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THE IMPACT OF TOURISM ON THE ENVIRONMENT AND DEVELOPMENT PROSPECTS OF ECOTOURISM

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Abstract
Tourism is one of the most important economic activities and a promoter of sustainable development. The increase in the complexity and volume of the tourism offer has led to the development of a real tourism industry, for which reason tourism should be treated as a separate branch of the economy. Tourism plays a key role in the economic and social life by acting as a dynamic force in the global economic system, as a means of diversifying the economic structure and alleviating inter-regional imbalances, and as an active and attractive means of education, raising the level of knowledge, culture and civilisation of the population.

Key words: *sustainable development, cultural tourism, environment protection, marketing activity*
JEL: *Q51, F61*

The economic role of tourism can be direct: 1- by increasing gross domestic product and national income, in this case we can mention the increase in tourism income of direct suppliers such as accommodation establishments, catering, tourist resorts, transport agencies or travel agencies; 2- by ensuring a stable balance of payments, which is a macroeconomic reporting and analysis tool which records the payments and receipts made by a country as a result of its relations with other countries, and by increasing the volume of receipts from the sale of tourist services in foreign currency, or through internal exports; 3- by increasing the prosperity of areas through favourable conditions for the development of infrastructure, the exploitation of existing resources and the workforce. The indirect economic role derives mainly from development and growth of tourism activities that generate growth in other branches of the economy.

Tourism activity stimulates the economy as a whole, linking sectors and/or areas. In addition to the basic products and services specific to tourism, services and products from other branches of the economy are used in tourism. Many countries in the world have shown through their own example that tourism contributes to the development of the national economy, firstly through the many economic links resulting from relations with other sectors of the economy, generating new jobs and contributing to GDP, and secondly by consolidating an identity image of the destination in the mind of a community and by creating a country brand that conveys the novelty and quality of the tourist destination.

Tourism has a positive influence on the economy as a whole, contributing to the development of specific new economic activity, such as leisure activities, cable car transport, handicrafts or crafts. One example is the launch of the "Revival of authentic folk crafts - common cultural heritage as a focal point for sustainable economic and tourism development" project in 2020 by the Southern Regional Development Agency of the Republic of Moldova in partnership with the ART-Crafts Association from Iasi, Romania. The aim of this project is to improve the tourism potential of the southern region of the cross-border area with a new economic activity related to traditional crafts as a way to increase the

income from tourism activities and to bring back the popular traditions of the ancestors in terms of craftsmanship [24].

Moreover, tourism contributes to an increase in the volume of activity in existing economic sectors such as cultural services, agriculture, food industry, construction, transport. A number of important factors are necessary for the harmonious development of tourism, including a well-developed infrastructure and transport routes. Tourism industry needs lead to the development of utilities and tourism infrastructure facilities, which can ultimately be used by the local population to the same extent. A wide range of means of transport is used to move tourists from one point to another. Often, in order for tourists to move around the territory, it is necessary to use a combination of different means of transport, depending on distance, the quality of roads and infrastructure, the competitiveness of fares for the different types of transport, speed and comfort of travel. This way, tourism contributes to the development and prosperity of the transport sector.

In economic terms, tourism can have both positive and negative effects. Tourism influences the growth of budget revenue through the accumulation of taxes and fees in this field. An additional positive influence consists in the fact that income is redistributed, the tourist spends in one place, the income earned in another - thus, income is redistributed between different territories. Tourism is instrumental in transferring money from revenue-generating countries to receiving countries. Money spent by tourists tends to pass through several stages, so tourism revenues are very difficult to quantify. The most common method is to determine the multiplier effect of tourism activity in a given area. Tourism expenditure multiplies as it passes through different segments of the national economy. Tourists initially spend within society, the income of tour operators, agencies, carriers, hotels. Hence, the money spent generates multiplied income several times over, then the initial tourist expenditure.

In many countries, tourism is a source of foreign currency income. Foreign currency income is the most convenient way to earn money compared to exporting goods, for example, as in this case there may be problems with packaging, transport, damage, finding a market, market demand and competitors. These problems do not apply to tourism. Experts in the tourism sector have concluded that if a country has foreign exchange earnings from tourism of at least 10% of goods exports, it is considered a tourism country.

Employment growth is another positive aspect of tourism's economic influence. More than 334 million people are employed in tourism, according to World Tourism Organisation statistics. Tourism also contributes to increased labour productivity, when people are sufficiently well rested and holiday periods are long enough for rest to be flexible, then work efficiency will be higher. At the same time, health tourism significantly reduces the duration of sick leaves, which also leads to increased labor productivity.

Apart from the positive effects mentioned above, the negative economic effects of tourism should also be considered. A large share of tourism staff's income is made up of 'tips', which is a great economic disadvantage as they are not officially declared and do not contribute to GDP growth or budget revenue, but contribute to the development of the underground economy - which includes any paid activity that is legal in nature, but illegal as the income is not declared.

The inflationary effect of tourism is another negative side of tourism on the economy. Tourist destinations are crowded with visitors, tourist activity accumulates at the same time, in the same place, a large number of people interested in various goods and services, many of whom have a high purchasing power compared to locals, which is a disadvantage for the less touristy.

Tourism is not only limited to the hotel sector, but also to the transport and leisure sectors with various tourist attractions - amusement parks, sports facilities, libraries and museums. Tourism and its management are closely linked to the main functions, processes and procedures that are practiced in tourist facilities as a complex system.

Tourism significantly affects the host community. This is evident both during the trip, an event, and after the tourists leave. Tourism is the economic sector that has the capacity to contribute to the economic growth of an area, creating employment opportunities, producing social benefits for the region as small and medium-sized businesses develop, infrastructure and transport routes are improved in order to make the tourism activity as balanced as possible. From a cultural point of view, tourism is seen as a tool for community prosperity due to the symbiosis between different cultures.

Apart from generating new jobs and increased income, tourism operations strengthen local entrepreneurs and enhance the culture and traditions of the community. However, there are many cases in which the impact of tourism on the environment is not exactly positive.

At the socio-cultural level, tourism generally has positive effects, one of which is increased education. One of the main consequences of tourism is that tourists are brought into direct contact with local people, thus boosting the level of knowledge of both visitors and locals. For residents, studying foreign languages is one of the most important benefits, in order to facilitate communication between locals and tourists, to be able to explain specific elements to tourists and to familiarize them with the culture of the region. Visitors eager for new knowledge will find visits to museums, libraries, theaters, cultural institutions an exceptional opportunity to enrich their knowledge in various fields and to develop their skills in a multilateral way. With the development of tourism in a given region, the quality of life of the community increases accordingly, as the infrastructure in the area develops. Whether it is transport or energy, which are necessary for a good development of the tourism service, the inhabitants will also benefit from these utilities. In order to improve and diversify tourist services, a wide range of quality goods and services will be available to the local population.

Raising the living standards of people on limited incomes. Tourism is a job generator, but can also contribute to increasing the budgets of the poor. This can be achieved by involving them in the design or delivery of the local tourism products. People on a limited budget can be encouraged to start their own business in areas such as handicrafts; natural food production specific to the area.

Another positive effect is the revival of traditions that have been forgotten. In rural areas, people rediscover folk culture, ancestral customs, costumes, local dances, unique celebrations, all of which contribute to making the place more attractive, promoting it as a tourist destination and, last but not least, preserving local diversity and specificity.

The impact of tourism on the social system manifests itself both in the emergence of a new type of habitat, as the development of tourist activity is possible when there is a comprehensive infrastructure that meets all the needs of visitors. Therefore, at the local level, a new form of human habitat - the tourist resort - is created through the grouping of infrastructure elements. Through the emergence of a new social behavior and a distinctive way of life, as long as the biological tone is stimulated by rest and recreation, they provide people with the physical and mental resources needed to overcome everyday difficulties. Similarly, tourism involves movement, getting from one place to another, so that sedentarism and isolation are totally ruled out. Traveling from one place to another also implies unavoidable contact with the inhabitants of the areas visited and with new situations - people are constantly learning about the world around them, but at the same time they are learning about themselves, overcoming their fears, limits and subconscious barriers.

If we are to approach the relationship between tourism and the environment, then it can be said with certainty that it is of major importance, as the components of the environment are the core resources of tourism, and the tourism activities carried out can have both a positive and negative influence on these components. Therefore, it is also a rather sensitive subject. There is a growing trend towards tourism activities that protect and preserve the environment, but unfortunately this basic condition for the development of tourism is not always respected. The impact of tourism on the natural environment can be observed continuously, with the complexity of the interconnections created increasing quite markedly as the tourism phenomenon accelerates. In general, the quality of the environment is affected by subjective factors - consequences of human activity - and objective factors resulting from the occurrence of adverse natural phenomena. Among the many activities through which individuals contribute to environmental devastation is the irrational activity of tourism. In some cases, where environmental destruction is unavoidable or at best limited, tourism can contribute to halting environmental degradation by protecting and conserving the environment, adopting effective regulations for this purpose.

Environmental components together with human resources, such as monuments of architecture and art, archaeological or historical sites, favor tourist attraction. The more complex, unspoilt, untouched or protected these resources are, the more attractive they will be and the more diversified tourist activity they will generate. The relationship between the environment and tourism is of major importance, which is why the protection and conservation of the environment is of paramount importance when it comes to developing tourism. Any destructive action or alteration of the original state leads to a decrease in tourism potential. The development of tourist activities affects all the physical components, the relief, hydrography, climate, vegetation, fauna and soil.

The impact of tourism activity on the landscape relates to the location of accommodation bases, the type of access roads or the layout of the tourist destination. Both accommodation and leisure facilities occupy different sizes of land. Their construction work involves shaping the relief by leveling, marking out or consolidating. It is well known that the more fragmented the relief, the greater the human intervention. Moreover, there is the construction of access roads, which have a more pronounced negative impact on the relief than the construction of accommodation units because they cover a larger area. In addition to the fact that the construction of access roads completely changes the landscape function of the occupied plot, the construction of railways or roads requires major works, especially in mountainous areas, where the stability of the slopes is destroyed and entire areas are altered in terms of morphology.

The climate continues to suffer as a result of tourist activities, with the effects of tourism manifesting in higher average annual temperatures. Some tourist attractions are being exploited unreasonably, as a result of which ice caves where artificial entrances have been created and which have a massive flow of visitors can lead to the melting of glacial accumulations and the total disappearance of the tourist heritage.

Massive pollution of the atmosphere, in which tourism also participates, is particularly felt in the major metropolises, which are visited by millions of tourists traveling by car, including Rome, Vienna, Paris and Tokyo. Pollution at the destination is also a serious problem. According to statistics in the Caribbean, each tourist generates an average of 3.5 kg of household waste per day, while a local resident generates less than 1 kg. Another example is the route from Peru to Machu Pichu, which has been dubbed the "Coca-Cola Can Trail" or the "Toilet Paper Trail".

Another negative environmental factor is the consumption of natural resources. The development of tourism in Tozeur, Tunisia, has led to an increase in water consumption by tourist establishments and tourists, which has a negative effect on the production of figs, the traditional branch that sustains the area's economy, as excessive water consumption irreparably affects the area's water reserves. At the hydrographic level, tourism has a negative influence on them from the following two points of view. Excessive anthropogenic action leads to depletion of resources, and pollution leads to changes in water chemistry. The main negative anthropogenic actions are:

- ✓ Water pollution;
- ✓ Drainage alteration through drilling actions;
- ✓ Drainage alteration by tourist facilities;
- ✓ Devaluation of aquatic resources through overuse.

Vegetation and tourism activities are closely related, as flora has special recreational characteristics. The progress of tourism and excursion activities affects the integrity of the vegetation cover in different dimensions. When access roads and recreational facilities are built, the flora in the area will be completely destroyed. The destruction of rare plants by tourists is yet another negative example of tourism's impact on flora. Furthermore, unorganized tourism also causes major damage to the vegetation, as tourists choose their own access routes to mountain tops or slopes. Uncontrolled tourist traffic to reach natural or man-made tourist attractions leads to irreversible destruction of sometimes unique components of the environment.

Fauna is also affected by human activity. Wild animals and fish are an attractive resource for tourists because hunting and fishing are encouraged as recreational activities for tourists. Intensive tourism indirectly affects the fauna, which changes its habitat conditions. Biotypes undergo great changes, resulting in fauna migrating to less visited areas. In this context, we can mention large animals such as bears, wild boar and deer, which, with the occupation of the mountains by tourists, have reduced their population area.

The soil is affected by human actions to a large extent. The construction of access roads, tourist resorts and accommodation bases excludes large areas of soil from natural development. Roads and paths laid by people practicing uncontrolled tourism, by destroying the soil substrate, become erosion-prone strips. In addition to the traffic routes around tourist resorts, chemical pollution of the soil is also occurring.

In addition to these negative effects that tourism has on the environment, there are also positive effects. Firstly, tourism helps to protect biodiversity, and secondly, rare species of plants and animals can be turned into tourist attractions, protected and cared for in parks and reserves, and the tourist demand that develops around them is an additional source of income.

The role of tourism is driven by its important economic, psychological and social benefits. The positive effects that tourism has on individuals are: broadening of cultural horizons, social integration, communication and interaction with different cultures, regeneration, both physical and mental, rest and escape from the comfort zone and daily routine. Economically, for many countries, tourism is a way of normalizing the economy and increasing local income. However, as well as the positive side and the benefits both socially and economically, there is that less good side, the significant increase in the flow of tourists, uncontrolled tourism, the ever-increasing range of tourist services and the large number of tourist agencies chasing tourists - all of which lead to environmental degradation, depletion of resources, global air pollution, depletion of the ozone layer, rising sea levels, these in turn pose dangers to various destinations, now existing tourist attractions. The components of the environment, both natural and

man-made, are the resources of the tourism industry, and therefore the environment is in a close reciprocal relationship with the tourism industry.

A trip is "a collective or individual journey through beautiful places, with a cultural and educational purpose, under the guidance of a guide". A trip is therefore not simply a mere visit of a tourist attraction, but an intellectual activity, a process of perception, knowledge and study of the environment. The basic characteristics of a tour are:

- ✓ Duration (from 1 hour to a day)
- ✓ The presence of the excursion group
- ✓ A specialized guide is present
- ✓ Analysis and examination of tourist attractions
- ✓ Familiarization with the sights during the trip
- ✓ A well-established theme

Tours, in general, fulfill several functions which are a contributing factor to the intellectual development of the tourists. 1- The information function consists in presenting information related to a specific field; 2- The scientific propaganda function counts in promoting opinions in various fields of activity (political, philosophical, artistic or scientific); 3- The function of forming one's own interests; 4- The function of expanding knowledge at a cultural level; 5- The function of cultural recreation, which is a means of recreation with benefits for the tourist.

Ecotourism or ecological tourism emerged as a revolt against environmental pollution and manifests itself in activities that contribute to the conservation of natural sites such as rivers, lakes, seashores, natural sites under state protection, such as nature reserves and valuable natural monuments.

Ecotourism is the segment of tourism activity that makes sustainable use of natural and cultural heritage, encourages its conservation and aims to create ecological awareness through the interpretation of the environment, promoting the well-being of the population. Ecotourism is characterized by contact with the natural environment and activities that promote the experience and knowledge of nature, as well as protecting the areas where ecotourism takes place. Simply put, ecotourism is tourism activities based on a protective and sustainable relationship with nature and its conservation, alongside the basic aim of recreation, the objective of knowledge prevails. With regard to the definition of ecotourism, experts have different opinions, as follows: Karen A. Ziffer, Ecotourism: The Uneasy Alliance, 1989, states that "ecotourism equally involves a favorable approach to the host country's rulers, who are committed to establishing and maintaining landscapes with the help of indigenous populations."; Valentine, P.S, 1991-1992, defines ecotourism as "a tourism that is based on the natural environment in a sustainable and ecological way, a tourism that is not degradable, not being dangerous and that contributes to the preservation and protection of the environment"; Boyd and Buttler, 1993, support the idea that "ecotourism is a journey with a high responsibility in the natural environment that contributes to the conservation and protection of the ecosystem and ensures that the tourist activities carried out are compatible with the existing resources"; Hector Ceballas Lascurain, 1991, 1996, is of the opinion that "ecotourism involves traveling to slightly altered areas, with the aim of admiring, getting to know, studying, enjoying a unique view, flora and fauna or some cultural resources".

By analyzing and assimilating all the above mentioned definitions it can be said that: Ecotourism is an alternative form of tourism, practiced in relatively unspoilt natural areas, an environmentally responsible journey, with the aim of observing and appreciating nature and local traditions related to it, promoting the protection , safeguarding of this space. The basic difference between traditional tourism and ecotourism is simply that in traditional tourism people contemplate monuments and landscapes

without actually interacting with them, without active participation. In ecotourism, there is action, movement and mainly people seeking a closer experience and contact with nature. In addition, ecotourism is notable for providing information and insights about nature, which ultimately promotes greater engagement and integration with the place visited and its customs, as well as being a great opportunity to promote environmental education, conservation and protection.

Ecological tourism is characterized by two basic activities: 1- environmental documentation and education, which involves groups of people traveling to investigate and determine the environmental condition of areas or objectives and, ultimately, to propose ways of improving their condition; 2- traveling for a specific period of time to less polluted areas for tourism purposes, in order to benefit from tourist services in rural areas, staying in specially designed, rustic-style accommodation with traditional features. Special attention is paid to traditional local gastronomy, with dishes made from natural products prepared in the locality where the tourist service is provided.

Ecotourism is a type of tourism that focuses directly on ecological and environmental issues. The name ecotourism and the first formal definition officially emerged in 1985, but it was not until 1987 that ecotourism activities began to be organized in response to concerns about economic development, environmental degradation and social problems caused by mass tourism. The main objectives of ecotourism are: to promote and develop tourism on a culturally and environmentally sustainable basis; to promote and encourage investment in the conservation of the cultural and natural resources used.

Based on the objectives of ecotourism, the primary conditions that should regulate this type of tourism have also been established: 1-Sustainability - the carrying out of tourism activity and its development is only possible in terms of meeting the needs of the current population, without discrediting the possibility of sustaining the environment for future generations; 2-Equity - ethical and legal principle underlying the regulation of all social relations, in this case loyal partnership relations, both for one generation and for future generations, disregarding selfish, egoistic interests focused on the accumulation of income; 3-Cooperation and partnerships at different levels of society (business-business; government-business; business-community). Excluding the dominance of big powers over underdeveloped countries, as this leads to the destruction of the biodiversity of the area, since the big world powers only pursue the goal of capital accumulation.

For an activity to be considered as ecotourism, there are basic principles that must be respected:

- ✓ Respect for local communities;
- ✓ Effective economic involvement of local communities;
- ✓ Respect for natural conditions above all;
- ✓ Minimum physical, social, behavioral and psychological impacts;
- ✓ Environmental conservation and educational interaction in this regard;
- ✓ Developing environmental awareness and respect;
- ✓ Providing financial benefits for environmental conservation;
- ✓ Generating financial benefits for the betterment of the local community.

The practice of ecotourism is not a recent phenomenon. This form of tourism emerged from the need to protect natural habitats with high vulnerability due to irrational tourism exploitation, being a tourism product with a high potential for long-term capital accumulation. The development of ecotourism activities is a primary necessity in the context of human development and continuous urbanization. Increased interest in spending leisure time in less populated and polluted areas has increased since the 19th century in countries such as France, Great Britain, Germany, as a reaction to the stress and poor air conditions in booming cities in the context of the grandiose development of industry.

Conclusions:

In the tourism industry, one of the mandatory requirements for the organization of tourist routes was the implementation of environmental safety rules for visited areas, sights and monuments appreciated with a high degree of tourist interest. Tourist itineraries should be established taking into account the environmental safety of the objectives of high tourist interest. Given that natural resources in the Republic of Moldova are intensively exploited for economic and social purposes and that the areas protected by the state are small, tourist routes should be designed in such a way as to avoid causing damage so as to make an active contribution to the conservation and protection of natural monuments.

Both those responsible for organizing a trip and the participants should follow the established route on existing roads, without looking for a shorter route, as this would cause damage to the flora, with the possibility of destroying some unique or rare plants. It is necessary that the persons responsible for organizing the tours be trained in ecological safety rules before they start. All participants must be informed about the importance of observing the established rules concerning the protection of the environment and the area to be visited, each participant being required to follow the established route in order to avoid uncontrolled tourism.

The tourist trails must have special sites for stops, overnight stays, setting up sleeping tents and lighting bonfires, as well as, very importantly, the existence of litter bins at these sites. With everyone's contribution, this will lead to a cleaner, protected and preserved environment.

Bibliography:

1. Cosovan, Veronica. Turismul cultural și educațional – o nouă perspectivă în activitatea Bibliotecii Naționale a Republicii Moldova. In: Magazin bibliologic. 2022, nr. 3, pp. 44-47. ISSN 1857-1476.10.5281/zenodo.6828108
2. Bejenaru, Mariana. Promovarea turismului în Republica Moldova, oportunități și impedimente. In: Abordări moderne privind drepturile patrimoniale. 12-13 mai 2022, Chisinau. Chișinău: MS Logo, 2022, pp. 77-82. ISBN 978-9975-3541-0-3.
3. Chiriac, Lilia; Grunzu, Tatiana. Cultural tourism as a form of cultural heritage valorisation. In: Competitiveness and sustainable development in the context of European integration. Editia 3, 4-5 noiembrie 2021, Chișinău. Chișinău: 2021, pp. 212-215. ISBN 978-9975-45-739-2 (PDF).
4. Lisa, Galina; Drăgălin, Iuliana. The challenges of cultural tourism of the Republic of Moldova. In: EcoSoEn. 2020, nr. 1-2, pp. 55-69. ISSN 2587-344X.
5. Куцарь, Мария; Буздуган, Адриана. Перспективы развития агротуризма в Республике Молдова. In: Проблемы и вызовы экономики региона в условиях глобализации международная студенческая научно-практическая конференция. Editia 6, Vol.1, 10 decembrie 2020, Comrat. Comrat, Republica Moldova: Tipografia "Centrografic", 2020, pp. 235-238. ISBN 978-9975-83-116-1.
6. Chiriac, Lilia. Behavior of cultural tourism consumers. In: Competitiveness and sustainable development. Editia 2, 20 noiembrie 2020, Chișinău. Chișinău, Republica Moldova: 2020, p. 18. ISBN 978-9975-45-652-4.
7. Кауненко, Ирина. Проблемы межкультурных отношений в транзитивном обществе: интеграция и преадаптация. In: Tradiţii şi procese etnice. Ediția 1, 6 octombrie 2020, Chişinău. Chișinău: Tipogr. „Grafema Libris", 2020, pp. 212-217. ISBN 978-9975-52-221-2.

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