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ASHOT MARKOSYAN

Senior Expert at "Amberd" Research Center at the Armenian State University of Economics, Doctor of Economics

 <https://orcid.org/0000-0002-5077-4253>

HOVHANNES TOKMAJYAN

Professor of the Research Laboratory Hydromelioration and Hydrology at the Institute of Water Problems and Hydro-Engineering Named After I.V. Yeghiazarov, Doctor of Technical Sciences

 <https://orcid.org/0000-0002-2315-7233>

ANAHIT OHANYAN

Researcher of the Research Laboratory of Architecture and Design at the Institute of Water Problems and Hydro-Engineering Named After I.V. Yeghiazarov

 <https://orcid.org/0009-0008-4843-922X>

URBAN INTERIORS WITH WATER BODIES AND ECONOMIC ASPECTS OF INTERNATIONAL ECOTOURISM

Tourism is projected to contribute 10.3 percent of global GDP—about USD 11.7 trillion—and support a record 371 million jobs worldwide in 2025. Nature-based tourism drives about 8 billion unique visits each year to protected areas representing 17% of the world's land and 8% of the world's marine areas, making it a significant economic sector. According to the WTTC's 2025 Economic Impact Research (EIR), international visitors are expected to spend \$2.1 trillion in 2025. This will set a new record, exceeding the previous high of \$1.9 trillion in 2019 by \$164 billion¹. However, despite the economic benefits of tourism, it can also harm the environment. These

¹ WTTC reveals record-breaking international visitor spending in 2025 and continued global growth. <https://wtcc.org/news/global-travel-and-tourism-is-strong-despite-economic-headwinds>

negative effects include damage to ecosystems, loss of biodiversity, and pollution caused by waste. To reduce such problems, ecotourism has become an alternative approach that aims to lower environmental impact while increasing economic benefits for local communities. Urban attractions have always played an important role in tourism. Today, urban design is seen as a way to improve both the ecological and visual quality of cities, making them more attractive and pleasant for visitors. Creating small open spaces near urban parks helps support ecotourism and strengthens the artistic and aesthetic character of a city. These spaces also make the environment more comfortable and appealing for tourists. Adding sculptures and other artistic elements to public areas helps them blend naturally into the city landscape, enriching the overall atmosphere. This study also explores Armenia's tourism income and expenses, and analyzes how they contribute to GDP per capita when measured by purchasing power parity (PPP).

Keywords: *recreation, parks, ecology, tourism, water, entertainment industries*

JEL: O18, Q26, R11

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INTRODUCTION. People experience cultural and spiritual values in different ways. A key feature of the experience economy is that individuals often prefer activities such as theater, concerts, exhibitions, monuments, and architectural sights because they evoke strong emotions. When designing recreational areas, it is important to consider all the challenges that modern urban environments face.

Particular attention should be paid to increasing the area of green spaces and water bodies, while simultaneously meeting the functional and social needs of the population.

Urban and suburban parks with water bodies are among the main centers of recreation and entertainment for the population. It is important to understand that water bodies play a crucial role in suburban parks, although they are primarily subject to significant anthropogenic impact and are often in a state of degradation. A comprehensive study of the ecological and hydrobiological parameters of water bodies, taking into account Armenia's natural conditions, will enable the development of a sound approach to the creation and safe operation of such centers.

LITERATURE REVIEW. The term «ecotourism» was first introduced in 1965 by Dr. Nicholas Hetzer. He explained ecotourism through four main principles: reducing damage to the environment, respecting cultures that may be disappearing, bringing as many benefits as possible to local people, and providing high-quality services. Ecotourism is a type of sustainable tourism that focuses mainly on experiencing and learning about nature. Today, more nature-focused tourist destinations are becoming popular among both domestic and international travelers. These places offer deep and meaningful experiences in nature, while also focusing on protecting the environment. Because of this, the

demand for ecotourism services is growing. Governments also help this growth by developing nature-friendly infrastructure. These projects are designed to reduce environmental impact and at the same time increase economic benefits for local communities. This support from the government contributes to the growth of the global ecotourism market. The concept of ecotourism was further developed by Keton Miller in 1978, and since then, many researchers have suggested different definitions. Most of them identify three important elements of ecotourism (Altunel & Bugday, 2019; Finadeeva, 2020): travel to natural areas, protection and conservation of the environment, opportunities to improve the economic situation of local communities and create additional benefits for them. Ecotourism, as a type of sustainable tourism, focuses mainly on nature and education about nature. More and more nature-based destinations are attracting visitors by offering experiences that highlight the importance of protecting the natural environment. This supports the increasing demand for ecotourism.

Government programs that aim to build environmentally friendly facilities—designed to reduce ecological harm and increase economic benefits for local people continue to support the growth of the ecotourism industry worldwide. The growth of the global tourism and travel industry, supported by the rising number of independent travelers, also contributes to the expansion of ecotourism. Today, ecotourism is considered one of the most promising and fastest-growing sectors of the entire tourism industry and holds a leading position (Alekseeva et al., 2015; Kostyukovich & Tereshchenko, 2017).

In general, the development of the global economy can be divided into four major stages: the stage of raw materials, the stage of goods, the stage of services, and the stage of experiences.

The last phase focuses on human perception of environmental elements, including urban design, which directly influences an individual's worldview. The experience economy is based on cultural, informational, and other products whose primary value lies in the impressions they create (Legchakov, 2011).

Like goods and services, experiences must meet consumer needs and be deliverable. Just as goods and services result from iterative research, design, and development processes, experiences emerge through a similar process of study and strategic planning to ensure meaningful delivery to society (Pine & Gilmore, 2019). Tourism is an important part of the experience economy because it creates many strong emotions. People are willing to travel long distances and spend a lot of money to have these experiences.

By telling interesting stories, tourism helps visitors better appreciate natural areas, architectural landmarks, and cultural heritage (Ivanova, 2011). Tourists also often buy souvenirs like postcards, T-shirts, and caps to keep memories of their trips.

In ecotourism, these memories can be associated with both natural phenomena such as waterfalls, lakes, and mountains, and the urban environment, including parks, monuments, and recreational facilities.

Ecodesign is a relatively new but highly significant trend in urban planning. In the public perception, "ecodesign" is primarily associated with environmental cleanliness and the creation of sustainable living spaces. Urban sculpture, as an artistic and aesthetic component of the urban landscape, defines the uniqueness of a given architectural and spatial environment. In recent years, park sculpture has gained recognition as an independent genre, reflecting the history of a city and country, adding visual and thematic diversity to urban spaces, and enhancing their identity. The integration of small architectural forms into vertical landscaping—such as floral lamp posts, hanging planters, topiary sculptures, and green facades—can significantly improve a city's environmental quality while also making it more attractive to tourists (Getmanchenko & Vyatkina, 2014).

Urban sculpture is an artistic and visual part of a city that helps make each architectural and spatial area unique. In recent years, park sculpture has become its own art style. It shows the history of a city or country, adds different visuals and themes to urban spaces, and strengthens the city's identity. Adding small architectural features to vertical landscaping—like flower-covered lamp posts, hanging planters, shaped plant sculptures (topiary), and green walls—can make a city's environment better and more attractive to tourists (Getmanchenko & Vyatkina, 2014). Cities combine natural elements and human-made structures in a balanced way. Proper and careful urban planning is very important. It helps keep the environmental impact balanced and makes sure every part of the urban landscape works well (Kochetkova & Oleynikova, 2019). There should be a close connection between art and urban life, and sculptures should reflect contemporary artistic concepts and strive for harmony between people and nature (Zyomko, 2015). The sculptor's creative work is intended to provide an additional emotional charge to people who expect emotional intensity and the expression of outstanding spiritual achievements from his works. Decisions regarding the installation of monuments in urban environments are aimed at creating psycho-emotional comfort. They must integrate into the public space and become an integral element, whose function is to imbue the urban environment with an aesthetic component. This approach is especially important when landscaping suburban parks (Ohanyan, 2024a, Ohanyan, 2024b).

Unlike a natural body of water, an urban water body can be assessed from several perspectives simultaneously. In addition to the environmental aspect of the problem, there are almost always a number of other aspects: medical, cultural and historical, technical and operational, and socio-psychological. Most small urban water bodies are at such a stage of anthropogenic degradation that environmental protection measures alone are insufficient to restore them to a comfortable living condition. This typically requires specialized engineering

and environmental measures. Modern urban water bodies are one component of the urban system. Their condition largely determines the social attractiveness of a particular urban development, its so-called «video ecology». Water bodies play a significant role in shaping sanitary and hygienic conditions in cities and can even serve as sources of infectious disease transmission (Goryunova, 2017).

Most small urban water bodies are at such a stage of anthropogenic degradation that environmental protection measures alone are insufficient to restore them to a comfortable living condition. This typically requires specialized engineering and environmental measures (Goryunova, 2017, Suzdaleva, 2014).

There are rules for how much people can use natural areas so that any damage they cause can be handled by nature itself. When building recreational spots near lakes or reservoirs, the number of visitors should depend on the type of natural area. Still, no more than 200 people should be allowed per 1 km of shoreline (Kolotova, 1999).

Based on the above, the objective is to analyze the possibilities and make recommendations for the further development of international ecotourism in the Republic of Armenia.

METHODOLOGY. The research methodology includes a number of tools, such as benchmarking, analytical descriptions of professional literature. Calculations related to the costs of creating and operating suburban parks with ponds, in particular the use of key performance indicators (KPIs) for the entertainment business.

Thematic standards deal with specific issues, like managing parks, natural forests with ponds, and recreational centers, as well as how human activity affects nature. These standards are divided into three groups: Economic (GRI 200), environmental (GRI 300), social (GRI 400). The study also used abstract methods, such as key performance indicators (KPIs), to measure and evaluate green entrepreneurship. Benchmarking tools were also employed.

The United Nations recognizes the World Tourism Organization as the appropriate organization to collect, analyze, publish, standardize and improve the statistics of tourism and to promote the integration of these statistics within the United Nations system. Pursuant to this mandate, the UNWTO Statistics Department compiles tourism statistics from countries and territories around the world in a statistical database that represents the most extensive international repository of statistical information available on the tourism sector. In addition to the dissemination of this data interactively on the Internet and through various analytical studies, UNWTO maintains its two flagship statistical publications: the Compendium of Tourism Statistics and the Yearbook of Tourism Statistics. This work uses the UNWTO methodology.

On December 22, 2023, the Republic of Armenia adopted a new Law on Tourism², which regulates relations within the tourism sector of the Republic of Armenia, as well as those arising from tourism-related activities, including leisure and travel, in the context of exercising the right to free movement.

A main feature of the new law is the introduction of modern tools to manage tourism and improve how the sector is governed. These include: An electronic registry of tourism service providers, a registry of tourism resources (Chapter 3). The law also defines: Tourism service providers, their qualifications, and classification (Chapter 4), How tourism services should be provided (Chapter 5), Tourists' rights (Chapter 6), How complaints are handled and investigated (Chapter 7).

Overall, the content and regulatory tools introduced in the new law appear to be more comprehensive and effective in terms of state regulation of the tourism industry.

The calculation of inbound and outbound visitor numbers in Armenia is based on data from the Border Electronic Management System of the National Security Service of Armenia. These figures are supplemented by coefficients derived from the Sample Survey of Incoming and Outgoing Travelers conducted in 2006 by the Statistical Committee of Armenia (NSS RA), with support from the Armenian Tourism Development Agency (ATDA) and the USAID Competitive Private Sector in Armenia Program (CPSA). A subsequent survey was conducted in 2013 by the NSS RA, in collaboration with the Ministry of Economy, the National Competitiveness Foundation of Armenia, and donor organizations such as Germany's GIZ and the USAID Enterprise Development and Market Competitiveness (EDMC) Program.

The objective is to analyze Armenia's tourism-related expenditures and revenues as a share of GDP per capita (measured in purchasing power parity, PPP) and compare these indicators with those of other South Caucasus republics.

FINDINGS. Almost all ecotourism projects begin in cities, as they are the primary entry points for tourists. From there, their travel experience starts. For this reason, a modern city should not only be functional but also prioritize ecological sustainability, aesthetics, and safety. To create a welcoming environment through small architectural forms, it is important to emphasize that urban eco-design is based on the use of natural rather than artificial materials, even if the latter are durable.

These materials are derived from natural sources, such as stone, wood, plant matter, and other substances. When you put small structures in an eco-friendly place, they should not just help the environment—they should also look

² Law of the Republic of Armenia "On Tourism". Adopted on 22.12.2023 N HO-4N. <https://www.arlis.am/DocumentView.aspx?DocID=188696>

right. That means keeping them in good proportion, the right size, and making the area look nice. When introducing sculptures into urban environments, they should be naturally integrated into the surrounding space so that they appear contextually appropriate rather than artificially imposed. Their role is to enhance the urban environment by adding aesthetic value.

It is difficult to determine the exact number of tourists visiting during a specific period. Usually, the data count all arrivals, like tourists, regular visitors, cruise passengers, and crew members. Different countries use different ways to collect this information. Often, border records (like immigration data) are the main source, and sometimes they also do border surveys to get more details. Other countries rely on data from tourism organizations. Some nations estimate arrivals using air traffic data or hospitality sector reports. Certain countries include their expatriates living abroad in the tourist category, while others do not. Because of these differences, it is important to be careful when comparing visitor numbers between countries. Tourism statistics are only part of total arrivals. For example, if a person visits the same country multiple times in one period, each visit is counted as a new arrival. Foreign tourists (overnight visitors) are travelers who visit another country, outside their usual environment, for a period not exceeding 12 months, with a purpose unrelated to remunerated activities.

Figure 1 presents data on tourist arrivals in Armenia, Georgia, and Azerbaijan from 2016 to 2020, based on the UNWTO methodology³.

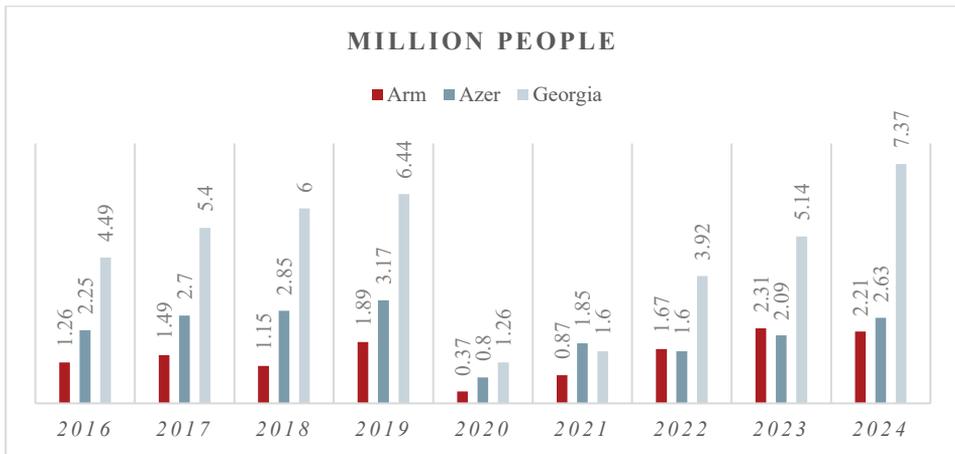


Figure 1. Indicators of Arrivals in Armenia, Georgia, and Azerbaijan Classified as Tourists According to the UNWTO Methodology (2016-2024)

³ The World Tourism Organization (2023). Methodological Notes to the Tourism Statistics Database, 2023, Edition, UNWTO, Madrid, [Doi.org/10.18111/9789284424160](https://doi.org/10.18111/9789284424160)

The UNWTO uses two main measures to see how tourism contributes to a country's economy:

- The share of tourism revenue in total exports of goods and services;
- The share of tourism in GDP.

For Armenia, these numbers are 15.3% for exports and 8% for GDP. A country's ranking by tourism revenue shows how important tourism is to the economy but does not show the overall strength of the economy. The experts state that a country should have a diverse economy and not rely too much on one sector. In 2023, Armenia had 2.3 million international tourist arrivals, a 22.3% increase compared to 2019, which is higher than the regional average in Central and Eastern Europe. At the same time, international tourism revenue reached USD 3 billion, almost doubling since 2019. This growth in tourist numbers, higher spending per visitor, and more hotel occupancy show that Armenia is doing well at attracting and keeping tourists. These trends also help create jobs, boost the economy, and make Armenia more competitive globally.

Economists say the ideal share of tourism in total exports is 5–30%. If it is over 30%, the country relies too much on tourism and can be vulnerable to outside problems. If it is below 5%, tourism is not very important to the economy. During the study period

- The GDP per capita grew by 235.2%;
- The balance of service costs per person was -0.35 USD in 2015 (meaning service imports were higher than exports). By 2023, this improved to 77.1 USD;
- The balance of tourism-related services like travel and passenger transport was -0.3 USD in 2015, improving to 48.9 USD in 2023.

The ecological condition of natural sites—like waterfalls, suburban forests, and parks with water—is very important for deciding how many tourists these areas can handle. Surveys show that more and more people travel to connect with nature, making it one of the main reasons people choose certain destinations.

Unique landscapes, unpolluted water in reservoirs, abundant forests, and mountain air are resources that must be preserved by establishing load limits that preserve the ability of natural systems to self-repair, recreational use of the territory, improvement of the territorial structure, and minimization of unwanted anthropogenic impact.

Table 1 presents information on the balance of service costs and the balance of travel and passenger transport services, including GDP per person in Armenia from 2015 to 2023. It summarizes GDP per capita, tourism-related services, including imports, exports, and their balance, and shows that tourism in Armenia has improved a lot, especially in recent years. This growth helped increase the country's balance of payments. In 2024, the number of foreign tourists visiting Armenia was 2,208,179, slightly lower than in 2023, when it was 2,316,210, a drop of about 4.7%. To improve the situation, it is essential to

consider what extra resources can be employed or measures be taken to attract more tourists and support the tourism industry. It is important to understand that bodies of water play a vital role in suburban parks, although they are primarily subject to significant anthropogenic impact and are often in a state of degradation.

Table 1

GDP Per Capita, Service Cost Balance, and Service Account Balance Related to Tourism in the Travel and Passenger Transport Sector in Armenia (2015–2023)⁴

<i>Years</i>	2015	2016	2017	2018	2019	2020	2021	2022	2023
GDP per Capita, USD	3512	3524	3869	4196	4597	4269	4685	6572	8168
Average Annual Resident Population, Million People	3004.6	2992.3	2979.4	2969	2962.5	2961.5	2962.3	2969.1	2964.2
SERVICES									
Credit	1513.8	1672.5	2022.8	2202.3	2433.7	1099.3	1735.2	4320.3	5619.4
Debit	1608.9	1601.5	1861.1	2191.6	2520.6	981.3	1338.3	2609.3	3333.8
Balance	-95.1	71.0	161.7	10.7	-86.9	118.0	396.9	1711.0	2285.7
Services Related to Tourism in the Travel and Passenger Transport Sector									
Credit	936.8	1,017.80	1,204.70	1,340.60	1,534.90	286.9	802.8	2,486.70	3,105.60
Debit	947.1	932.7	1,107.30	1,228.20	1,433.60	252.8	458.5	1,299.60	1,655.20
Remaining Balance	-10.3	85.1	97.4	112.4	101.3	34.1	344.3	1187.1	1450.4
Ratio of Tourism-Related Services to the Cost of Services in the Travel and Passenger Transport Sector									
Credit	61.9	60.9	59.6	60.9	63.1	26.1	46.3	57.6	55.3
Debit	58.9	58.2	59.5	56.0	56.9	25.8	34.3	49.8	49.6
Remaining Balance	10.8	119.8	60.3	1053.5	-116.6	28.9	86.7	69.4	63.5
Balance of Tourism Services in the Travel and Passenger Transport Sector per Capita, USD	-31.6	23.7	54.2	35.9	-29.3	39.8	13.3	57.6	77.1
Service Cost Balance per Capita, USD	-31.6	23.7	54.3	35.9	-29.3	39.8	13.3	57.6	77.1
Balance of Tourism Service Costs in the Travel and Passenger Transport Sector per Capita, USD	-0.3	2.8	3.3	3.8	3.4	1.2	11.6	40	48.9

To preserve all types of tourism resources and prevent serious environmental problems, it is necessary to calculate the capacity of all attractions and tourist sites in advance. Such calculations allow for restricting tourist access to specially protected natural sites (parks, nature reserves, etc.). To assess the capacity of a tourist destination, the following indicators must be calculated (Kolotova, 1999):

⁴ Countries with the largest share of tourism in their economies
<https://nonews.co/directory/lists/countries/international-tourism>

- The physical (or ecological) capacity of the system is the maximum number of visitors that can be accommodated in a given area. Beyond this threshold, the cultural and historical environment is irreparably damaged by tourism;
- The economic capacity of the system is the limit beyond which revenues decline, making the destination less attractive;
- The social capacity of the system is the number of visitors an area can accommodate without negatively impacting other socioeconomic activities that support its existence.

A decline in the quality of the tourist product ultimately leads to a decline in tourism. Therefore, the specific environmental characteristics of each tourism project must be carefully analyzed to determine its capacity.

CONCLUSIONS.

1. Based on the above analysis, it can be concluded that the first stage of ecotourism development in Armenia, which included the creation of a comfortable urban environment in terms of functionality, ecology, aesthetics, and safety, has been successfully implemented. The positive experience accumulated during urban development should be applied to natural heritage sites to further expand ecotourism opportunities.

2. State regulation has been very important for developing tourism in Armenia. The Law «On the Regulation of Tourism and Related Activities» was adopted in 2003. In December 2023, the law was updated with new rules to reflect changes in the tourism sector and make it work more efficiently. During the study period, GDP per person grew by 235.2 percent. The balance of service costs per person was -\$0.35 in 2015, showing that more services were imported than exported. By 2023, this improved to \$77.1. The balance of tourism services for travel and passenger transport was -\$0.3 in 2015 and rose to \$48.9 in 2023.

3. Due to the constant clearing of green spaces in large cities, finding natural habitats is becoming increasingly difficult, negatively impacting tourism development. Particular attention should be paid to increasing the area of green spaces and water bodies, while simultaneously meeting the functional and social needs of the population. Small bodies of water are subject to significant anthropogenic impact and are often in a state of degradation. For the environmental rehabilitation of small bodies of water, the development of new water purification technologies and design methods for biotechnical structures is necessary.

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