

THE ROLE OF ECOTOURISM START-UPS IN DEVELOPING A SUSTAINABLE ECONOMY. CASE STUDY THE DANUBE DELTA

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Abstract

The purpose of this article is to examine ecotourism's potential as a sustainable model of economic growth in the Danube Delta, beginning with consumer attitudes and comparing them to real-world examples of best practices. The research aims were to identify tourist values and preferences connected to ecotourism, determine the degree of availability for the consumption of sustainable services, and assess the Danube Delta's viability as an ecotourism destination. Methodologically, the study was based on the use of a structured questionnaire, given to a sample of respondents interested in sustainable tourism. The instrument included questions regarding ecotourism values (environmental protection, community involvement, ecological education), travel behaviors, preferences for types of activities and willingness to pay for eco-certified services. The results were statistically analyzed and correlated with concrete examples of ecotourism in the Danube Delta. The results obtained highlight a clear consumer orientation towards responsible tourism: 92% of respondents support environmental protection as a fundamental value, 76% would pay more for ecological services, and 73% are interested in visiting the Delta. Activities such as bird watching, eco-lodging or kayaking were strongly preferred, confirming the relevance of the existing offer in the region. The examples analyzed, sustainable guesthouses, guided tours, community projects, demonstrate the applicability of these preferences in the field. The research conclusions support the idea that ecotourism in the Danube Delta has real potential for scaling and can simultaneously contribute to the conservation of ecosystems and the economic development of local communities. The recommendations aim to strengthen this model through institutional support, digitalization, transparent ecological certification and the promotion of green entrepreneurship as a viable strategy for natural areas with high ecological value.

Key words: ecotourism, environmental, social and economic sustainability, ecotourism market, the Danube Delta

INTRODUCTION

Ecotourism is a rapidly expanding segment of the global tourism business that is distinguished by a dedication to environmental protection, community engagement, and education [11]. As demand for sustainable travel grows, entrepreneurs are looking for new ways to develop lucrative and ethical tourism enterprises [6].

Ecotourism is a type of sustainable tourism that emphasizes responsible travel to natural areas, environmental protection, and increasing communities' well-being [6]. Effective governance is a key requirement for an effective sustainable tourism [2, 16]. Unlike mass tourism, ecotourism promotes low-impact experiences, environmental education, and active engagement in conservation initiatives [14, 17]. It operates

under the basic principles of minimizing negative impacts on the environment and local culture, generating financial benefits for local community conservation, and promoting ecological awareness [4, 9].

In this perspective, ecotourism business is more than just exploiting a niche market; it embodies a comprehensive vision of social, economic, and environmental responsibility [1]. An ecotourism company is founded not only on the appeal of a natural area, but also on the following values: transparency, community participation, carbon footprint reduction, and educating tourists about local ecosystems [13, 23]. Thus, the goal and vision of an ecotourism firm are essential aspects in engaging a target audience concerned about sustainability.

Several elements combine to provide market prospects for ecotourism entrepreneurs. First,

worldwide trends indicate a growing demand in genuine and sustainable experiences, particularly among Generation Y and Z travellers [3, 8]. Second, European and worldwide policies that promote sustainable development enable access to funds, collaborations, and mentorship for green ventures [15, 18, 22]. Important investigations and researches on the remarkable ecotourism potential of the Danube Delta were made by [11, 25].

Strategically, developing an ecotourism startup requires a careful analysis of local resources, establishing partnerships with environmental authorities and NGOs, as well as a business model that combines profitability with social and ecological impact [12]. Planning activities must include a clear identification of the target audience (international tourists with ecological values, families, schools, etc.), the development of integrated tourism packages (accommodation, guiding, educational experiences), as well as adapting to seasonal demand.

Another essential aspect is the integration of digitalization in the promotion of the startup. Online presence through an interactive website, reviews on responsible tourism platforms and storytelling on social networks can ensure not only visibility but also credibility in front of a demanding audience [24]. Also, the integration of eco-friendly reservation systems, transparent communication of the impact on the local community and the periodic publication of sustainability reports can differentiate the startup in the market [5, 20].

Financially, launching an ecotourism startup involves moderate initial investments, with the possibility of progressive scaling. Sources of financing can include European funds, green tourism grants, partnerships with conservation foundations or crowdfunding campaigns [19]. The impact of ecotourism startups is reflected not only in economic terms, but also in social and environmental dimensions, as they can contribute to the conservation of natural landscapes, the revitalization of local traditions and the education of tourists about the fragile balance of ecosystems. In addition, the involvement of the local community in tourism

activities (guides, traditional gastronomy, artisan workshops) can create sustainable jobs and reduce the phenomenon of migration [10, 21, 23].

Therefore, considering all these aspects, this paper aims to investigate the development of an ecotourism startup, exploring the values, market opportunities, strategic actions and financial requirements necessary for success.

MATERIALS AND METHODS

A quantitative, descriptive approach was used to conduct the research, based on the application of a structured questionnaire. The main objective of the chosen method was to collect relevant data from the perspective of consumers interested in ecotourism, in order to identify strategic directions, fundamental values and necessary conditions for the development of an ecotourism startup.

The central research instrument was the questionnaire, which included both closed and open questions, in order to capture the attitudinal and motivational nuances of the respondents. The questionnaire was structured into several thematic sections, including:

- values and principles perceived as essential in ecotourism;
- preferred ecotourism activities and services;
- level of awareness and education regarding sustainability;
- willingness to pay for environmentally friendly services;
- perceptions regarding the impact of ecotourism on local communities;
- importance of ecological certification and local partnerships.

The sample consisted of respondents, recruited through online distribution of the questionnaire on social networks, thematic groups and forums focused on tourism, nature and sustainability.

The selection was non-probabilistic, snowball type, but the diversity of responses was sought according to age, gender, educational level and previous experience in ecotourism. A significant percentage of participants (over 65%) was represented by people aged between 20 and 35, a demographic segment recognized

for its increased interest in responsible tourism and the digitalization of the tourist experience. The collected data were centralized and statistically processed. The answers to the open questions were analyzed through thematic coding, in order to identify recurring ideas and emerging strategic perspectives. Thus, the methodology combines a quantitative vision with elements of interpretative qualitative analysis, for a more complete understanding of the phenomenon studied.

In parallel, relevant secondary sources were analyzed, in order to consolidate the analysis framework and compare the results obtained with existing global trends.

At the same time, exploratory interviews were conducted with experts in the field of ecotourism and green entrepreneurship, in order to validate the interpretations and obtain more realistic estimates regarding the budgets necessary to launch an ecotourism business, the cost structure and sustainable financing sources. These qualitative data were integrated into the analysis to provide depth to the economic dimension of the research.

By choosing this mixed methodology, quantitative supported by qualitative components, the aim was to obtain the most detailed and applicable picture possible of the real potential of the development of ecotourism startups, in accordance with market requirements, consumer values and sustainability objectives.

RESULTS AND DISCUSSIONS

The Danube Delta not only provides a spectacular natural backdrop, but it also fully meets the criteria for sustainable tourism: minimal impact, ecological education, local engagement, and biodiversity preservation. Simultaneously, the region plays an important role in the macro-regional development of ecotourism as part of the Black Sea riparian states' cooperation. Romania receives European funding for the development of tourism infrastructure and initiatives that promote sustainable attractions, such as the Danube Delta., creating an institutional and financial environment suitable to entrepreneurial enterprises.

Furthermore, shared regional development strategies encourage integrated tourist packages (beach tourism, ecotourism, cultural and adventure tourism), and the Delta plays an important part in these initiatives due to its distinctive characteristics and worldwide appeal.

Given the Danube Delta's outstanding ecological and economic potential, the current study sought to assess consumer attitudes and expectations of ecotourism practices in this area. The goal was to better understand the sustainable consumer's behavior, degree of information, and readiness to support existing ecotourism businesses through purchasing decisions.

The research was guided by the desire to answer questions like as: *How popular is the Danube Delta as an ecotourism destination? What kind of ecological experiences do tourists want while picking this region? What is the willingness to pay for eco-certified services?* In this sense, the questionnaire was created in such a manner that it captures both the ecotourism values of consumers and their choices for activities, accommodation, cultural experiences, and modes of transportation.

The research results highlight a high level of ecological awareness among respondents, along with a favorable attitude towards the principles of ecotourism. Thus, 92% of participants believe that environmental protection should be a fundamental value in any ecotourism business, while 88% support the importance of minimizing the ecological footprint in carrying out tourism activities. Other strongly supported values include respect for local culture (79%) and the involvement of communities in the management and sharing of economic benefits (85%). Also, 64% of respondents believe that ecological education should be integrated into the experiences offered to tourists.

The data is equally relevant to consumption intentions and tourism habits. 73% of respondents were interested in visiting natural reserves in Romania, such as the Danube Delta, and 41% had previously participated in ecotourism activities in the previous two years. This indicates the existence of an active and receptive market, which not only aspires to a

sustainable tourism model, but also practices it in practice.

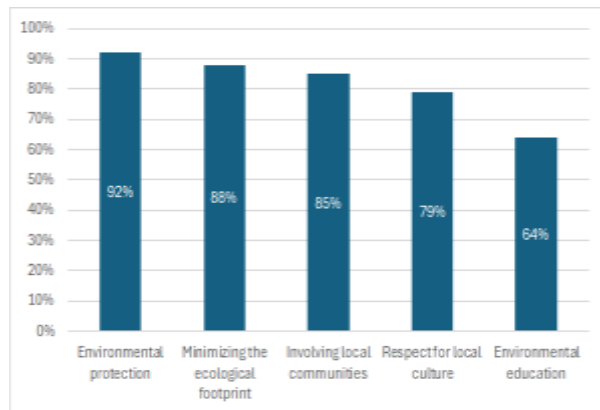


Fig. 1. Ecotourism values and principles
Source: own processing.

Regarding willingness to pay, 76% of respondents said they were willing to pay 10–20% more for certified ecotourism services, which highlights a positive elasticity of demand in relation to sustainability. At the same time, 61% say that sustainability influences the decision to choose a destination, and 83% prefer accommodation units that use renewable energy or serve local, organic food.

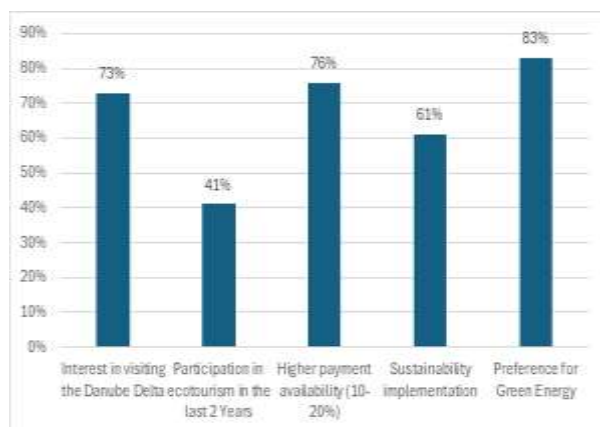


Fig. 2. Ecotourism behaviors and intentions
Source: own processing.

Regarding tourist preferences related to specific activities, respondents indicated increased interest in: wildlife and bird watching (67%) – a representative activity for the Danube Delta; authentic cultural experiences (58%) – such as craft workshops or traditional gastronomy; eco and sustainable accommodation (53%); nature and adventure-based activities, such as kayaking, hiking or guided tours (49%).

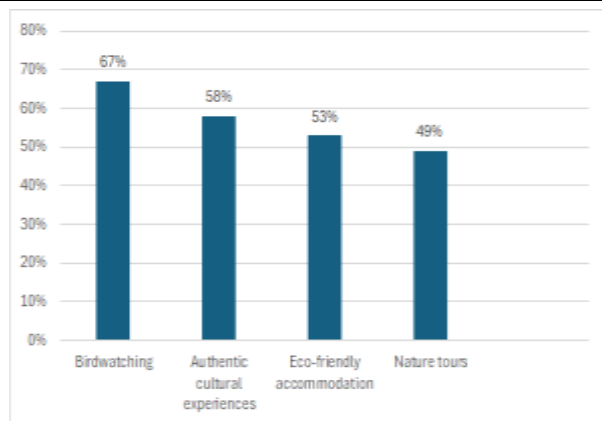


Fig. 3. Ecotourism values and principles
Source: own processing.

All these options coincide with the real offer in the Danube Delta, which validates both the feasibility and practical attractiveness of ecotourism in this area.

The integrated interpretation of these data demonstrates that the target audience is already aware of environmental issues and receptive to sustainable tourism models.

Furthermore, the Danube Delta offers an ideal setting for the concrete application of ecotourism principles, being an example of a balance between biodiversity conservation, local community involvement and sustainable economic development. In localities such as Sfântu Gheorghe, Mila 23 and Crișan, there are eco-friendly guesthouses built with traditional materials, using solar panels, rainwater harvesting and local food ingredients. These enterprises provide travellers with real experiences, such as fishing workshops and deltaic gastronomy, which directly benefits the local economy.

At the same time, guided bird watching trips that focus on protected species like the Dalmatian or the White-tailed Seabird adhere to stringent wildlife protection requirements and contain educational components, meeting the expectations of conservation-minded travellers. Kayaking or canoeing excursions provide a sustainable alternative to motorized transport, safeguarding vulnerable habitats and providing a deep connection to nature. Furthermore, local non-governmental organizations (NGOs) and ecotourism operators work together on ecological restoration and environmental education programs that are funded by visitor donations.

These examples closely corroborate the choices revealed by survey respondents, who highly supported environmental conservation, community participation, ecological education, and low-impact tourism. Thus, the Danube Delta not only demonstrates the genuine implementation of the ecotourism idea, but also provides a repeatable example for other locations with significant natural potential.



Fig. 4. Ecotourism map of the Danube Delta
Source: taken from [7].

The ecotourism map of Deltei Dunării (Figure 1) includes 15 approved water routes for canal and lake tourism, including Tulcea - Gârla Şontea - Mila 23 - Crişan - Tulcea, Murighiol - Dranov Canal - Gura Portiţei - Dunavăţ Canal - Murighiol, Sulina - Cardon Canal - Periprava - Musura Bay - Sulina, and 9 land hiking routes, including ecologically protected Letea and Caraorman forests. The questionnaire responses, together with examples of successful Danube Delta practices, form a solid foundation for the expansion of Romania's ecotourism industry. On the one hand, customers are becoming more aware and interested in the environmental impact of their journeys. On the

other hand, the Danube Delta demonstrates that it is feasible to construct a sustainable tourist strategy, combining economic growth with natural resource protection and the valorisation of local heritage. For entrepreneurs, this convergence between sustainable demand and viable local offers translates into a clear business opportunity. An ecotourism startup in the Danube Delta can directly respond to the preferences expressed in the research – authentic experiences, low-impact activities, eco-accommodation, ecological education – while benefiting from the advantage of a unique natural setting, European financial support and international visibility. In addition, consumers' willingness to pay more for eco-certified services (76%) and their preference for establishments that use renewable resources (83%) indicate a potential for sustainable monetization of these values.

For these initiatives to become scalable and sustainable, an integrated entrepreneurial vision is needed, combining innovation (green technologies, digital marketing), ethics (transparency, respect for the community) and adaptation to local specificities. Initial investments, although moderate (50,000–120,000 euros), can be supported by European funds, partnerships with NGOs or green investors, thus reducing financial risks.

Therefore, the Danube Delta is not only an exceptional ecotourism destination, but also a real platform for testing and implementing sustainable entrepreneurship. The present study demonstrates that the values promoted by ecotourism are shared by consumers, already present in the field and scalable in the future. Strengthening this type of entrepreneurship can contribute not only to protecting natural heritage, but also to the economic revitalization of rural regions and to positioning Romania as a regional leader in sustainable tourism.

CONCLUSIONS

The growing public interest in sustainability, coupled with the accelerated degradation of natural ecosystems, has led to a profound change in consumer preferences in tourism. This transformation has created the necessary

premises for the development of ecotourism as the dominant form of conscious and responsible travel. Thus, against the backdrop of a growing demand for authentic, educational and environmentally friendly experiences, ecotourism entrepreneurship is becoming not only possible, but necessary.

The survey data showed that respondents consistently value environmental protection, local community involvement and minimizing the ecological footprint. As a result, startups that align with these principles are more likely to be accepted and supported by the target audience. Furthermore, the indicated readiness to pay extra for eco-certified services is a direct result of increased awareness of the harmful effects of mass tourism, which has transformed sustainability into a clear competitive advantage.

Applying these ideals in the context of the Danube Delta, one of the most significant wetlands in Europe, reveals that ecotourism is not a theoretical concept, but a realistic model with tangible impacts. Investments in eco-lodges, guided wildlife tours, low-footprint activities and community-based conservation initiatives have demonstrated that, when there is harmony between the natural resource, local actors and market demand, ecotourism can function as a mechanism for sustainable rural development. In conclusion, when public policies, consumer behaviour and entrepreneurial initiatives align around sustainability values, the conditions for a structural transformation of tourism are created. The Danube Delta provides a clear example of applied ecotourism, and the results of this research support the idea that expanding this model can produce positive effects on both biodiversity conservation and the economic revitalisation of local communities. Therefore, ecotourism should no longer be seen as a niche alternative, but as a sustainable development strategy with broad applicability.

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