch of agriculture in Petrovac on Mlava municipality, despite favorable conditions for development in the past decades, recorded a decline in the livestock fund. The departure of the working population from the village, the lack of new knowledge and technologies, and the lack of financial resources for subsidies are main reasons for the decline. Once there were over 100,000 sheep and goats in this region, over 30,000 cattle, and now the number of livestock is far less than that of a few decades ago. Existing livestock fund, despite the unsatisfactory number of cattle in relation to the available agricultural area, is a significant development resource, provided the systematic and very intensive improvement of genetic structure, as well as technology and production organization. The intensification of livestock production and the increase in the share of this activity in the structure of total agricultural production can be ensured by encouraging the alteration of the breed composition of livestock and increasing the production of meat and milk per animal (Mekić & Novaković, 2013).

The departure of the working age population. - A large number of the working age population from the village went to the cities and abroad due to unfavorable conditions in agriculture. The practice of emigration from rural areas has been present for decades. Sometimes for economic reasons, citizens went to the countries of Western Europe, however now they more often go to Petrovac, Pozarevac and Belgrade. Difficult working and labor conditions were the cause of migration. It is necessary to look at the people needs and make an effort to create the conditions for the younger people in the villages to have the opportunity, through their work and the use of available resources, to provide for their families, and be able to live off their farms and work. Renewal of agricultural cooperatives, the establishment of associations, etc. would help agricultural producers to market their products. Young people would be
interested to stay on their land and in their villages if there were to be some security that their products would be sold at an adequate price.

**Lack of knowledge and new technologies in livestock breeding.**
Agriculture, especially cattle breeding, has made great progress in terms of knowledge innovation and the creation of new technologies. Knowledge has always been a powerful weapon - one who applies it in practice is one step ahead of others. In livestock breeding it is necessary to monitor achievements and apply them in production. Livestock production is the most challenging part of agricultural production. As such, it is very sensitive, and is becoming more intense. It is necessary to perfectly balance all the factors involved in the production process. In order to make the production profitable, the genetics and production performances of today's breeds of cattle, pigs, sheep, goats and poultry should be utilized to the maximum.

**Livestock breeding as the backbone of the agriculture development.**
The tradition presented in the municipality of Petrovac proves that livestock breeding is the driver for the development of agriculture. Petrovac on Mlava municipality is the leader in livestock production in the Danube-Branicevo region. According to the last census, there were 8,820 cattle, 64,558 pigs, 19,644 sheep and goats, 300,855 poultry, and 9,324 hives. One of the most important branches is the production of raw milk, and over 30,000 liters a day is redeemed.

The newly formed Association of sheep and goats breeders 'Mlavski shepherds' gave themselves the task to, not only find new members, but make a step forward in the organization of production and marketing. There are hardworking people in the villages and natural conditions who can help this branch of animal husbandry in the near future to become the leading branch that could revitalize our villages.

**Development directions and structural changes in livestock breeding**
The main direction of development in livestock production, in the near future, should be concentrated in towards the elimination of animal origin product deficits, and towards the increase of consumption per citizen, as well as towards the increase of export. Livestock products have high exporting potential. (Mekić & Novaković, 2018)
Directions for developing livestock production should be as follows: realization of cattle breeding technology, improvement of genetic characteristics of cattle, improvement of dairy cattle types, meat production types, and improvement of nutrition conditions, better use of pasture, greater share of quality fodder, care and health care, economic incentives adapted to the length of the biological cycle, and the speed of capital turnover. Based on this increase of the final weight of the fattened cattle (480-550 kg).

It is estimated that in the next 5-7 years, the production of beef can be increased by about 150 thousand tons (370 thousand tons of cattle), and by 2030 to about 180 thousand tons (720 thousand cattle) if the above guidelines are followed. Based on this, beef meat, especially high-quality baby beef, can again become one of the leading export products in the current and new markets.

It is estimated that the average milk yield of cows (with the increase in the existing number and the change in racial composition) will increase to about 4000 liters, and in these conditions the total production of raw milk can reach 1920 billion liters. In addition, production of about 200 million liters of sheep and goat milk is expected. The production of sheep meat, mutton as dominant type of meat, could reach about 45,000 tonnes if the increase in the number of sheep and the improvement of the genetic features, as well as improvement of nutrition and care, were to be implemented.

**Development concept of the cattle breeding and sheep farming**

Genetic improvement of cattle breeding: given the ecological conditions and natural potentials in the analyzed area, cattle for combined production, milk-meat or meat-milk should be reared, especially domestic spotted in the Simmental type (Mekić et al. 2011).

Consumption of animal origin products per resident is on a steady increase. This refers primarily to meat and milk, and therefore a further increase in their production can be expected Mekić et al. (2018).

In extensive and semi-intensive conditions, the production of meat-milk would be developed, and in intensive milk-meat production will be developed.
Domestic spotted cattle would be improved with selection and crossbreeding. Breeders of domestic spotted cattle that follow the direction meat-milk would be manufacturers of high quality calves which would be used as fattening cattle that have higher final weight.

Farmers who have better breeding conditions would be directed towards the milk-meat production and they would be producing milk for markets as well as calves and cattle. They would rear a large number of cows where selection would go towards higher milk yield (Mekić & Novaković, 2018).

The basis of the breeding operation must be controlled reproduction. Therefore, it is necessary, first and foremost, to undertake all necessary measures in the field of artificial insemination of cows (A.I.) in order to improve the work of this service, because without addressing this issue, the improved goals in terms of improving production cannot be realized.

Cattle production requires state support over a longer period of time for these measures effects to be felt.

Improvement of sheep production: The main orientation is towards the intensive sheep production, second towards production of large quantities of high-quality lamb meat per ewe in one year and the period of use, providing large quantities of milk, and the on the third place comes the improvement of wool yield and quality.

In the future it is necessary to take specific measures to improve the sheep production:
- To increase the number of sheep,
- To genetically improve the production traits,
- To increase fertility,
- To reduce lambing intervals,
- To provide high quality animal food.

Since sheep production is found in individual agricultural producers, sample farms with 100-300 breeding sheep should be formed, i.e. commodity producers of meat, milk and wool. Professional services would give special attention to these farms.

**Genetic improvement and sheep breeding program.** - According to the Breeding Selection Program (Breeding Target and Genetic Improvement
Strategy, 2014), it is defined that the improvement of genetic capacity and the change of racial composition of sheep in R. Serbia should be realized as above all: 1) cultivation of domestic strains of pramenka in a pure race for the conservation of genetic resources; 2) by changing the hereditary basis of a certain number of pramenka sheep - by creating new established populations and types; 3) by directing and upgrading the desired characteristics of the existing groups of mules within the defined breeding programs. In this sense, the concept of genetic improvement of sheep in the territory of the Municipality of Petrovac on Mlava (in the shortened scope) would be the following: it is necessary to create a new population (more productive) of the lighter type for dual direction meat-wool production, while keeping milk production at the level of superior sheep from the mother's genetic base.

Within the genetic concept, combination crossing should be used. For the maternal basis, selective herds of autochthonous Svrljiska pramenka would be used, and as a father's race type of merino, such as the Württemberg race, would be used.

The ultimate goal of this paper is to create a programmed population with a certain combination of genes, production and traits: body weight of adult sheep 50-55 kg; rams 70-90 kg; yield of unwashed wool per sheep 3.0-3.5 kg; per ram 4.0-5.0 kg; Diameter of fibers 25-29 micrometers; length of bead 10-12 cm; fertility 120%; milk yield in lactation 80-90 kg; solid constitution and good health. The breeding conditions would in any case have to be improved in relation to the traditional breeding of the pramenka, which is now present (poor accommodation, poor and inadequate nutrition).

**Development of organic livestock production**

Due to the distance from large city centers and limited financial resources of individual agricultural producers in the territory of the municipality, there was no high level of pollution of soil, water and air. That is why this area provides good conditions for the production of healthy food.

However, still a small number of primary agricultural producers have certificates for Global and G.A.P., organic production and products with a geographical origin (Popović et al. 2017).
An increasing number of consumers require food to be biologically as valuable and more natural effect the production of organic livestock. Organic farming, which is synonymous for ecological farming and biological agriculture, is not a new agricultural activity, (Kovačević et al., 1997). Agriculture in mountainous areas is very close to organic farming. A large part of the agricultural land in our country can be immediately certified without a conversion period. Organic production in animal husbandry means that health problems are addressed mainly through preventive care.

**Beekeeping**

In addition to the listed branches of agriculture, the development of beekeeping also takes a significant place.

**Fishing is a great potential of Petrovac on Mlava municipality**

The municipality of Petrovac on Mlava is a region of diverse natural resources, rich in numerous sources of clean water. Potential for fish breeding in the municipality of Petrovac on Mlavi exists, but is little exploited. The Californian trout is the most prevalent in the municipality. Along the Mlava River, there is a pond with a restaurant, where the production of the Californian trout of the Marinkic family takes place. This is a true example of how all can be produced in one place and then marketed through a restaurant and fresh fish sale to the local population.

**Tourism**

The concept of sustainable development gets its application in the tourism market. Ecotourism as a modern form of tourism with special requirements, and it is becoming an increasingly important segment of the overall tourism development of many countries at the beginning of the 21st century (Milenković & Bošković, 2012).

Tourism is important for the local and national economy, because it generates income, (Štrbac & Hamović, 2011). The word tourism originates from the English word "tour" which means in the Oxford dictionary: pleasure from the trip. A tourist is a person who takes such a trip (Pejanović & Vujović 2008).
Petrovac on Mlava municipality with its rich, diverse and attractive natural and anthropogenic tourism potential represents a potentially interesting micro-region of eastern Serbia, whose values have become increasingly important in the tourist map of Serbia in recent years. Very favorable tourist geographical position, interesting topographic physiognomy, climatic specificities, diversity of hydrographic objects, wild plant cover, but also rich cultural and historical heritage (e.g. Belovode archaeological site). These elements give the potential for development and entry into the tourist market of our country (Miljković & Marković, 1985).

Special attention is paid to the affirmation of spa, excursion, transit and hunting, but according to previous indicators the emphasis should be on the development of rural tourism. The archaeological site "Belovode" is a settlement of the Vinca culture that existed on the territory of the central Balkans during the second half of the VI and the first half of the V millennium of the old era (roughly 5500-4,500BC years old).

In this region there are also monasteries, works of great and modest people in search of the exalted beauty of the Kosovo Decani, such are the monasteries Gornjak, Vitovnica, Sv. Trojica in Zdrelo and Reškovica in the same under Homolje area, which, however, is still under construction.

**Spa tourism**

Recreational catering center "Ždrelo", popular "Banja Ždrelo" is located at a place where the fertile Stiška plain runs through Gornjačka gorge in a miraculous way and rises to the Homolje Mountains. It is located on the 11th kilometer of Petrovac on Mlava – Zagubica road at the foot of the two dominant Homolje peaks Vukan and Ježevac.

During the research of coal deposits in the area in 1986 from the borehole broke out a strong stream of thermal mineral water whose surface temperature was about 40 °C. The water comes from a depth of 180 meters where the temperature exceeds 80°C. As it passes through the cold layers of the soil on the surface it reaches and retains a constant temperature of 40°C during winter and summer periods.

Thanks to its exceptional chemical composition, this water is successfully used in the treatment of skin diseases, eczema, fungal diseases, psoriasis, healing wounds, and after bathing in this water, the skin becomes softer.
and tighter. Cooled water can be drunk and helps with gastritis. The center has open and closed pools, aqua park with warm water, wellness center, massage salons with healing mud, sea water, jacuzzi baths, saunas, solarium, hotel and other amenities. Aqua park is unique in Serbia because it can be used both in summer and in winter.

**Hunting tourism**

Climatic conditions - moderate continental climate favours the development of wildlife, as well as other natural conditions, and above all unpolluted water and pastures, meadows, forests etc. Hunting terrain is mainly of hilly plain character and hunting is possible for short legged hounds and dogs: birdcatchers, terriers and others. While in the villages over 500 meters above sea level is more suitable for long-legged hounds: Balkan hound, posavac hound, etc. On the territory of the municipality, on an area of over 65,000 ha there are two hunting grounds: Trest and Krilaš, and each has a separate reservate of about 20% of the area. From big game there are Roe deer and wild boars, while from small game there are rabbits, pheasant, partridge, wild duck, quail and etc. By promoting hunting the total tourist offer will be increased and tourism potential will be maximized.

Republic Hunting Event "Hunting for copper fox" in Kamenovo, "Hunting wild boar" in places: Melnica, Stamnica and Vitovnica, "Roe deer hunting" in Ranovac and others, are unique in Serbia and at the very top in their character. Each of the mentioned events gathers up to 500 hunters from nearby and further surroundings, and visitors come from Montenegro and Republika Srpska (Prentović et al., 2016).

**Village tourism**

In order to rest from a rather unnatural life in cities, people have the need to spend at least ten days a year in cleaner conditions and they are doing it all the more. Petrovac na Mlavi municipality develops this type of tourism, with the development of initial bases and projects. It offers enticing offer of residence in this region, villages and mountains, in the complexes of environmentally healthy old houses, cottages and farmsteads in Podhomolje. For this reason, the municipality sees this type of tourism in the upcoming period as one of the greatest opportunities for its development. The households that should be mentioned are:
Simonović, Jenić, Novaković and Marinkić from Ždrela, Milenković and Ilić from Mali Laole as the bearers of this type of tourism.

A special attraction is the ethno village of Bistrica, which is located next to the regional road connecting the center of Braničevo district with Žagubica and Bor.

**Excursion sites: Gornjačka gorge and Trest**

Downstream from conflux where Krupa River enters Mlava, this river forms an epigeny that forms the Gornjačka gorge, 16 km long. The gorge is located in the territory of the municipalities of Petrovac on Mlava and Žagubica. Otherwise, these two municipalities have exceptional cooperation in all segments, which is very important for the development of tourism in this region. Entrance to the gorge from the fertile plain of Mlava fascinates travelers. The mountain ranges of Vukan (825 m) and Jezevac (675 m) are bending over the river, in the shape of "bird in flight with wings spread," and the poet says that those are the doors of Homolje. The entrance to Homolje "oversees" the remains of the guard towers which are there since the Roman era.

**Mountain climbing**

The Homolje region is rich in natural beauties and cultural sights. The area is extremely beautiful and raw; some of the climbs are a real challenge. The Karst landscape is decorated with numerous caves, sinkholes and unusual springs, it is a meeting with the wild and untouched nature. The mountains are covered with oak and beech forest. Homolje region is located so that it can be accessed from all Homolje villages. Infrastructure and traffic capacities are solid. Homolje represents a unique tourism potential that is still insufficiently explored and exploited.

**Catering**

The importance of the gastronomic segment in the tourist offer is growing in the market. The basic of the gastronomic offer of a particular area is the production of specialties in the traditional way. One of the main motives for making a decision for a specific destination is the gastronomic offer of the area. Local and regional specialties certainly contribute significantly to the tourist offer. There is also the offer of traditional specialties, and there are many of them in the Petrovac area: čuš, plašinte, žumjare,
čulama, kolješ, etc. The real specialty is young Homolje lamb, Vlaški cheese, trout and other. The catering in the municipality is still not developed enough to follow the potentials of tourism development.

Conclusion

The above mentioned directions of regional development of the municipality Petrovac on Mlava can provide a greater degree of functional integration of geographic space by defining priority activities and solving current development problems.

The realization of the proposal for the development of livestock and tourism in the municipality is a long-term process and cannot be carried out on a one-off basis with individual activities, but it is necessary to recognize the priorities through the cooperation of the local authorities and the community, in order to attend to development problems and solve them in stages.

With the advancement of livestock production (which is nowadays at a low level), it is legitimate to use the existing, unused natural resources to increase the production volume, and especially to increase and improve sustainable agricultural production - organic livestock production. Therefore, the possibilities of organic food production, the creation of a brand of products with known geographical origin, the existing rural authentic accommodation capacities, and the development of rural ecotourism are the chance of the analyzed region that has to be used.

References


