



AWARENESS AND READINESS OF ENTERPRISES IN RURAL TOURISM TO ADAPT TO ENVIRONMENTAL REQUIREMENTS

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Abstract

Rural tourism, as a sector with great potential for sustainable development, faces the challenge of adapting to growing demands for reducing negative environmental impacts and preserving natural and cultural resources. The aim of the research was to analyze the level of awareness among entrepreneurs in the rural tourism sector regarding the green transition, as well as their motivation and readiness to implement ecological practices. The research was conducted through a survey involving representatives of 17 enterprises from the South Bačka District. An interview was also held with a representative of the Tourism Organization of Vojvodina. The results show that most entrepreneurs understand the basic principles of the green transition but require additional support and resources for its implementation. The main challenges identified were high investment costs in sustainable technologies and a lack of financial means for introducing renewable energy sources and other environmentally friendly practices. The state and local authorities were recognized as key actors in supporting rural tourism enterprises through subsidies, education, and information sharing. Entrepreneurs are generally positively oriented toward the green transition and recognize the economic and social benefits that an environmentally responsible approach to tourism can bring, but they need additional support instruments. It is recommended to improve subsidy programs, introduce mandatory training, and standardize ecological labels in the tourism sector. These measures would enable rural tourism enterprises to become more competitive and attractive to environmentally conscious tourists, contributing in the long term to the sustainable development of tourism in the Republic of Serbia.

Key words: *Rural tourism, sustainable development, green transition, ecological practices.*

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Introduction

Tourism is one of the fastest-growing economic sectors and plays a key role in the economies of many countries, especially those rich in natural and cultural resources [1]. According to data from the World Tourism Organization, tourism generates billions of dollars in revenue annually and employs millions of people [2]. However, as the tourism industry expands, so does its impact on the environment. The expansion of tourism has led to increased resource consumption, degradation of natural habitats, greenhouse gas emissions, and waste generation – all of which pose serious risks to the environment and local communities [3]. Given the growing need to preserve natural resources, it has become clear that changes are necessary to steer tourism toward sustainable practices [4].

The European Union (EU) has developed a strategy for sustainable economic development called the European Green Deal, also known as the Green Transition. The goal of this strategic framework is to make Europe climate-neutral by 2050, meaning that CO₂ emissions would be balanced by the environment's ability to absorb them [5]. The Green Transition is a top priority of the EU and is considered essential for enhancing sustainability in tourism. The benefits that the Green Transition brings to the tourism industry include reducing negative environmental impacts, preserving natural resources, improving the quality of life for local communities, and increasing the competitiveness of destinations [6].

One of the key segments of the tourism industry where the Green Transition can have the greatest impact is rural tourism. Rural tourism plays a special role in preserving natural and cultural resources, as it takes place in natural environments that are often directly affected by climate change. Rural areas, which attract tourists with their natural beauty, biodiversity, and authenticity, face challenges that require responsible resource management and the application of sustainable practices. Implementing the Green Transition in rural tourism can help reduce the negative impact of tourism and increase the competitiveness of destinations, as a growing number of tourists prefer environmentally friendly and sustainable options. Based on these preferences, the Green Transition can also be economically beneficial, as it enhances the attractiveness of tourist destinations and increases the number of visitors [2, 6].

However, for the Green Transition to be successful in rural tourism, it is essential that tourism entrepreneurs recognize and respond to the demand for sustainable practices. A responsible approach to tourism can involve various aspects, such as reducing energy and water consumption, using renewable energy sources, waste management, and protecting local flora and fauna. The sustainability of rural tourism contributes to achieving the goals of sustainable development and helps the planet preserve its natural resources [7]. Given the specific challenges faced by rural tourist destinations, such as weak infrastructure and greater dependence on natural resources, support from the government and local authorities is of crucial importance.

It is essential to highlight the need for supporting tourism enterprises in rural areas as they face various challenges. This support can be provided through education and training on sustainable practices, as well as through financial assistance that would enable entrepreneurs to invest in technologies and infrastructure adapted to environmental requirements. Environmental degradation particularly affects



vulnerable tourist destinations that depend on their natural surroundings [1]. Therefore, it is crucial to find ways to develop and manage tourism in a manner that minimizes its impact on the climate and natural environment.

The aim of the research was to provide insight into the awareness and readiness of businesses in the rural tourism sector of the South Bačka District to adapt to the environmental requirements set by the European Green Deal.

Given that rural tourism has the potential to support sustainable development through the preservation of natural and cultural resources, this research offers valuable information that can be useful in creating sustainable strategies and support policies for businesses in this sector.

Green transition in the context of tourism

The Green transition represents a response to climate change, which threatens both the environment and humanity. Global warming is rapidly affecting ecosystems and climate conditions, prompting the EU to launch a policy framework aimed at achieving climate neutrality by 2050. This transition encompasses sectors such as energy, transport, industry, biodiversity, and agriculture [8].

The Green transition is a political agreement aligned with the 2030 Agenda and the Paris Agreement. Its goals include reducing greenhouse gas (GHG) emissions by 55% by 2030 (compared to 1990 levels), as well as the sustainable management of resources. Key focus areas include clean energy, circular economy, resource-efficient construction, ecosystem protection, sustainable mobility, and environmentally friendly agriculture [9].

In this context, tourism is recognized as an important sector in the green transition. Sustainable tourism involves responsible practices that protect nature, respect cultural diversity, and contribute to local economies [10]. Sustainable tourism is a development approach based on the principles of sustainability – environmental protection, social equity, and economic benefit [4].

The UNWTO defines three key objectives of sustainable tourism: conservation of natural resources and biodiversity, respect for the cultural authenticity of local communities, and fair distribution of socio-economic benefits [2].

To support sustainable tourism, certification systems have been developed, such as the EU Ecolabel, Travelife, and GSTC. These labels help tourism enterprises implement sustainable practices and promote environmentally responsible services. For example, the EU Ecolabel sets standards for energy-efficient services, while Travelife supports resource management and the protection of workers' rights [11].

Although not a member of the EU, the Republic of Serbia embraces the principles of the green transition in tourism. The national tourism strategy through 2025 emphasizes the importance of preserving natural and cultural heritage and promotes environmentally sustainable practices [12]. Serbia has the potential to enhance its tourism offer and build the image of a green destination [13].

Sustainability certification in Serbia includes criteria such as operating in rural areas, preserving nature and cultural heritage, quality of services, visibility on tourism



platforms, and the application of ecological standards [14]. Examples include rural and ecotourism, which combine nature conservation with local traditions [1, 15]. These systems not only contribute to environmental protection but also enhance competitiveness and consumer trust. They also support local communities through employment, the promotion of cultural identity, and the sustainable use of resources. Through such initiatives, Serbia can improve the quality of its tourism offer and align with global sustainable development goals.

Materials and methods of research

The research was conducted in the South Bačka District, which includes both urban and rural areas with well-developed potential for tourism and natural resource conservation. A mixed methodological approach was used—both quantitative and qualitative. The main instrument was a survey questionnaire consisting of 29 questions (closed, open-ended, and scaled types), distributed via the *Google Forms* platform during the period from October 23 to October 30, 2024. The sample included 17 businesses from the rural tourism sector, and additional insight was obtained through a structured interview with a representative of the Tourism Organization of Vojvodina. The criteria for selecting respondents included geographical location, engagement in tourism activities, and active business operation. The data were analyzed using charts and response coding.

Research results

Awareness of enterprises about the green transition

A total of 17 business representatives responded to the survey. Businesses from every municipality in the South Bačka District participated. The share of respondents from the municipalities was 58.8%, while 41.2% were based in the city of Novi Sad. The majority of respondents were enterprises engaged in accommodation services.

Two businesses (11.8%) rated their understanding of the green transition in tourism with a score of 1, while three businesses (17.65%) gave the highest score of 5. The most common response was a score of “3,” selected by six businesses (35.29%) (see Figure 1).

Two respondents did not know what the green transition is, and one thought it meant “green turning.” Three entrepreneurs more or less understood the concept, while 11 knew what the green transition is and what it entails.

Two businesses could not specify what effects the EU’s green transition has on rural tourism. One company believed that nothing will change and that rural tourism will remain the same. Seven businesses considered that the green transition has both positive and negative effects. It was noted that misunderstandings and problems can sometimes arise. On the other hand, it was mentioned that it is much easier to implement sustainable activities in rural areas than in cities, but transportation remains a problem, as it is not well-developed in rural regions. One business



responded: *“Changes are always hard to accept, but no one is trying to turn the planet in the opposite direction; we will probably succeed.”*

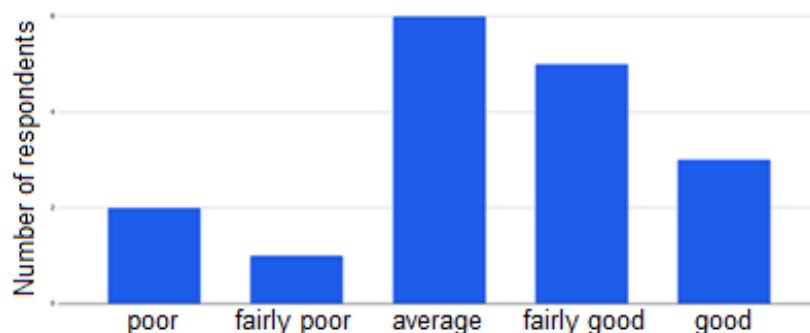


Figure 1. Entrepreneurs' assessment of their understanding of green tourism

Legend: 1 - poor, 2 - fairly poor, 3 - average, 4 - fairly good, 5 - good

Seven businesses believe the green transition has positive effects. They mentioned increased use of local raw materials, greater participation of renewable energy sources, more subsidies, and growing awareness about environmental protection, all of which boost interest in eco-friendly rural tourism.

Two businesses could not say what effects the green transition would have on their operations. Two companies think the transition may have negative effects. They pointed out that if people stop traveling, there will be fewer clients, and costs—such as introducing various waste bins—may increase. One business noted that the transition is already affecting them because, when developing subsidies and services, they must describe and follow green transition principles like energy efficiency, renewable energy use, recycling, etc. Four companies believe there are no effects because they were already operating in an eco-friendly way before the transition. Seven businesses consider the green transition to have a positive impact because it encourages them to think more about eco-friendly operations and the possibilities of subsidies for developing ecotourism and environmentally friendly accommodation facilities.

Eight businesses have heard of the circular economy concept and know something about it. Also, eight businesses have good knowledge of ecological economics, and two of them apply it in their operations. One business stated that their products mostly consist of recycled materials and industrial waste. Another said their goal is to apply the circular economy to the greatest extent possible. Unfortunately, one business did not know what circular economy means.

Four businesses do not know what sustainable tourism is, while eight businesses are partially familiar with the topic. They were aware of general concepts, such as choosing cycling instead of flying, having a small ecological footprint, and preserving natural resources. Five businesses demonstrated awareness of the circular economy. One business stated that all of its activities are guided by sustainability principles: *“In our museum, visitors wear our slippers (saving materials for flooring, cleaning costs, electricity, etc.), we extend the season by adding winter activities (sledding hill, ice rink, lantern walks, winter magic), we offer many different services on-site so visitors can get*



everything they need here, we use local raw materials in catering, and closely collaborate with local entrepreneurs – most of our souvenirs are produced by local companies."

Elements of the green transition

Up to 13 businesses (76.5%) are accessible by public transportation, while 4 (23.5%) are not (see Figure 2).

Twelve businesses (70.6%) use reusable or deposit containers, four (23.5%) do not, and one business (5.9%) indicated that this option does not apply to them (Figure 2).

Unfortunately, one business (5.9%) does not sort waste, but the remaining 16 (94.1%) do so on a daily basis (Figure 2).

In response to the question of whether they support the preservation of local landscapes, biodiversity, and nature conservation, four businesses (23.5%) replied that the question was not applicable because they do not have protected landscapes. The remaining 13 businesses (76.5%) responded affirmatively (Figure 2). Local landscapes are maintained through grazing. Biodiversity is protected by refraining from mowing hay and cutting trees. Nature conservation is supported through educational nature walks, where guides talk about nature and its protection, as well as through the maintenance of parks, recreational, and public spaces.

To the question of whether the business supports the preservation of local cultural heritage, three businesses stated that the question was not applicable to them. One business responded "no" without justification. Thirteen businesses (76.5%) support the preservation of local cultural heritage by supporting cultural associations (Figure 2). Some supporting businesses are museums, which already contribute by maintaining heritage sites.

Sixteen businesses (94.1%) support the local community, while one respondent (5.9%) did not answer the question (Figure 2). The local community is supported through the purchase of services that the businesses themselves do not provide. In addition, cooperation is achieved by offering food and accommodation to local residents and organizing events for the community. One of the support measures also includes providing employment opportunities.

Seven businesses (41.2%) use renewable energy, mostly solar panels. Electricity is also generated using geothermal heat pumps. Eight businesses (47.1%) do not use renewable energy due to a lack of financial resources for purchasing solar panels. Two businesses (11.8%) did not respond to this question (Figure 2).

Thirteen businesses (76.5%) have adopted low-energy heating and lighting equipment, three businesses (17.6%) have not, and one business (5.9%) indicated that this was not applicable (Figure 2).

Eleven businesses (64.7%) base their equipment purchases on whether it is sustainably produced, while three businesses (17.6%) do not. The question was not applicable to three businesses (17.6%) (Figure 2).

Fifteen businesses (88.2%) use local service providers as cooperation partners, and the question was not applicable for two businesses (11.8%) (Figure 2).

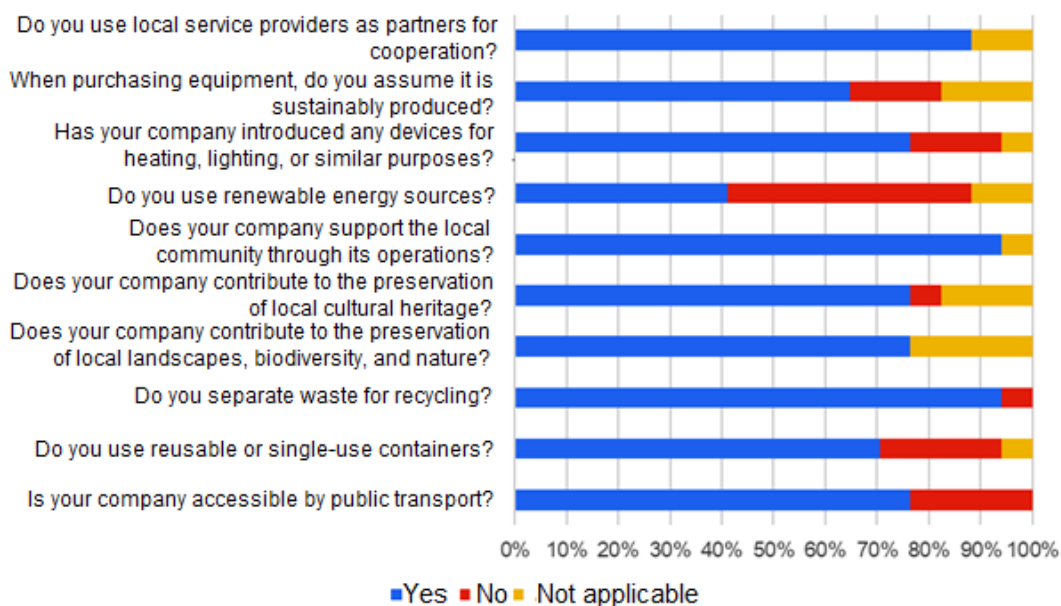


Figure 2. Use of green transition elements among businesses

Readiness of businesses to get involved

According to six businesses, the state has done nothing to support the implementation of sustainable development principles or the design of the green transition. Four businesses have received subsidies from the government. One respondent stated that mandatory waste sorting is an idea of the green transition. One business participated in a study day, and three businesses received information and guidelines from the state. Two businesses were unable to say how support was provided to them.

The municipality assisted in developing the transition plan, providing information, and offering subsidies related to the green transition concept. One business received subsidies from the local government. Six businesses received information. One business stated that the local government helped with waste sorting options, while another business from a different municipality reported that the local government blocked access to waste containers and that there was even a conflict over it. In the case of five businesses, the local authorities did not provide any support, and two businesses could not say how or if any assistance was given.

Almost half of the respondents (7) have not trained themselves or others on topics related to the green transition and sustainable tourism. Six businesses participated in some form of training. One business trains its employees through internal regulations, which employees must read before starting work. Two businesses received training online, and one entrepreneur is currently working on green transition training.

Tourism businesses in the South Bačka District believe they could become more environmentally friendly. Fourteen businesses stated that they could improve by using reusable dishes and renewable energy sources. Ten businesses mentioned waste collection services, twelve cited waste sorting and cooperation with local authorities. Others noted that these measures alone do not automatically make a business eco-friendly. It was also believed that most small businesses already provide services in an environmentally responsible way.



For 13 businesses (76.5%), it is important that their business partners apply sustainability principles.

The interviewee, who has worked in the tourism sector for over 20 years, is an employee of the Tourist Organization of Vojvodina. Among its tasks are to make the South Bačka District more attractive and visible, to offer comprehensive and high-quality value, to develop attractive products/services, and to carry out tourism marketing. The organization helps businesses become more visible as destinations, increase the number of visitors, turnover, and profit, and provide quality value to guests.

The Tourist Organization of Vojvodina implements the green transition in cooperation with municipal tourist organizations, with whom it organizes training and programs for entrepreneurs on the topic of sustainable tourism. It also helps businesses obtain eco-labels by providing support and guidance. Work is also being done on "Green Destination" labels.

According to the interviewee, there is no avoiding the green transition, and everyone must deal with it, as the directives apply to all, and entrepreneurs must begin implementing them. Most entrepreneurs are already familiar with what the green transition is and how to apply it in their operations. The interviewee stated: *"At first, they don't know what to think of, but the more they learn and receive training, the more they begin implementing changes in their businesses."*

However, in order to implement the green transition, businesses want clear instructions and support measures from the state and local authorities. The interviewee could not answer the question regarding the main challenges entrepreneurs face in implementing eco-friendly solutions, as no such survey has been conducted among them.

According to the interviewee, the competence and awareness of entrepreneurs in the South Bačka District regarding sustainable tourism development have been raised through training sessions and information days organized by the municipalities. The South Bačka District does not currently have a specific "green transition plan" as a separate document, but there are numerous initiatives and activities addressing ecological and sustainable development within the district's municipalities.

At the local level, cities and municipalities in the district adopt projects and strategies that include goals such as energy efficiency, improving infrastructure to reduce greenhouse gas emissions, and promoting sustainable practices in agriculture, industry, and the service sector.

According to the interviewee, sustainability labels help promote sustainability, as they inherently involve sustainable activities. In his words, ecological labels, rules, requirements, and guidelines for businesses are sufficient to make local tourism more sustainable.

Discussion

It was revealed that tourism businesses in the South Bačka District tend to underestimate their knowledge of the green transition and sustainable practices. They



rated their understanding lower than what they actually demonstrated. The interview showed that most entrepreneurs have become familiar with the concept of the green transition and how to implement it in practice. According to the entrepreneurs, the green transition will have a positive impact on rural tourism and businesses by encouraging them to become even more environmentally friendly.

The green transition is viewed as a positive development that helps destinations better implement sustainable solutions. Söderholm (2020) pointed out a downside of the green transition, noting that making businesses more sustainable often comes at a higher cost, which in turn leads to rising prices [16]. Awareness of the circular economy and sustainable travel is very high, and there are already entrepreneurs applying circular economy principles in their operations and focusing on sustainable travel.

Questions related to the elements of the green transition revealed that businesses are applying sustainability principles. More than half of the businesses use reusable dishes, sort waste, support the preservation of local landscapes, protect biodiversity and nature, and contribute to the conservation of cultural heritage and the local community. In addition, most businesses have adopted low-energy equipment for heating and lighting and take sustainability into account when purchasing equipment. The majority of businesses are accessible by public transportation, although one entrepreneur pointed out that public transportation is poorly managed in rural areas. All businesses reported using local service providers as partners in cooperation.

The only element that showed nearly equal division was the use of renewable energy. The reason for the lack of renewable energy use lies in its high cost. Similarly, in the study by Li et al. (2019), it was shown that many businesses would like to use renewable energy sources, but such solutions are still relatively expensive.

Through the implementation of sustainable development principles and the conceptualization of the green transition, the state and local governments have supported more than half of the businesses in the form of subsidies, training, information, and other resources.

Local authorities have also assisted tourism businesses in preparing strategies for sustainable growth. However, businesses are seeking more concrete instructions and support measures from both the state and local governments for the implementation of the green transition (Interview, 2024).

More than half of the respondents have trained themselves or their colleagues on topics related to the green transition and sustainable tourism, and one business is currently working on such training. It can be concluded that the Tourist Organization of Vojvodina is providing a sufficient number of trainings and programs on sustainable tourism (Interview, 2024).

Based on the research, it can be confirmed that tourism businesses are becoming more environmentally friendly. Collaboration with local governments remains incomplete, as they also lack financial resources. For more than half of the entrepreneurs, it is important that their business partners adhere to sustainability principles.



Conclusion

There is evident potential for improving rural tourism through the application of green transition principles. The research showed that businesses in the rural tourism sector of the South Bačka District are moderately aware of the environmental requirements of the European Green Deal and demonstrate a willingness to implement them. However, the lack of financial resources, technical support, and knowledge remains a key obstacle. Although some businesses have already introduced eco-friendly practices such as recycling, the use of local raw materials, and renewable energy sources, most still require additional training and institutional support.

The role of the state and local governments is crucial, yet current support programs are insufficient. It is necessary to introduce subsidies, clear guidelines, and mandatory training to encourage the broader application of sustainable practices. Sustainability is increasingly recognized as an opportunity to enhance the competitiveness and attractiveness of destinations, especially in rural areas.

The development of a system of eco-labels and sustainability certificates for tourism is recommended, as well as further research into the challenges entrepreneurs face when implementing environmentally friendly solutions.

The study confirmed that businesses in the rural tourism sector of the South Bačka District are ready to contribute to the goals of the green transition, but they need additional support and training to effectively implement sustainable practices. Entrepreneurs are generally open to change and aware of the benefits that environmentally responsible business can bring, but they lack the resources and concrete support plans from local authorities and the state.

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