Ecotourism in the Chechen Republic: resource potential

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Abstract. The article analyzes the natural resource potential of the Chechen Republic in the context of the ecologically oriented tourism. It examines the functions and possibilities of ecological tourism as well as the versatility of approaches to its definition in domestic and foreign publications as well. Weaknesses in the region’s recreational opportunities like underdeveloped infrastructure, poor promotion of ecological tourism product, shortage of highly qualified personnel in tourism and others have been identified along with the favorable prerequisites being high landscape diversity, significant recreational resources, rich cultural and historical heritage, special mentality of the population, etc. In the future, the solution of these problems and the development of eco-tourism in the Chechen Republic will allow engaging remote areas (settlements) in the economic activity, thus contributing to the development of small business as well as engaging the local population in the tourism industry for preserving landscape and biological diversity.

1. Introduction
Ecotourism is one of the most dynamically developing sectors of the tourism industry. According to various estimates, ecotourism accounts for more than 10-20% of the profit of the entire tourism market [1]. Significant successes in this area were achieved by Germany, Australia, Canada, the USA and other developed countries. According to the forecasts of the World Tourism Organization, in the near future its growth rates will remain high, and the income generated by ecotourism will make a significant contribution to the development of economies of both developed and developing countries of the world. The rational use of natural and cultural-historical tourist resources will allow for avoiding many of the negative consequences of mass tourism. The emergence of the term and the further popularization of the concept of ecotourism are associated with an awareness of environmental problems.

Modern studies on ecotourism are highly differentiated depending on the goals pursued, philosophical approaches and theoretical and methodological tools [2–5]. In domestic literature about twenty terms (from conservational and green to socially responsible, sustainable) are used as the synonyms for the concept of “ecotourism” [1, 7, 8]. In foreign publications, the term “Ecological tourism” or its short form “Ecotourism” is presented [5, 8, 9].
2. Materials and methods
The study is based on the work of domestic and foreign scientists, revealing the specifics of ecotourism development, including its relation to mountain conditions. The work used statistical, historical and comparative-geographical methods.

3. Eco-tourism concept
All existing approaches to the definition of ecotourism come down to two forms: narrow (classical) and wide. The classical ecotourism interpretation involves conducting ecological tours within the boundaries of specially protected natural territories and water areas. In a broad sense, the meaning of the term is close to its Western European counterpart and may imply all types of ecologically oriented tourism both within the boundaries of the specially protected natural reservations (SPNR) and beyond.

The International Organization of Ecotourism defines it as a responsible travel to natural areas that conserves the environment and improves the well-being of local people. Ecotourism can be interpreted in the context of environmental management. In this case, it will be considered as one of the areas of natural tourism, aimed to include environmental principles of environmental management in the economy, production and public consciousness [6].

Some researchers [1] see the basis of the ecotourism concept in the increasing pressure on natural and cultural-historical resources due to the increase in tourist flows. Ecological tourism being a form of nature-oriented tourism should provide: conservation of ecosystems through the rational use of natural resources and tourists involvement in campaigns devoted to wildlife protection; raising tourists awareness by means of educational nature-oriented tourism products, as well as honoring the traditions and customs of indigenous ethnic groups. Most modern researchers name the need for greater environmental awareness of tourists and stimulation of their environmentally responsible behavior as the most important condition for the ecotourism development [10, 11].

A number of researchers [1, 6] are concerned about the evolution of ecotourism as it is often expressed in new forms and in combination with other types of tourism, which are not always nature-oriented. To minimize such negative impacts of tourism, the maximum load on tourist routes and the flow of tourists should be determined and strictly regulated.

The basic principle of the international concept of ecotourism denotes travelling to the world of wildlife, which requires a responsible attitude to nature through its protection, promotion of environmental culture and tourist awareness. Ecotourism aims to provide a balance of environmental, socio-cultural and economic interests, which together constitute the basis adopted in 1992 in the Rio de Janeiro conception of sustainable development.

4. Tourist and recreational potential of the study region
The mountain regions of Russia, which include the Chechen Republic, have significant potential for the development of ecotourism [12]. After all, natural systems which are to the least extend transformed by anthropogenic activities are usually confined to mountainous regions.

In the modern world, the development of ecotourism is inextricably linked with the system of specially protected natural territories, whose main task is to maintain the ecological balance of the territory through the preservation of environment-forming functions, which are the basis for maintaining the biological diversity of the region and comfortable life of population.

The mountain regions of the North Caucasus as a whole are characterized by a high level of biodiversity compared to other regions of Russia. However, the area of protected areas here is smaller in comparison with other mountainous territories [13]. There are no national parks in the North-East of the Caucasus, and natural reservations in the Chechen Republic.

In accordance with the Law of the Chechen Republic “On Specially Protected Natural Reservations” dated 04.12.2006 No. 40-RZ (as amended on 29.11.2018), the SPNR regulations and the status of nature protection institutions located on them, the following categories of these territories are distinguished: natural parks, state nature reserves, natural monuments, dendrological parks and botanical gardens.
The system of specially protected natural reservations in the Chechen Republic started in 1963, when hunting reserves Sovetsky, Vedensky and Parabochevsky were formed in Chechen-Ingushetia [13]. The total area of SPNR on January 1, 2020 was equal to 150,359 ha. The main of SPNR is taken by state nature reserves (Table 1). The order of the Ministry of Nature of the Chechen Republic No. 11 dated January 17, 2020, approved 50 specially protected natural territories and objects. Chechnya’s regional protected areas include state nature reserves (Argunsky, Bragunsky, Vedensky, Urus-Martanovsky, Stepnoy, Parabochevsky, Shalinsky, Green Zones of Grozny and Sovetsky), dendrological park (Grozny) and numerous botanical parks (Caucasian linden tree, Oak, the Makazhevsy pine forest, the Bamut pine grove, etc.), hydrological (lakes: Kezenoy-Am, Galanochozh, Bezenoy-Am, mineral springs: Melch-Khi, Ephe, waterfalls: Vashindaroysky, Kharachoysky), geological (oil springs: in the valley of the Bolshoi Yaryk-Su river, on the outskirts of the village Simsyr), paleogeomorphological (remnants of the “Arch” and “Brothers” in the upper reaches of the Gekhinka river) and other natural landmarks.

Table 1. State natural reserves of Chechnya of regional significance (as of January 1, 2020)

| SPNR              | Area, ha | Administrative regions |
|-------------------|----------|------------------------|
| Argun             | 1,600    | Grozny                 |
| Bragunsky         | 3,500    | Gudermes               |
| Vedeno            | 35,000   | Vedeno, Sharoy         |
| Steppe            | 52,000   | Shelkovskaya          |
| Parabochevsky     | 12,000   | Shelkovskaya          |
| Urus-Martan       | 12,600   | Urus-Martan, Shatoy    |
| Shali             | 7,500    | Shali                  |
| Greenzone of Grozny| 1,800    | city of Grozny        |
| Soviet            | 22,500   | Sharoy                 |

The Chechen Republic has significant hydro-recreational potential [14], which is formed by the river system, lakes, waterfalls, mineral springs, which generally creates the prerequisites for the development of water tourism being one of the areas of ecotourism. Waterfalls on the flashy rivers of Chechnya are very picturesque. Vashindaroysky waterfall in the valley of the river Varanda is one of them. It is 10 m high and up to 2 m wide. Its background in the form of a layered, multi-colored limestone steppe with bright green spots of vegetation gives it special beauty. It is easily accessible and until the 1990s was often visited by tourists.

The important components of natural recreational resources are lakes used for recreation and water tourism. Lakes of various origin (dammed, landslide, glacial, karst, etc.) are numerous in the studied region, which attracts tourists due to their proximity to settlements. At the same time, they are more vulnerable ecologically in comparison with large water bodies.

Kezenoy-Am Lake, the largest alpine reservoir in the North Caucasus (an area of about 2 km²), is among the few objects of the Chechen Republic that have become widely known outside the region. It was declared a natural landmark in 1978. It is located on the slope of the Andean ridge at the very border of Chechnya with Dagestan and at an altitude of 1870 m above sea level in the zone of mountain meadows and steppes. It currently attracts a significant number of tourists [15]. Lake Galanchozhskoe, declared a natural landmark, is framed by emerald greenery of subalpine meadows at an altitude of 1,533 m above sea level.

Nature landmarks Steppe Pearl and Kissyk are breeding and stops grounds during the migration of rare and protected semiaquatic and desert-stepphe birds including those listed in the Red Books of the International Union for Conservation of Nature and Russia (cormorant, white-tailed eagle, curlew, small tern, etc.). The Kissyk natural boundary is an ornithological territory of international importance in the Caucasian ecoregion created to protect endangered species of birds.

The differentiated nature of the relief led to a variety of floral resources in Chechnya. There are over 2,200 plant species. Forest resources are of great value with regards to recreation (the average
forest covers 21.6% of the territory). The fauna of Chechnya is diverse both in terms of species composition and ecological groups. The largest number of red-book species of plants and animals is recorded in the mountainous regions of the republic.

Golovlev A.A. [16] described 18 ecological-tourist routes within the mountain zone of Chechnya. According to him, the development of local ecotourism in the future will allow the region to exist to a large extent due to the income received from ecotourism and recreation and, accordingly, achieve sustainable socio-economic development.

Cultural and historical resources are represented by the material and spiritual culture of the peoples living in the territory of the republic at present and those who have been living here for hundreds and thousands of years. Each culture imprinted on history. The mentality and culture of people living in the Chechen Republic can also be considered as an object of tourism, the basis of tourist interest. This basis is the desire of people to see not only virgin natural systems but also to get acquainted with the life and traditions of people who have been living in harmony with their environment for thousands of years (mainly in the mountainous part).

Cultural and historical recreational resources include the totality of the society achievements in material production, education, science, art, state and public life arrangement. The Chechen Republic has a significant historical and cultural heritage, which is especially widely represented by architectural, historical and archaeological landmarks.

The Argun State Historical, Architectural and Natural Museum-Reserve is a huge castle complex built in the mountain part of the republic in the 13th century and one of the main attractions of the Chechen Republic. There are unique historical and architectural monuments. In total, in the Argun reserve occupying an area of 240 thousand hectares, there are 650 cultural monuments and about 200 stone towers requiring restoration.

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The objects of historical and cultural heritage in the lowlands and on the plains are mainly represented by the preserved monuments to the soldiers of the Great Patriotic War, houses of famous people (scientists, poets, artists), obelisks, groups of ancient barrows, and in the mountainous part by watchtowers, defensive and flag towers, bas-reliefs, above-ground tombs and sanctuaries.

Other important prerequisites for the development of tourism and recreation in the region include a favorable geo-economic situation, especially in terms of inter-regional and international transit, human capital assets being the increasing labor resources with a good age structure and a growing level of education.

In general, ecotourism in the North Caucasus is poorly developed due to various limiting factors. Among the key factors is the underestimation of the regional tourist and recreational potential, which cumulatively forms an integral tourism system in the country. The development of ecotourism in Russia is constrained by insufficiently favorable socio-political and economic conditions for investment in this area [17].

5. Conclusion
Ecotourism is a tourism industry sector aimed to provide a balance between environmental, socio-cultural and economic interests, which, in turn, meets the principles of the concept of sustainable development adopted by the world community. The term “ecological tourism” is one of the most widely used concepts. Numerous definitions of the concept under consideration can be combined into two groups. The first one implies traveling to natural places untouched by civilization, specially protected natural territories and water areas. In other cases it is defined as an activity to maintain ecological balance in nature, i.e. ecotourism involves ecologically oriented tourism both within the boundaries of the protected territories and beyond them.

The natural resource potential of the Chechen Republic allows developing various types of tourism in the region, in particular, ecologically oriented tourism. The region approved 50 specially protected natural territories and objects, including 9 state nature reserves of regional significance and natural landmarks (botanical, hydrological, geological, paleogeomorphological). They occupy over 150 thousand hectares. However, at present, the development of ecotourism in the studied region is at
a rather low level. The problems hindering the development of ecological tourism are as follows: underdeveloped tourism infrastructure, a shortage of highly qualified personnel in the tourism sector, poor promotion of ecological tourism product, etc.

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