Analysis of ecological tourism in Russia and USA

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> Abstract. The necessity of development and marketing of ecological tourism is substantiated today by requirements for sustainability of entrenched economic activities in specific regions, as well as by problems of environment preservation. The ecological tourism with active involvement of local residents in particular should become an important element for development of the regions promoting both economic development and preservation of natural and cultural heritage of our countries and the regions. The work presents the modern concept and approaches to ecological tourism, as well as the trends of its development in Russia and USA. The method of sociological survey and comparative approach are suggested as the tools to evaluate the role and effectiveness of ecological tourism, which is the most prospective way of tourism development, and is an important component of the socio-economic development too, capable not only to develop, but to protect natural, historic, and cultural heritage. The preliminary conclusions about the importance of the ecological tourism development for the sustainable development of the regions based on the entrenched economic activities of the local population. There is a need to implement modern effective and efficient eco-tourism practices in specific regions of Russia and USA.

1 Introduction

Today there is a need to support innovative activities in various industries of economy and in tourism in particular. It is the ecological tourism, which is the global activity and an important component to facilitate economic and political relations between our countries and the development of the regions involved and to preserve their natural and cultural values.

Ecological tourism is a popular theme in developed countries but a relatively new concept in many regions in Russia. The distinguishing feature of ecological tourism is that the common tourism in general implies just travelling a distance from home, while ecological tourism is defined specifically as "responsible travel to natural areas that conserves the environment and improves the welfare of local people [1]. Other definitions of the ecological tourism are:

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• "tourism involving travel to areas of natural or ecological interest, typically under the guidance of a naturalist, for the purpose of observing wildlife and learning about the environment" [2];

• "tourism that is designed to contribute to the protection of the environment or at least minimize damage to it, often involving travel to areas of natural interest in developing countries or participation in environmental projects" [3];

• tourism to places having unspoiled natural resources [4];

• tourism to exotic or threatened ecosystems to observe wildlife or to help preserve nature [5].

A distinctive feature of ecotourism from conventional tourism is that mass tourism means simply traveling a distance from home, while ecotourism is defined as responsible travel to natural areas that promotes the protection of nature and supports the well-being of the local population and includes interpretation and education. The International Ecotourism Society (TIES) defines ecotourism as a system of travel and tourism that promotes environmental conservation by educating travelers about sustainable lifestyles [1]

2 Development of ecological tourism

The innovative development of the economies requires a deep study of domestic and foreign tourism experience [6]. After studying a variety of modern local, national and international sources about tourism, authors came to the conclusion that eco-tourism should be an important component of the socio-economic development of specific regions that can preserve its natural, historical and cultural values.

According to statistics provided by the World Tourism Organization (UNWTO), ecotourism accounts for about 12-15% of all tourists flows. Moreover, the number of ecotourists increases by 25-30% annually. It is expected that the share of Russian and American tourists in the total number of ecotourists will significantly increase [7].

Actually, ecotourism received its initial development back in the 1970s in the United States, the country that for many years is the leading tourist region of the North America. The USA is one of the most popular tourist destinations. This is due to the many natural, cultural and historical sights and monuments. The ecological tourism plays an important role, especially now, in the whole United States tourism industry.

According to the UNWTO data, the number of tourists in the United States in 2017 and before the Covid-19 pandemic amounted to more than 75.9 million visitors, which allowed the country to take the third place in the ranking of host countries with tourist spending \$210.7 billion [8]. Despite the fact that the United States is one of the largest markets for recreational tourism for residents of European countries [9], it is impossible not to underestimate the role of ecotourism in Russia.

Russia, like the United States, has very wealthy recreational resources that are studied and used further for ecological tourism purposes. Our countries have a huge number of specially protected natural areas (SPNAs) that have become world-famous and are of interest to both tourists and local residents, especially those who are interested in wildlife.

It should be noted that the specifics of American and Russian attractions is not only in their diversity and scale, but also in their geographical location at a considerable distance from each other. And if day trips, thematic voyages, for example, to places known out of westerns, to Indian indigenous territories or to the largest megacities are very popular in the United States, then in Russia, these are, first of all, places of wildlife and natural attractions.

The understanding of the tourism and of ecological tourism in particular in Russia by local residents is usually strongly correlated with backpacking, recreation activities and leisure time. Recreation is considered as a sort of amusement or an activity a person takes part in for pleasure or relaxation rather than as work. Hence local tourist areas are mostly

areas for recreational stay, sports, and games, often with children. Considering the climatic conditions of the region, with average annual temperatures below zero degrees Celsius, the outdoor recreation is more closely related to the mass tourism and usually to the sea or to the ocean. For example, sunbathing, ashore and in-water attractions visited are usually both recreational activities and tourist activities, with no regard to the duration and location of the trip. Whereas, a traveler who is going out or backpacking, for example, to the nearby forests, for a day or for a weekend, or a longer trip, if visiting further destinations, can be considered as a tourist participating in an ecological tour.

Every year ecological tours attract many thousands tourist from Russia and abroad. There are thousands of places quite interesting for the visitors not only during the summer but during other seasons too. Though, most of the visits are definitely during the summer months. Some people like to stay in comfortable cottages and bungalows, others prefer to spent nights in tents or aboard the boats. However, there is still no such a developed ecological tourism infrastructure in Russia as we can see in other eco-attractive destinations, and, especially, in the United States.

Today we can name at least seven defining practices to describe ecotourism in international practice, which are to be adopted and implemented in Russia in particular too. The profound studies of ecotourism including University programs use this as the following defining points for the working definition [10]:

a. *It assumes travels to sites of real nature:* These places are usually quite remote areas, whether inhabited or uninhabited, and are officially under the environmental protection at the international, national, regional, municipal or private level.

b. *Minimum impact:* Ecological tourism always strives to minimize the adverse anthropological impact, which can be achieved via, for example, well established and organized tours and use of recycled materials or local construction materials for hotels and other buildings required to provide the tourists infrastructure and environmentally and culturally sensitive architectural design, as well as, alternative energy sources, recycling and/or non-harmful disposal of wastes. Minimization of impact also requires that the behavior of tourists and number of visits are regulated to ensure no damage to the local ecosystem.

c. *It educates environmental awareness:* Ecological tourism always means education, for both tourists and residents of the local communities. It is very important to provide travelers with the relevant information about the country, environment and people, as well as about the formal and informal institutions involved well before the departure to a destination. According to Ecotourism Societies guidelines it is required "to learn about the places and peoples visited" and "to minimize their negative impacts while visiting sensitive environments and cultures". Therefore, good eco-touristic programs should be provided by well-trained, multilingual guides with the knowledge of natural and cultural history, environmental interpretation, ethical principles and effective ways of communication. All ecotourism projects are supposed to educate tourists and local community members, including adults and kids in the host country.

d. It provides direct financial benefits for nature protection and conservation: Ecotourism not only promotes environmental awareness but is directed to raise some funds required for the environmental protection, research and education. This can be achieved via a variety of financial mechanisms, including park entrance fees, eco-tour and transportation companies' contributions, special offers in hotels, eco-taxes and voluntary contributions.

e. It should provide financial benefits and job advantages to local people: It is a common believe that National Parks and other conservation areas will only survive if there are "happy people" around the area. It is getting obvious that local communities must be involved with and receive income and other tangible benefits related to state of life improvement and local infrastructure as a result of the conservation areas promotion and construction of it's tourist

facilities. Actually, people from the local communities surrounding an ecotourism attraction should run campsites, lodges, guide services, restaurants and other concessions. Such a partnership is suggested for all sorts of investors planning their activities in parks or other tourist destination. More importantly, since Ecotourism is often viewed as a tool for rural development, it should also allocate most of economic and political control to the local communities. This is the most common mistake of the operators and the foreign partners to neglect the role of the local officials and business people, including those living in villages and nearby settlements.

f. It respects local culture: Local culture is another concern of the ecotourism. Ecological tourism is not only "greener" but also less culturally intrusive and exploitative than any other forms of tourism. Ecotourism always strives to be culturally respectful and have a minimal effect on both the natural environment and the human population of a host country. Sometimes it is not that easy, since ecotourism often involves travel to distant and secluded places where small and isolate communities have had little experience interacting with foreign visitors. Sometimes, even ecotourism involves an unequal relationship of the visitors and the hosts and a commoditization of the relationship through exchange of money. Actually, responsible eco-tourists are learning beforehand about the local customs, dress codes and other social norms and do not intrude into the community unless either invited or as a part of well-organized tour.

g. It should support human rights and local democracy: Traditionally, it is tourism that is loudly hailed as a tool for building international understanding and world peace promotion. However, it is not always the fact or it does not necessarily happen immediately upon a visit. Most often tourism just bolsters the economies of various countries including even those that tend to be or are undemocratic and repressive. While regular tourists pay low attention to the political system of a country they visit, unless a civil unrest brakes out in there and which is harming the tourists too. In fact, rural population living around national parks and close to other ecotourism attractions are in contradictions with the national and regional laws and regulations, and multinational corporations for control of the assets and possible benefits.

3 Marketing in the sphere of ecological tourism

Marketing in the sphere of ecological tourism is the same activity of planning, development, promotion, and selling of touristic products, including goods and services, stimulating their demand and price setting, as for mass tourism. Marketing in Ecological tourism also can be defined as a complex of measures to increase the market share of eco-touristic products and services. Touristic marketing is a system of management and organization of touristic organization for development and provision of new ecological and eco-effective kinds of touristic services and excursions for their further sale to make a better profit resulting from eco-oriented attitude to services and products provided and considering the processes happening in tourism markets. The major task of Ecological tourism marketing is to stimulate eco-oriented demand for recreation activities, to set the prices right, to provide market segmentation and develop a favorable assortment of eco-touristic services and excursions and attractive advertisement.

The specifics of the marketing in the sphere of ecological tourism are that the major product is actually intangible, the source is inseparable from the service offered itself, the great correlation of the service quality with the local culture and level of training for the personnel, and that none of the eco-product can be stored or kept in a storage. The touristic services offered in the ecotourism market are intangible, you cannot taste or try them, really smell or hear before an actual purchase of such a product.

The marketing of any eco-tour should start with marketing analysis of the environment. The overall and detailed perception of the markets and professional feedback is the responsibility of marketing specialists, whose job is not only to stimulate the demand and increase sales but to develop a firm considering employees' potential, financing, management, price formation, customers' feedback. It implies the creation of channels of distributions, marketing programs development and implementation and budgeting.

Marketing is a good tool to stimulate the demand for ecological tourism, the knowledge of which is a responsibility for everyone involved in tourism industry. The major marketing task in ecological tourism is creation of an ecological tour/product/service to motivate and satisfy clients eco-oriented demands. The major task of a professional marketing specialist in the sphere of ecological tourism is to attract and keep aware customers about the advantages of ecological tours and services, to satisfy the existing and create new demand to increase the profitability. Therefore, marketing in the sphere of ecological tourism is to solve such tasks, as, for example, determination and/or formation of needs and demands for ecological services and touristic products in the market, development and offer of high quality products and services at a market price, stimulation of demand and distribution of supply and its availability. Hence, we can name major tasks of the marketing management in the sphere of ecological tourism. These are demand regulation, analysis, planning, ecological tourism products sales and control, and touristic markets monitoring.

The major feature of the concept of ecological tourism marketing is the nature protection compound. Marketing in the sphere of ecological tourism always assumes a high level of responsibility of marketing specialists for the environment and nature. The nature oriented concept of marketing implies environmental friendliness and careful management of nature resources. Touristic companies and ecological tour operators have to consider their potential negative influence on the environment and strive, if not fully eliminate it, than, rather to minimize it via related environmental activities. This is what is called the environmental friendliness. The care for the clients health in places of their stay is the task of managers in eco-oriented touristic companies.

The modern marketing strategy always requires the inclusion of the ecological component. The issue of social responsibility and of ethical behavior are especially important in tourism business today. The social concept of marketing means employees and specialists awareness about the lawful and acceptable business practices and have to know the business dealing principles, which are based on ethics, corporate culture and interests of clients.

The customer oriented approach is the key to success for any touristic company, since, touristic business consists not only in the development of a final touristic product, but, rather, in satisfaction of customers' demands. Herewith, customer demands can be changed and corrected, and specifically due to professional work of marketing specialists. Marketing can manage the demand and promote ecological tourism products at the target markets, can help to evaluate dynamics of sales in every strategic direction and determine prospective incomes. Once the ecological tour aims of a company and possible financing are determined, the marketing can solve the tasks, which have been set, effectively to maximize the profitability.

Marketing planning in ecological tourism is required to forecast levels of ecological tours sales and incomes. Therefore, current and planned sales and their time are analyzed and related strategies are suggested. First of all, marketing specialists have to consider the existing markets shares and further market penetration with ecological tour products and only than the possibilities of new markets development. The following steps are development of new products for existing markets, and offer of new products in new target markets, i.e. diversification.

Once a marketing strategy is developed, the related programs for its implementation are defined. Therefore, the strategy includes frame, resources, and personnel to achieve the strategy aims. The qualified and professional employees are involved, training and educational programs for the personnel are introduced, products and services quality control

and improvement programs are implemented, the services and touristic products are promoted, informing about the positive and innovative features.

It is worth to mention the particular importance of the personnel awareness and involvement in touristic companies into the development and implementation of corporate strategies. The firm employees in touristic business are the most important element of successful product and service. Formation of terms and conditions, which encourage good services for clients, is often called *internal marketing* [11]. Today, the most successful tourism enterprises have to offer in the markets not only ecological tourism products, but to develop corporate ethics and mentality to satisfy the customers' specific ecological demands. The employees of travel agencies should understand prestige value of ecological tours and advantages of their promotion. The key aspect of the successful internal marketing is employees' motivation. Therefore, along with various financial advantages, the positive influence plays credibility and prospects of their workplace. Other reinforcements and motivators are, for example, a flexible work schedule, child and kids care programs, and other non-financial benefits. The internal marketing will help tourist companies attract and keep good employees too.

We can specify at least three major current tasks of ecological tourism marketing: 1) maintaining and developing existing markets of ecological tourism; 2) search and development of new markets (new clients and destinations); 3) reduction of seasonality influence on demand.

In order for a touristic company to achieve these tasks there is a need to perform the following at least annually: to correct the marketing plan; to assign group of professionals to develop a program of the company's specific, collaborative, research, and other related activities to improve the marketing plan and attract more customers; to cooperate with other touristic companies to allocate, provide, and serve customers in the market of ecological tourism; to test new ecological tourism products and services; to develop mutual measures to promote ecological tourism products in the target markets; to develop target segments of the market with seasonal character of services; to offer ecological tour packages to multiple destinations according to customers preferences and inquiries.

The major task of the marketing of ecological tourism is to understand the specific ecological interest of customers and offer them the best suiting ecological destinations and services. As a matter of fact, the most successful touristic companies offering ecological tourism products and services, first of all, study from the customers and their demands. It is called "getting closer to the customer". Later they have just to monitor their client and their demands to improve their capabilities and services offered.

Hence, the basic functions of ecological tourism marketing should be the following:

a) creation of ecological tourism products and services to be offered to clients in the region studied;

b) promotion of the ecological touristic products and services in the market, including advertisement, and consequent sale;

c) arrangement of direct and in person sales;

d) setting prices and achieving an allowable level of sales and incomes.

In order to comply with international norms and standards, marketing specialist of ecological tours should follow three main tourism marketing functions proposed by International Tourism Organization:

1. Customer relations and feedback establishment. The major task is to convince clients that ecological destinations offered fully satisfy their expectations and demands;

2. Development, including design of innovations;

3. Control, which is analysis of the results of activities to promote ecological tourism services in the market and verification of results real compatibility to existing touristic capabilities.

Therefore, the especial importance in the marketing of ecological tourism agency plays the relations with the customers. The long lasting relations with clients can be more lucrative and cost less than the marketing expenses, incurred to attract the interest of prospective consumers of ecological tourism services.

If the long lasting relations with ecological tourist are established, it provides a synergy effect, expressed even in adherence and devotion of clients to the touristic agency and their reluctance to change the tour company providing ecological products and services when repeating purchases. It is an interesting fact, that the Pareto effect is clearly observed in the sphere of ecological tourism: 20% of consumers make 80% of a company's income.

Tourism and, especially, ecological tourism is totally different from other consumer industries. Hence, we can indicate its specific characters to be considered by marketing specialists:

1. While planning ecological touristic activities, the central issue to be considered are the preferences and demands of the final consumers;

2. Non-primary essence of ecological tourism services and lack of knowledge about the regions studied. The ecological tourism is not an essential product, though, the importance of the tourism and of ecological tourism, in particular, as the means of recreation and healthy life style, is on the rise;

3. Marketing plays a crucial role in ecological tourism industry. Since, there is no a reference samples of touristic tourism products and the ecological tours sellers have to provide the proof and sound arguments in advantage of their products and services. It is possible only with a well planned marketing program that uses tailored for the target markets instruments of advertising and promotion;

4. There is a need to constantly monitor the quality of ecological tourism products and services in especially due to their unstable provision and seasonality in some regions;

5. Ecological tourism services are unique. The repetitions of all its aspects and provisions are very uncommon. The schedules, routes, terms and conditions of services and prices usually always vary.

Therefore, marketing of ecological tourism for a touristic agency operating in selected regions should become a system of continuous harmonization of services and products provided with services and products demanded, which an ecology oriented company can offer with a profit and more effectively than the competitors in the market. Today, only a firm with creative and ecology oriented marketing concept can succeed in competitive environment, constantly searching new ways to promote their services in changing markets, actively influencing and interacting with the consumers.

4 Results and discussion

After studying the issue of the ecological tourism development in our countries the authors has figured out that the basis of ecological tourism in USA are natural, cultural and historical sights and monuments and in Russia are SPNAs mostly, which include nature reserves, national and natural parks, State reserves, natural monuments, dendrological parks and botanical gardens, medical and recreational areas and resorts, and territories of traditional nature usage.

In Russia there are 105 State nature reserves (*zapovedniks*), covering more than 330,000 km² or about 1.5% of the country's territory. There are also nature protected areas where only certain species are protected, and some certain activities are prohibited known as *zakazniks*, 64 national parks that cover approximately 155,672 square kilometers, 57 Federal reserves, 17 natural monuments, and 67 botanical gardens have been created in Russia in total [12]. Detailed information about 102 nature reserves, 39 national parks and 68 Federal reserves of the Russian Federation can be found on the website Specially Protected Natural Territories

of Russia. [13] The total area of Federal protected areas is 63.3 million hectares, and together with regional SPNA territories, they comprise the area of 209.5 million hectares.

During the Soviet era only nature reserves (zapovedniks) and preserves (zakasniks) existed in Russia. Only in 1961, Russian geographers visited the United States to study international experience in creating protected areas intended for tourists to relax and teach them to take care of nature. This trip was an introduction to the USA experience in environmental protection. Soviet scientists visited the Yellowstone National Park and the Great Smoky Mountains National Park.

Only after this trip, Innokenty Gerasimov, director of the Institute of Geography, USSR Academy of Sciences, developed further the idea of creating nature parks in Russia. He proposed the creation of a Baikal nature park in 1965. A similar Nature park was designed in the Lake Seliger area on the Valdai Hills too. In 1966 Innokenty Gerasimov and Vladimir Preobrazhensky published an article about the need to create a system of Nature parks in the USSR. Since then, Nature parks had been thought of as recreation places for tourists to relax, but to protect animals and plants too. So, that is why in some territories of Nature parks tourists are not allowed to visit without a guide.[14]

Many of SPNAs are included into the UNESCO world heritage list. Moreover, some of them, such as, for example, lake Baikal in Russia, are under the threat of extinction. In total, there are 11 World natural heritage sites in the territory of the Russian Federation, which include: 13 nature reserves, seven national parks, three Federal reserves, several natural monuments and buffer zones of reserves: "Virgin forests of the Komi Republic "(Pechora-Ilych reserve and the national Park "Yugydva»); "Lake Baikal" (Baikal, Barguzinsky, Baikal-Lensky nature reserves, Pribaikalsky, Zabaikalsky and Tunkinsky national parks (partially), Kabansky and Frolikhinsky nature reserves); "Kamchatka Volcanoes" (Kronotsky reserve and Yuzhno-Kamchatsky wildlife preserve); "Golden mountains of Altai" (Altai and Katunsky reserves); "Western Caucasus" (Caucasian state reserve, Sochi national Park, Bolshoy Thach Natural Park, natural monuments "Buyny ridge", "headwaters of the Tsitsa river", "headwaters of the Psheha and Pshehashha rivers»; as well as part of the buffer zone of the Caucasian reserve, which goes along its Northern and North-Western edge with the width of 1 km); "Central Sikhote-Alin" (Sikhote-Alin reserve and national Park "Bikin"); Wrangel Island reserve; Ubsunurskaya basin reserve; "Putorana Plateau" (Putoransky reserve); national Park "Lena pillars; "landscapes of Dauria" (Daursky reserve).

All the listed above specially protected natural areas are objects of national heritage. The Ministry of natural resources and ecology of the Russian Federation carries out State management in the fields of organization and functioning of specially protected natural territories of Federal significance. However, government agencies do not always cope with their responsibilities, as have been noted by the head of the Greenpeace program for specially protected natural areas. In 2020, the World Heritage Committee considered five the most problematic Russian World heritage sites, namely: "Virgin forests of Komi", "Lake Baikal", "Volcanoes of Kamchatka", "Golden mountains of Altai", and "Western Caucasus" [15].

The protected areas of the United States and their designations are the following: 1) National Park System including National parks, National preserves, National seashores, National lakeshores, National forests, National grasslands; 2) National conservation lands, including National Monuments, National Conservation Areas, Wilderness Areas, Wilderness Study Areas, National Wild and Scenic Rivers, National Scenic Trails, National Historic Trails, Cooperative Management and Protection Areas, Forest Reserves, Outstanding Natural Areas; 3) National Marine Sanctuaries; 4) National Recreation Areas; 5) National Estuarine Research Reserves; 6) National Trails System; 7) National Wild and Scenic Rivers System; 8) National Wilderness Preservation System; 9) National Wildlife Refuge System, and 10) International protected area designations, which are .UNESCO Biosphere Reserves. In the United States, in turn, there is also an extensive network of national parks and protected areas. Recreational areas in the United States consist of more than 36,000 protected territories with the total area of 1 233 161 km2, which is 14% of the total area of the country. [16] The system of U.S. National parks, consisting of 419 national landmarks, includes 62 major natural monuments, such as Acadia, the Everglades, the Grand Canyon, and Yellowstone, as well as 346 natural, cultural, and 11 other protected areas that are used in the tourism industry. [17]

The SPNAs of the United States are managed by an array of different federal, state, tribal and local level authorities and receive widely varying levels of protection. Some areas are managed as wilderness, while others are operated with acceptable commercial exploitation. The U.S. also had a total of 787 National Marine Protected Areas, covering an additional 3,210,908 km2 or 37 % of the total marine area of the United States. In year 2021, 803 wilderness areas have been designated, totaling 450,691.20 km2, which comprise about 4.5% of the land area of the United States. [18,19]

The National Wilderness Preservation System (NWPS) of the United States protects federally managed wilderness areas designated for preservation in their natural condition. Activity on formally designated wilderness areas is coordinated by the National Wilderness Preservation System. Wilderness areas are managed by four federal land management agencies: the National Park Service, the U.S. Forest Service, the U.S. Fish and Wildlife Service, and the Bureau of Land Management.

More than 400 U.S. national parks are monitored by the U.S. Department of the interior's National Park Service, which works with local communities to help preserve historical monuments and create and maintain recreational areas. [20] Parks are also controlled by regional and local authorities, national and international environmental organizations.

Ecotourism in the United States is one of the fastest growing tourism industries. The goal of ecotourism in USA is to provide a fun, relaxing holiday while protecting the surrounding ecosystem. Ecotourism is also often used to educate and immerse participants in the eco-friendly lifestyle that brings thousands of people to some of the most beautiful regions of the United States, while preserving and protecting these natural wonders. [21]

Along with traditional types of ecological tourism, such as, for example, trips to nature reserves, trips to reservations, adventure tours, scientific tourism, and nature history tours, the United States has also developed such ways of ecotourism as: agricultural tourism, community ecotourism, eco-lodging, eco-tracking, cultural ecotourism, ecotourism associated with endangered species of wildlife, extreme ecotourism, and others. [22,23] There are states that specifically encourage ecotourism. Among those are California, Louisiana, and Alaska. At the same time, environmental tours abroad including to Russia are especially popular in the United States.

Each of these types of ecological tourism has its own features and contributes to the development of national parks, reserves, wildlife preserves, tourist infrastructure, the emergence of new ecological trails and routes, and excursion programs. There are no mandatory certificates to conduct environmental tourism business, but there are several national and international voluntary certificates. The major factors that are taken into account when planning an eco-friendly holiday in the United States are the following: the hotel or resort must adhere to all local and national safety standards, there must be a high level of service quality, and the environment have to be sustainable and all efforts should be directed to maintaining the environmentally responsible protocol.

The detailed analysis of the literature about the development of ecotourism in Russia, as the whole, was conducted for this particular research. The thorough in-depth study of methodological materials on ecotourism, management and interaction of SPNAs with the local population in the United States and in Russia is scheduled too. The further work involves field research, including formal and informal surveys and interviews with scientists, managers, specialists, tour operators and other experts in the field of eco-tourism. The survey is intended to analyze the development and role of ecological tourism in the studied regions. Interviews with stakeholders will also help determine the levels of development and impact of tourism on the preservation of natural complexes and cultural heritage sites. For this purpose, we propose using the comparative approach and has developed the method of sociological survey and regression analysis models to evaluate the effectiveness of ecological tourism. A special questionnaire has been prepared and published for the experts interviewing in Russian and English [24,25,26]. Though, it is quite difficult to conduct expert surveys and formal interviews with representatives of local communities due to the low availability of respondents, administrative and cultural barriers. However, authors have prepared a number of questions in advance, plan to obtain visas and are requesting invitations from universities, institutes and other interested organizations. It is also planned to interview local residents in informal conversations if possible. The visits to some tourist attractions, natural sites, SPNAs have been partially accomplished for full-scale survey, assessment and analysis.

Many regions in Russia and in USA are the most prospective centers of ecological tourism. These days many purely ecological tours are offered. Though, visitors wishing to see the cleanest and most beautiful lakes and the Atlantic ocean can easily reach them and stay at the modern ecological facilities few days or weeks and enjoy the comfort of local small resorts and campings only in USA. Since, the tourism infrastructure and the ecological tours themselves are still underdeveloped in Russia and in its particular regions.

Ecotourism to natural attractions, which is usually accompanied with recreational and educational activities, actually, is a promising means of advancing social, economic, and environmental objectives. It offers new opportunities for small-enterprise investment and employment and increases the national stake in protecting biological resources, as well as improves economic ties and political relations. That is why it is so important for our countries.

However, making ecotourism a positive economic and environmental tool requires policies that foster responsible nature tourism development, broad-based and active local participation in its benefits, and conservation of cultural heritage. It also helps educate travelers and locals and make them environmentally responsible; it even supply funds if not for the conservation but for the minimization of the negative anthropogenic influence; and can directly benefit the economic development and social empowerment of local communities; and it also fosters respect for different cultures and for human rights.

5 Methods and models

We propose the comparative approach to analyze the ecological tourism in our countries, which assumes visits to various places of interest in Russia and in USA to evaluate the role and effectiveness of ecological tourism, and to identify relevant and popular destinations and the ways of its further development, considering the modern environmental requirements. It has been previously revealed, with the help of the comparative approach to ecological tourism destinations in Russia are significantly attractive for visitors. At the same time, new innovative eco-oriented projects, which are based on the experience of developed countries, are required for implementation in Russia to achieve the goals of socio-economic development of the regions and of the ecosystems sustainability. [24]

When specifying the existing terms and conditions and circumstances of the formation of the competitive tourist environment and of the ecotourism itself as the priority direction of development, and taking into account all institutional factors to address the problems of ecological tourism in popular wild nature, history and culture regions, we have to apply the comparative approach, which helps to reveal and select the best eco-oriented tourism and nature management practices. It is important to train professional personnel in these fields via special educational programs, including mutual ones, both for the local population and for tourists visiting ecological attractions. This will result in positive attitude and promotion of ecological tourism in our countries. The specific feature of ecological tourism is that it stimulates and satisfies the desire to communicate with nature, and at the same time, it prevents or at least minimizes the negative anthropogenic impact on the environment.

In addition to the comparative approach and method of system analysis to evaluate the state of popular attractions in regions, methods of economic, statistical and institutional analysis of the problems of development of ecotourism can be used to determine the advantages and disadvantages of natural, historical and cultural attractions and the institutional problems of their sustainable development.

We suggest the method of sociological survey as the measurement tool for evaluation of the role and effectiveness of ecological tourism. Therefore, a special questionnaire for experts and cross-sectional regression models have been developed and presented to evaluate the role and effectiveness of the ecological tourism. Another wide used analytical tool used in this research is the SWOT analysis. [26]

For the evaluation of the effectiveness of the ecological tourism development we suggest the generalized estimation of the ecological tourism development progress in a specific region in general. The short description of the totals and of regressors presented in the models is given bellow. The following estimation characteristics are selected as the major factors influencing the totals: gross domestic product, government and administrations effectiveness, norms and legislature provisions, the quality of infrastructure and services, availability of educational programs and information and analytical support, informal institutions. As the explaining variables in the models the sights features and their kinds are selected: natural, cultural, historic.

The sociological survey method and regression analysis is substantiated to determine the problems and directions of the further development of ecological tourism, as well as to evaluate its role and effectiveness, when the quality estimates obtained have to be converted into the quantity characteristics, which is required for the interpretation of results and models presented

The model for evaluating the role of ecological tourism in the sustainable development of the specific regions is the following:

$$ET = f(GDPt, GovEfft, Qst, Pat, Iet, Iinft),$$
 (1)

where indicator (ET) is a generalized assessment of the progress of ecotourism development in the region as a whole (it is an expert assessment of the volume and quality of the institutional structure of ecotourism). The following estimated development characteristics were selected as potential factors influencing the *ET* indicator: GDP: gross domestic product in 2017 prices, representing the share of tourism revenue, GovEfft: efficiency of the government and administrations, including such institutional aspects as regulatory and legislative support and its implementation and infrastructure quality, Qst: quality of service, Pat: popularity of attractions, Iet: implementation of educational programs and information and analytical support, Iinft: informal institutions (traditions and customs) and other factors that determine the attractiveness of the visited place.

To evaluate the effectiveness of ecotourism, the following regression model is proposed:

$$Ef = f(An, Ac, Ah, E), \tag{2}$$

where (Ef) is a generalized indicator that evaluates the effectiveness of ecotourism development. The explanatory variables of the model are the estimated characteristics of the

use of certain types of attractions in the region, namely: An: natural attractions, Ac: cultural attractions, Ah: historical attractions, E: compliance of attractions with expectations.

This model meets the requirements and can be used to explain (analyze) the effect of ecotourism on the sustainable development of tourism in the region as a whole. It allows us to evaluate the following: 1) how effectively ecotourism programs are implemented in the region; 2) evaluate the role of attractions; 3) determine the importance of natural, cultural and historical attractions in the development of tourism.

This model shows the total impact of attractions due to variations in the values obtained based on expert estimates. From this model, and according to preliminary estimates of experts, it is clear that for the sustainable development of tourism in our countries, special attention should be paid to the development of rooted activities of the local population and provide access to attractions in such a way that it does not cause damage to the environment.

The comparative approach and methods of sociological survey and regression analysis to evaluate the state of natural, historical and cultural attractions and evaluate the effectiveness of ecological tourism in Russia and USA, involves visiting places of natural and cultural heritage and is used along with other methods presented earlier. The scientific novelty of the proposed comparative approach consists in the development of methods of analysis and evaluation of natural, historical and cultural attractions and of ecological tourism as a factor of sustainable socio-economic development on the basis of a questionnaire survey of experts in the field of tourism.

The preliminary questionnaire "Ecological tourism" for the survey of experts has been conducted already. It includes information specific and related to ecological tourism to answer the questions, such as: how attractive the sights are; how important are the factors affecting the sustainable development of eco-tourism; what impedes the development of ecotourism; what is influenced by the implementation of eco-tourism; how the State is involved; how perfect is the current tourist legislation; what are the main problems of ecological tourism development; what are the major advantages of eco-tourism; is the professional staff in the tourism industry trained well; are visits to ecological attractions comfortable and safe for ecological tourists, etc.

6 Conclusions

The result of activities of the ecological tourism facilities in our countries is to attract funds for the development of tourism and the economy of the regions in which they are located. The importance of ecotourism in the territories selected is currently highly relevant. This type of tourism plays a significant role in preserving the unique natural, cultural and historical heritage used for tourism purposes. It attracts a huge number of tourists and is thus profitable from an economic, social and political attitudes.

The UNWTO experts make forecasts according to which the popularity of ecological tourism in our countries will increase annually and the growth rate of popularity will be very high. This will ensure high efficiency of the activities of those territories that are located around national parks and other SPNAs, as well as create a mentality aimed at taking care of nature.

Wildlife and its habitats in regions under study are becoming increasingly popular attractions for international tourism. The regions specified can provide many of the richest, in terms of unspoiled nature, places with bio diverse inhabitants conserved. The numbers of eco-tourists to our region are growing, despite the crisis and sanctions. The new wave of nature tourists is expected to bring with them the finances to spend. This money will support the local travel industry, which already exists and will create new jobs and incomes for households and local communities in and around places of attractions and in other protected areas. There is a need to establish ecotourism enterprises, special tour agencies and guide

services, lodges and private reserves, as well as, such activities *as arts and crafts industries*, already present in Russia and in USA. There is also a need to develop transportation and food services at the local levels in Russia and improve them in USA to foster ecological tourism. Local administrations can use the incomes generated in this way for more efficient operating and protection of natural attractions.

The further research will be tailored to better understand the participation, economics, and marketing of ecological tourism in specific regions of Russia and the United States, and to conduct a comparative analysis of eco-tourism in our countries. In addition, the development of course modules on Ecological tourism development and marketing, and on cultural heritage and its relationship to international tourism development and management is expected, which are part of the University of Central Florida's Rosen College of Hospitality Management Master's program in hospitality management, since one of the author is invited to present his research and provide lectures to students during classes if sponsored by the Fulbright Visiting Scholar program.

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