

ECOLOGICAL SELF-EDUCATION OF ADULTS AS AN ELEMENT OF SUSTAINABLE DEVELOPMENT

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The article highlights the importance of environmental education in ensuring the sustainable development of the country's economy and contribution to the achievement of sustainable development goals. The importance of environmental education for adults and the availability of its receipt is emphasized. The importance of these issues in the system of strategic planning of the Russian Federation, the role of specially protected natural territories in the formation of environmental thinking is described. The problematic aspects related to the mechanism of environmental education, including depth of study of these issues in the federal state educational standards are revealed. The directions and forms of adult self-education on environmental education and improving environmental culture are shown.

Keywords: sustainable development, self-education of adults, environmental education, standards, environmental protection, environmental management, environmental safety

The ecological self-education of an adult is a significant component of the general system of ecological education.

According to the Federal Law of December 29, 2012 No. 273-FZ "On Education in the Russian Federation" (hereinafter referred to as Law No. 7-FZ), education is a single purposeful process of education and training, which is a socially significant benefit and is carried out in the interests of the individual, family, society and the state, as well as a set of acquired knowledge, skills, abilities, values, experience and competence of a certain amount and complexity for the purposes of intellectual, spiritual, moral, creative, physical and (or) professional development of a person, satisfying creating his educational needs and interests. One type of education is additional education, which, both for children and for adults, is aimed on shaping and developing the creative abilities of children and adults, meeting their individual needs for intellectual, moral and physical improvement, developing a culture of healthy and safe lifestyle, health promotion, as well as the organization of their free time [1].

Environmental education is a process of training, education, personal development and population, self-education and accumulation of experience, aimed at the formation of value orientations, behavioral norms and special knowledge on environmental protection, environmental management and environmental safety, implemented in environmentally competent activities [2].

The relevance of environmental self-education for adults is of particular importance for ensuring the sustainable development of the Russian economy. Based on the principles described in the UN Conference on Environment and Development (Rio de Janeiro,

1992), sustainable development implies a balanced solution of socio-economic problems and the problems of preserving a favourable environment and natural resource potential in order to meet the needs of the present and future generations of people. The need for a gradual transition of the Russian Federation to sustainable development was first voiced at the state level in 1996 [3].

Sustainable development includes three types of assets: physical, natural and human capital [4, p. 82]. Accordingly, indicators of sustainable development include three blocks relating to the level of economic development, environmental well-being and quality of life. The main indicators characterizing the quality of life include the level of knowledge and educational skills. The Declaration on Environment and Development, adopted by the United Nations Conference on Environment and Development, proclaims that at the national level everyone should have appropriate access to information relating to the environment. [5].

Among the United Nations Member States in 2015, the Sustainable Development Goals (SDGs) include a goal of providing inclusive and equitable quality education and encouraging lifelong learning opportunities for all (goal 4). This goal includes the goal to ensure that by 2030 all students acquire the knowledge and skills necessary to promote sustainable development, including through training on sustainable development and sustainable lifestyles, human rights, gender equality, promoting a culture of peace and non-violence, citizenship of peace and awareness of the value of cultural diversity and the contribution of culture to sustainable development [6].

Objective: analysis of the existing system of adult environmental self-education and

identification of ways for its development to ensure the possibility of achieving the SDGs.

Research methods: study, analysis and systematization of existing regulatory legal acts and other documents and materials on research issues.

Results of research and their discussion

Issues of environmental education occupy an important place in the strategic planning documents of the Russian Federation.

As determined by the Fundamentals of the State Policy on Environmental Development of the Russian Federation for the period until 2030, approved by the President of the Russian Federation on April 30, 2012, the formation of environmental culture, the development of environmental education and training is one of the tasks of state policy in the field of environmental development.

The National Security Strategy of the Russian Federation, approved by Decree of the President of Russian Federation No. 683 dated December 31, 2015, notes that the low level of environmental education and ecological culture of the population reinforces the effect of factors that have a negative impact on the state of environmental safety (such as depletion of natural resources as a result of their irrational use, the presence of a significant number of environmentally hazardous industries and environmentally disadvantaged areas characterized by a high degree of pollution and degradation of natural complexes, etc.).

The strategy of environmental safety of the Russian Federation up to 2025, approved by Decree of the President of the Russian Federation of April 19, 2017 No. 176, has established that one of the priority areas for solving the main tasks in the field of ensuring environmental safety is the development of a system of environmental education.

In the strategies of social and economic development of federal districts until 2020, environmental education and education of the population are considered as the basis of the country's environmental well-being.

In a message dated March 1, 2017, to the Federal Assembly of the Russian Federation, the President of Russian Federation stressed that the main priorities of the state, such as spatial development, investment in infrastructure, education, health care and the environment, new technologies and science, economic support measures, promotion of talent, youth – everything is intended to work for one strategic task which is the breakthrough development of Russia.

According to the Decree of the President of the Russian Federation of 07.05.2018 No. 204 “On the national goals and strategic objectives of the development of the Russian Federation for the period up to 2024”, the goal of ensuring the global competitiveness of Russian education and the entry of the Russian Federation into the 10 leading countries by the quality of general education.

The federal law of January 10, 2002 No. 7-FZ “On Environmental Protection” (hereinafter referred to as Law No. 7-FZ) organizes and develops the system of environmental education, education and formation of ecological culture are referred to the basic principles of environmental protection [7]. According to Article 71 of Law No. 7-FZ, a system of general and integrated environmental education is established for the purpose of forming an ecological culture and vocational training of specialists in the field of environmental protection, which includes general education, secondary vocational education, higher education and advanced vocational education of specialists, and also the dissemination of ecological knowledge, including through the mass media, museums, libraries, cultural institutions, nature conservation institutions, organizations, sport and tourism.

One of the key platforms for the dissemination of knowledge about the rational use of natural resources, environmental protection and environmental safety, sustainable development can be considered especially protected natural territories (SPNA).

The State Program of the Russian Federation “Environmental Protection” for 2012–2020”, approved by the Government of the Russian Federation of April 15, 2014 No. 326, determined that increasing the role of civil society in environmental protection and preservation of biological diversity, the formation of environmental thinking, the environmental culture of citizens, as well as the creation of an effective system of environmental education and education on the basis of protected areas are among the main priorities and objectives of the state policy in the field of biodiversity conservation.

In the Concept of development of the system of protected areas of federal significance for the period up to 2020, approved by the decree of the Government of the Russian Federation No. 2322-p of December 22, 2011, one of the main directions of development of the system of protected areas is environmental education. These activities are intended to contribute to the increase in the level of environmental

culture of the population of the Russian Federation and to form an understanding of the conservation of biological and landscape diversity, the role of protected areas in solving these problems, as well as their place in the socio-economic development of the regions, which should ensure an effective public support of protected areas as national heritage sites.

The strategy of preserving rare and endangered species of animals, plants and mushrooms in the Russian Federation for the period up to 2030, approved by the Government of the Russian Federation of 17.02.2014 No. 212-p, among the main activities within the framework of the task of developing a responsible attitude to natural complexes among citizens and facilities, as well as to create conditions for their information and participation in decision-making in the field of conservation of rare and endangered species of animals, plants and fungi and the protection of such species, includes:

- the formation of public interest in the preservation of rare and endangered species of animals, plants and fungi, propaganda among the various categories of legal entities and individual entrepreneurs and citizens of the ecological, economic and cultural value of rare and endangered species of animals, plants and fungi;

- the contagion of knowledge about environmentally responsible methods of environmental management and the formation of interest and the need for active support by citizens of activities and actions aimed at preserving rare and endangered species of animals, plants and fungi;

- the inclusion of the conservation of rare and endangered species of animals, plants and fungi in the environmental component of the federal state educational standards of primary, basic and secondary (complete) general education;

- the preparation and implementation of additional vocational education and advanced training programs for teachers in biological and environmental subjects;

- the development of a system of training and advanced training for managers of organizations and specialists in the field of environmental protection, including the conservation of rare and endangered species of animals, plants and fungi;

- the formation of an environmentally responsible attitude among citizens towards rare and endangered species of animals, plants and fungi.

The integrated strategy for handling solid municipal (household) waste (MSW) in the

Russian Federation, approved by order of the Ministry of Natural Resources of Russia dated August 14, 2013 No. 298, states that the task of developing a system of environmental, sanitary and epidemiological education, education and upbringing on the treatment of MSW in conjunction with other activities, it will ensure the achievement of the main goal of the integrated strategy for handling MSW in the Russian Federation – the prevention of the harmful effects of MSW on human health and the environment, as well as the involvement of waste components (organic matter, scrap metal, paper, glass and plastic containers, textiles, worn car tires, etc.), as an additional source of raw materials, semi-finished products, other products or products for the production of goods (products), performing work, providing services or for power production.

The formal system of environmental education is regulated by federal state educational standards. However, there are no such standards for additional adult education. There is also no single professional standard of university education in terms of environmental education.

Competences, knowledge, skills and abilities in the use of natural resources, environmental protection and environmental safety are included in federal state educational standards (for example, in the Approximate Basic Educational Program of Secondary General Education [8]), in professional standards that include relevant labor functions (for example, in professional standards “Environmental Safety Specialist (in Industry)” [9], “Specialist in the field of waste management” [10]).

At the same time, the main educational program aims to form the following personal results of its development:

- the readiness and ability to self-education throughout life, a conscious attitude towards lifelong education as a condition for successful professional and social activities;

- the formation of ecological culture, respect for the native land, the natural wealth of Russia and the world; understanding the impact of social and economic processes on the state of the natural and social environment, responsibility for the state of natural resources; skills and knowledge of rational nature management, intolerant attitude to actions harmful to the environment; gaining experience in green activities [8].

Analysis of the content of the state program of the Russian Federation “Development of Education”, approved by Decree of the Government of the Russian Federation No. 1642

of December 26, 2017, showed that it does not provide a separate area (subprogram) or individual activities related to environmental education or adult self-education. It has only the direction "Development of additional education of children and the implementation of youth policy measures", which includes an event to create conditions for effective self-realization of young people, aimed at increasing the proportion of young people aged 14 to 30 who are involved in events held by executive bodies in the framework of the implementation of the state youth policy, youth and children's public associations enjoying state support, in total number of young people aged 14 to 30 years.

Law No. 7-FZ supplements environmental education with professional activities only, and does not disclose issues of environmental self-education for an adults that does not concern their professional activities.

The actual regulatory legal framework in terms of issues of environmental self-education for adults does not have detailed mechanisms for its implementation, formalized results requirements, and the necessary methodological and educational and methodological support.

The issue of creating in the interests of sustainable socio-economic and environmentally safe development of Russia a modern model of environmental education as a systemic process that has a cross-cutting, continuous and prestigious character throughout a person's life, with the coordination of goals, objectives and implementation mechanisms, is pending.

Additionally, the leading experts in the field of environmental education point out the problem of the lack of education of the necessary level of training for the implementation of the modern environmental education model [11, p. 658], in connection with which the creation of a state order for training and raising the level of skills in this area is required.

Thus, the issues of environmental self-education of adults at the goal setting level are worked out, but the methodology, tactics and approaches to the implementation of the system of environmental self-education for adults require taking into account world trends in this area and the need to improve the environmental awareness and environmental responsibility of people to lay the ideology of sustainable development.

There must be a need in society to achieve a socially, economically and environmentally significant result, manifested in increasing a person's motivation to responsibly treat nature and to form a high level of ecological culture

and a culture of healthy lifestyle inseparably linked with it.

Currently, the issue of developing the concept of integrated general environmental education is being worked out [11, p. 658-659].

The action plan for the Implementation of the Fundamental Principles of State Policy on Environmental Development of the Russian Federation for the period until 2030, approved by the order of the Government of the Russian Federation No. 2423-r dated December 18, 2012, is planned to develop by the Ministry of Education and Science of Russia by 2020 methodological, programmatic and educational support of the implementation of the State educational standards of primary, basic and secondary (complete) general education based on the Concept of General Environmental Education.

Article 42 of the Constitution of the Russian Federation guarantees everyone the right to reliable information about the state of the environment. In conditions of free and wide access to environmental information, an adult has all the prerequisites and opportunities for obtaining environmental education on his own, and, often, it is fairly accessible and does not require significant financial and time costs. You can find the necessary information in specialized literature, on the Internet, from the mass media, interacting with environmental organizations and public associations of the appropriate focus, participating in environmental activities, attending thematic lectures, seminars, museums, environmental education centers and environmental education departments of SPNA. Protected areas, field camps, volunteering, etc. or training in additional general education programs. For adults, these programs are of general developmental nature and, as a rule, special training is not required for their mastering. Any person is allowed to master without setting requirements for the level of education (unless otherwise stipulated by the specifics of the educational program being implemented) [1]. In postgraduate education, distance learning is especially popular, designed for a different number of hours.

It should be noted that there are initiatives to promote the ideas of sustainable development in the educational environment. For example, the pilot project "Interregional Network Partnership" Learning to Live Sustainably in a Global World: Ecology. Health. Security "launched in 2016 as part of the UNITWIN / UNESCO program; the project "Arctic Floating University", jointly implemented by the Northern (Arctic) Federal University. M.V. Lo-

monosov and the Northern Administration for Hydrometeorology and Environmental Monitoring of Roshydromet; Projects of the Non-Governmental Ecological Fund named after IN AND. Vernadsky, etc. [11, p. 661-690].

The ecological self-education of an adult in the field of sustainable development should include the issues of the impact of social and economic processes on the state of the environment; studying global and internal challenges and threats to environmental safety, civil rights and obligations on environmental issues, and the danger of waste to the environment; the use of measures to ensure environmental management and resource conservation, including the culture of using water, energy, other resources and materials in everyday life, developing practical skills and actions on the application of environmental knowledge in life situations (at home, in the store, in the street, in transport and etc.) and various fields of activity (public, financial, medical, etc.), including to minimize the amount of human waste.

Benefits for an individual from environmental self-education are obtaining new knowledge on environmental protection, environmental management and environmental safety, transformation of behavioral skills and value orientations, lifestyle changes and house-keeping aimed at minimizing resource usage (water, electricity, etc.), reducing the amount of household waste, the formation of a healthy lifestyle and proper eating habits, etc. In practice, this can bring quite obvious benefits in the form of revenues from the delivery of secondary raw materials, from reducing the cost of medical services, saving on utility bills, etc.

Conclusion

If the acquisition of environmental self-education by an adult becomes a mass phenomenon involving the younger generation in the process, this will help shape responsible consumption patterns in society and, through them, responsible production patterns, which is key to ensuring the transition to a green economy. In general, this will improve the quality of life of the population, including by minimizing health risks, will have a positive social and economic effect and will contribute to the achievement of the SDGs. Consequently, the state should both

create conditions for stimulating environmental education and self-education of a person at all stages of his life, and ensure the availability of such education, as well as the quality of this education.

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