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## Ecological Problems of Russian Cities on the Views of Young People

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### Abstract

At present, the ecological situation in Russia is characterized by a high level of anthropogenic environmental impact. Despite the fact that the model of sustainable environmental development of the country is approved at the state level, there is a lack of research on the existing socio-ecological situation in the country. The study of the state of the environment must be conducted not only by monitoring various indicators of environmental services, but also by studying the public opinion about the quality of the living environment, which can give a more complete picture. The article presents the results of a sociological study, in which a questionnaire survey was conducted of students from Russian universities. 2,651 people took part in the survey. The purpose of the research was to study the opinions of students concerning the current environmental situation in Russia. The analysis of the most acute environmental problems, features of ecological culture and ecological lifestyle is carried out. Students' opinions on the likely changes in the interaction between man and nature, as well as state policy over the next 10 years, have been studied.

**Keywords:** environmental problems, ecological culture, ecological lifestyle, sustainable development

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### THE CURRENT ENVIRONMENTAL SITUATION

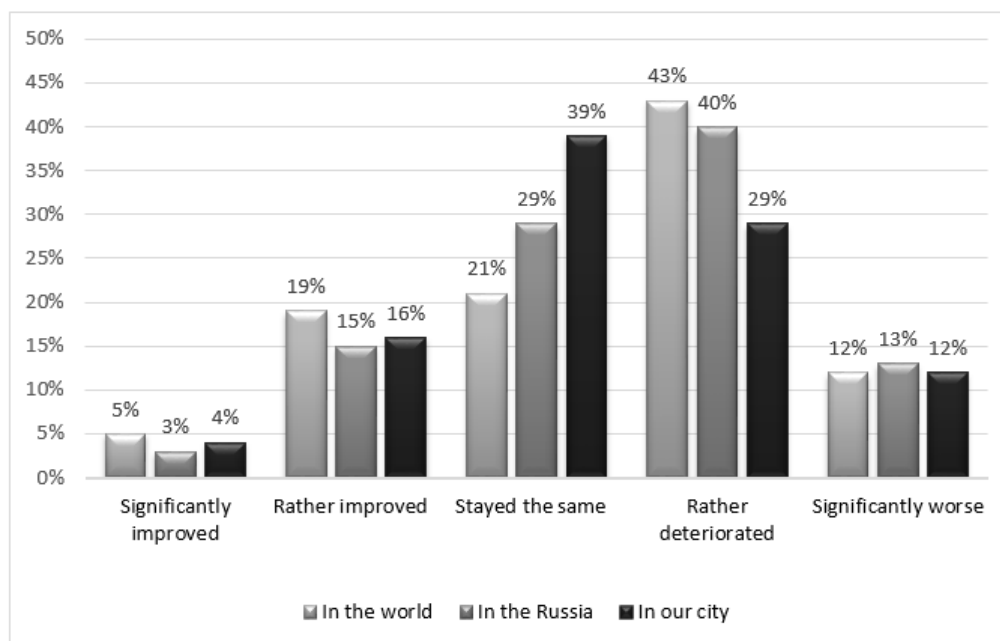
The world community is concerned about the ecological state and changes of our planet. The attention of many scientists is drawn to the solution of environmental problems associated with human activity.

There are questions about the proper use of land resources. The most important is the study of agroecological systems and their dependence on climate variability (Tessema and Simane 2019), skillful land use (Scherrer and Guisan 2019), state support for agriculture in respect for the land (Androsova et al. 2016).

The basis for the dynamic development of large cities, taking into account the preservation and protection of the environment is the UN program to achieve sustainable development goals (Bobrov 2011). At the same time, attention is paid to getting business dividends from participation in caring for the environment (Belousova et al. 2016). In this issue, social sustainability and social responsibility (Frolova et al.

2016), the ability to use advanced techniques for assessing the ecology of the city (Sorokoumova et al. 2018; Bobylev, Kudryavtseva and Soloveva 2014, Akhmediyeva et al. 2019) occupies an important place. They contribute to the implementation of a new urban development program, in which the basic principles are inclusiveness, equality, participation in solving environmental problems, and efficient management. This program is actively implemented in Singapore (Malone-Lee 2019), major cities of Russia, Europe, Asia, and the USA.

The current ecological situation in Russia is characterized by a high level of anthropogenic environmental impact. Negative changes in the environmental situation can lead to a deterioration of the living environment of the population and the deterioration of their quality of life. The study of the environmental situation is an important management task, requires a systematic study, which is often conducted at an insufficiently high level or completely absent, which becomes an obstacle in the search for effective management solutions to social and environmental problems. In this regard, it becomes



**Fig. 1.** Changes in the environmental situation over the past 3 years

relevant to study the opinion of the population regarding the environmental situation in cities.

#### METHODOLOGY FOR ASSESSING THE ENVIRONMENTAL SITUATION IN CITIES

In order to study the current environmental situation in Russia, in 2018 a sociological survey was conducted based on a questionnaire survey. The evaluation was performed using a Likert technique.

The study was attended by students of Russian universities located in major cities of the country: Moscow, Tomsk, Ufa. A total of 2651 people took part in the survey.

The purpose of the study - the study of students' opinions on the current environmental situation in Russia. To study the existing environmental situation, it was important to understand how respondents assess changes in the environmental sphere in their region of residence, in the country and the world as a whole.

The main objectives of the study:

1. to identify the most acute environmental problems causing concern among the population;
2. to determine the factors in the industrial and social sphere that have a negative impact on nature and man;
3. to analyze the opinion of the population regarding the effectiveness of measures aimed at protecting the environment;

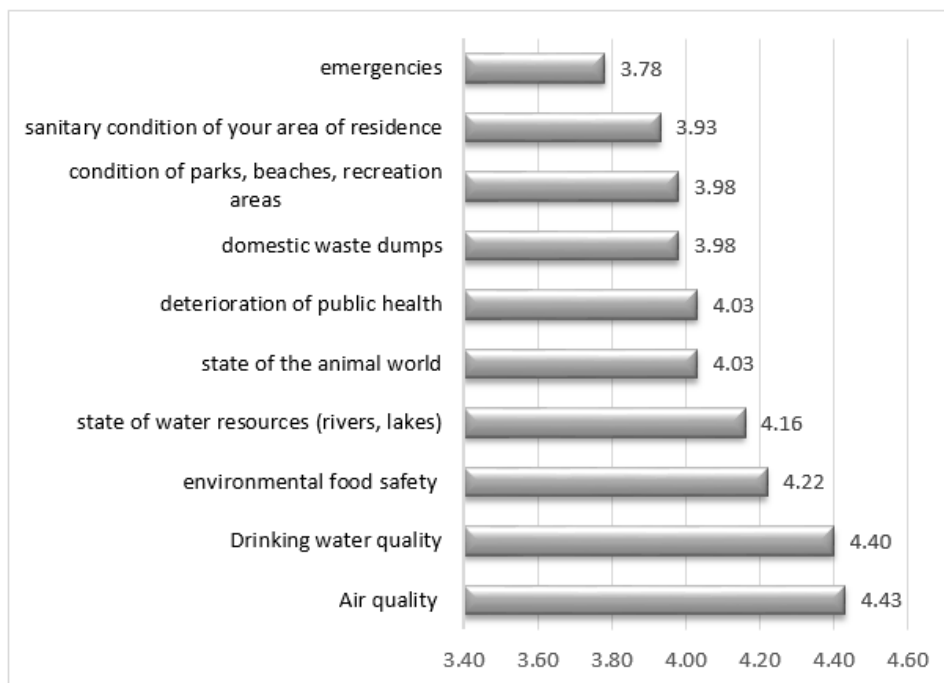
4. to determine the factors influencing the formation of ecological culture, ecological lifestyle;

5. to identify the opinion of the population about possible changes in the interaction of man and nature, the policies of states in the next 10 years.

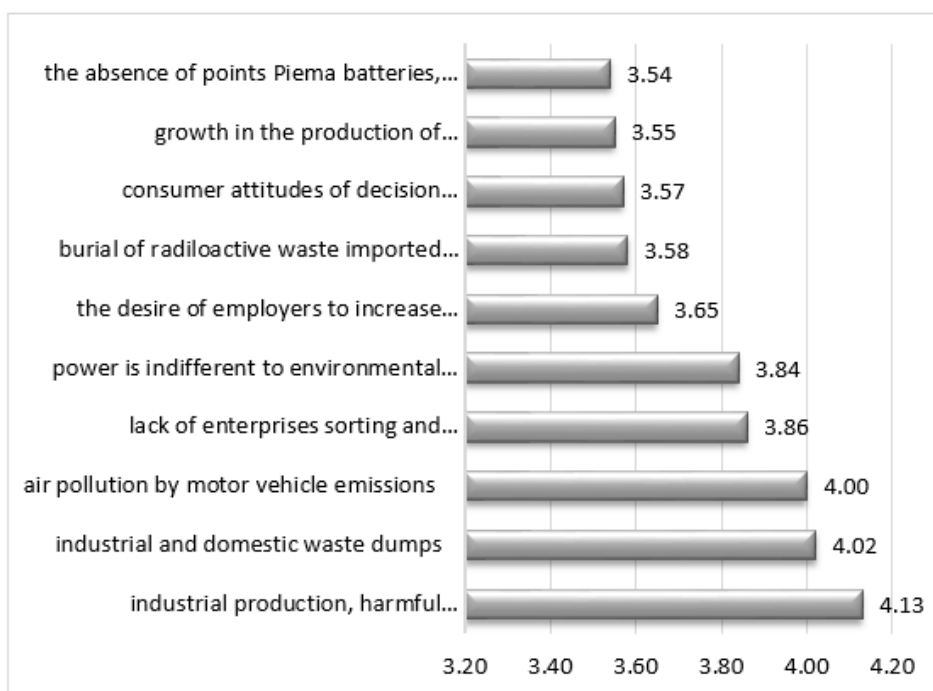
In solving the first and second problems, the Likert method was used. In the first question, respondents were offered a list of problems that needed to be assessed on a 5-point scale, where 1 doesn't bother at all, and 5 is very disturbing; in the second question - to evaluate on a 5-point scale, depending on the degree of influence of the factor, where 1 - the factor does not cause harm, 5 - causes the maximum harm.

#### THE STATE OF ECOLOGY IN LARGE CITIES OF RUSSIA ACCORDING TO THE VIEWS OF YOUNG PEOPLE

In the course of the study, it was established that the environmental situation remains stable at the local level — in the city — 39% of respondents (**Fig. 1**). At the same time, one-fifth of the respondents (20%) reported environmental degradation in the city of residence, while 41% of the votes were for improving it. At the level of Russia, more than half of respondents (53%) reported a deterioration in the environmental situation over the past 3 years. At the global level, environmental degradation was noted by 55% of respondents. Positive in this matter turned out to be when assessing the ecology of Russia - 18% and in the world - 24% of respondents.



**Fig. 2.** Degree of environmental concerns



**Fig. 3.** Factors in the production sphere that cause the greatest harm to nature and man

The study revealed a list of environmental problems that currently cause the most concern to respondents in Russia (**Fig. 2**). Among the leaders were air quality (4.43), drinking water quality (4.4) and environmental safety of products (4.22). Also, the assessment of high significance above 4 points received the state of water resources (rivers, lakes) (4.16), the state of the animal world (4.03) and the deterioration of public health

(4.03). The landfills of domestic waste (3.98), the state of parks, beaches, recreation zones (3.98) and industrial waste dumps (3.95) turned out to be significant.

The main factors of the production sphere that cause the greatest harm to the environment and humans in Russia were industrial production, harmful emissions (4.13), industrial and municipal waste dumps (4.02) and air pollution from motor vehicles (4 points) (**Fig. 3**).

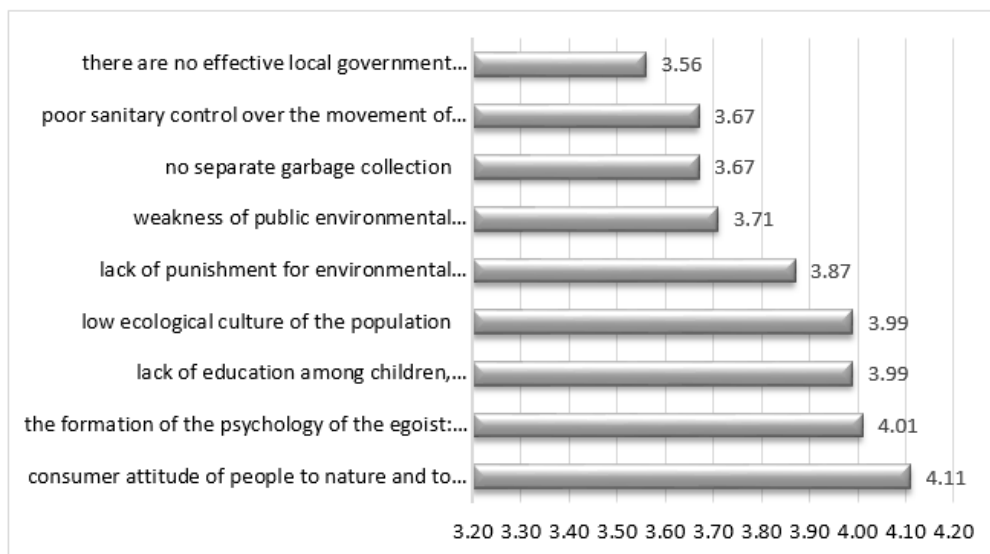


Fig. 4. Social factors that cause the greatest harm to nature and man

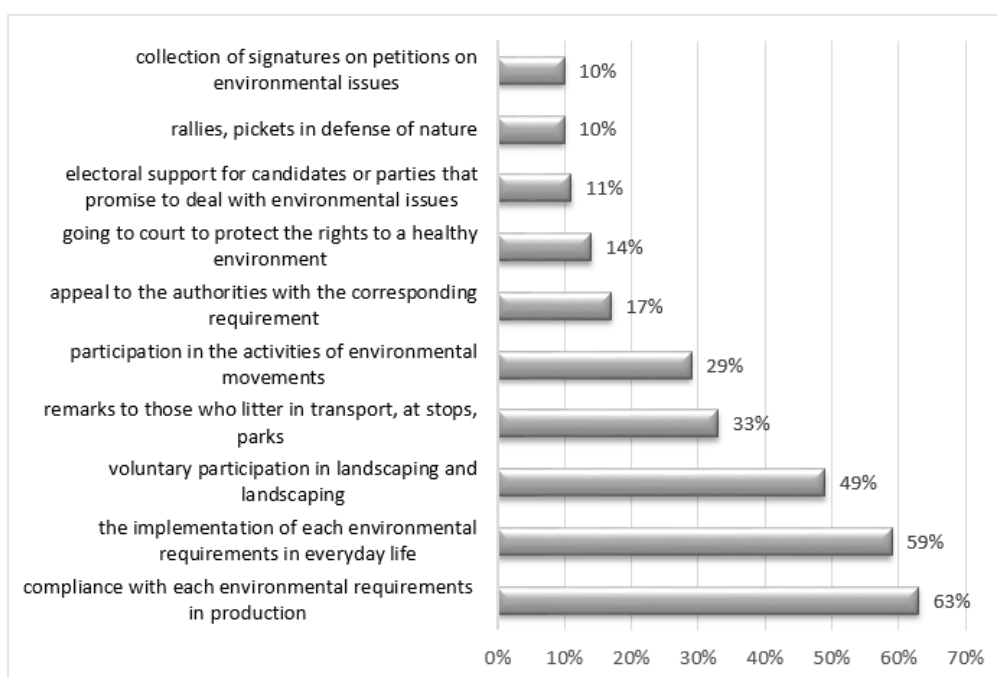


Fig. 5. What actions of the population to protect the environment do you consider most effective?

The second largest group consists of the absence of enterprises sorting and processing waste (3.86), the indifference of the authorities to environmental problems (3.84) and the desire of employers to increase profits at any cost (3.65).

According to the survey results, the most important social factors that render the greatest harm to the surrounding nature and man in Russia include the consumer attitude of people towards nature and each other (4.11), the formation of the egoist's psychology: after me even a flood (4.01), lack of proper upbringing

among children and adolescents, the general population (3.99), low ecological culture of the population (3.99) (Fig. 4). Less significant was the absence of effective self-government organizations at the place of residence (3.56).

The next task of the study was to identify students' views on the effectiveness of various measures aimed at improving the environmental situation and protecting the environment (Fig. 5). The most effective actions of the population were the following: each meeting environmental requirements at work (63%) and in

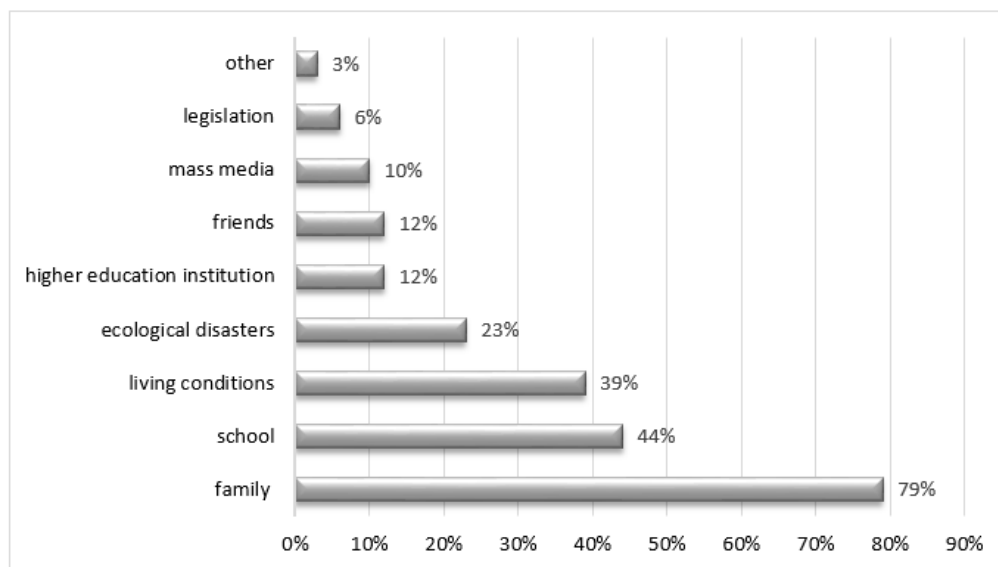


Fig. 6. Who more influenced the formation of ecological culture?

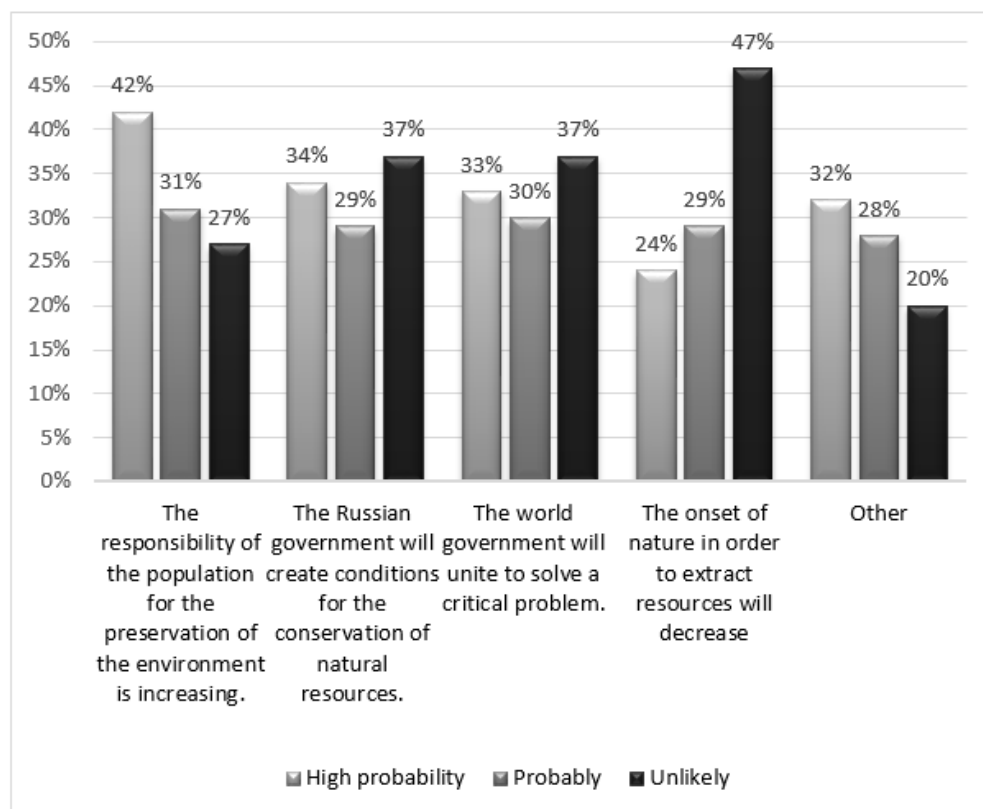


Fig. 7. Changes in the interaction of man and nature, the policies of states in the next 10 years

everyday life (59%), as well as voluntary participation in gardening and landscaping (49%). The least collected was the collection of signatures for petitions on environmental issues (10%).

The family (79%), school (44%) and living conditions (39%) significantly influenced the formation of ecological culture (Fig. 6). In the opinion of

respondents, the least effective measures include measures involving interaction with the legislative (executive) authorities, as well as measures involving the use of the media.

It is most likely that the responsibility of the population for the preservation of the natural environment will increase (42%) (Fig. 7). The discord

with this statement looks like the fact that it is unlikely that the offensive on nature will decrease in order to extract resources (47%). It is likely that the Russian government will create conditions for the conservation of natural resources (63%).

In general, the results of the study make it possible to assess the environmental situation in Russia and a number of large Russian cities by studying the opinions of young people.

#### **WAYS TO IMPROVE THE EFFECTIVENESS OF THE STRUGGLE FOR THE ENVIRONMENT IN LARGE CITIES**

As the results of the study show, despite the fact that in recent years Russia has been pursuing an active environmental policy, regulatory acts have been developed, and 2017 was declared the “Year of the Environment”, only 18% of respondents noted an improvement in the environmental situation in the country, more than half consider that the situation not only did not improve, but also became worse (53%). If we talk about the situation in the world, more than half believe that it has worsened (55%). This suggests that the measures taken to improve the environmental situation in Russia and abroad are insufficient, often not systematic, but fragmented, random.

As part of solving the first task, it was revealed that the quality of air, drinking water, food, i.e. factors that have a direct impact on the quality of life of the population. The concern of the respondents about the state of water bodies, parks, recreation areas, as well as the sanitary condition of the house and the district speaks about the social and environmental problems of the living environment.

It should be noted that, according to domestic scientists, the ecological situation plays an important role for the population, and its deterioration can lead to a number of social problems, such as reduced life expectancy and a period of high activity of residents, as well as an increase in morbidity and mortality.

When solving the second task, the nature of the respondents' concern about the influence of production factors on the environment was revealed. The respondents identified industrial production, harmful emissions, landfills of industrial and household waste, and air pollution from motor vehicle emissions as negative factors affecting production factors. All these factors scored 4 or more points. Analysis of their origin suggests that almost all of them belong to the system of government. The legislative and executive bodies are

not acting effectively enough to improve the environmental situation, poorly streamlining the activities of the industrial sector of the country's economy. Sometimes they are just indifferent. Also a negative contribution here is made by business representatives who seek to make a profit at any cost.

The highest value among the social factors that have a negative impact on the environment among the received such factors as the consumer attitude of people to nature and to each other. Such factors as the formation of the psychology of the egoist, the lack of proper upbringing of children and adolescents, low ecological culture, also contribute to strengthening the negative impact on the environment, causing the consumer attitude of the population to nature and its resources.

The fight against the influence of negative factors is carried out both by state structures and public organizations, movements and individual citizens. The effectiveness of their actions varies. As the results of the research in the course of solving the third task showed, the most effective actions of the population aimed at improving the environmental situation and protecting the environment were the following: each meeting environmental requirements at work and in everyday life, as well as voluntary participation in greening and landscaping. Respondents believe that the establishment of order in the environmental field should begin with oneself - to comply with all environmental requirements at work and at home. It is necessary to take an active life position - to participate in the activities of environmental movements, to make comments to violators in public places, on transport, parks, go to the authorities and to the court, protecting the ecology of the area of residence. This will significantly improve the environmental performance of the city.

One of the ways to achieve this is the development of ecological culture and the maintenance of a proper ecological lifestyle. This was revealed in the course of solving the fourth problem.

According to the study, the “family” (79%) has the greatest influence in the process of forming an ecological culture; among the significant factors, “school” (44%) and living conditions (39%) can also be noted. Educational institutions are given an honorable place. Also, respondents named such factors as - books, films, Internet, personal beliefs and values. It was surprising that the media does not act as a leader in the

formation of environmental culture. There is great potential here.

At the final stage of the study, when solving the fifth task, it was necessary to identify how, in the opinion of the respondents, changes in the interaction between man and nature, the policies of states in the next 10 years are likely.

On the basis of the data obtained, it can be concluded that in the next 10 years, according to the majority of respondents, there is a high probability that the population's responsibility for the preservation of the natural system will increase. Slightly fewer respondents who believe that the conditions for the preservation of natural resources will be created by the Russian government, and the governments of the world, in turn, will unite to solve climate problems. However, opinions about the fact that the attack on nature in order to extract resources will decrease, divided, almost half of the respondents believe that this is unlikely.

As the results of the study show, today in many cities of the country an unfavorable ecological situation has developed. Environmental concerns such as air quality, water quality and food safety are of greatest concern to the population. Among the factors that lead to a number of environmental problems, industrial production and landfills for household and industrial waste were

identified as the most significant. Unfortunately, the negative impact on the environment is exacerbated by anthropogenic influences. According to the data obtained, the majority of Russians show a negligent or indifferent attitude towards nature, which is caused by insufficient environmental education and environmental education of the population. Based on their research results, the family and the school have the greatest influence on the formation of ecological culture. Also according to the results, personal beliefs and values are the basis of ecological culture and behavior of the population; therefore, an important role in the process of shaping ecological culture should be assigned to books, films, and the mass media with great potential in transmitting environmental and cultural values.

The fulfillment by enterprises and the production personnel of environmental requirements, as well as voluntary participation of the population in gardening and landscaping, can act as effective measures to create and maintain a favorable environment.

When developing measures aimed at improving the environmental situation and the quality of the environment, it is important, both at the state and municipal levels, to take into account the opinion of the population regarding the most acute problems affecting the quality of their life.

## REFERENCES

- Akhmadiyeva RSh, Aleksandrova NS, Zakhariycheva MA, Ashrafullina GSh, Matyukhina OS, Kurbanov RA, Belyalova AM, Gurbanov RA (2019) Individual's Ecological Outlook and its Ethical Values of Environmental Safety Sustainable Development. *Ekoloji* 28(107): 4905-4912.
- Androsova IV, Melnichuk AV, Bondaletov VV, Vinichenko MV, Duplij EV (2016) On the Issue of State Support of Agriculture: Regional Aspect. *International Journal of Economics and Financial Issues*, 6(S1): 114-119.
- Belousova AA, Gurianov PA, Melnichuk AV, Vinichenko MV, Duplij E (2016) Dividend Payments and Cross-country Differences in the Choice of Dividend. *International Journal of Economics and Financial Issues*, 6(S1): 46-51.
- Bobylev SN, Kudryavtseva OV, Soloveva SV (2014) Indicators of sustainable development for cities. *Economy of the region*, 3: 101- 110.
- Bobrov EA (2011) Socio-environmental problems of large cities and their solutions. *Scientific Gazette of BelSU. Series: Natural Sciences*, 15(110): 24-28.
- Frolova EV, Medvedeva NV, Kabanova EE, Kurbakova SN, Vinichenko MV (2016) Social Partnership in Russia: Prerequisites, Problems and Trends. *Journal of Advanced Research in Law and Economics*, 2(16): 221 – 228.
- Malone-Lee, LC (2019) The Ecology of Neighbourhood Resilience: A Multi-Disciplinary Perspective. *Advances in 21st Century Human Settlements*, 2020: 1-11.
- Scherrer D, Guisan A (2019) Ecological indicator values reveal missing predictors of species distributions. *Scientific Reports*, 9(1): 3061-3075.

Sorokoumova EA, Shiryova IV, Zvonaryev AV, Trempelets L, Grishnova EYe, Rybakova MV, Matveeva ES (2018) Environmental Education via Project Activity: Implementation Experience. *Ekoloji*, 27(106): 2027-2031.

Tessema I, Simone B (2019) Vulnerability analysis of smallholder farmers to climate variability and change: an agro-ecological system-based approach in the Fincha'a sub-basin of the upper Blue Nile Basin of Ethiopia. *Ecological Processes*, 8(1): 145-157.