The role of ecological tourism in achieving sustainable development goals in the EAEU

Veronika Vyazovskaya1,*, Oksana Falchenko1, Irina Savelyeva1, Ekaterina Pankova1, and Luis Cesar Molina Almanza2

1Ural State University of Economics, 620144 Yekaterinburg, Russia
2Public Institute of Higher Technological Education “Simon Bolivar”, Bellavista 07011 Lima, Peru

Abstract. The authors propose to consider certain aspects of sustainable tourism development and assess their contribution to the development of the economies of the EAEU countries. The article provides an assessment of the development of ecological tourism in the EAEU countries, based on existing indicators, including evaluation of the level of competitiveness of tourism, the development of special protection conservation areas, data on environmental education and tourism activities on the territory of the state wildlife sanctuaries and national parks. The authors draw conclusions about the need to create a unified policy and regulatory framework for the development of ecological tourism in the EAEU, to work out a system of indicators and to create tourism assessment methodology for sustainable development. Besides, it is important to introduce a set of measures for information, marketing and staffing to develop ecotourism in the EAEU countries. Competitiveness in ecotourism remains low.

1 Introduction

The concept of sustainable development, which is as a process of socio-economic changes that meets the needs of the present without endangering the well-being of future generations, forms a new field of research, both for individual states and their industries, and within the framework of integration associations. In the modern context the concept of sustainable development as a sustainable transformation of society aimed at ensuring a new quality of life was used in the UN document "The 2030 Agenda for Sustainable Development" in 2015 and became one of the most widely discussed in the world scientific community [1]. One of the topical directions for the formation of sustainable development of countries and regions of the world is the creation of conditions for ecological tourism.

2 Theoretical framework

The concept of ecological tourism became popular at the end of the 20th century, when numerous studies of the tourism industry in the context of environmental conservation appeared. In the first decade of the XXI century there appeared works aimed at

* Corresponding author: vyazovv@usue.ru
reconsideration of the concept of sustainable tourism in reference to new realities.
According to B. Bramwell and B. Lane, sustainable tourism emerged as a reaction to the
negative impact on local culture, society, and the environment of the traditional tourism
industry [2].

In 2001, The World Tourism Organization defined sustainable development as tourism
development that meets the needs of today's tourists and host regions, protecting and
expanding tourism opportunities in the long term. It is assumed that economic, social and
aesthetic needs can be met while maintaining cultural integrity, basic ecological processes,
biodiversity and life support systems. In 2005, the UN Environment Program and the World
Tourism Organization determined that sustainable tourism must fully take into account its
current and future economic, social and environmental impacts, while meeting the needs of
tourists, industry, the environment and host communities.

In the work of Liu Ch., Tseng G., Li P., and Li M., sustainable tourism is defined
differently and implies all types of tourism that are compatible with sustainable
development or contribute to it [3]. Sustainable Tourism Guidelines and Management
Practices are applicable to all forms of tourism in all destinations, including mass tourism
and various tourism segments. The principles of sustainability refer to environmental,
economic and sociocultural aspects that must be balanced to ensure its long-term
sustainability.

The concepts of "ecological tourism", "sustainable tourism", "responsible tourism" are
inextricably linked with each other and are often used synonymously.

According to the International Society for Ecotourism (TIES), ecotourism is defined as:
“responsible travel to natural areas that preserves the environment, supports the well-being
of the local population and includes an educational dimension” [4]. The numerous
definitions of ecotourism can be divided into two groups. In the first case, we are talking
about trips to the places untouched by civilization, in the other case, these are efforts to
maintain ecological balance in nature.

Responsible tourism is about creating economic benefits and enhancing the well-being
of host communities, improving working conditions, positively contributing to the
preservation of natural and cultural heritage, as well as ensuring access for people with
disabilities and promoting respect between tourists and local communities.

Recently, a large number of publications have appeared on certain aspects of the
development of ecological tourism.

The effects of ecotourism development are reviewed by Ralf Chtistother Buckley [5],
Md. Ghulam Rabbany, Sharmin Afrin, Airin Rahman and others [6]. A comparative
analysis of ecotourism practices for the sustainable development of individual territories
and countries of the world is undertaken in the works of Sultan Sevinc Kurt Konakoglu,
Maria Heldak, Banu Cicek Kurdoglu and Joanna Wysmulek [7], Rubtsova M. [8], Mondino
E. and Beery T. [9], Malra R. [10], Adil Siswanto, Moeljadi [11]. However, there is not
enough research on the development of ecological tourism within the EAEU.

3 Methods and results

The variety of interpretations of the concepts of "sustainable tourism", "ecological tourism"
and "responsible tourism" in the scientific literature testifies to the ongoing discussion and
development of the terminological apparatus of the study. Currently, there is no universal
methodology that makes it possible to assess the dynamics of development, as well as the
contribution of a particular type of tourism to the sustainable development of the economy,
both within a country and in the framework of an integration association, which allows
analysis based only on indirect indicators.
The study of the topic of ecological tourism today is hampered by the fact that a unified methodology and system of indicators has not been formed to assess this direction of development of tourist activity. In this regard, we can use only indirect estimates and parameters indicating the development of this kind of tourism.

To assess the role of ecological tourism in the country's economy in order to achieve sustainable development goals, we used the following research methods: monographic method (to clarify the main content and conceptual apparatus of the study to determine the role of ecological tourism in the economy to achieve sustainable development goals); method of analysis and economic and statistical methods (used to analyze and assess the contribution of ecological tourism to the country's economy and determine their comparative advantages in this direction to achieve sustainable development indicators).

The information base for the study is scientific publications on the topic of ecological tourism and sustainable development, as well as data from the official statistical agencies of the EAEU countries and international organizations.

According to The Travel & Tourism Competitiveness Report 2019, Eurasia is the least competitive, but the most promising sub-region in Europe in terms of tourism and travelling development. In terms of the "Favorable Environment" rating (health and hygiene), the countries of the Eurasian region are higher than the world average, and also surpass the average European indicators in terms of price competitiveness. Among the problematic aspects of the development of tourism and travelling, one can note the lack of international openness, undeveloped infrastructure and underutilization of natural and cultural resources. In recent years, the Eurasian region has rapidly increased its competitiveness, which is associated with the recovery of tourism and travel after economic downturns and instability, increased security (this indicator is still the lowest in Europe), readiness to use ICT, price competitiveness and investment in tourism infrastructure.

The Russian Federation (39th in the ranking) is the most competitive tourism economy in Eurasia; it accounts for most of the region's GDP. While the country lags behind subregional and global averages for the business environment (92nd), safety and security (98th), and international openness (123rd), Russia has a developed air transport infrastructure (23rd). Kazakhstan demonstrates the lowest rate of competitiveness improvement, moving up one position to rank 80 in the world. The country became more competitive in most indicators of the Travel and Tourism Competitiveness Index 2019, but growth was constrained by the deterioration of the business environment (from 36th to 49th), the labor market (from 47th to 57th) and health and hygiene (from 6th to 12th).

Armenia took 79th place in the Travel and Tourism Competitiveness Index, compared to 84th place in the previous years and showing strong positions in price competitiveness (30th place), business environment (31st place). The Kyrgyz Republic performed better than two years ago, but remains the least competitive economy in Eurasia in tourism (110th). In particular, the country needs additional investment in underdeveloped infrastructure (131st place). The Republic of Belarus is not presented in this report.

Following global practice, for the sustainable development of tourism in the EAEU countries, a system of specially protected natural areas (SPNA) is used. These territories are intended for the preservation of typical and unique natural landscapes, the diversity of flora and fauna, the protection of natural and cultural heritage sites. In our opinion, the development and support of protected areas in the EAEU countries is a prerequisite for the development of ecological tourism in order to achieve the goals of sustainable development of the countries of the region.

The EAEU countries have significant potential for ecological tourism (Table 1). Russia has the greatest potential among the EAEU countries. According to the Federal State Statistics Service, in 2020 there were 11,825 protected areas in the Russian Federation, incl. federal significance - 296, regional - 10439, local - 1090.
Table 1. Total area and share of protected natural zones in the total area of the EAEU countries in 2014-2020.

| Year | Russia | Kazakhstan | Belarus | Kyrgyzstan | Armetia |
|------|--------|------------|---------|------------|---------|
|      | Total area of protected natural zones - total, mln. Ha |          |         |            |         |
| 2014 | 202.30 | 24.82      | 1,7227  | 0.925      | 0.384   |
| 2015 | 206.60 | 25.33      | 1,8256  | 0.937      | 0.3832  |
| 2016 | 211.70 | 25.39      | 1,7987  | 0.968      | 0.3831  |
| 2017 | 212.00 | 25.80      | 1,8116  | 1.303      | 0.3831  |
| 2018 | 237.70 | 26.25      | 1,8615  | 1.303      | 0.3831  |
| 2019 | 238.80 | 26.25      | 1,8701  | 1.305      | 0.3831  |
| 2020 | 240.20 | 26.25      | 1,8791  | ...        | ...     |

Share of protected natural zones in the total area of the country, %

| Year | Russia | Kazakhstan | Belarus | Kyrgyzstan | Armetia |
|------|--------|------------|---------|------------|---------|
| 2014 | 11.8   | 9.1        | 8.2     | 4.6        | 12.9    |
| 2015 | 12.1   | 9.3        | 8.8     | 4.7        | 12.9    |
| 2016 | 12.4   | 9.3        | 8.7     | 4.8        | 12.9    |
| 2017 | 12.4   | 9.5        | 8.7     | 4.8        | 12.9    |
| 2018 | 13.9   | 9.6        | 8.9     | 6.5        | 12.9    |
| 2019 | 13.9   | 9.6        | 9.0     | 6.5        | 12.9    |
| 2020 | 14.0   | 9.6        | 9.0     | ...        | ...     |

Sources: on the basis of the data from the Federal State Statistics Service (https://rosstat.gov.ru/), Statistical Committee of the Republic of Armenia (https://armstatbank.am/); National Statistical Committee of the Kyrgyz Republic (http://www.stat.kg/); National Statistical Committee of the Republic of Belarus (https://www.belstat.gov.by/); Agency for Strategic Planning and Reforms of the Republic of Kazakhstan Bureau of National Statistics (https://stat.gov.kz/).

The development of ecological tourism in the EAEU is facilitated by the cultural and historical potential of the countries of the region. The UNESCO World Heritage List includes 5 natural sites of the Russian Federation (virgin forests of Komi, Lake Baikal, Kamchatka volcanoes, golden Altai mountains, Western Caucasus); 3 natural objects of Kazakhstan (Petroglyphs of the archaeological landscape of Tamgaly; Saryarka - Steppes and lakes of Northern Kazakhstan; Western Tien Shan); 1 natural site of Armenia (Upper Azat River); 1 natural site of Belarus (Belovezhskaya Pushcha); 2 natural sites of Kyrgyzstan (Sulaiman Too Sacred Mountain; Western Tien Shan). In the EAEU countries, the development of ecological tourism can help in environmental protection and the socio-economic development of countries.

It should be noted that today there is no official statistical information on sustainable (including ecological) tourism in the EAEU countries. Indirect indicators that allow assessing the volume of ecological tourism are available only in the official statistics of the Russian Federation. Data on environmental education and tourism activities on the territory of state nature reserves and national parks of the Russian Federation are presented in table 2. It shows that recently there has been a slowdown in tourist activity in the Russian Federation, which is due to the pandemic and the closure of borders. However, if we compare the data of the past 5 years, then a slight increase in ecotourism is still noticeable.
Table 2. Ecological, educational and tourist activities on the territory of state natural reserves and national parks in Russia for 2014-2020.

|                  | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   |
|------------------|--------|--------|--------|--------|--------|--------|--------|
| **State wildlife sanctuaries** |        |        |        |        |        |        |        |
| Number of museums | 67     | 68     | 67     | 68     | 70     | 67     | 70     |
| Number of visitors, people | 462113 | 525774 | 522836 | 509660 | 536719 | 602577 | 544249 |
| Number of visitor-centres | 155    | 164    | 169    | 171    | 174    | 154    | 146    |
| Number of visitors, people | 475937 | 503065 | 651943 | 1178222| 1215339| 425622 | 358480 |
| Number of eco-routes and itineraries - total | 424    | 445    | 487    | 478    | 496    | 509    | 543    |
| Number of visitors, people | 965497 | 1173778| 1262852| 1543533| 1814655| 958861 | 921633 |
| **National parks** |        |        |        |        |        |        |        |
| Number of museums | 53     | 60     | 60     | 59     | 67     | 62     | 65     |
| Number of visitors, people | 205605 | 170663 | 164946 | 170691 | 237501 | 223581 | 116246 |
| Number of visitor-centres | 140    | 143    | 149    | 131    | 128    | 137    | 144    |
| Number of visitors, people | 488772 | 592693 | 606549 | 544534 | 581900 | 1704266| 703339 |
| Number of eco-routes and itineraries - total | 755    | 817    | 852    | 895    | 940    | 988    | 977    |
| Number of visitors, people | 1201087| 1906003| 2149611| 2470204| 2000315| 4442375| 3773692|

Source: on the basis of the data from the Federal State Statistics Service (https://rosstat.gov.ru/)

Note that these statistics do not reflect the full picture of the development of ecological tourism, and the methodology and indicators for the development of ecological tourism and its distribution to all EAEU countries need to be improved.

In our opinion, in order to effectively promote ecological tourism for the sustainable development of the EAEU, it is necessary to take the following actions and to coordinate the participation of states in the following areas:

1. improve the regulatory framework for the development of ecological tourism in the Russian Federation and the EAEU countries. The concept of "ecological tourism" is not clearly fixed in the legislation, which entails problems associated with the creation of social, economic, personnel and investment conditions for its successful development;
2. create a universal methodology for assessing ecological tourism. To date, no uniform statistical approaches have been formed to assess the contribution of ecological tourism to the economies of countries. For example, the state statistics of the EAEU countries reflects general data only for specially protected natural areas; the set of available statistics differs from country to country, making it difficult to make a relevant assessment of this type of tourism activity;
3. increase the investment attractiveness of ecological tourism in the EAEU countries. To achieve this goal, it is necessary to ensure the formation of attractive conditions
for investment based on government support, targeted development programs, funds from private investors and credit and banking structures, etc.;

4. develop marketing of ecological tourism. It is necessary to form a brand of ecological tourism of the EAEU countries through the creation of unified information resources for its promotion, participation in international thematic exhibitions and fairs, the development of attractive tourist programs taking into account the ecological, natural, and cultural characteristics of the territories of the EAEU countries.

5. develop human resources to improve and promote ecological tourism. The shortage of qualified personnel is a problem in the EAEU countries. Thus, it is necessary to form appropriate areas of training and retraining of specialists at the level of unified educational approaches in the EAEU member states.

References

1. Mainstreaming the 2030 Agenda for Sustainable Development. Reference Guide to UN Country Teams (2017)
2. B. Bramwell, B. Lane, Journal of Sustainable Tourism, 1, 19 (1) (2011)
3. Chui-Hua Liu, Gwo-Ishiung Tzeng, Ming-Huei Lee, Po-Yen Lee, Tourism Management Perspectives, 6 (2013)
4. The International Ecotourism Society (TIES, 2015)
5. R. Buckley, Journal of Sustainable Tourism, 17 (2010)
6. Md. Ghulam Rabbany, Sharmin Afrin, Airin Rahman, Fajul Islam, Fazlul Hoque American Journal of Environment, Energy and Power Research, 1, 7 (2013)
7. Sultan Sevinc Kurt Konakoglu, Maria Heldak, Banu Cicek Kurdoglu and Joanna Wysmulek Sustainability, 11(9) (2019)
8. M. Rubtsova, Effect of Environmental Awareness/Education and Tourism Development on Local Communities in Middle Siberia (State Nature Biosphere Reserve “Tsentral’nosibirsky”, 2010)
9. E. Mondino, T. Beery, Journal of Ecotourism, 18:2 (2019)
10. R. Malra, International Journal of Multidisciplinary Research, 5, 1 (2015)
11. A. Siswanto, Moeljadi International Journal of Evaluation and Research in Education 4, 4 (2015)