

**Mendel University in Brno  
Czech Society of Landscape Engineers – ČSSI, z.s.**

**Public recreation and landscape protection  
– with environment hand in hand!**



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**Editor: Jitka Fialová**

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**Czech Society of Landscape Engineers – ČSSI, z. s.,**



**and**

**Department of Landscape Management  
Faculty of Forestry and Wood Technology  
Mendel University in Brno**



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**Proceedings of the 15<sup>th</sup> Conference**

**Editor: associate Professor Ing. Jitka Fialová, MSc., Ph.D.**

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Under the auspices  
of prof. Dr. Ing. Jan Mareš, the Rector of Mendel University in Brno,  
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# ENVIRONMENTAL PROTECTION AND SUSTAINABLE TOURISM OF CROSS-BORDER NATIONAL PARKS IN KOSOVO, MONTENEGRO AND ALBANIA: CONTINGENT VALUATION METHOD

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## Abstract

The border triangle between Kosovo, Montenegro, and Albania, comprising national parks in the Western Balkans, is experiencing a surge in mountain tourism, posing environmental conservation and sustainable tourism challenges. Concerns about preserving these parks have prompted an investigation into visitors' willingness to support sustainable practices financially. This study used willingness-to-pay (WTP) methods to examine visitor preferences based on demographic factors such as age, country of origin, and education. The Contingent Valuation Method (CVM) was employed to determine the monetary value visitors are willing to contribute to these parks. Results indicate that most (80%) visitors are willing to financially support improving services and sustainable tourism practices, with willingness to pay ranging from 1 to 4 €. However, willingness to pay tends to decrease with age, and visitors from Kosovo and Albania exhibit higher willingness levels than those from Montenegro. Interestingly, visitors with primary education show a negative inclination towards WTP. These findings offer valuable insights for stakeholders crafting sustainable tourism strategies in the Western Balkan countries.

**Keywords:** Cross-border forests, environmental conservation, Mountain tourism, National Park, Sustainable tourism; Western Balkans, Willingness to Pay

## Introduction

In the south of the Dinaric mountain range, which includes the borders of Kosovo, Montenegro and Albania, mountain tourism has increased during the last decades (Porfido, 2020). This preceded the decision of each Western Balkan country in this border triangle to create their national parks, motivated by a commitment to protect ecological and social-historical locations while promoting sustainable tourism practices. Four national parks and one regional park have been created within this region. Bjeshkët e Namuna is the largest national park in this region, with an area of about 63,000 ha. This park lies south and west of Kosovo, along the border with Montenegro and Albania (Hasanaj & Kuqi, 2022). The announcement of this area as a National Park was made in 2013. Prokletije is a national park in Montenegro, with an area of about 16,000 ha (Young, 2008). Valbonë and Thethi are national parks in Albania, while Nikaj Merturi has the status of a regional park. These three parks together have an area of about 29,000 ha and are also known as the "Albanian Alps" (Young, 2008). For residents, creating national parks helps protect these areas and promotes ecological, social, and cultural values (Platania & Rizzo, 2018).

While the flow of tourists continues to increase, thus reinforcing the need for services, accommodations, and infrastructural facilities, the respective states must address these needs on time. This delay can be attributed to bureaucratic procedures, a need for more qualified personnel working in national parks and financial support. The lack of projects, relevant legislation and financial resources to actualise such initiatives has forced residents and businesses to increase their capacities to meet the demands of visitors, often without a clear strategic plan and sometimes without following all the rules of existing laws. The main consequences of unsustainable tourism practices can be economic and environmental (Eagles, 2009), underscoring the need for a balanced approach prioritising sustainable planning over immediate benefits (Hojeghan & Esfangareh, 2011).

The main challenge for managers of these National parks is the need for more funds for park management, which causes financial instability and affects sustainable management (Platania & Rizzo, 2018). Funds are limited and are mainly allocated for salaries and routine maintenance. Additional funds are needed to promote the development of sustainable tourism. They are establishing a tax to improve services and provide sustainable tourism as an acceptable alternative (Doli et al., 2021). Establishing this tax requires an insight into the perspectives of residents and visitors regarding their willingness to contribute financially to the parks (Fialová et al., 2019).

Being aware of the necessity of continuous funding for maintaining and promoting national parks, visitors' contributions are envisaged to transform proposed sustainable tourism projects into reality (Platania & Rizzo, 2018). However, the initiative has raised concerns among locals and visitors alike, with concerns that imposing entrance fees could reduce the number of potential visitors, subsequently reducing income for residents (Petcharat et al., 2022). A subset of dissenting voices argues that national parks, considered public property, should not charge entrance fees; instead, the government should fund projects directly.

The study's main objective was to assess visitors' willingness to contribute financially to improved services and the promotion of sustainable tourism within the National Parks. The application of the entrance fee serves a dual purpose: funding initiatives to improve visitor services and ensuring the conservation of these National Parks.

### **Material and methods**

The Contingent Valuation Method (CVM) was used for field data collection. CVM, widely utilised for environmental assessment (Bamwesigye et al., 2020, Doli et al., 2021, Petcharat et al., 2022, Bamwesigye 2023), directly elicits individuals' opinions on the value they assign to a given resource and its associated services. The Contingent Valuation Method determines the economic value of a non-market good or service by asking individuals about their willingness to pay for it. This hypothetical non-market value is contingent on a scenario described to participants before the inquiry, outlining the conditions and characteristics of the evaluated resource (Doli et al., 2021).

The study calculated a sample size of approximately 368 surveys, considering an estimated population size of  $P=100,000$  individuals who lived or have visited one of the National Parks mentioned in the research. The interviews were conducted in the field to get access and participation from different respondents from the different national parks mentioned in this study. Targeting individuals who had visited National Parks at least once, the study sought to capture a representative perspective on the experiences and preferences of this specific group of visitors. The 366 questionnaires were enough for our study to reach our desired conclusions.

Field surveys were conducted over four months (June to September 2022) during 12 visits to the national parks mentioned in this study. The questionnaire form was filled out by 366 respondents (after removing the incorrect forms).

Descriptive measures (mean, median and mode) were calculated to discern trends within the dataset. Variance, standard deviation, and range were computed for numerical data to gauge the spread and dispersion of values. Cross-tabulation was employed to explore relationships between willingness to pay (WTP) and national park visitor activities.

### **Results and Discussions**

The demographic characteristics of the respondents are illustrated by the respondents who visited the National Parks. Variables include Gender, age, State, distance of residence from the National Park, and Level of Education. Each variable has categories, including the number of respondents (n) and the percentage.

Regarding Gender, the respondents are well-balanced, with 51.9% Male and 48% Female, ensuring diverse perspectives. Age distribution is varied, with the majority (45%) being in the 18-34 range, followed by the range 35-49 (32%) and 50-65 (16%) age groups. A smaller percentage (6%) are respondents aged 65 and above. Geographically, the majority of visitors are from Kosovo (44%), followed by Albania (23%) and Montenegro (20%). The rest are foreign visitors (13%). Data based on the distance of residence from the National Park shows that approximately 29% of visitors live within 0-50 km of National Parks, while around 75% are located within 0-150 km; the rest of the visitors belong to the group who live at a distance greater than 150 km. Specifically, the segmentation of visitors based on their residential

distances is as follows: 5-10 km (14%), 10-50 km (15%), 50-100 km (27%), 100-150 km (19%) and distances over 150 km make up 24.9%. The Level of Education is diverse, with the majority having a University education (53%). High school graduates constitute 26%, while those with primary school education and postgraduate qualifications represent 12% and 9%, respectively.

### ***The willingness of visitors to pay***

Numerous studies have shown that demographic variables significantly influence visitors' willingness to pay an entrance fee (Doli et al., 2021). Specifically, the findings highlight the role of age, education level, employment status and monthly income in shaping responses. Key determinants include visitor spending and the importance individuals attach to the presence of parks and green spaces. Notably, Gender did not emerge as a significant factor influencing individual decisions, a finding consistent with the results documented in our study (Doli et al., 2021).

Most visitors (81%) expressed a positive inclination to pay for national park entry, while a minority (20%) did not indicate readiness to pay. Specifically, 32% of visitors were willing to pay €1 (100 ALL), and the highest percentage (41%) opted to pay the range 2-4€. Approximately 8% of visitors expressed readiness to pay more than €5. Conversely, 19.5% showed unwillingness to pay a tax (€0/ALL). Visitors understand that more than relying on state funds is needed to effectively manage and maintain these national parks. Consequently, there is a willingness among visitors to contribute financially. This assertion supports previous studies where visitors from different countries have articulated their willingness to contribute financially to protecting the environment and sustainable tourism practices (Doli et al., 2021).

### ***The willingness of Visitors to Pay by Groups of Age***

Analysing willingness to pay by age groups showed a trend where the willingness to pay (WTP) decreases with the increase in the age of the visitors, but still, the WTP has a positive trend, higher than 50%. Younger individuals, mainly those aged 18-34, showed higher WTP (90%). This willingness decreases to 85% in the age group 35-49 and further to 58% in the age group 50-65, with almost equal proportions of willing and unwilling people 65+ (52-48%). Additionally, young visitors (18-34 years of age) showed a higher preference for paying 2-4€ (48%) and slightly more minor preferences for category 1 € (33%) and less for the last two categories "5€ (9%) and "I would not pay 0 € (10%), which covers a smaller percentage across age group. The 35-49 age group showed a data distribution similar to the previous age group, although more moderate. In the 50-65 age group, the distribution of data is as follows: category 1 €/100 ALL (31.5%), category 2-4 € (23%), with the lowest representation in the >€5 category (4%), and a significant percentage expressed unwillingness to pay, marked with 0 €/ALL (42%). The data distribution for the +65 age group is similar to that of the previous age group but with a more moderate representation in the categories indicating WTP.

The analysis of the proportion of visitors who are ready to pay based on their age reveals an apparent inverse correlation, which shows that with advancing age, the proportion of visitors' WTP decreases. This model is rationalised by the perception of older adults that mountains are public assets, and therefore, they refrain from rewarding the services provided by mountain tourism (Platania & Rizzo, 2018).

### ***Willingness of visitors to pay by State***

In Albania, approximately 80% of respondents are prepared to pay an entrance fee, with only 20% expressing unwillingness (Figure 1). The majority, 35.2%, are inclined to pay €1 (100 ALL), while the smallest percentage pertains to payments exceeding 5€. For Kosovo, the WTP percentage is similar to Albania, with the highest proportion (41%) favouring the 2-4€ category. In Montenegro, the WTP distribution is different, with 50% willing to pay an entrance fee and 50% unwilling. Among those willing to pay in Montenegro, 31.5% chose the 2-4€ category (Figure 1). In the "Others" group, comprising foreign visitors not from these three countries, the majority (97%) answered positively for WTP from 1 to 4 € (Platania & Rizzo, 2018).

Different responses regarding willingness to pay and the acceptable amount are evident among visitors from different countries. Mainly surveyed from the study countries - Albania, Kosovo and Montenegro, with a more miniature representation of international visitors - different perspectives emerge. Visitors from Albania and Kosovo show a marked tendency to pay for better services and sustainable tourism practices.

capital of Kosovo, Pristina, where citizens have expressed their willingness to pay for improved recreational services. Various prior studies have substantiated Visitors' WTP (Doli et al., 2021). This opinion contradicts other studies, emphasising the importance of public institutions taking responsibility for the care and maintenance of recreational areas, as opposed to the notion that these spaces are considered public property with unlimited access and no fees (Platania & Rizzo, 2018). As far as the WTP is concerned, in Montenegro, it is relatively lower than in the previous countries. The overall better infrastructure conditions and the creation of self-managed tourist villages potentially influence the decrease in willingness to pay in Montenegro. These factors contribute to a lower tendency of visitors to make financial contributions. Within the "Others" category, which indicates foreign visitors who have visited one of the national parks, the consensus in favour of an entrance tax is almost unanimous.

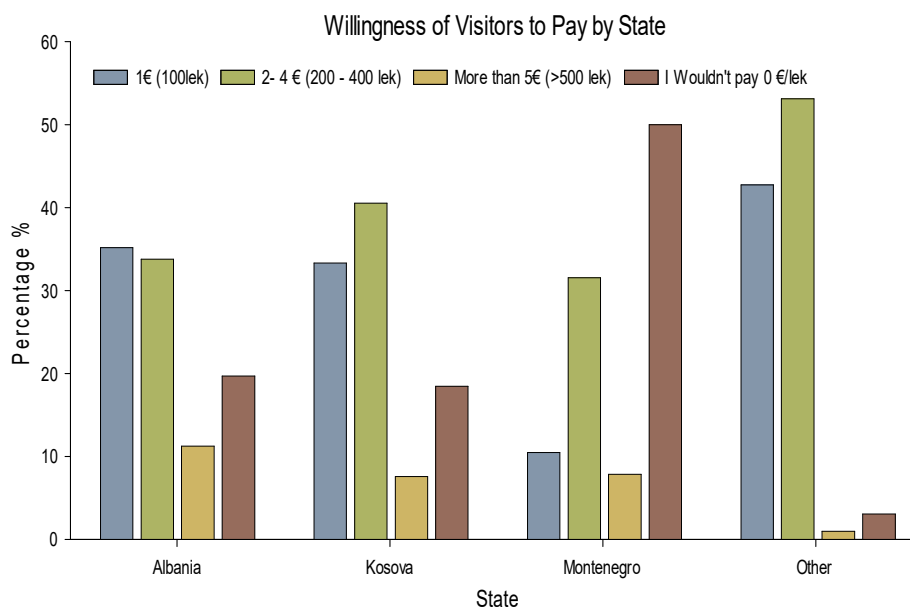


Fig. 1: Willingness to pay (WTP) based on the origin of visitors

This trend finds support in the case study of Gërmia Park (Doli et al., 2021), located close to the Examining willingness to pay based on respondents' Education, those with Primary School education predominantly (77%) expressed an unwillingness to pay (0 €/ALL). In comparison, the respondents with secondary Education expressed a willingness to pay around 63% for one of the categories; the remaining 37 % of the visitors did not want to pay any entrance taxes. The willingness to pay among visitors with a university education is higher (90%), and only 10% expressed their unwillingness to pay. Respondents with postgraduate and master's studies expressed a slightly lower willingness to pay than the previous group, with a percentage of around 81%. From the general view, we find that with the increase in the Level of Education, the willingness to pay also increases, based on the data of visitors who have visited one of the National Parks that are part of this study.

In the specific context of the first group (Primary School), the unwillingness to pay (€0/ALL) is 77%, with corresponding percentages for the categories 1/100 Lek, 2-4 €, and >5€ with 12%, 7% and 4%, respectively. For the group consisting of visitors with Secondary Education, the percentages are defined as follows: ALL 1/100 (29%), €2-4 (27.1%), > €5 (7%), and 37% express unwillingness to pay. Within the group of visitors with a university education, the percentages appear as follows: 1/100 ALL (36.9%), 2-4 euros (46%), >5 EUR (8%), with 10% expressing unwillingness to pay. In the last group, which includes visitors with master's and doctorate degrees, the percentage distribution is as follows: ALL 1/100 (23%), €2-4 (42%), > €5 (16%), and an unwillingness to pay rate of 19%.

The negative WTP of visitors with primary Education to contribute to a tax that supports sustainable development may be related to their ability to understand the principles of sustainable development and their Level of awareness regarding environmental issues. Mainly

living near national parks, respondents with primary education often perceive these areas as an integral part of their community, considering them communal spaces inherited from generations. As such, this demographic's prevailing sentiment questions the necessity of tax contributions, given their historical connection to these lands (Hough, 1988).

## Conclusion

The study concludes that most visitors have expressed their willingness to contribute through an entrance tax provided to encourage sustainable tourism and facilitate the improvement of services in National Parks in Kosovo, Montenegro and Albania. In particular, the category from 2 to 4 euros (equivalent to 200 to 400 ALL) has accumulated the highest percentage of visitor support. The generated income can empower the park's management to implement sustainable mountain tourism development initiatives and improve services, addressing immediate needs within specific sectors. This study is a valuable resource for governing bodies overseeing National Parks, providing insights into a strategic approach to promoting sustainable tourism. The cooperative willingness of citizens to financially support sustainable mountain tourism is noted, advocating for cooperative engagement with the public. Additionally, stakeholders involved in these national parks can use this research to formulate business strategies consistent with sustainable tourism practices.

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## Souhrn

Studie dospěla k závěru, že většina návštěvníků vyjádřila ochotu přispívat prostřednictvím daně ze vstupného na podporu udržitelného cestovního ruchu a na zlepšení služeb v národních parcích v Kosovu, Černé Hoře a Albánii. Zejména kategorie od 2 do 4 eur (ekvivalent 200 až 400 ALL) nashromáždila nejvyšší procento podpory návštěvníků. Získaný příjem může vedení

parku umožnit realizovat iniciativy v oblasti udržitelného rozvoje horské turistiky a zlepšovat služby a řešit okamžité potřeby v rámci konkrétních odvětví. Tato studie je cenným zdrojem informací pro řídicí orgány dohlížející na národní parky a poskytuje poznatky o strategickém přístupu k podpoře udržitelného cestovního ruchu. Je zaznamenána ochota občanů finančně podpořit udržitelný horský cestovní ruch, což obhájí spolupráci s veřejností. Kromě toho mohou zúčastněné strany zapojené do těchto národních parků využít tento výzkum k formulaci obchodních strategií v souladu s postupy udržitelného cestovního ruchu.

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