Improving the environmental safety of the Russian Federation following the implementation of the national project "Ecology"

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Abstract. Environmental problems in the Russian Federation are an object of close attention from the state and scientists. On the territory of the largest state in the world, there are many unique natural complexes that are of great importance not only for the country, but for the entire planet. The article considers the main documents regulating the improvement of the ecological situation at the present stage of the country's development.

1. Introduction

The critical state of the biosphere makes the problems of nature protection and the restoration of biogeocenoses among the most important problems of our time. A huge amount of factual material has been accumulated that requires generalization and practical application. The need for a correct relationship between man and nature to ensure sustainable life support on the planet must be realized not only by ecologists, but also by the general population, as well as by government leaders and the business community.

In June 2020, Russian President Vladimir Putin noted that environmental concerns are one of the most important topics for society. He noted that the problems of the environment and ecology have always been and remain among the most sensitive, important for society. And it is no coincidence that among the citizens' initiatives on amendments to the Constitution there were so many proposals to strengthen the requirements for the preservation of nature and the environment. Many live according to the principle “after us - even a flood.” This is regrettable. Such logic is dead-end and extremely dangerous. Nature itself gives us a signal: sustainable development is possible only if a harmonious, rational balance of interests is observed - economic growth, welfare of society and, on the other hand, environmental safety [1].

The goal of the national project "Ecology" is to radically improve the ecological situation and positively influence the health improvement of Russians. The relevance of this study is determined by the fact that the implementation of the tasks set will reduce the volume of pollution, improve the state of resources, protect people and fauna from negative technogenic impact.
2. Materials and methods

Materials for writing the article were based on works in the field of ecology by leading international scientists published in major scientific journals, statistic data from the website of the statistics service of the Russian Federation, as well as data from the passports of the national project "Ecology" and federal projects related to this national project.

The main methods for writing an article were the following: analysis of articles and materials, scientific generalization, comparison of statistical data.

3. Results

Environmental problems today are becoming one of the most important in matters of human survival. Without their solution, it is impossible to imagine sustainable development of both a single country and the entire world community. Anthropogenic impacts are increasingly threatening the planet's ecology. Negative actions are manifested through deforestation, barbaric exploitation of natural resources, and harmful emissions. Such actions can disrupt the ecological balance of the planet and lead to global processes associated with climate change on Earth.

Figure 1 shows the main threats to environmental safety.

![Figure 1. The main threats to environmental safety.](image)

There are many international studies on the influence of certain factors on environmental pollution. For example, Rivaes, R.P., Feio, M.J. and others raised the topic of analyzing ecosystem response to longitudinal river regulation gradients [2]. Ozcan, B., Khan, D., Bozoklu, S. analyzed the dynamics of the ecological balance in the OECD countries [3]. Lavrova, O. Y., Nazirova, K. R. and others conducted parallel field experiments and satellite surveys to assess environmental risk in the coastal area of the southeastern Baltic [4]. Qiu, J. studied the issues of pollution by deposits of heavy metals in the bed of the Beng river [5].

The achievement of significant shifts in this area would be impossible without the formalization of indicators. To this end, on the day of his inauguration on May 7, 2018, the head of The Russian Federation Vladimir Putin proposed the development of 12 national projects in the country aimed at different aspects of the life of citizens. For this purpose, the special Decree was signed.

Among the directions of development of Russian society and the state, according to the Decree, were the following:

- Culture;
- Demography;
- Digital economy;
- Ecology;
- Education;
- Healthcare;
- Labor productivity and employment support;
- Safe and high-quality roads;
- Science;
• Small and medium business and support for individual entrepreneurial initiatives.

Within the framework of this article, we investigate the indicators for the national project Ecology. Targets for this national project and calculation of chain indices of the planned increase in indicators, calculated by the authors, are shown in table 1 [6].

Table 1. Targets of the national project Ecology and indices.

| Target indicator name | 2020 | 2021 | 2022 | 2023 | 2024 |
|-----------------------|------|------|------|------|------|
| The most dangerous objects of accumulated environmental damage were eliminated, pcs. | 57   | 67   | 14   | 74   | 15   |
| Growth rate of the indicator to the previous year (current year/previous year) | 1.18 | 1.1  | 1    | 1.01 |       |
| The number of commissioned production and technical complexes for the processing, disposal of hazardous class I and II waste, units | 0    | 0    | 0    | 4    | 7    |
| Growth rate of the indicator to the previous year (current year/previous year) | 1.75 |      |      |      |      |
| Reduction of total emissions for the reporting year, % | 97   | 95   | 93   | 81   | 78   |
| Growth rate of the indicator to the previous year (current year/previous year) | 0.98 | 0.98 | 0.87 | 0.96 |      |
| Number of cities with high and very high levels of air pollution, units | 6    | 5    | 3    | 2    | 0    |
| Growth rate of the indicator to the previous year (current year/previous year) | 0.83 | 0.6  | 0.67 | 0    |      |
| The share of the urban population of the Russian Federation provided with quality drinking water from centralized water supply systems, % | 94.9 | 95.5 | 96.5 | 97   | 99   |
| Growth rate of the indicator to the previous year (current year/previous year) | 1.01 | 1.01 | 1.01 | 1.02 |      |
| Area of restored water bodies, thousand hectares | 6.4  | 10.6 | 14.4 | 17.3 | 23.5 |
| Growth rate of the indicator to the previous year (current year/previous year) | 1.66 | 1.36 | 1.2  | 1.36 |      |
| Increase in the number of visitors to specially protected natural areas, thousand people | 4913 | 5617 | 6203 | 6895 | 7891 |
| Growth rate of the indicator to the previous year (current year/previous year) | 1.14 | 1.1  | 1.11 | 1.14 |      |
| Damage from forest fires by year, billion rubles | 18   | 17   | 16   | 15   | 12.5 |
| Growth rate of the indicator to the previous year (current year/previous year) | 0.94 | 0.94 | 0.94 | 0.83 |      |

Within the framework of this national project, 11 federal projects are being implemented. The most significant from them are the following:

- Clean country;
- Integrated solid waste management system;
- Infrastructure for waste management of hazard classes I-II;
- Fresh air;
- Pure water;
- Conservation of forests;
- Implementation of the best available technologies.
The most important tasks to be solved following the implementation of these federal projects, according to the authors of this article, will be:

- Restoration, including reclaimed, lands exposed to the negative impact of accumulated environmental damage;
- Cleared sections of river channels;
- Conservation of biological diversity and development of ecological tourism;
- Amount of grown planting material of forest plants;
- Area of reforestation and afforestation;
- Reduction of total emissions for the reporting year;
- Creation of infrastructure facilities aimed at reducing the negative impact on Lake Teletskoye;
- The number of people involved in the cleaning of the banks of water bodies.

The implementation of these tasks will make it possible to quickly improve the environmental situation in the Russian Federation.

4. Discussion
Based on statistical and normative documents, the article analyzed the main regulatory acts of the Russia. They affect the development of the ecology in this country. Based on the planned indicators, it can be concluded that the environmental situation should improve in the coming years. The only thing is not entirely clear to what extent these indicators will be realized. The restrictions of the last year associated with the coronavirus pandemic have made serious restrictions on the implementation of these plans, but the state is striving to fulfill its obligations. The results of this study can be useful for companies from different industries, as they clearly clarify the position of the state on improving the environmental situation, and therefore form possible directions for the development of domestic companies towards moving away from technologies that pollute the environment to more environmentally friendly ones.

5. Conclusion
The article analyzed the main international works related to environmental issues. The authors have systematized the classification of the main threats. Were analyzed the regulatory documents governing the development of the country based on technologies for the development of ecology. The authors concluded that with the implementation of all the planned indicators, the environmental situation in the country will significantly improve, however, due to restrictions due to the coronavirus pandemic, these indicators may be changed or extended over time.

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