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ECOTOURISM ECONOMY: GREEN INCOME AND ENVIRONMENTAL RESPONSIBILITY

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ЕКОНОМІКА ЕКОТУРИЗМУ: ЗЕЛЕНИЙ ДОХІД ТА ЕКОЛОГІЧНА ВІДПОВІДАЛЬНІСТЬ

In the context of escalating environmental challenges caused by climate change, biodiversity loss, environmental pollution, and land degradation, as well as the growing interest in sustainable development, the development of the ecotourism economy is becoming increasingly relevant. This is because this sector supports the interaction between tourism activities focused on preserving the natural environment and cultural heritage, as well as the economic benefits it generates. Thus, the article aims to explain the specifics of developing the ecotourism economy, focusing on the key features of generating "green income" and its connection to the environmental responsibility of those involved in tourism activities. It has been demonstrated that among the key characteristics of the ecotourism economy, which ensure the harmonious integration of economic and environmental interests, the following can be distinguished: nature-centeredness, minimal environmental impact, economic benefits for local communities, support for the conservation of natural resources, the presence of an educational component, as well as the integration of sustainable economic models. Research shows that key factors for generating "green income" in ecotourism include a low ecological footprint, the localization of profits within local communities, direct reinvestment in conservation efforts, income seasonality and sustainability, as well as the significance of environmental certifications and standards. An important component is the creation of added value through the uniqueness of the tourist experience, which increases the attractiveness of ecotourism routes and contributes to the sustainable development of regions. In the eco-tourism economy, there is a combination of economic benefit with environmental responsibility, which can be highlighted through several key features, including: awareness of the ecosystem's value, preventive environmental actions, responsible consumption of natural resources, integration of environmental standards into business processes, increasing the level of environmental awareness among tourists, residents, and staff, as well as transparency, accountability, and active social engagement of all participants in the tourism process.

В умовах загострення екологічних викликів, спричинених кліматичними змінами, втратою біорізноманіття, забрудненням довкілля та деградацією земель, а також зі зростанням інтересу до сталого розвитку, розвиток економіки екотуризму набуває особливої актуальності. Це пояснюється тим, що цей напрямок підтримує взаємодію між туристичною діяльністю, орієнтованою на збереження природного середовища та культурної спадщини, і економічними вигодами, які вона генерує. Отже, метою статті є обґрунтування специфіки формування економіки екотуризму з акцентом на вивчення ключових особливостей формування "зеленого доходу" та його взаємозв'язку з екологічною відповідальністю учасників туристичної діяльності. Доведено, що серед ключових ознак економіки екотуризму, які забезпечують гармонійну інтеграцію економічних і екологічних інтересів, можна виділити: природоцентричність, мінімальний вплив на довкілля, економічну вигоду для місцевих громад, підтримку збереження природних ресурсів, наявність освітнього компонента, а також інтеграцію сталих економічних моделей. Доведено, що серед характеристик формування зеленого доходу в екотуризмі виокремлюють: низький рівень екологічного сліду, локалізація прибутку в межах місцевих громад, пряме реінвестування у природоохоронні заходи, сезонність і стійкість доходу, а також значення екологічної сертифі-

кації та стандартів. Важливим складником є формування доданої вартості через унікальність туристичного досвіду, що підвищує привабливість екотуристичних маршрутів і сприяє сталому розвитку регіонів. Констатовано, що в економіці екотуризму відбувається поєднання економічної вигоди з екологічною відповідальністю, яку можна виділити за кількома ключовими рисами, зокрема: усвідомленням цінності екосистем, превентивними екологічними заходами, відповідальним споживанням природних ресурсів, інтеграцією екологічних стандартів у бізнес-процеси, підвищенням рівня екологічної обізнаності серед туристів, місцевих мешканців і персоналу, а також прозорістю, підзвітністю й активною соціальною залученістю всіх учасників туристичного процесу. Перспективи подальших досліджень полягають у глибшому аналізі механізмів генерування зеленого доходу та розробці ефективних моделей, що поєднують економічну вигоду з екологічною відповідальністю в екотуризмі.

Key words: biodiversity loss; environmental pollution; land degradation; tourism; ecotourism routes; green income.

Ключові слова: втрата біорізноманіття; забруднення довкілля; деградація земель; туризм; екотуристичні маршрути; зелений дохід.

PROBLEM STATEMENT

In the context of escalating environmental challenges caused by climate change, biodiversity loss, environmental pollution, and land degradation, as well as the growing interest in the concept of sustainable development, the growth of the ecotourism economy is becoming especially relevant. According to the World Tourism Organization (UNWTO), the demand for sustainable and ecotourism is growing each year by an average of 5 to 10%. Additionally, the Global Sustainable Tourism Council reports that more than 70% of tourists are willing to choose travel options that have a lower environmental impact.

Ecotourism, in contrast to traditional tourism, focuses on minimizing negative impacts on the natural environment and the culture of a region.. It promotes activities that preserve natural ecosystems while benefiting local communities and businesses financially.

This concerns the decisive role of ecotourism in preserving the natural environment and cultural heritage, as well as the impact of the ecotourism economy it has created on the attractiveness of a tourist region (driven by an increase in the flow of responsible tourists willing to invest in environmentally friendly services and products). This outlined focus contributes to the creation of a sustainable

source of income, which is invested in environmental protection, infrastructure development, and educational programs.

For example, in many countries around the world, ecotourism promotes the creation of protected natural areas, the funding of which is provided through tourist fees. At the same time, it engages local communities in preserving cultural heritage through the organization of ethnic tours, workshops, and other educational activities. Thus, ecotourism forms a comprehensive human activity that includes the production, distribution, and consumption, import and export of goods and services, where the preservation of nature and culture serves not only as a social but also an economic prerequisite. The income generated serves as a tool for further protection and support of these values, ensuring the sustainable development of the regions.

ANALYSIS OF RESEARCH AND PUBLICATIONS

The features of the ecotourism economy's formation are systematically presented in the works of scholars such as H. Zavaryka, A. Vydrenko [2], V. P. Derevyanko [1], N. M. Kovalenko [3], and L. O. Kravchenko [4]. Most studies focus on how the ecotourism economy contributes to fostering environmental responsibility among all

participants in the tourism process, from organizers and business representatives to tourists and local communities themselves.

In particular, L. O. Kravchenko [4] viewed the ecotourism economy as a factor that contributes to increasing awareness of the need to protect the environment. N. M. Kovalenko [3] emphasized its role in rationalizing the use of natural resources. Meanwhile, H. Zavaryka, A. Vydrenko [2], and V. P. Derevyanko [1] defined the ecotourism economy as a tool for supporting biodiversity, which, in turn, ensures the long-term sustainability of both the economic system and natural ecosystems.

The analysis of existing scholarly sources indicates growing academic interest in the ecotourism economy as an effective tool for environmentally responsible development. These studies primarily focus on the interconnection between economic benefit, environmental conservation, and social priorities. At the same time, it has been found that key aspects of forming "green income" and its relationship with the concept of environmental responsibility remain insufficiently explored. This highlights the need for further in-depth analysis of these phenomena within the context of the ecotourism economy.

FORMULATION OF THE ARTICLE'S OBJECTIVES

The article aims to explain the specifics of developing the ecotourism economy, focusing on the key features of generating "green income" and its connection to the environmental responsibility of those involved in tourism activities.

THE PAPER MAIN BODY

The ecotourism economy as a distinct field of study began to take shape in the late 1980s to early 1990s in response to escalating global environmental challenges and growing interest in the idea of sustainable development, as well as the spread of the concepts of environmentally responsible tourism and sustainable tourism.

It should be noted that the ideas of environmentally responsible tourism—specifically, the need to minimize the negative impact of tourism activities on the environment, support biodiversity, involve local communities in the management of natural resources, preserve cultural heritage, and integrate sustainable development principles into tourism planning—were first clearly articulated in the documents of the International Union for Conservation of Nature (IUCN), the United Nations Environment Programme (UNEP), as well as during the United Nations Conference on

Environment and Development in Rio de Janeiro in 1992.

It was at that time that the concept of sustainable tourism was established, which envisions the organization of tourism activities in a way that ensures long-term economic feasibility, environmental safety, preservation of the natural and cultural environment, as well as social justice for local communities. This concept is based on the principles of sustainable development outlined in Agenda 21, where tourism is viewed as an industry that must address the current needs of tourists and host regions without compromising the ability to meet the needs of future generations.

With the increasing focus on tourism sustainability, ecotourism emerged as a specific type of tourism activity centered on nature, ecological responsibility, and the active involvement of local communities. The ecotourism economy developed as an interdisciplinary scientific and applied field that combines knowledge from economics, ecology, tourism studies, and regional development.

The deepening focus on tourism sustainability encompassed the following key stages [1]:

1. Institutionalization of sustainable tourism principles — establishing regulatory, ethical, and managerial foundations for ecotourism activities.
2. Definition and scientific understanding of the concepts of "green income" and "environmental responsibility" as fundamental economic and ecological categories in the field of ecotourism.
3. Development of local ecosystem-based approaches to organizing tourism activities, taking into account the specific natural and social conditions of regions.
4. Emergence of practical case studies and accumulation of empirical research confirming the effectiveness of ecotourism as a tool for sustainable development.

Thus, at the present stage, the ecotourism economy is viewed as an activity aimed at the development of sustainable tourism. Its significance lies in its ability to provide a balanced combination of environmental conservation practices and the generation of so-called "green income", especially in regions with high natural or cultural value. Such practices include environmentally responsible tourism (limiting the number of visitors to natural areas, using eco-friendly transportation), preservation of natural resources (protection of flora and fauna, control of water and soil pollution), support for local communities (creating jobs, developing local culture and crafts), environmental education of tourists (information campaigns, guided tours), and the use of sustainable technologies (energy-

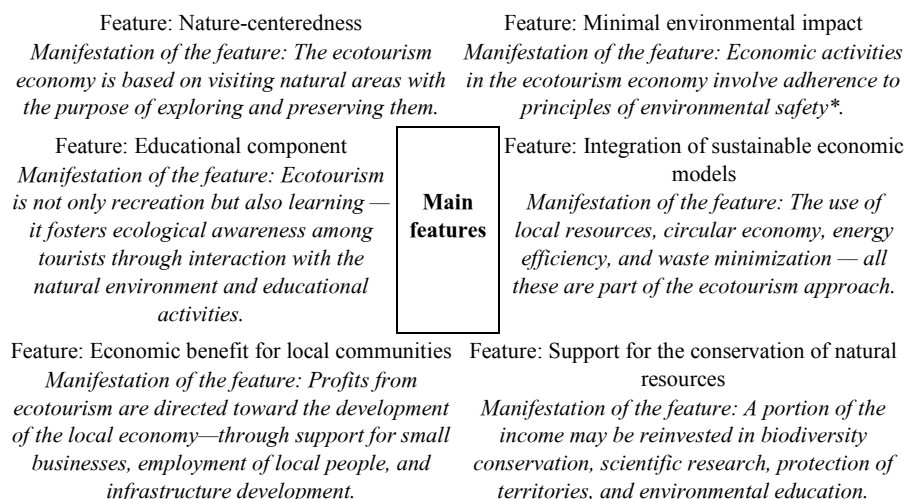


Fig. 1. Main features of the ecotourism economy integrating green income and environmental responsibility

Note

* Environmental safety principles encompass limited construction, visitor number control, and eco-friendly transportation.

Source: compiled based on [1—2; 5].

efficient hotels and campsites, use of renewable energy sources, minimizing plastic and waste use, waste sorting).

Thus, among the main features of the ecotourism economy that ensure the integration of economic and environmental interests are (see Fig. 1):

— Nature-centeredness (as a priority focus on preserving natural ecosystems and biodiversity during the organization of tourism activities [3]);

— Minimal environmental impact (as a priority of practices that reduce the negative ecological footprint of tourism activities [3—4]);

Table 1. Key characteristics of "green income" formation in ecotourism

Key characteristics of "green income" formation	Manifestation of the key characteristics of "green income" formation in the context of ecotourism	Practices that contribute to the formation of "green income" in the context of ecotourism.
Low ecological footprint	Income is generated from activities that involve minimal interference with the natural environment.	Environmentally friendly transportation, accommodation using energy-efficient technologies, reduction of waste and resource consumption.
Localization of profits	Maximizing profit retention within the region.	Engagement of local entrepreneurs, support for local producers, development of eco-farms, local excursions.
Reinvestment in conservation measures	A portion of income is directed toward nature conservation and territorial development.	Funding of nature reserves, environmental education, ecosystem conservation, territory cleanup.
Seasonality and stability of income	Dependence on natural seasons, but year-round development through product diversification.	Development of off-season tours, workshops, environmental education, cultural events
Environmental certification and standards	Environmental compliance certification increases tourists' trust.	Participation in Green Key, Earth-check programs, compliance with international sustainable tourism standards.
Uniqueness of the experience as a source of added value	Income generation through the value of an authentic, eco-friendly experience.	Offering authentic routes, guided tours with eco-guides, integration of local culture.

Source: compiled based on [2; 4—5].

Table 2. Key characteristics of environmental responsibility in ecotourism

Key characteristics of environmental responsibility	Manifestation of environmental responsibility in ecotourism	Practices that contribute to the development of environmental responsibility in ecotourism
Awareness of ecosystem value	Understanding natural areas as valuable assets.	Organizing informational tours, establishing eco-centers, preserving unique landscapes.
Preventive actions	Prevention of environmental risks.	Route planning with consideration of ecosystem load, restricting access to vulnerable areas.
Responsible resource consumption	Rational use of water, energy, and materials.	Installing rainwater harvesting systems, using energy-saving technologies, minimizing single-use items.
Integration of environmental standards into business processes	Compliance with environmental standards in the operations of tourism providers.	Environmental certification of hotels, use of local resources, implementation of environmental management systems.
Raising awareness among tourists, local residents, and staff about the importance of nature conservation	Promoting environmental awareness through educational activities targeting tourists, local communities, and industry staff. This helps shift behavior patterns toward the sustainable use of natural resources.	Conducting seminars, interactive educational programs, placing environmental information signs, involving professional guides focused on ecological topics.
Transparency and accountability	Transparent reporting on environmental impacts.	Publishing environmental reports, cooperating with local authorities, participating in monitoring activities.
Social engagement	Involvement of local populations in decision-making.	Collaborating with communities, partial profit-sharing, creating local initiatives.

Source: compiled based on [1; 6].

— Economic benefits for local communities (as a priority of practices that create stable jobs, support local businesses, and attract investment for regional development [2]);

— Support for the conservation of natural resources (active participation in nature conservation efforts, protection of flora and fauna, and ecosystem restoration [1–2]);

— Educational component (as a priority of practices that inform tourists and local populations about the importance of nature conservation and responsible environmental behavior [4]);

— Integration of sustainable economic models (as a priority of development practices that combine environmental safety with economic efficiency [2]).

Based on the outlined features of the ecotourism economy, it can be argued that this model of management is a source of income generation accompanied by positive or neutral environmental impacts, often referred to as green income.

Among the key characteristics of generating such income in the context of ecotourism, the following can be highlighted (see Table 1): low

ecological footprint; localization of profits; direct reinvestment in conservation measures; seasonality and stability of income; the importance of environmental certification and standards; creation of added value through the uniqueness of the experience.

Green income in ecotourism does not diminish natural capital — it does not deplete natural resources or disrupt ecosystems, and in some cases even contributes to their restoration through reinvestment in conservation measures. Therefore, green income can be regarded as an equivalent of sustainable income, capable of being generated repeatedly without compromising the ability to meet the needs of future generations.

In the ecotourism economy, economic benefit is integrated with environmental responsibility, which aligns fully with the concept of sustainable welfare proposed by John Hicks.

This concept emphasizes the importance of balancing economic growth with the preservation of natural capital, which is key to ensuring long-term development and the well-being of future generations. In this context, among the key

features of environmental responsibility in ecotourism, the following can be highlighted (see Table 2): awareness of ecosystem value; preventive actions; responsible resource consumption; integration of environmental standards into business processes; raising awareness among tourists, residents, and staff about the importance of nature conservation; transparency and accountability; social engagement.

Thus, the ecotourism economy model is an integrated economic system aimed at generating economic benefit ("green income") through tourism activities carried out in accordance with the principles of environmental responsibility.

CONCLUSIONS

Based on the results of the study, it is concluded that the ecotourism economy combines environmental protection with the generation of so-called green income. This is especially relevant for regions with high natural and cultural value, where ecotourism serves not only as a driver of economic growth but also as an effective tool for environmental education and social engagement of local communities. Based on the results of the study, the following has been proven:

1. Among the key features of the ecotourism economy that ensure the harmonious integration of economic and environmental interests are: nature-centeredness, minimal environmental impact, economic benefit for local communities, support for the conservation of natural resources, the presence of an educational component, and the integration of sustainable economic models.

2. Among the main characteristics of "green income" formation in ecotourism are: a low level of ecological footprint, localization of profit within local communities, direct reinvestment in conservation activities, seasonality and stability of income, as well as the importance of environmental certification and standards. An important component is the creation of added value through the uniqueness of the tourist experience, which enhances the attractiveness of ecotourism routes and contributes to the sustainable development of regions.

3. In the eco-tourism economy, there is a combination of economic benefit with environmental responsibility, which can be highlighted through several key features, including: awareness of the ecosystem's value, preventive environmental actions, responsible consumption of natural resources, integration of environmental standards into business processes, increasing the level of environmental awareness among tourists, resi-

dents, and staff, as well as transparency, accountability, and active social engagement of all participants in the tourism process.

The prospects for further research lie in a deeper analysis of the mechanisms for generating "green income" and the development of effective models that combine economic benefit with environmental responsibility in ecotourism.

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