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DEVELOPMENT OF ANIMAL HUSBANDRY AND TOURISM AS CONCEPT OF HOMOLJE RURAL DEVELOPMENT

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Abstract

Homolje is a small area of Eastern Serbia. It is almost entirely within the municipality of Zagubica, with a few deviations. The agricultural land of the area is predominantly grasslands, natural meadows and pastures, around 69% of the total agricultural land. The most significant animal husbandry products of this traditional production are the widely known Homolje cheese, Homolje mutton, Homolje honey and trout. The rural area of Homolje represents a significant (but still unused) resource, not just for conventional food production, but for the development of sustainable organic animal husbandry, production and processing industry, forestry, water management, trade, tourism, hunting, fishing, etc. Analysis shows that, taking into account the available resources, animal husbandry and tourism development should be the main framework for Homolje rural development.

Key Words: *Homolje, agricultural resources, animal husbandry development, tourism development.*
JEL classification: *Q1*

Introduction

Homolje is small geographic area in Eastern Serbia. It borders mountain ranges on all sides, Zvižd to the north where Homolje (940 m) mountains continue, Resava to the south where mountain chain of Beljanica (1339 m) begins, lower Mlava plains are to the West and next to them are low Gornjak mountains (825 m). Geomorphological system framed in this way consists of two parts: Žagubica basin in the East and Krepoljin-

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krupaj basin in the West, between which there is Beljanica-Homolje mountain chain (Miljković, 1992).

Through the Mlava plain, Homolje is connected with the fertile lower Mlava and Stig, and via the pass on Crni vrh, it is connected to the Crnoreka and Timok basin. Through the lower parts of the Homolje Mountains and Pek valley, it connects to Zvižd and Poreč, and via slopes of west Beljanica, it connects to Resava. However, these accommodating natural benefits are not just insufficiently used but the destruction of existing roads and functions is evident. The main reason for this is the lack of high quality roads and poor maintenance of the existing ones.

From the point of hydrology, the Homolje area belongs to the upper river basin of Mlava, which flows through its middle part, and represents hydrographic framework of the entire area. Administratively, Homolje belongs almost entirely to the municipality of Žagubica. However some small deviations in territory do exist.

Municipality of Žagubica

Žagubica almost entirely belongs to the Homolje area, therefore mountain ranges border it on all sides. With around 4,000 people living there it is the center of the entire municipality.

With an average of 22 people per square kilometer, it is one of the most sparsely populated municipalities in Serbia, and according to 2011 census, 12,737 people live there. Next to the village of the same name, the municipality of Žagubica consists of 17 more villages: Bliznik, Kreznica, Vukovac, Izvarica, Jošanica, Krepoljin, Krupaja, Laznica, Lipe, Medvađica, Milanovac, Milatovac, Osanica, Ribare, Selište, Sige and Suvi Do. The Serbian population is almost 71%, followed by the Vlah population of 22%.

The Municipality of Žagubica is situated on the northern side of Beljanica on the shore of the clean and pure river Mlava. It is surrounded by intact nature, endowed with many natural riches occupying the attention of world scientists.

The Homolje underground river (potajnica), locally called “Stojanje” (Standing), is one of forty underground rivers in the world and one of three in Serbia. The Mlava spring is 74m deep and is the subject of

scientific research. Divers from many European countries go there to research. The Krupaj spring belongs to insufficiently researched springs. When numbering all the natural riches one should mention Osanička prerast, a tunnel type, stone bridge that connects the two shores of the Osanica gorge, Gornjak and Ribar gorge, Buk etc. Among the cultural and historical monuments, monastery Gornjak (1378 AD), an endowment of Knez Lazar, is on the left shore of the river Mlava, and at the exit from the municipality of Žagubica. The Trska church is the oldest monastery in the Braničevo diocese, and it is situated on the fourth kilometer of regional road Žagubica-Petrovac.

Žagubica industry is based on using the natural resources of this area, wood industry, mining, exploitation of brown coal, marble, decorative stone and forestry. The main industry of the people who live there is agriculture and animal husbandry. Development plans of the municipality are strategically committed to natural resources. However, there is an opportunity for the municipality to develop faster in tourism, animal husbandry and crop farming, as well as in the development of private entrepreneurship.

Position and size

The municipality of Žagubica is located in the southeast part of the Braničevo district, 170km southeast from Belgrade and 83km from Požarevac. The municipality of Žagubica covers the lower part of the Mlava valley and its branches. It is naturally divided into two basin parts: hilly and mountain ranges. The main and middle part is the Žagubica basin, the lower part of which is on the average elevation of 300 meters.

The second, smaller and lower part, is the Krepoljin-krupaj basin with an average elevation of 220m. Between those basins, there is a hilly area. The largest part of the basin edge, from the western, northern and north east side, is closed by the lower Gornjak (up to 825m) and Homolje (up to 940m) mountains, while the southern and eastern range borders on the higher and steeper Beljanica (1339meters) and Crni vrh massif (1043meters).

The municipality border is at the highest ranges of these mountains. It has the shape of a stretched rectangle, 35km long and 26km wide. Within these borders, it covers an area of 760 square kilometers.

Natural resources

Climate

Homolje is situated between 44º 05' and 44º 22' northern geographic width and between 21º 31' and 21º 50' eastern geographic length. This fact, among others, conditions the area to have a mild continental climate. Spring and autumn are characterized by very unpredictable weather. Summers are very stable and have occasional rainfall, while winters are very long and sharp. The coldest month in the year is January with an average temperature of almost two Celsius below zero, and the warmest month is July, with an average temperature just over nineteen Celsius. The wind in the Homolje Mountains blows most frequently from the east and southeast. This wind is known as Košava.

Hydrography

The Hydrography network of Homolje is uneven. The main artery for this area is the river Mlava. This is one of the longest rivers in Eastern Serbia. The river basin of the river Mlava in the Homolje Mountains can be divided into the part that belongs to Žagubica, and the part that belongs to the Krepoljin-Krupaj basin. Mlava springs from Žagubica hot-spring division and river Tisnica. In terms of hydrology, Homolje is very interesting. The rivers in the Krepoljin – Krupaj basin, which is known by the name Lower river, are Mlava, Krupaj river, Breznička river, Medvedička river, Dubočica and numerous streams. Springs and hot-springs can be divided into three groups: normal, karst and thermal. Normal springs are the most numerous in this area. They appear in the terrains built from water-stout geologic formations. Karst springs and hot-springs rise to the surface from limestone rock crevices and cave canals. The only intermittent spring in Eastern Serbia is the Homolje potajnica, on the northern edge of Žagubica basin. If we go from the east towards the west, the hot-springs are: Žagubica spring, Belosavac, Suvodol and Izvarik spring. There are also Mala Tisnica hot-spring, Lopusnja, Komnenska reka and Krupaj spring. Krupaj spring is situated below the western limestone slope of Beljanica at an altitude of 220 meters. Its location is within the Milanovac village. This spring belongs to the group of karst springs. The water temperature is between 9 and 11 degrees Celsius. The Žagubica spring or Mlava spring (as it is called colloquially) springs out in the southeastern part of the Žagubica basin at an altitude of 312 meters. The spring has the form of a smaller lake and the inner

surface of the spring is 655 m^2. The Žagubica spring has green to dark green water color and its temperature is between 9.3 and 11C.

Land

All the Homolje territory lands belong, mainly, to the automorphic group, the largest systematic section in land classification of this part of Eastern Serbia. Lands of this classification are characterized by normal moisture only under the influence of atmospheric precipitation. Exceptions are the lands next to the river Mlava and its tributaries, that get additional moisture under the influence of underground water, and rarely, via floods. Undeveloped, or initial lands, cover relatively small surfaces. To this class of lands in the Homolje Mountains, are lithosols (gravel), regosols and collative lands. Gravel grounds appear in many separate areas especially in the Beljanica and Homolje mountains. Regosols are extensive in eroding lands, in particular in arid and semi-arid areas and in mountain regions. Collovial lands are the most fertile lands in Homolje Mountains and they are mainly situated around the river Mlava and its tributaries.

Serbia has approximately 5,111,152 acres of arable land, 631,552 farming households. Out of the total available arable land in Serbia, only 3,437,423 acres are used; out of which furrows and gardens take 2,513,154 acres; orchards 156,657 acres, vineyards 22,150 acres, meadows and pastures 713,242 acres (table 1), (Mekić & Vasiljević, 2017).

Table 1: *General information about agricultural land usage*

Region	N°of households	Used arable land	Furrows and gardens	Orchards	Vineyards	Meadows and pastures
Serbia	631.552	3.437.423	2.513.154	156.657	22.150	713.242
Žagubica	3.156	18.893	6.956	559	5	11.260

Source: *Statistic yearbook – Municipalities in Serbia, 2016.*

Agriculture is one of the development priorities in the municipality of Žagubica. The municipality has an excellent climate and hydrographic conditions for animal husbandry, as well as for crop farming as the possibilities for irrigation are excellent. Moreover, there are clear water beds and clean rivers which are excellent for fish production. In the municipality of Žagubica, from the total amount of used arable land,

59.60% are meadows and pastures; Furrows and gardens are 36.82%; Orchards 2.96% and Vineyards 0.03%. Therefore, grass areas – meadows and pastures - are widespread from the lowest plains to the highest mountain ranges. Swamp terrains are situated near the river beds, they mainly consist of shrubbery, bamboo, wading spurge, buttercup, and marsh horsetail. Valley meadows are mainly transformed into furrows. On these lands there is mainly white clover, red clover, narrow leaf plantain etc. Barley and wheat are grown on 50% of land in the Žagubica municipality. The other half is under the corn of different waxing stages and other cultures. Industrial plants and tobacco are also grown.

In the municipality of Žagubica, according to the official data taken from the agricultural census which was conducted by the Republic institute for statistics in 2012, 3,145 households use agricultural lands, largely in the form of furrows and gardens where grain corn (2705 households), wheat and spelt (1669 households) are grown. According to the census, 1,040 households produce alfalfa, 945 households produce clover, and 794 households produce potatoes. The largest number of farms is family farms 98.8%, and the rest are corporate farms. Total number of 689 households rear mixed types of domestic animals, and 29 rear domestic animals in combination with different crops, while 310 households grow different crop cultures. Fruit production is organized in small agricultural lands and mainly in the areas where the climate and land conditions are favorable, lower lands, near the rivers where soil quality is higher. A small number of households have a surplus of products.

Animal husbandry

Having in mind the natural resources, (59.60% under meadows and pastures), and the climate of the hilly-mountain area, animal husbandry should be the main branch of agricultural production. Moreover, having in mind that meadows and pastures dominate in the structure of arable land, cattle and sheep breeding should be primary in animal husbandry development. Tradition, based mainly on natural resources of this area, has contributed, along with other factors, to the fact that animal husbandry is the dominant branch of agriculture in the Žagubica municipality. Villages of this area have lived off animal husbandry and its products for centuries. Today, in the 21st century, animal husbandry should be the future of agricultural production of this area. Homolje Mountain area has always been known for sheep production, therefore there is no village farming household that has never bread sheep. Animal

husbandry represents one of the best opportunities for agricultural development in the municipality of Žagubica, especially bearing in mind the quality and size of the animal fund that used to exist in this area. In the past decade, the number of sheep in the Zagubica municipality has decreased by approximately 3,000, the number of cattle by 2,500 animals. Cattle and pig fattening has decreased too. It is worrying that in this municipality that has all the necessary conditions for domestic animal rearing, there is no farmer who can deliver 100 liters of milk. There used to be hundreds of farmers who delivered even more. It is a great pity that in the Homolje Mountains today, there are no true farmers, and the milk producers are gone, even though pastures and the other essentials are present. The destiny of the Žagubica municipality is in many ways a reflection of the state of animal husbandry in the Republic of Serbia. In the Republic of Serbia, the state of the animal fund, from census from 01.12.2017 compared to the previous condition is: number of cattle has increased by 0.7%, sheep by 2.4 and poultry by 0.6%, while the number of pigs has decreased by 3.7%, goats by 8.8%. Cattle is mainly reared in the region of Šumadia and Western Serbia (45.9% compared to total number of cattle in the Republic of Serbia territory) and pigs reared in the Vojvodina region (41,9%). Compared to the ten year average (2007-2016), the total number of cattle is lower by 6.2%, pigs by 13.5% , goats by 23.2% and poultry by 10.6%, while the number of sheep has increased by 5.8%. Conditions for animal husbandry from the point of ensuring the quality and amount of animal food are favorable. With the development of the animal husbandry production based on available agro ecologic potentials it is possible to positively influence structural changes in agriculture, especially in plant production, actually to adjust the structure of corresponding agroindustrial production (meat, milk and skin processing). Development of this branch is highly conditioned by the possibilities of domestic and foreign marketing (Mekić & Novaković, 2012).

Cattle production in Serbia represents a base for modern animal husbandry production, it partakes in the production with about 41.5%, while in total meat production it partakes with 22-25%. In the last years, cattle breeding has had a tendency for decreasing, and in 2017, the registered number of cattle was 898,650 which is lower by 23,5% compared to the period of 1988-90. Cattle production in Serbia partakes in world cattle production with 0.2%, or 1.1% in European production, which shows relatively marginal significance in the world. In the eighties Serbia exported approximately 20 thousand tons of high quality beef –

baby beef. In the recent years only 4-5% of that milestone is exported, Serbia gives only 10-12% of preferable quote from EU which is 9,870 tons. From the point of the economy, export has decreased from 35 million USD to 4-5 million USD. Next to export to traditional markets of Greece and Italy now there is Montenegro, BiH and Macedonian market available. With that goal, in order to stimulate "export mentality" of domestic agriculture and food industry to achieve beef export quote for EU market, it is needed to start a program that would enable beef meat production. The program starting point will be based on the cattle breeding analysis as most significant animal husbandry branch in Serbia, on the recognition and thorough preparation of potential participants, on the development of infrastructure support (marketing, informing and quality). The potential markets for Serbian product placement next to EU are Russian federation markets and some markets from Middle East.

Organizing of beef production, next to mentioned development goals, can be realized through four goals of regional politics:

- Achievement of sustainable development on local and regional levels;
- Development of human resources in order to keep the people from migrating through opening new working perspectives and employment;
- Preservation of rural spaces, its validation and optimal exploitation, and
- Development of competitive and restructured activities with special attention given to development of small and medium enterprises, (Mekić et al., 2011).

Sheep production is present on 99% of individual farms, therefore development programs should be adjusted to that sector, which could significantly, with new technologies, contribute to the intensification of meat, milk and wool production. Optimal but unused agro-ecologic potentials, especially in hilly-mountain areas, extensive and natural animal husbandry production are characteristic of the sheep production of Serbia.

According to the animal count, sheep are on fourth position in the Serbian animal husbandry. Average figure of 1,5-1,7 million sheep places it on the fourth place in mutton production too, where around 20.000 tons of meat is produced. According to the statistical data since 1985 until 2016, mutton production is at the level of around 32,000 tons. This unfavorable production was influenced by the decrease of breeding stock, unfortunately they were slaughtered for meat and not used for

reproduction as they should have been. Export results are menial and they do not represent potentials that Serbia has for mutton production.
Mutton production, if number of animals were to be increased along with genetic improvement and breeding, diet and care, could reach around 40.000 tons per year.

Relatively small number of sheep in farms is negatively influenced by many factors:

- Difficult farming conditions;
- Parity price relations and low prices of mutton;
- Low farmer solvency;
- Problems with lamb sale;
- Decreased village population;
- Decreased people buying power, and etc.

Achieved results in the animal husbandry production

The existing animal fund, although unsatisfying compared to available agricultural resources, represents very significant development resource. Animal genetic abilities have to be systematically and intensively improved as well as technology and production organization. The intensifying of production in animal husbandry and increase in its share in total agricultural production structure can be ensured by encouraging the change of racial composition of domestic animals and by an increase in meat and milk production per animal (Mekić & Novaković, 2013).

Development of agricultural production based on available agro-ecology resources, with aim on rumnivorae production, can have positive influence on structural changes in agriculture. The changes would be most prominent in crop production which would adjust its agroindustry structure to correspond the demands (meat, milk and skin processing). Development of this branch of agriculture is highly conditioned by the possibility to market the products on domestic and foreign markets. Today, animal husbandry in the Republic of Serbia is, in spite of very favorable conditions, in great crisis. Number of domestic animals in the last decade has been decreasing yearly by 2-3%, meat production has dropped from 600.000 t (in the 90-ies) to 465.000 t today, meat consumption has decreased from 65 kg to around 43,3 kg per resident. In the year 2016, the total value of realized animal husbandry production in Serbia was estimated to 1.802 million USD, which represents a decrease

by 1,69% compared to 2015. In the total value of agriculture production in the year 2016, plant production participated with 66.6% and animal husbandry with 33.4%. Today, on the territory of the Žagubica municipality, according to the statistical data for Serbian municipalities for 2016, 5,967 cattle, 10,603 pigs, 12,707 sheep and 93,583 poultry are being reared. This region is known by its traditional products which are made within households. Largest amount of milk produced in the Homolje Mountains is still used for production of cow mixed or sheep white cheese. Having in mind the significance of animal husbandry for the development of this region, significantly higher investments are needed for this economic sector, specifically agriculture. Faster and higher quality development of animal husbandry (cattle and sheep breeding) would create space for a significantly higher meat production, milk, milk products, wool and skin production. Only the origin of these products would make their demand higher (it is high even today, on the markets of large cities in Serbia and Montenegro), and income from those products would be significant. Obtained income from this "healthy food" would speed up the revitalization of this region, especially villages. In order for cattle and sheep breeding to gain significance, it is necessary to improve forage base. For meadow and pasture improvements, a special program for melioration and other agro-technic measures are needed. It is essential to improve the breed composition of domestic animals. On the territory of the Žagubica municipality, there are more than 2,000 registered farms and that number is constantly increasing due to the numerous subsidies and incentives from the state. Ministry budget for 2018 and agriculture is 44 billion dinars which is by 5.2 billion (11,8%) more than in 2017. By implementing one long-term project for animal husbandry development, local authorities should significantly help development of sheep farming as important branch of animal husbandry production. Sheep farming is traditional and culturally interesting in everyday life of local people, which has been brought lately to un-enviable position.

Development directions and structural changes in animal husbandry

The causes of the current animal husbandry situation are well known, and they are, above all, due to the fact that price parity is unfavorable, the market is lost, there is an inability to export (except beef and thermally processed pork), the buying power has decreased, the financing and support system has been damaged, the funds in the budget are insufficient, bad privatization processes have led to a disintegration in the

primary production and processing, there is an inadequate functioning of stock reserves, etc. The main development directions in animal husbandry future production should be directed towards eliminating the balance deficit of certain animal origin products, increase of consumption per person and towards export growth. In order to fulfill those goals, it is necessary to provide proper healthcare for the animals, proper quality of animal origin food, and adequate veterinary control for milk, meat and egg yielding animals. Everything in the chain starting from nutrition and identification of animals has to be a long-term systematic stimulation of the animal husbandry production. If entire structure of the animal husbandry production is changed, animal husbandry products will have much higher potential for exporting (Mekić & Vasiljević, 2017).

Economic incentives that are adjusted to the length of biology cycle and to the speed of investment turnover would help increase final body weight of fattened cattle (480-550 kg). If that is followed it is estimated that in the next five to seven years beef production can be increased by approximately 150 thousand tons (370 thousand fattened animals), and by 2030 to around 180 thousand tons (720 thousand fattened animals). Based on that, beef, especially high quality baby beef can again become one of the lead export products on present and new markets. It is estimated that average milk yield for cows (if existing animal numbers are increased and breed composition is changed) could be increased to around 4,000 litres, in these conditions the total production of raw milk can rise up to 1,920 billion liters. Moreover, the sheep and goat milk is expected to increase to around 200 million liters. Total milk production should be within 2.1 billion liters, and it would satisfy demands of domestic market for fresh milk and milk products.

Significant part of produced milk could be exported as milk products and authentic products of high quality (white cheese, milk cream, hard cheese). Production of mutton, if number of animals is to be increased and genetic traits of sheep improved along with nutrition and care, could reach around 4,500 tons, where lamb meat would be the dominant product. Total production of basic types of meat could reach around 635 thousand tons by 2025, if game, horse, fish and entrails are taken into consideration it would reach around 850 thousand tons. That would satisfy the total demand of domestic market (meat consumption around 63-67 kg per resident) and enable yearly export of around 100-135 thousand tons of meat and processed products.

Concept of cattle and sheep breeding development

Genetic improvement of cattle breeding: Considering the ecologic conditions and natural potential of the Homolje Mountain area, the cattle for combined production (milk-meat, meat-milk) that the domestic spotted Simmental type belongs to should be reared. In extensive and semi-extensive conditions, the development would go towards meat-milk production, while in intensive conditions milk-meat direction would be taken. Domestic spotted cattle would be improved by selection and crossing. Breeders of domestic spotted cattle that have a production direction towards meat-milk would be producers of high quality bullocks for sale and for fattening (Mekić & Novaković, 2012).

Farmers that have better breeding conditions would go for milk-meat production and they would produce milk, calf and bullocks. They would rear larger number of cows where selection would be made for higher milk yield. A controlled reproduction must be the base for improvement.

Therefore, it is needed to make a plan for artificial insemination of cattle that includes all measures to improve the work of this service, because if this problem is not addressed the improvements cannot be applied.
It is necessary to solve the problem of obtaining good quality pregnant heifers in order to change breed composition and improve the level of production. There is an interest for good quality reproductive material, however due to the lack of funds, the possibility to buy good quality breeding cattle is very limited. Cattle production requires state support in the long run in order to feel the effects of applied improvement measures.

Improvement of sheep production: The main orientation in intensive sheep production today is the production of high amounts of high quality mutton per sheep during the year and usage period, higher milk yield and improvement of wool yield and its quality.

In the future period it is necessary to take certain measures in order to improve sheep production:

- To increase the number of sheep,
- To genetically improve production traits,
- To increase fertility,
- To reduce lambing interval,
- To provide high quality food.

Considering that sheep production is mainly oriented to individual farms, large farms should be formed with 100-300 sheep for reproduction, and they would be meat, milk and wool producers. Professional services would give special attention to those farms.

Genetic improvement and sheep improvement program: According to the breeding selection program (Breeding aim and genetic improvement strategy) improvement of genetic potential and breed change of Republic of Serbia should be realized by following these: 1) breeding domestic strains of pramenka in pure breed in order to preserve genetic resources; 2) to change heredity base of certain number of pramenka breed – by creating new permanent population and types; 3) by directing and building upon wanted traits of already existing mix breeds within defined breeding program. In this regard, concept of genetic improvement of sheep in Žagubica municipality (in short) would be as follows: it is needed to create new more productive populations of lighter type dual production (meat-wool), and keeping milk production at a superior level.
Within genetic concept, combination crossing should be used, selected flocks of Svrljig pramenka as the female parent and merino light type rams, for example Wurttemberg sheep, as the male parent. The aim is to create programmed population with specific genetic combination, production and traits per animal: body weight of fully grown sheep 50-55 kg; rams 70-90 kg; unwashed wool yield per sheep 3,0-3,5 kg; ram 4,0-5,0 kg; fiber diameter 25-29 micrometers; lock length 10-12 cm; fertility 120%; milk yield 80-90 kg; solid constitution and good health. However, breeding conditions have to be improved compared to the traditional way of breeding pramenka sheep breed which is still present (bad housing, inadequate and bad nutrition).

Development of organic animal husbandry production

Due to the remoteness from big city centers and limited funds of individual farmers in Žagubica municipality, soil, water and air are not affected with high pollution. Therefore, this area is excellent for organic food production especially in the Homolje region. The growing number of consumers who demand food of high biologic value influence the increase in organic production. Organic agricultural production whose synonym is also ecologic production or biologic agriculture is not a new branch of agriculture (Kovačević et al., 1997).

However, in order for one farm to be characterized as "organic', it is necessary to fulfill numerous conditions, since this type of animal husbandry is very different from the conventional production, especially from the industrial one.

Most differences are in the field where great attention is given to protection and preservation of environment in organic animal husbandry farms. One of the solutions which will stop degradation of environment is crossing from conventional to organic agriculture. Agriculture of hilly-mountain areas is very close to organic type. Large amount of arable surfaces can be instantly classified and certified without conversion period. Organic production in animal husbandry means that health problems are mainly resolved by prevention.

Fresh water fishery concept

The rivers in the Žagubica municipality are the base for development of fresh water fishing, especially trout breeding. Development of fresh water fishery in the Žagubica municipality can be realized via:

- Aquaculture development;
- Development of sports and recreational fishing.

Aquaculture development (rearing of water organisms in prebuilt objects) should be done through:

- Improvement of production at existing (they should be renovated) cold water (trout) fisheries;
- Building of new cold water (trout) fisheries.
- Development of sports and recreational fishing would also go through several phases:
- Overview of conditions for recreational and sports fishing;
- Development of plans, elaborate reports, bases for proper ownership and manipulation of fishing waters;
- Development of secondary conditions for recreational and sports fishing.

Beekeeping

Next to above numbered branches of agricultural development significant place is given to beekeeping development.

Tourism

Movements on the global economic market during the end of the last century included ecologic component in their analysis (Pejanović & Vujović, 2008). The concept of sustainable development is getting its place on the tourist market. Ecotourism as a modern form of selective tourism (tourism with special demands) has become a more significant segment of total tourist development of many countries during the beginning of 21st century (Milenković & Bošković, 2012). Agriculture tourism as a branch of tourism has begun to develop intensively in the area of Žagubica municipality in the past ten years. Many motels have been built and new ones are in the planning stage. Future orientation in the tourism development in the Homolje Mountains should be based on village tourism. Village tourism in the Homolje Mountains has great prospects and big potential in this area. That form of tourism can give great contribution to nature preservation, and contribute to village development and survival (Štrbac & Hamović, 2011). The ethno Village "Trska" is located in the Žagubica municipality in Braničevo area, and its architecture dates from older times. This ethno village is situated near the river Mlava in the clean and preserved nature of fertile plains of the Homolje Mountains. The Homolje area is ideal for intensive rural development, functioning of mutually connected economic activities (agriculture, processing industry, forestry, water management, trade, tourism, manufactories, hunting, fisheries etc (Prentović et al., 2016). Hunting tourism can become a significant factor of rural development in the Homolje Mountains because there are enough available resources. Natural touristic potentials are caves Ceremošnja and Ravnistarka which are well known and the most attractive ones. For passionate fisherman and river enthusiasts, the Mlava spring in Žagubica and Krupaj spring should be mentioned.

From religious monuments most significant ones are monastery Gornjak (Knez Lazar's endowment), monastery Vitovnica (King Milutin's endowment), the Trska church, Blagovestenje Monastery and many others.

Geo-thermal spring "Warm water" in Ždrelo is one of the mostly visited thermal springs of this area. Homolje meadows and pastures are full of medicinal herbs and honey bearing plants, which contributes to the reputation of the Homolje honey in Serbia and abroad. The Homolje honey is a product that has double protection, first one was from

Intellectual property office 2008 when it got the proof of origin, and the second is the International geographic origin sigil. By far famous Homolje cheese and milk have always been a trademark of Braničevo, famous for the unpolluted environment, untouched nature, altitude between 500-800meters, pastures full of medicinal herbs, as well as the milk products from this area that have been on the EU, USA and Japan markets since a long time ago. Next to the mentioned products there are other well known products like Homolje lamb, trout, corn meal, different brandies.

Healthy food production, medicinal herbs production, hunting, fishing enable development of numerous types of eco-tourism in this area.

Conclusion

Above mentioned directions for regional development of the Homolje Mountain area, municipality of the Žagubica can provide higher degree of functional integration of this geographic area by defining priority activities and solving imminent development problems. Suggested realization of animal husbandry and tourism development of the Žagubica municipality is a lasting process and it cannot be conducted sporadically by implementing just some solutions. It is necessary to set priorities and problems of development, which will be solved one at the time, through cooperation with local government and society. It is possible to utilize existing unused natural resources in order to increase the production, sustainable organic animal husbandry production by improving animal husbandry production (which is at very low level today – especially in terms of production). Therefore, the possibility for organic food production, creation of protected brands such as the Homolje honey with geographic origin, cheese, lamb, existing authentic village housing conditions enable development of eco-tourism which is a chance that the analyzed region should use.

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