

THE POSSIBILITY IN USING THE SAVA RIVER VALLEY LANDSCAPE IN AGRO TOURISM

MOGUĆNOST KORIŠTENJA DOLINE RIJEKE SAVE U AGRO TURIZAMU

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Abstract: *This work analyzes the possibility of using the protected landscape Jelas field in agro and eco-tourism. The target area had not been used before by tourist, so that is the reason why we observe positive and negative impacts of tourism on the natural habitats as well as the attractiveness of landscape near river Sava and cultural heritage to visitors. After analyzing Jelas fields as agro and eco tourism destinations, we have concluded that area is interesting for observing and visiting for various tourist target groups and individuals who need an active holiday.*

Key words: *Agritourism, landscape near river Sava, biodiversity, evaluation, ecology*

Sažetak: *u radu se analiziraju mogućnosti korištenja zaštićenog krajolika Jelas polje u agro i ekoturizmu. Ciljano područje do sada nije bilo turistički korišteno, to je razlog radi kojeg smo promatrali pozitivne i negativne utjecaje turizma na prirodna staništa kao i atraktivnost prisavskog krajolika i kulturnog nasljeđa za posjetitelje. Nakon analize Jelas polja kao eko i agro turističke destinacije zaključili smo kamo je područje zanimljivo za promatranje i posjetu različitim turističkim ciljanim skupinama i pojedincima kojima je potreban aktivni odmor.*

Ključne riječi: *Agroturizam, prisavski krajobraz, biološka raznolikost, vrednovanje, ekologija*



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1. Introduction

The subject of the study, we focused on the Brod-Posavina county, which extends along the left bank of the river Sava in the length of 117 km, the whole basin is rich in fertile fields created by river Sava flooding in the past, a large part of today are wetland habitats that are also a number of nesting birds among them being the black and white species, herons: spoonbill, the loitering, little egret, White-tailed Eagle, wild geese and ducks and in winter, cranes that come to wintering in Western Europe. A large part of the basin, Jelas field, and west of Slavonski Brod is because of that stated reason from 1995. protected landscape with parts from which significant parts have declared special ornithological reservation. The area is included in the proposal for the National Ecological Network as an internationally important area for birds. The area enjoys international protection, was named for the internationally important bird area (IBA). Traditionally, agriculture is the most important industry, and farmers are increasingly directed towards organic production methods and nature conservation. Due to these area characteristics, agro tourism, and ecotourism are suitable for development as well as becoming more acceptable tourist form for a large number of domestic tourists and Europeans. The area of Slavonski Kobasa itself and surrounding area are historically important because for the first traces of life in this area dates back 6000 years into the past at the time Starčevo and Sopot cultures[1] because they are from this period found in parts of practical items-clay pottery. The area has since been continuously inhabited, and each new population carried a change of lifestyle. Important findings show about the life of the Celts and Romans at this site. The culturally significant monument was the Roman bridge, which was discovered and verified the authenticity in 2001, and parts of the old Roman road. Kobaš was located at the intersection of important traffic road and river routes. An important cultural monument is the Church of Our Lady Ascended into Heaven and Kloštar site which is linked by many monks (Templar, Hospitallers, Augustinians, Cistercians Franciscans)[1] and the monastery from which the rest of today's church is and Cultural Heritage site. In order to improve the connection between rural tourism and natural beauty of the Brod-Posavina landscape we decided to analyze the western part of the county. The area stretches from the town of Slavonski Brod, including Jelas-field and ending with Slavonski Kobas.Slavonski Kobaš is a typical Sava river valley village in the study included only because of the potential ecological breeding, nesting, and specially developed relations by kobaš population with tradition and ethnology. Fishing economic activity takes place within the field, which leads to a connection between the economy and agritourism. Ponds can be used for tourist fishing and increasing the potential gastronomy. Jelas field and Slavonski Kobaš are available on the tourist map of Brod-Posavina.

2. Problem

Marketing processes about agro tourism, which are well organized, are leading to changes in natural landscapes for tourists what must be taken into account when planning. The presence of tourists, beside positive, can lead to negative

consequences. Major walkthrough, decorating approach, landing and collecting sites, the greater the amount of waste would adversely affect the natural values. Positive effects with agro social perspective in long-term could improve the quality of life and furthermore; it could open the possibility for young families to stay in rural areas. It is necessary to carefully analyze and evaluate the space in order to preserve the landscape.

2.1. Research goals

The aim is to determine the most valuable areas within the set limits and maintain them, and other areas to include in rural households of Brod-Posavina County.

2.2. Methodology evaluation

The area will be evaluated in terms of attractiveness and vulnerability. All evaluation will be done in relation to the category and value of landscape for its preservation, regardless of interaction with agro tourist activities.

3. Rural tourism

Rural tourism is a broad term describing any tourism activity within the rural areas, and covers various aspects of tourism (hunting, fishing, tourism in the parks of nature, winter, rural, ecotourism, health, and culture.). Rural tourism does not generate extra revenue but can also be a professional activity. In the targeted area, Jelas fields, due to the wealth: the cultural and natural heritage and traditional agricultural population can be established all forms of rural and ecological tourism.

3.1. Targeted groups

Target groups are students' day-tour, "team building" and business partners, ecologists, ornithologists, families who want an active vacation, fishing with families, youth groups interested in ecology and environmental protection. Today, the farm holidays in Brod-Posavina are limited to a few farms that are focused on hunting, wine roads in the county and ethno-cultural events that are more widespread as a form of daily tourism and are now focused on domestic tourists.

3.2. Agro tourist offer in Slavonski Brod-Posavina:

Rural households in Brod-Posavina:

- Kereković - Zivike: offers a ranch the size of 5 ha, ride a boat on the Sava River, horseback riding, and equestrian sports, cuisine
- Stara Kapela - Eco-ethno village in Stara Kapela
- Wine Roads (municipal Oriovac, Brodski Stupnik)
- Mlinc - Oriovac, agro tourist farm Švaganović
- Brod-Posavina County is included in the project "Three River one destination" - bike paths that connect the route Sava and Danube River route, which will allow the popularization of the destination field Jelas

4. Landscape description

The area of Slavonski Brod-Posavina County, both in lowland and in the hilly part, is characterized by the original rural landscape (combination of anthropogenic structures and the natural environment).

In terms of geography and landscape, the County allocated the following Landscape units:[5]

1. Psunj slopes, Pozega hills, and Dilj mountain (foothill zone);
2. We have a filtered list of the Sava valley on the transition slopes (boundary zone);
3. Then, we have a central zone of the Sava Valley (in the flood zone field);
4. In the end, there is a narrower and higher area along the Sava (Sava river valley zone).

The Jelas field is protected in the significant landscape category 1995. In addition, include three landscape units (1-4). The vast area of 20,800 ha, extends to the territory of Slavonski Brod and municipalities Oriovac, Bebrina, Sibinj, and Brodski Stupnik. Northern boundary of the protected areas extends to highway Zagreb - Lipovac, and South with the Sava River from Orjava to Mrsunja and follows their courses to the north.

Jelas field is important because it continues in parts of alluvial habitats in rivers basin (Nature Park Lonja field) and shows a connection between the western and eastern parts of the Sava River. The vicinity of ponds and the river Sava this area makes it suitable for feeding and nesting birds. It is important to rest, and wintering of migratory species

4.1. Rare and protected species and habitat types:

The observed region Jelas fields, as important areas of ecological networks and habitat types protected by the Habitats Directive (the National Classification of habitats and Natura 2000)[3] are oak forests with a large broom and associated types of grassland. Among the areas of the first level of Emerald network included the entire Lower Posavina (lower part of the Sava river basin with its tributaries, and all types of vegetation), and especially the Jelas-field ponds and flooded pastures, as well as valuable habitat for birds and other species. [3]

4.2. Rare and protected species and habitat

In the wider area 8 strictly protected are recorded, and 21 protected species of mammals, 83 are strictly protected and 46 protected bird species, 7 of strictly protected and 4 protected species of reptiles, 9 strictly protected and 7 protected amphibian species, 3 are strictly protected insects species, and a protected species of mollusks[2] The above review of strictly protected and endangered species of animals points to the ecological sensitivity of this area.

4.3. Ecotourism Introduction in the concerned area

The impacts of ecotourism in the Jelas field area have been observed through the analysis of strengths, opportunities, and difficulties

<p>Strengths</p> <ol style="list-style-type: none"> 3. Cultural Heritage 4. Authentic cultural identity 5. A rare and ecologically important habitat 6. The economic orientation of the population (agriculture, fish farming) 7. Characteristic Sava river valley landscape 8. Developed Hunting activities 9. Road links 	<p>Weaknesses</p> <ul style="list-style-type: none"> - A rare and ecologically important protected areas - Carried out agro melioration on the part of the observed area - Insufficient marketing activity
<p>Opportunities</p> <ul style="list-style-type: none"> - Utilization of cultural resources for tourism - Increasing employment - Young families stay in rural areas - Creation of a distinctive ecotourism destination 	<p>Threats</p> <ul style="list-style-type: none"> - The traffic intensification - Environmental pollution - Disturbing the natural landscape (flora and fauna) - Poor local population organization - Partially implemented hydro melioration

Table: SWOT analysis of the observed Jelas field area as agro and eco tourist destinations

4.4. The benefits from agricultural and ecotourism activities

The entire area Jelas fields are included in the intensive and extensive partial and ecological agriculture, which is one of the main resources for the establishment of ecotourism. The area includes arable land, pastures, hay meadows, forests, fishing grounds, fishponds that are economically exploited. Within the area, a water protection area stands out from all forms of use. During the planning and construction of tourism infrastructure (point of view, educational trails, rest areas, roads) it is necessary to take into account parts of the areas that have been designated as part of a special category of ponds as ornithological reservation (marked on map 1) and protect them from negative impacts of tourism. The same should be taken into account and by mapping the nests of birds that are not in the strict protection and prevent access closer than 100 m. The basic element for the establishment of tourism is a road infrastructure, which includes parts for bicycle paths included in the program "Three River one destination". Initially, we suggest the development of ecotourism at the drawbar Oriovac-Slavonski Kobaš because of good road infrastructure. In the future, with Posavina highway construction it would be possible to expand the area of ecotourism activity to Stupnicki Kuti and Bebrina and connect them with the wine roads of Oriovac and Brodski Stupnik. The entire area is due to

these characteristics suitable for agro tourist activity, and for what is needed to determine the possible resting places, points of view, educational path that would be located along the marginal parts of the woods or ponds, and in wet pastures allowing unobstructed viewing tourists, and has no harmful effects on the fauna. One of the main threats to the degradation of the area are carried hydro melioration which lead to a lowering of groundwater level on which depended the natural flora, and it is necessary to stop the further lowering of groundwater levels to preserve the natural values of protected landscapes.

5. The space and activities analysis

By the analysis of space and activities, we have concluded the following: We suggest for agro tourism an organized visit to OPGs that have a rich gastronomic offer, which activates the direct selling crafts and food products. The area is rich in ethno-heritage, which allows visitors to participate actively in traditional customs. For the ecotourists, we propose attractive walks through the landscape with well-kept Sava river valley perspective for the study of fauna, educational paths with short depicting of phytocoenological communities and abundant species, and participation in sport fishing. It is necessary to connect the traditional events (equestrian sport), and allow tourists to ride a horse-drawn cart through the Sava river valley landscape.

6. Legislative framework

Legislation Environmental regulations are as follows:

Environmental Protection Act, OG 110/07

National Environmental Protection Strategy NN 46/0

National Environmental Action Plan NN 46/02

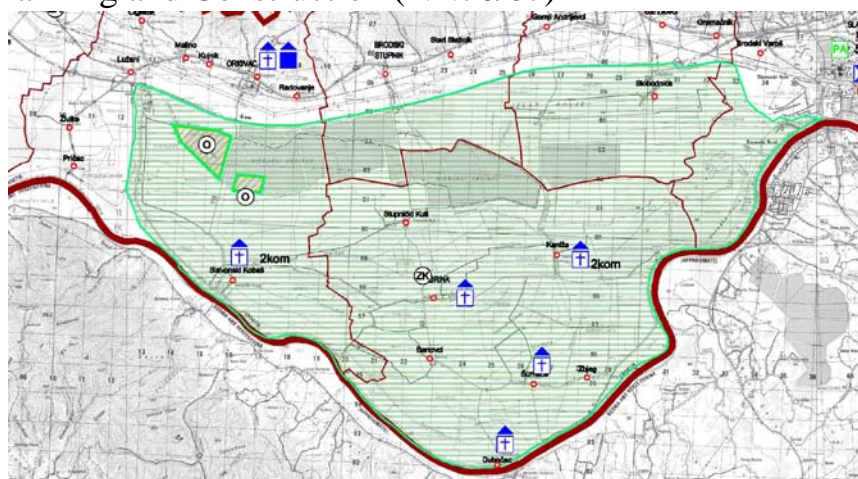
Regulation on the assessment of impact on the environment, NN 64/08, 67/09

Regulation on Strategic Environmental Impact curriculum on environment, NN 4/08

Regulation on information and public participation and public interest in environmental matters, NN 64/08

Strategy for sustainable development of Croatian, NN 30/09

The measures of landscape protection required in accordance with the Law on Spatial Planning and Construction (NN76/07)



Map: The map view for the usage of special conditions

7. Conclusion

The analysis of space and activities we have concluded the following:

In the agro tourist fields, we suggest organized visits to OPG, which has a rich gastronomic offer, which activates the direct selling crafts and food products. The area is rich in ethno-heritage, which allows visitors to participate actively in traditional customs. We propose to ecotourists attractive walks through the landscape with well-kept Sava valley landscape perspective for the study of fauna, educational paths, phytocoenological communities and abundant species, and participation in sport fishing. It is necessary to link the traditional events (equestrian sport) and allow tourists a horse-drawn cart ride through a Sava valley landscape.

8. References

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Photo 123. Polytechnic of Pozega / Veleučilište u Požegi