

The importance of ecological tourism in the formation of ecological culture in children and adolescents

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Abstract. *The aim of the study is to develop recommendations on the formation of an ecological culture for children and youth within the framework of ecological tourism. Materials and methods: the components, types, principles and distinctive features of ecotourism were examined; the legal framework of environmental education in the Russian Federation was analyzed; the foreign experience in the formation of the ecological culture was studied, as well as the main behavioral characteristics of citizens of Sweden and Finland and the environmental policy pursued by the governments of both states. An experiment was conducted with schoolchildren from the comprehensive school in St. Petersburg with a trip to the ecological path located in the specially protected natural area "Sestroretsk swamp". Results: the author's understanding of the term "ecotourism" is presented, the rules and requirements for the formation of the ecological culture of children and youth in sociocultural institutions are formulated, recommendations on the formation of an ecological culture are presented.*

Keywords - *ecological tourism, nature-oriented tourism, children, adolescents, ecological culture.*

I. INTRODUCTION

In the last decade, people have become more inclined toward personal growth, so the current interest in ecological tourism is quite explainable. If earlier many tourists traveled to live in a beautiful hotel, they carried a lot of goods from trips, now in the context of globalization, when almost everything can be bought everywhere, it becomes much more important to acquire knowledge, observe nature, and do other things that are not typical for ordinary life.

Another reason is the increased public attention to the environment. People strive to see those places that risk to disappear from the face of the Earth. And, of course, they choose ecotourism because they want to get rid of stress and touch nature.

In the 20th century, tourism was considered the privilege of the elite. Not many could afford traveling around the world. After the Second World War, tourism became widespread as a result of the development of air and rail services. Currently, people with almost any income can afford traveling. Due to the growing number of travelers, governments and businessmen began to invest more and more money in the development of industry, often

neglecting the natural landscapes and the local population. Currently, in many countries the main motto is "the more tourists, the more money."

As a result of uncontrolled tourism, rare plants and trees are destroyed, water bodies become polluted, animals and birds die.

In developed countries, people are aware of the consequences of their actions and draw public attention to environmental issues. It is believed that tourists are a problem, but this is not always the case. Due to the multiplier effect, travelers support the development of small businesses.

In the West, the term "ecotourism" was first used by Mexican ecologist Hector Ceballos-Lascurain. From this moment on, the term, which contains a harmonious relationship between recreation and ecology, has become firmly established.

Ecotourism components:

- education - during the trip, tourists actively study the environment;
- money - income from the tourist flow goes to maintain nature conservation;
- actions - each eco-tourist during the holidays participates in activities aimed at restoring natural resources.

Types of ecotourism:

1. Scientific ecotourism - expeditions of scientists, summer field practices of students and special ecological and educational tours, during which scientific information is collected about the place visited. Usually, these tourists spend a lot of time in nature reserves, wildlife sanctuaries and national parks. This type of ecotourism is widely known in Latin America, for example, cruises on the Galapagos Islands.
2. Cognitive ecotourism - tours to observe animals, birds, insects; botanical, archaeological, ethnographic, paleontological excursions; eco safari. Such tourists purposefully come to protected areas to get acquainted with the local nature and culture.
3. Recreational ecotourism can be active and passive. In the first case, these are hiking, horseback riding, skiing,

mountaineering, rafting. Passive ecotourism includes rest in tents, walks and fishing.

Table 1 describes the distinctive features and principles of ecotourism.

TABLE 1. DISTINCTIVE FEATURES AND PRINCIPLES OF ECOTOURISM

| Principles | Distinctive features |
|---|---|
| Minimum negative consequences of ecological and socio-cultural nature, maintaining environmental sustainability | <p>The maximum permissible recreational loads should not be exceeded.</p> <p>Careful planning and monitoring the development of tourism.</p> <p>Compliance with the rules designed for natural areas.</p> <p>The use of ecological transport.</p> <p>Garbage should be collected in a special way and then transferred to eco-technological processing.</p> <p>Huts, bivouacs and bonfires are arranged only in specially equipped places.</p> <p>It is not allowed to buy souvenirs made from wildlife.</p> <p>Mushrooms, berries, flowers, medicinal plants, any natural souvenirs are collected only if and where it is allowed.</p> <p>Hotels, campsites, huts, where tourists stay, are located so that they do not violate the sustainable development of the landscape and do not disfigure its appearance.</p> <p>These hotels and campsites are built of environmentally friendly materials, their inhabitants do not spend too much energy and water, while wastewater and emissions are cleaned.</p> <p>Ideally, "closed" eco-technologies are used.</p> <p>The food of tourists is ecologically clean and healthy, while local foods are present in the diet.</p> |
| Promotion of nature conservation | <p>Tourism activities should lead to additional financing of areas visited by tourists or environmental protection measures.</p> <p>Tour participants must actively participate in environmental protection on the principles of volunteerism.</p> <p>Tourists should respect the local customs, traditions and lifestyle, and strive to study and understand them.</p> |
| Environmental education | <p>Before the trip, tourists should be informed about the visited natural site and familiarized with the rules at the tour venue, which should result in a clear understanding of their responsibility for nature conservation.</p> <p>Tours must be conducted by qualified environmental guides.</p> <p>Tourists should be introduced to local environmental problems and their solutions, as well as ongoing environmental projects, attracting tourists in solving local environmental problems.</p> |
| Sharing income from tourism activities with local residents to create economic incentives for the protection of local areas | <p>Local residents are involved in the tourism business through the predominant use of local products and labor, thus gaining the opportunity to develop traditional forms of economy and maintaining the natural environment.</p> |

Some authors [6, 7, 11] consider ecotourism as an active form of recreation, based on the rational use of natural resources, involving the rejection of comfort, mass communications and the consumption of numerous tourist services in favor of an alternative value system based on contemplation of nature, spiritual enrichment, involvement in the protection of the natural heritage.

There is also a number of scientists [4, 5, 8, 9, 10, 12] who relate to ecotourism all types of communication with nature - rural, agrarian, historical and regional, adventure, balneotherapy (medical tourism) and sports tourism.

In this article, we will try to focus exclusively on ecological tourism, by which we mean a nature-oriented tourism to destinations relatively untouched by human with the aim of interacting with nature, without violating its integrity, or with minimal impact on it.

II. MATERIALS AND METHODS

The study was carried out on the premises of the Resource Center for Children and Youth Tourism in the North-West Federal District of St. Petersburg State University of Economics. For the analysis, empirical data, Internet sources, and the legal base "Consultant" were used. The authors conducted a tour with a group (n = 7) of students from 8–9 grades to the Sestroretskoye Swamp, which was opened in 2019, on the protected areas.

III. RESULTS AND DISCUSSION

In the spring of 2019, a new eco-path was opened in the Kurortny district of St. Petersburg, passing through the Sestroretskoye Swamp, a specially protected natural area.

A significant part of the path passes through the coastal ramparts of the ancient seas, the predecessors of the Baltic Sea (up to 10 thousand years old), which are covered with pine forest. The path starts from a forest lake, passes through a marshy swamp, which is now safe to walk thanks to wooden flooring, through forests and fields, and ends at another lake. During a walk along the path, one can appreciate the rich flora and fauna of the reserve. This territory is of great importance as a place of accumulation of waterfowl and near-water birds during the period of migration. In total there are 162 species of birds. Among amphibians, the most common are the gray toad and grass frog. Every spring they make mass migrations from wintering places to spawn to the Sestroretsky Spill.

Before visiting the eco-path, a preventive conversation was held. Nevertheless, during the visit, almost all children tried to sit on the bridges as on a bench. 2 boys tried to break young birches during the game. The girls tried to collect bouquets of heather. During the walk, there were cyclists trying to overtake our group right in the swamp, and dog owners walking their pets without leashes. The vast majority of visitors came down from wooden walkways in order to take a photo, pick berries, etc.

One conversation was clearly not enough. Moreover, the children saw a bad example of how not to behave on the eco-path.

The analysis of scientific articles and personal experience shows that, despite the apparent propaganda of ecology, the majority of the population has a complete lack of environmental culture.

One of the ways to develop the ecological culture of the population is ecological tourism.

In order to form a personality capable of positively transforming the world around, moral standards should be inculcated in relation to the natural environment.

A humane attitude to nature, to living organisms, to natural materials is based on:

- environmental awareness;
- environmental education;
- environmental knowledge.

We agree with the opinion of D.A. Ruban and N.N. Yashalova that many countries are focusing on the concept of environmental protection [17].

Countries with a highly developed ecological culture are characterized by:

- higher life expectancy,
- a lower number of diseases associated with adverse environmental effects,
- significant savings and an increase in natural wealth due to the environmental orientation of the population.

Consider the position of Russia in comparison with the most environmental-friendly countries (Table 2).

TABLE 2. INFLUENCE OF ECOLOGY ON MORTALITY OF POPULATION

| Country | Ecological level (2018) | Mortality rate from environmental pollution (2016), persons per 100 000 population | Air pollution (2018), (mkg / m3) |
|---------------|-------------------------|--|----------------------------------|
| Switzerland | 87.42 | 414 | 11-15 |
| France | 83.95 | 416 | 10-15 |
| Denmark | 81.6 | 533 | 10-15 |
| Sweden | 80.51 | 298 | <10 |
| Great Britain | 79.89 | 559 | 10-15 |
| Austria | 78.97 | 640 | 11-15 |
| Finland | 78.64 | 320 | <10 |
| Russia | 63.79 | 1752 | 10-25 |

Based on [14, 15,16].

In Table 1, the environmental level is taken from the ranking of the most environmentally friendly countries in the world, compiled annually by the Yale Center for Environmental Law and Policy. To calculate the rating, the country's achievements are measured in terms of the state of the environment and natural resource management. Measurements are carried out based on 22 indicators in 10 categories, reflecting various aspects of the state of the environment and the viability of its ecological systems, the conservation of biological diversity, combating climate change, the state of public health, the practice of economic activity and the degree of its environmental load, as well as the effectiveness of the state environmental policy.

According to Table 1, there is a direct relationship between mortality and the existing environmental policy of the state.

State policy aimed at the formation of the ecological culture of the population should be expressed in the regulatory and economic mechanisms, as well as in the principles of environmental education introduced into the education system.

Consider the legal aspects of environmental education in Russia.

Article 9 of the Constitution of the Russian Federation [1] states that natural resources and land in the Russian Federation, being the basis of the life and activities of peoples, are both used and protected.

"The rights of the population are specified in Article 42 of the Constitution, according to which all citizens of the Russian Federation have the right to a favorable environment, reliable information about its condition, as well as to compensation for damage caused to health or property by an environmental offense." The duties of citizens are discussed in Article 58, according to which citizens are obliged to protect nature and the environment and take care of natural resources."

The Federal Law "On Environmental Protection" dated 10.01.2002 N 7-Φ3 [2] states that natural resources are the national property of the peoples of Russia. In accordance with Federal Law No. 7, Russian citizens are obliged to take care of nature and natural resources, preserve nature and the environment, and comply with the requirements of "environmental" legislation.

But of particular interest is Chapter 13, "Fundamentals of the Formation of Ecological Culture," where in Article 71 "The Universality and Complexity of Ecological Education," special emphasis is placed on the importance of creating an ecological culture and professional training of specialists in the field of environmental protection. This requires a system of universal and integrated environmental education to be established, which includes general education, secondary vocational education, higher education, etc. A special role is given to the dissemination of environmental knowledge by the media, museums, libraries, cultural institutions, environmental institutions, sports and tourism organizations.

In accordance with Article 74 "Environmental education", environmental education shall be carried out in order to foster a respect for nature, the formation of an environmental culture in society, the rational use of natural resources through the dissemination of environmental knowledge about environmental safety, information on the state of the environment and the use of natural resources. State authorities of the Russian Federation, local governments, public associations, the media, as well as organizations engaged in educational activities such as cultural institutions, museums, libraries, environmental institutions, sports and tourism organizations, other legal entities must participate in environmental education, including informing the public about environmental legislation. Thus, we see that, in accordance with the legislation of the Russian Federation, its citizens have much more rights than obligations and, accordingly, the relevance of research on this topic is beyond doubt.

Possessing an ecological culture means the ability to act in accordance with the requirements of environmental management, avoiding destruction and environmental pollution. Therefore, it is necessary not only to know biology, geography, chemistry, ecology, but also to have moral values and to recognize the importance of such behavior. Such values are usually formed in early childhood. The formation of the ecological culture of children and youth includes: knowledge of the environment, the principles of its development; interest in environmental issues; emotional perception of nature; environmental

literacy; personal motives that determine the attitude to the environment.

The solution of these problems is impossible without restructuring the educational process, providing for the inclusion of environmental components in all subjects of the school curriculum and extracurricular activities. This should lead to the development of cognitive interest, readiness to study and understand the world around us.

Considering the foreign experience in the formation of ecological culture, one can emphasize the experience of Sweden and Finland. Both countries have been at the top of the list of countries with the best ecology for several years despite the fact that both countries are states with a high standard of living, which in modern conditions inevitably implies possessing a car by almost every adult citizen and developed industry.

Let us formulate the basic characteristics of citizens and the policies pursued by the governments of both countries in the field of environmental culture:

- Finns and Swedes do not buy plastic bags;
- citizens of both countries usually have reusable canvas bags for shopping;
- each family sorts garbage;
- in both countries, one can drive old (non-environmentally friendly) cars that produce too much exhaust gas, but driving them will cost such an amount that it will be cheaper to buy a new and more environmentally friendly car;
- in both countries, people save electricity, water and even clothes. Water in Sweden and Finland can be drunk from the tap;
- the idea of love to nature is actively suggested to children in elementary school - along with the idea of saving the resources in general;
- almost all industrial enterprises in both countries are constantly introducing innovative solutions to improve efficiency and at the same time reduce energy consumption;
- any child at school knows the conditions for keeping pets;
- the governments of both countries support energy efficiency and resource conservation policies in the form of investments in research and development in the field of ecology and environmental protection;
- more than 90% of garbage is recycled;
- ecology is a national idea in both countries;
- almost all residents of both countries try to spend more time in nature, carefully monitor the safety of their nature reserves and show maximum efforts to preserve the environment for future generations;
- the right of public access to nature, which allows every citizen of the country and any tourist to enjoy the picturesque landscapes of Sweden and Finland, to move freely even in private possessions, at the same time it also imposes obligations: to take care of the flora, fauna and property of others. The right of public access is guaranteed by the Constitutions and is part of the cultural heritage;
- the rational use of natural resources plays a decisive role in the planning of cities;
- the wide use of alternative energy sources - sun, wind, bio-fuel;
- there are special Nature Centers where children begin a systematic environmental education from the age of 5. Kids do not sit at books, they make excursions into nature, look after plants, watch animals, learn to respect any natural resources;

- the popularity of a healthy lifestyle.

An analysis of the ecological culture of both countries shows that for the global environmental protection the participation of other countries, including the Russian Federation, is obligatory. Therefore, environmental education should be a process of continuous development aimed at the formation of knowledge, ideas and skills that allow for a responsible attitude towards environment both in children and adults.

The formation of the ecological culture of children and adolescents should be focused on the introduction of interactive technologies in the environmental and cultural (Table 3).

TABLE 3. COMPONENTS, FUNCTIONS AND PRINCIPLES OF ECOLOGICAL CULTURE

| Component | Function | Principle | Measures |
|--|--|--|--|
| acquiring and assimilating knowledge about the environment and cultural and historical objects | informational, which is based on the receipt, storage and accumulation of environmental information; development of the interests of the child in the environmental aspect | science and competence | street advertising, social media advertising |
| recognizing the value of any member of the biological community | educational and developmental | responsibility | developing responsibility – creating the so-called “living corners” in schools and kindergartens |
| respecting social norms and rules | recreational and health-improvement for various groups of the population. | universality, voluntariness and accessibility | developing and organizing various kinds of leisure programs aimed at a healthy lifestyle |
| regulatory (study of the legal aspects of environmental management) | Adaptive-normative function that provides acquaintance with environmental conditions, correct behavioral strategies, and also helps to acquire value orientations and norms of ecologically correct coexistence with nature. | The unity of cultural and historical experience, traditions and innovations. | meetings in schools and universities |
| emotional-sensual (development of emotional) | communicative | development of creative initiative should contribute to the ability to independently | environmental quests, clubs for travelers and nature lovers, |

| | | | |
|---|--|---|---|
| responsiveness) | | assess the environmental situation and to make environmentally sound decisions | amateur associations of an environmental orientation, meetings with natural scientists, environmental festivals, holidays, etc. |
| readiness for an environmentally-friendly type of behavior and activity when visiting natural-cultural destinations | cultural and creative function is aimed at involving children and youths in various kinds of art | consistency and continuity. Environmental knowledge, skills and abilities should be organically combined with previously acquired at school and further developed and deepened with the help of extracurricular resources | environmental festivals, olympiads, shows, contests, environmental quizzes, etc. |

The components, functions and principles of environmental and cultural activities constitute a concept on which the rules and requirements for forming the ecological culture in children and youth are built.

IV. CONCLUSION

Based on the modern concept of ecotourism, the economic and environmentally protective impact of single tourists in many cases is insignificant. Tourists can be guided by serious environmental intentions, but, unfortunately, only a few come, and they cannot provide any economic alternative to forest cutting, expansion of farmland and settlements. In turn, more mass types of ecological tourism can bring potential benefits to the environment.

Thus, we can conclude that the following factors are important for nature conservation in the context of ecological tourism:

- ecological culture of a tourist;
- the impact exerted by tourists on nature;
- income received by the local population or local authorities from tourist visits.

A dozen tourists can do much more harm than hundreds of organized tourists.

The main recommendations on the formation of an ecological culture in children and youth in the context of ecological tourism:

- more frequent field trips, the main content of which should be acquaintance with wildlife, with local customs and culture;
- during a stay in nature, minimizing the negative consequences of an environmental and sociocultural nature;
- constant explanation to children and adolescents of the consequences of "non-environmentally friendly" behavior;
- provision of assistance to the protection of nature and the local sociocultural environment (mandatory garbage collection);
- conducting class meetings on environmental issues;

-for pupils of kindergartens and primary schoolchildren, going out to nature to collect herbariums and materials for crafts at labor lessons. Nature should not suffer, no need to break branches and tear flowers;

- field trips should include: visits to specially protected natural areas, national and natural parks, state nature reserves, natural monuments, dendrological parks and botanical gardens, walks in health-improving areas and resorts, reserves;

-organization in schools and kindergartens of the so-called "living corners" and gardens;

- learning how to sort garbage.

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