

IMPORTANCE OF ENVIRONMENTAL SUSTAINABILITY IN ACHIEVING MORE RESILIENT WESTERN BALKAN DESTINATIONS

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Abstract

Managing environmental threats in the tourism industry is a critical challenge for future development. Adhering to sustainable development principles is a vital solution. This paper examines the natural resource availability and environmental sustainability capacity of Western Balkan countries to highlight the risks of preserving natural resources. The results of the analysis show that the countries of the Western Balkans have a significantly higher level of capacity for environmental sustainability than the availability of the potential of the natural environment. Therefore, better protection of natural resources is necessary through increased protection areas, the number of total known species, terrestrial and freshwater ecoregions, and better promotion of natural attractions through effective digital demand management.

Key Words: *natural resources, environmental sustainability, tourism, ecological risk.*

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Introduction

Natural resources represent one of the most important factors and the basis for the development of tourism. „Since the last decade of the twentieth century, the natural environment has been considered a key

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resource in tourism“ (Mason, 2016, p. 119). In modern conditions of development, an important task at the micro and macro level of tourism development is to ensure the conditions for carrying out tourist activities so that natural resources are used in such a way that there are at least as many of them for future generations how many are there today.

Since natural resources play a very important role in the creation of tourist offers and are increasingly in demand in satisfying tourist demand, the issue of environmental sustainability is becoming increasingly important. „When destinations solely focus on attracting more visitors and neglect long-term sustainability, it can lead to their ultimate deterioration and decline“ (Sustainable Travel International, 2024). Managing the development of destinations must be based on a long-term view of the impact of tourism on the environment and people. Only by establishing a trade-off between the quality of natural resources and environmental sustainability is it possible to use the benefits of tourism in the form of creating new jobs, preserving natural, cultural, and historical values, as well as ensuring the satisfaction of both tourists and the local population.

Destinations in the countries of the Western Balkans have significant potential for the development of nature-based tourism. The subject of research in this paper is the availability of natural resources viewed through heritage natural sites, the number of total known species, total protected area, natural tourism digital demand, and the number of terrestrial and freshwater ecoregions in the Western Balkan countries. The research aims to examine whether the level of availability of natural resources for carrying out tourist activities follows the achieved level of environmental sustainability. The information basis for the research in this work is the data of the World Economic Forum. The expected result of the research should indicate the level of risk faced by the countries of the Western Balkans in terms of the preservation and availability of natural resources to achieve a higher level of resilience.

Importance of natural resources for tourism activity

The relationship between tourism and the environment is very complex. The increase in demand for attractions in nature, outdoor activities, and nature-based tourism is evident, especially after the COVID-19 pandemic (Macdonald et al., 2023; World Travel & Tourism Council, 2021). This increased demand for vacations and attractions in nature creates a threat

due to their excessive use, endangering biodiversity, and increasing the level of pollution.

Tourism has a strong negative impact on natural resources. The negative impacts of tourism on the natural environment are reflected in air pollution caused by traffic, water pollution, and waste generation. There is a significant negative impact on the natural environment due to the construction of tourist infrastructure in the form of hotels, roads, and airports.

The pressure of tourism on the environment is reflected in the following (United Nations Environment Programme, 2014):

- *the increase in gas emissions* (NG) that cause the greenhouse effect – here we particularly take into account the significant gas emissions created by the transport sector (road and air), as well as accommodation services in tourism (use of heating and cooling systems);
- *water consumption* – tourism creates pressure on already reduced water resources;
- *waste management* – tourism creates significant solid waste and wastewater;
- *harmful impact on biodiversity* – here we mean especially the erosion of coral reefs, coastal areas, forests, and mountain areas;
- *increased conflict with the local community* – conflict can arise in cases where the future of biodiversity is not taken into account when planning the development of the destination;
- *relation to cultural heritage* – a negative impact is created during the unplanned development of tourism.

„On the one hand, tourism activities, which are based on environmental resources, can have a significant negative impact. On the other hand, tourism has the ability to influence the restoration and preservation of the environment” (Jovanović 2017, p. 272). The high level of quality of natural resources provides tourists with satisfaction and the expected experience.

The development of tourism provides a means for managing the quality of natural resources, and thus tourism contributes to their protection and preservation. The development of tourism increases the income from this activity, which should be partly used to improve the state of the

environment. Thus, tourism can contribute to: the improvement of local infrastructure and quality of life of the local population, conservation of cultural and historical resources, creation of nature parks and protected areas, conservation of biodiversity, and protection of water and air through the use of renewable energy sources (Baloch et al., 2023). „Tourism is the backbone for growth and development as well as for pollution reduction“ (Tian et al., 2021).

Research conducted by the World Economic Forum in the *Global Risks Report 2022*, states that environmental risks with climate action failure, extreme weather, and biodiversity loss, are some of the biggest threats in the future, in addition to the debt crisis, geoeconomic confrontations, livelihood crises or infectious diseases (World Economic Forum, 2022).

For the development of tourism, it is not enough to take care of the preservation of natural resources in the sense of their conservation. It is very important to carry out activities to constantly improve their quality. An important element in that process is the awareness of people, i.e. tourists, but also of the entire tourism system.

Relationship between natural resources and environmental sustainability in Western Balkan countries

The World Economic Forum has been publishing the report on the *Travel and Tourism Development Index* (TTDI) since 2021. TTDI represents a revised version of the *Travel and Tourism Competitiveness Index* (TTCI) that was published until 2019. The new version of the index should „reflect the growing role of sustainability and resilience in T&T growth, as well as the sector's role in broader economic and social development.“ (World Economic Forum, 2022) TTDI is composed of five subindexes, 17 pillars, and 112 indicators which provide information on the main forces for the development of tourism in national economies.

Pillar - *Natural Resources* shows „available natural capital as well as the development of outdoor tourism activities“ (World Economic Forum, 2022). Indicators that show the extent to which the country has resources for attracting tourists refer to heritage natural sites, number of total known species, total protected area, natural tourism digital demand, and number of terrestrial and freshwater ecoregions.

Table 1: *Value, score, and range of a pillar - Natural Resources in Western Balkan countries in 2019 and 2021*

Country	2019			2021			Change of rang 2021/2019
	Value	Score	Rang	Value	Score	Rang	
Albania	1,9	1,9	84	2,1	2,1	80	↑
Montenegro	1,7	1,7	92	1,8	1,8	92	-
North Macedonia	1,5	1,5	101	1,8	1,8	93	↑
Serbia	1,5	1,5	102	1,6	1,6	104	↓
Bosnia and Herzegovina	1,4	1,4	108	1,7	1,7	96	↑

Source: *World Economic Forum (2024)*

Table 1 shows that all the countries of the Western Balkans are positioned very low in terms of the availability and quality of natural resources for carrying out tourist activities. In relation to the 117 countries included in the World Economic Forum Report - *Travel & Tourism Development Index 2021: Rebuilding for a Sustainable and Resilient Future*, the analyzed group of countries is in the last third of the world list according to its rank and value, both in 2019 and 2021. The best positioned, within the Western Balkan countries, is Albania (80th place on the world list in 2021), followed by Montenegro (92nd position), North Macedonia (93rd place in the world), Bosnia and Herzegovina (96th place in the world) and the worst rated and positioned Serbia at 104th place in the world. In 2021, compared to 2019, Albania, North Macedonia, and Bosnia and Herzegovina improved their score and ranking, while Serbia fell by 2 positions on the world list.

Table 2: *Value, score, and range of pillar – Environmental sustainability in Western Balkan countries in 2019 and 2021*

Country	2019			2021			Change of rang 2021/2019
	Value	Score	Rang	Value	Score	Rang	
Albania	4,3	4,3	40	4,4	4,4	27	↑
Montenegro	4,0	4,0	60	4,0	4,0	64	↓
North Macedonia	3,6	3,6	94	3,7	3,7	91	↑
Serbia	3,7	3,7	84	3,8	3,8	78	↑
Bosnia and Herzegovina	3,4	3,4	111	3,5	3,5	105	↑

Source: *World Economic Forum (2024)*

This positioning of the countries of the Western Balkans indicates an extremely low commitment to the quality of natural resources, which can

be seen in the value of the indicators that make up the pillar - *Natural Resources*. Thus, the countries of the Western Balkans are positioned low according to the indicator - *Number of world heritage sites*, then, according to the indicator - *Total known species*, the indicator - *Total protected area*, the indicator - *Natural tourism digital demand*, and the indicator - *Number of terrestrial and freshwater ecoregions*.

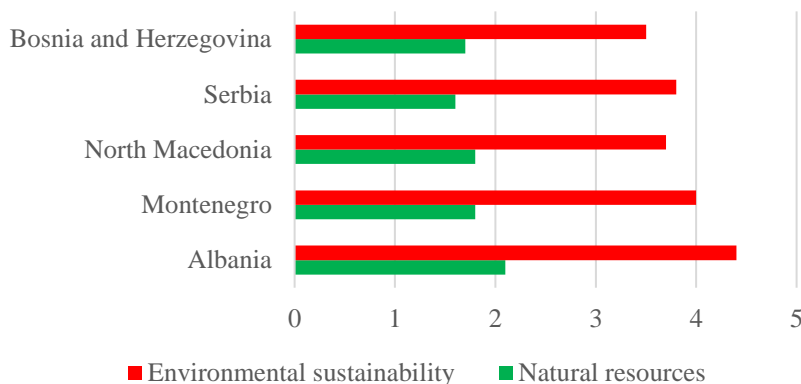
According to the achieved level of *Environmental sustainability*, Western Balkan countries are also positioned low in the world list of the World Economic Forum. In 2019, the best rated and ranked was Albania (40th place in the world according to the level of environmental sustainability compared to 117 analyzed countries), followed by Montenegro (60th place in the world), North Macedonia (94th place in the world), Serbia (84th place in the world), and the worst-rated Bosnia and Herzegovina (111th place in the world). In 2021, all countries of the Western Balkans improved their scores and ranking according to environmental sustainability, except for Montenegro. Montenegro worsened its position by 4 places, but this is not the result of a reduction in the score (the score remained unchanged), but a change in the overall rankings. The biggest positive change in the ranking was recorded by Albania, improving its position by as many as 13 places. In 2021, Albania ranked 27th in the world according to the achieved level of environmental sustainability. In 2021, North Macedonia, Serbia, and Bosnia and Herzegovina are still in the last third of countries in the world according to environmental sustainability.

Ecological risk and nature-based tourism

One of the very important issues highlighted in the World Economic Forum Report - *Travel & Tourism Development Index 2021: Rebuilding for a Sustainable and Resilient Future* refers to ecological and environmental threats and challenges. The Report emphasizes that „comparing the *Natural Resources* and *Environmental Sustainability* pillar scores helps to pinpoint where some of the greatest risks to nature-based tourism might lie“ (World Economic Forum, 2022, p. 27). Since natural resources represent one of the most important bases for creating tourism demand, it is extremely important to manage the risk of endangering and damaging the natural environment. In this, respect for the principles of the concept of sustainable development is a key solution. That is why the WEF (World Economic Forum, 2022) emphasizes the

importance of monitoring the achieved level of availability and quality of natural resources and the sustainability of the natural environment.

Figure 1: *Scores of pillars - Environmental Sustainability and Natural Resources in Western Balkan countries in 2021*



Source: *World Economic Forum (2022)*

Figure 1 shows the score of pillars - *Environmental Sustainability* and *Natural Resources* in Western Balkan countries in 2021. It can be seen that in all the countries of the Western Balkans, the level of environmental sustainability is significantly higher than that of natural resources. It is noted that Albania records the highest level of availability and quality of natural resources, as well as the highest level of environmental sustainability. At the same time, Bosnia and Herzegovina has the lowest level of both availability and quality of natural resources, as well as the lowest level of environmental sustainability.

This analysis indicates that the situation regarding the sustainability of natural resources in the countries of the Western Balkans is favorable and the level of ecological risk for the further development of tourism is lower. All the countries of the Western Balkans achieve a significant difference between the score of *Natural Resources* and the score of *Environmental Sustainability* in favor of the elements and indicators of sustainable development.

Conclusion

The increase in demand for natural attractions and nature-based tourism carries with it the risk of increased air pollution caused by traffic, water

pollution, waste generation, and deterioration of the quality of all environmental factors. This trend represents a challenge for destinations that should base their management of tourism activities on a long-term view of the impact of tourism on the environment and people. Only by establishing a trade-off between the availability and quality of natural resources and environmental sustainability, it is possible to ensure and use the benefits that tourism creates.

The results of the research in this paper showed that the countries of the Western Balkans are rated very poorly according to the availability and quality of natural resources. All Western Balkan countries are on the world list between 80th place (Albania) and 104th place (Serbia) out of 117 analyzed countries in 2021 by the World Economic Forum. This positioning of the countries of the Western Balkans indicates a particularly low commitment to the quality of natural resources, which can be seen in the value of the indicators - *Number of world heritage natural sites*, *Total known species*, *Number of terrestrial and freshwater ecoregions*. According to the achieved level of environmental sustainability, the group of Western Balkan countries is slightly better positioned, from 27th place in the world (Albania) to 105th place (Bosnia and Herzegovina) in 2021.

Since natural resources represent one of the most important bases for creating tourism demand, it is extremely important to manage the risk of endangering and damaging the natural environment. Hence, the importance of monitoring the achieved level of availability and quality of natural resources and the sustainability of the natural environment. The research results in the paper showed that Albania records the highest level of availability and quality of natural resources, as well as the highest level of environmental sustainability. At the same time, Bosnia and Herzegovina has the lowest level of both availability and quality of natural resources, as well as the lowest level of environmental sustainability.

It is characteristic for all countries of the Western Balkans that the *Environmental sustainability* score is significantly higher than the *Natural resources* score. This analysis indicates that the situation regarding the sustainability of natural resources is favorable and the level of ecological risk for the further development of tourism is lower. Managing the development of destinations in the countries of the Western Balkans is necessary based on a long-term assessment of the impact of tourism on

the environment and people to ensure greater resilience to challenges and environmental sustainability.

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