

УДК: 316.4.063

Молодые люди и проблемы экологии

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Аннотация. В статье рассматриваются факторы, влияющие на ухудшение окружающей среды, анализируются меры, предпринимаемые странами для сохранения природы, а также уровень загрязнения окружающей среды. Авторы провели исследование, определяющее степень вовлечения молодых людей в решение экологических проблем. Анализ литературных источников и интернет - ресурсов позволил авторам сделать определенные выводы. Проведенное исследование поможет молодым людям понять последствия безрассудного отношения к природе и заставит их думать о последующих поколениях.

Ключевые слова: экология, проблемы окружающей среды, защита окружающей среды, загрязнение.

UDC:316.4.063

Young People and Environmental Problems

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Abstract. The article examines the factors that contribute to the deterioration of the environment in the world. The authors analyzed the measures that countries take to preserve the environment and determined the level of environmental pollution in the world. We also were interested to what extent young people of our country care about the ecological state of the world. The analysis of literature and Internet resources allowed us to make some conclusions. In our opinion, our own research can help people understand the consequences of their careless attitude to nature and make them think about future generations.

Key words: ecology, environmental problems, protection of the environment, environmental pollution.

Introduction.

One of the main problems of the modern world is the pollution of the environment. It is clean environment that can be considered to be the source of life for everybody. People know about it, but in spite of this fact, they continue polluting nature. It is not the first generation in a row that mankind has lived with constant and obsessive fear of environmental disasters. Deforestation, ocean pollution, ozone layer depletion - we have heard these phrases in our lives hundreds, if not thousands of times.

But where is the real threat, and where is sheer speculation? Let's figure out what environmental problems pose a threat to us and our descendants.

The aim of our research was to study the scale of human influence on the ecological situation in the modern world and to suggest the ways to protect the environment. We completed the following tasks:

- 1) studied the factors contributing to the deterioration of the state of the environment in the world;
- 2) analyzed the measures that countries take to preserve the environment;
- 3) determined the level of environmental pollution in the world;
- 4) identified the degree of interest among citizens in the ecological state of the world.

Ecological doctrine is a separate science that studies the laws of nature, which was introduced in 1866 by Ernst Haeckel. People have been interested in natural laws since that time, they have always wanted to study them. That is why ecology is so popular today. It studies absolutely all human influences on the living environment, it touches upon many topical issues of interest to humanity. Technological progress is constantly developing, people paid little attention to the environment in the past, and therefore the air is polluted, many species of animals and plants are dying out. Now millions of scientists are trying to solve environmental problems, gradually improving the current environmental situation.

Environmental problems are mainly caused by human activities, that lead to a violation of the structure and functioning of nature. This is a man-made problem. In other words, it arises due to the negative impact of a man on nature.

Materials and methods.

We studied various sources of information: magazines, textbooks, and online resources. Based on them we prepared the theoretical material and conducted a survey. We made the analysis of the information and presented it in the form of diagrams. With a help of a special program, we created a video and voiced it. The aim of the video is to attract people to the problems and make them think about their own lives and the lives of future generations.

In our research we paid attention to the following urgent issues that demand immediate solution.

1. Global warming is a by-product of the existence of a huge human population. In other words, this is a general increase in the temperature of our planet due to human actions (burning fossil fuels, for example). As a result, glaciers melt, sea level rises, anomalous precipitation falls, and ocean acidification happens.

Not all these processes seem particularly scary. However, one must remember that the Earth is a very thin and fragile system in which all links are interconnected. Such large-scale

interventions destroy this system and lead to unpleasant consequences - to seismic activity and the disappearance of entire species of animals.

2. Pollution of the World Ocean. More than half of our planet (or more precisely, 70%) is water. The ocean is the main factor shaping the climate on Earth: currents cause heat or coolness, and evaporated water forms clouds and provokes precipitation. But in fact, the world's oceans in one way or another affect the life of each of us: rains and other precipitation; delivery of goods between continents; fish and other seafood that we eat every day. However, now the world's oceans are in danger due to constant man-made disasters, sewage and industrial waste emissions into the ocean.

3. Destruction of the ozone layer. Ozone is one of the constituents of the stratosphere, which is one of the types of oxygen. For humans, the value of ozone lies in the fact that it blocks some of the ultraviolet rays, protecting all living things from direct sunlight. Our science has only recently learned about the existence of ozone, although humanity has been detrimental to the ozone layer for centuries. As a result, there are holes in the ozone layer due to the lack of substances. Among the reasons for this phenomenon is International Space Program. We can speak about launching rockets and satellites; air flights at an altitude of twelve kilometers and above; industrial and domestic emissions of freon.

4. Air pollution. The most obvious danger of atmospheric pollution is a shortage of clean air, but an equally serious problem is the planet's climate change and the further consequences of this process. The main elements that pollute the atmosphere are: emissions from industrial activities; exhaust from cars and other vehicles with an internal combustion engine; radioactive objects; waste (household and industrial).

5. Soil pollution. Soil is a resource that belongs to the category of non-renewable, in the event of its loss or degradation, we cannot restore it in any way. Soil conditions have a direct impact on the food we eat, the water we drink, and our health - our internal organs and our lifespan. Among the causes of soil pollution are: localized landfills, which are used for the disposal of food waste, building materials, materials left after repair work. Heavy industry causes this pollution, too: metallurgical and machine-building, the activity of which involves the release of salts of heavy metals: beryllium, arsenic, cyanides, cadmium, mercury and lead. Transport emits lead, nitrogen, hydrocarbon oxides into the environment. Agriculture uses pesticides and mineral fertilizers.

6. Deforestation and desertification. Like the ocean, the forest is a complex fragile ecosystem that operates according to its own laws and combines plants, fungi, animals and microorganisms that collectively affect the climate of our planet, the quality of drinking water and the air we breathe.

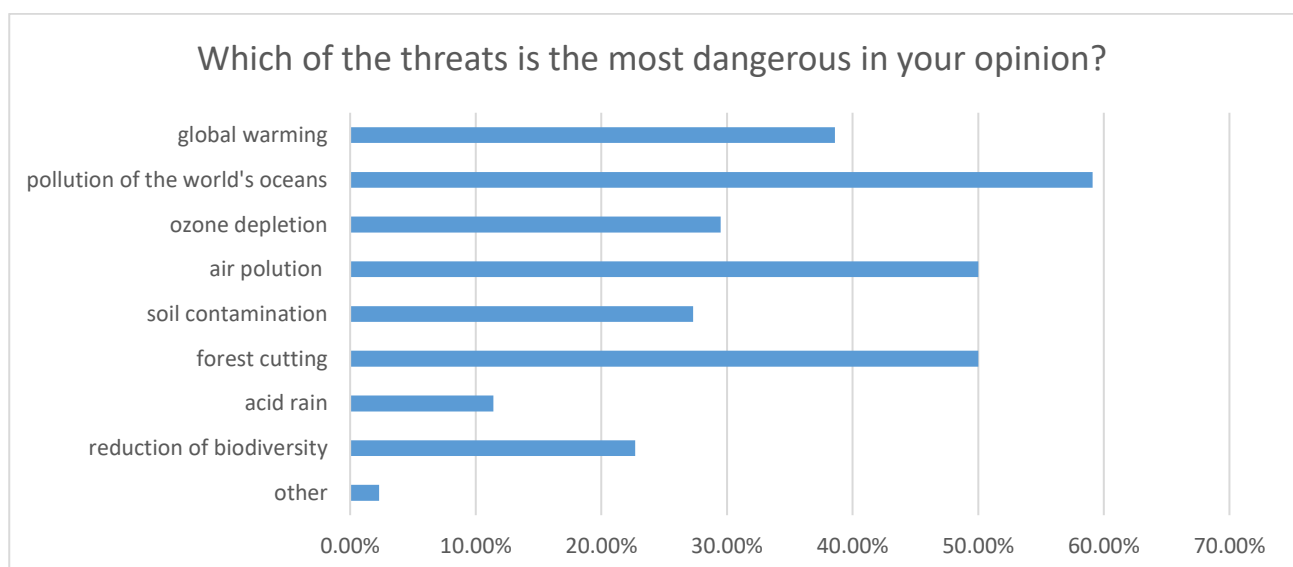
Forest is a renewable resource, however, the intensity of deforestation in the modern world is not comparable with the rate of its renewal. To this day, significant territories after deforestation or forest fires become deserts, which leads not only to biological disasters, but also to social ones, including the disappearance of entire ethnic groups.

7. "Acid rain". By this we mean any meteorological precipitation (including snow and hail), during which a strongly acid reaction occurs. Among the sources of this phenomenon are the activities of heavy industry enterprises (especially metallurgical), which emit into the atmosphere a serious amount of nitrogen oxide and sulfur. In addition, the activities of thermal power plants and the exhaust gas of cars lead to acid rain.

8. Reduction of biodiversity. On our planet, there is a huge number of species of flora and fauna that live in different regions and natural zones. This huge variety of living things, represented at the current point in history, has been formed over several billion years. However, all of the above environmental disasters provoke one more, large-scale and serious, - the reduction of biodiversity.

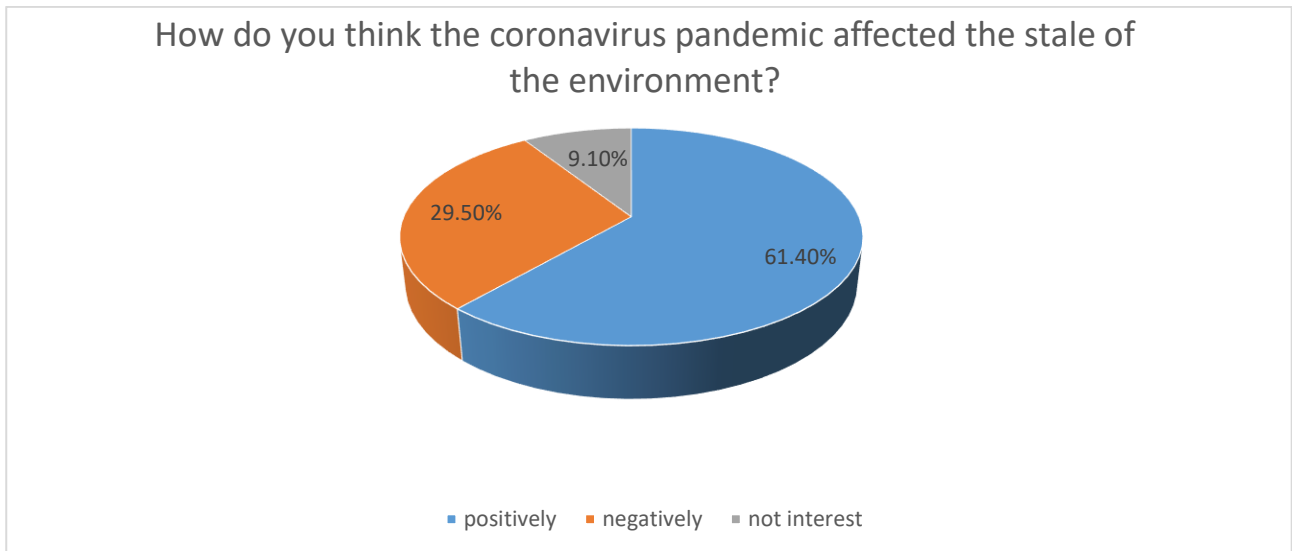
Results.

The conducted survey shows the attitude of the people and their understanding of the ecological problems. We also analyzed their readiness to do something for protection of the environment. More than 81% of the respondents are interested in the state of the ecology and most of them are familiar with the most dangerous environmental problems. According to the citizens, ocean pollution poses the greatest danger (Picture 1).



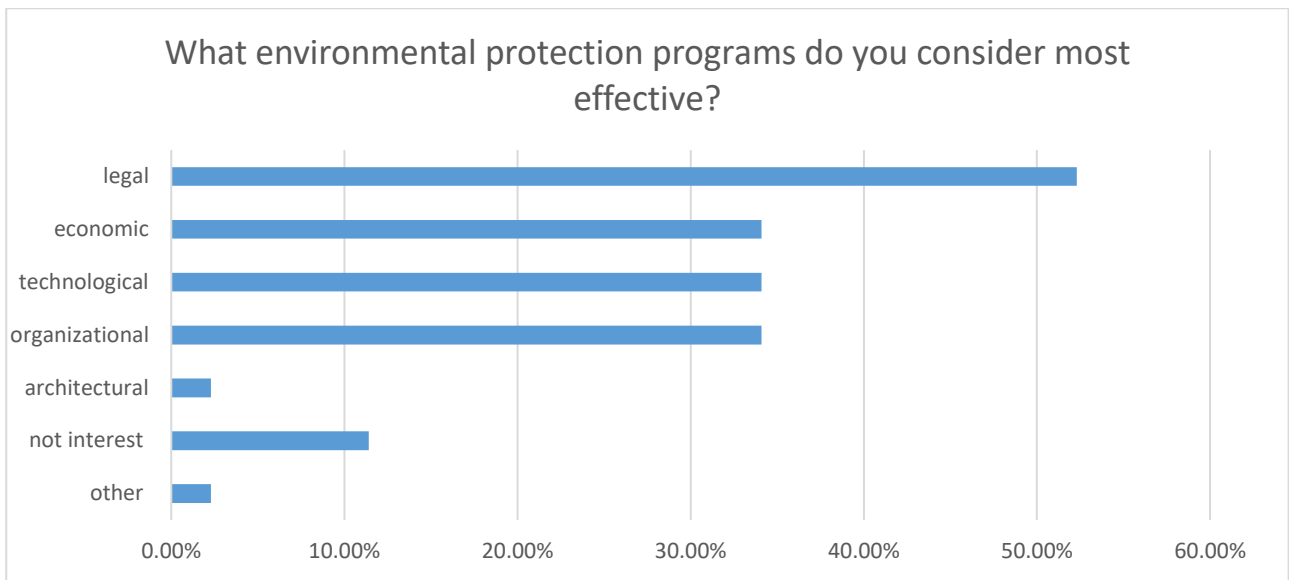
Pic. 1

We included a question about pandemic into our survey. It was interesting to know that more than 50% of respondents believe that the pandemic has a positive impact on the environment. They say that the nature is having a rest from pollution and emissions now. It is connected with economic recession, with decrease of flights and of usage of public transport and personal cars (Picture 2).



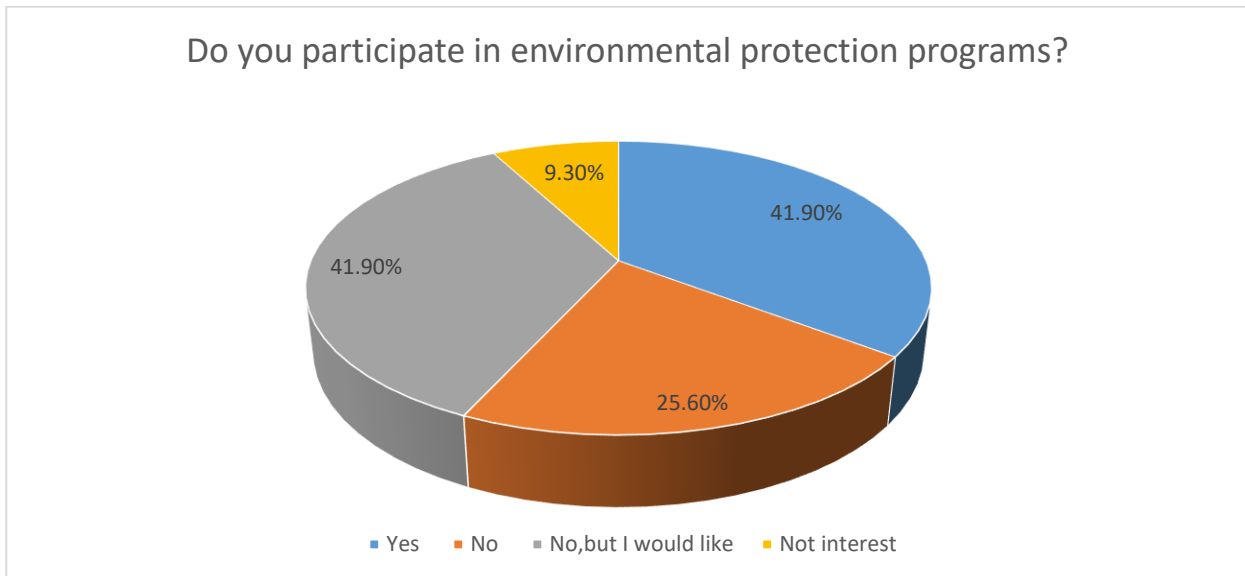
Pic. 2

There are a lot programs aimed at protection of nature and improvement of its state. The results of our survey show, that only about 1/4 of the respondents are familiar with such programs. Since the beginning of the twentieth century, the first programs began to appear, aimed primarily at protecting the environment, however, by the end of the century it became clear that mankind needed more radical and effective measures. Over the past decades, humanity has realized the danger of the current environmental situation in the world and has begun an active struggle to protect and restore our nature. It is interesting to note the most effective program, according to the citizens, is the legal one, as only penalties can deter people from crimes against the environment (Picture 3).



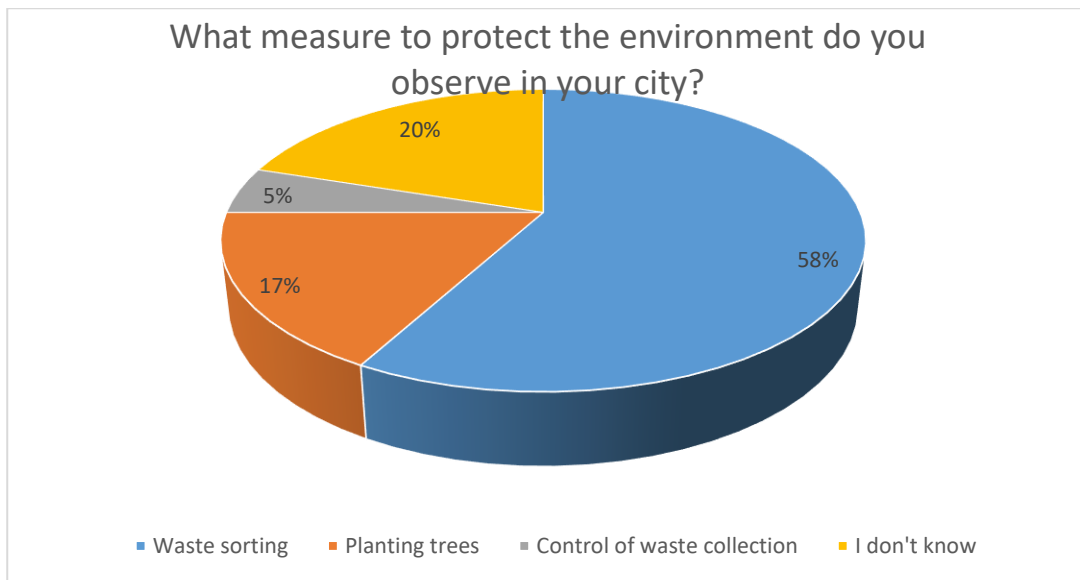
Pic. 3

More than 90% of the respondents believe that the contribution of each person affects the state of the environment. But not all of them take part in this activity. Some of them are not interested, some do not know the programs they can participate in. Fortunately, 23.3% do something to protect nature and more than 40% want to be useful for the programs of protection the environment (Picture 4).



Pic. 4

More than 60% of the respondents believe that the city authority does not take enough measures to protect the environment. Those who say that the city does a lot in this sphere, think that the most effective measure of protecting the environment is sorting the waste. This process is rapidly developing in our city now (Picture 5).



Pic. 5

Conclusion.

Thus, according to the results of the survey, we see that there is an insufficient number of measures to protect the environment in the world, which is why the state of the environment is deteriorating every year. However, the results showed that many people are interested in this problem and are ready to participate in different programs aiming at environmental protection. We propose to develop more effective measures to protect the environment in order to solve environmental problems, as well as for countries to pay more attention to this problem, because the future life on our planet depends on this. Moreover, taking care of the environment is the duty of every person. Some do not even realize the full scale of the disasters, and the situation in the world is deplorable. Human irresponsibility can lead to the death of all life on Earth.

However, we must admit that in the 21st century we have made significant progress in terms of awareness of the problem and activity. Despite all the damage that we have caused to our planet, we still have enough chances to return it to its previous form. All inhabitants of the planet can constantly do a series of simple actions, the combination of which will gradually restore the natural balance. You can hand over waste paper, pack waste according to the materials, etc.

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