

the station has increased slightly. «Azerbaijan IES» is the largest industrial enterprise located in Mingachevir. It is the largest power plant in the South Caucasus.

At the same time, the largest Hydroelectric Power Station in Azerbaijan is «Mingachevir SES». Varvara HPP is located 18 km below the Mingachevie HPP, and this HPP has the capacity to store about 2 billion m³ of water. There are 2 large power stations and 4 power substations in the city. Also, «Regional Electricity Network» which includes 9 districts is located in Mingachevir. This network serves the electricity consumption of Yevlax, Goychay, Goranboy, Agdash, Barda, Tarter, Ujar, Agsu and Gabala regions. In addition to the Thermal Power Station and HPP, «Azerkabel» and «Izolit» OJSC regional electrotechnical enterprises, «Shushe-lifi», «Techniki-razin» chemical and petrochemical enterprises and «Regenerat» OJSC operate in the city of Mingachevir, machine-building enterprises. «Azyolneftmash» and «Machine repair» JSC, light industrial enterprises «Tokhucu» JSC and «Nur» sewing factory, food industry enterprises «Meat processing and baking» enterprises and other industrial products production areas are located.

Mingachevir State University, Mingachevir Tourism College and Mingachevir Medical College operate in Mingachevir city. Also in Mingachevir there are Technical Humanities Lyceum named after national hero Ruslan Muradov and Mingachevir City Natural Mathematics and Humanities Oriented High School.

MTV-Mingachevir Television and Radio Company and Alvin Channel Television also operate in Mingachevir.

Local and foreign tourists who come to Mingachevir are also interested in ancient historical monuments and examples of material culture in the city. Mingachevir History Museum is one of the places that attract tourists to the city and create an impression about the city. The museum operating in the new building presents about 15,000 exhibits that reflect the ancient history of the area where Mingachevir is located. Based on the building material, construction and composition of the temples, which have a simple and ancient architectural style, historians note that their construction dates back to the 6th century. Currently, there are 27 cultural institutions in Mingachevir, including 16 libraries, 3 museums, art galleries and 9 monuments.

ECONOMIC AND GEOGRAPHICAL BASIS OF ECOLOGICAL IMPROVEMENT OF PRODUCTION IN AZERBAIJAN

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In the concept of modern economic-geographic research, the fundamental analysis factors of globalized economic-ecological processes based on scientific-practical bases have a special political-economic position. As a result of the research, it was determined that the economic-geographic apparatus and sustainable analysis of the typological structure of the system of regional conceptual development and

ecological improvement of production were not sufficiently reflected. In this regard, the requirements of the conceptual direction of the modern era demand the importance of sustainable development forms as well as taking into account traditional researches. In our opinion, only complex and systematic approaches can give great results in the study of forms of sustainable development of the principles of ecological improvement of production.

Ecological improvement of production is the main form of social production and environmental impact metabolism performed against the background of sustainable development [4]. It reflects the forms of production relations in the process of sustainable development of the economic-ecological functional structure in the country. As it can be seen, ecological improvement of production consists of a set of types of human activity and includes a very wide system of economic measures that have a complex impact on the natural environment and is directly related to industry, agriculture, and non-production areas.

Material and method

The material of the research is the territorial structural analysis of the ecological improvement of production in Azerbaijan, the economic-geographic directions of its effective management. For the economic and social development of Azerbaijan, the regions located within the territory are rich in various natural resources. These resources have been rapidly exploited for more than 170 years. The nature of the use of mineral resources, which is the basis of the development of the modern economy of the country, has caused not only the deterioration of the general potential and the regional ecological situation, but also the health of the population. In this regard, during the research, when determining the management of ecological improvement of production within the economic-ecological system of Azerbaijan, their economic-ecological usefulness, production funds, capital investment, technical structures were emphasized in recent years, and the differences and ratios between individual regions were taken into account [9].

Modern and traditional research methods were used during the research. The factors that make up the ecological improvement of production - natural resource potential, production traditions of the population, the initial level of economic development, and complex ways of development of the territory-production structure have been taken into account.

Methodologically, sustainable development of regions has a constructive position in territorial organization of various levels of integral and field structures. During the analysis of the ecological improvement of the production - the realities of the system-structure, mathematical-statistical, geographical information system, monitoring organization, etc. methods, as well as analyzes based on various methodical materials and norms.

Setting the issue and research findings

The purpose of ecological improvement of production is to meet the needs of the population, to further increase the efficiency of public production, and it has a complex impact on the environment, and its main task consists of the following:

- meeting the society's increasing demand for natural resources;

- increasing the productivity of the natural environment, ecological improvement of production;
- constantly increasing the efficiency of using natural resources, creating conditions for their reproduction;
- efficient and economical use of non-renewable resources.

Scientific and technical progress has repeatedly expanded the scale of modern production and significantly complicated its relationship with the environment. It not only requires the active participation of a person in the expansion of the reproduction of natural resources, but also in its more effective use for the interests of society, ecological improvement of production, and creates the necessary conditions for the complex reconstruction of the environment [8]. Two directions of use of natural resources - ecological improvement of production and re-production of natural resources are closely related and replace each other - ecological improvement of production emphasizes quality changes, reproduction-quantity changes.

Ecological productivity restoration of society's production and expansion of reproduction of natural resources cannot be applied outside of this ecological nature, protective means. Beneficial environmental protection elements are already included in combinations based on the ecological resources of production and the reproduction of natural resources. Because, thanks to the ecological benefit of production, it is inseparable from the solution of environmental protection problems. Its results can be researched on maintaining ecological balance under the right conditions. The construction and operation of the Jeyranbatan Reservoir is very important to protect the waters here from industrial, agricultural, domestic and other wastes. It is one of the important elements of the water supply of Baku and Sumgait cities as a reservoir [10].

On the other hand, the nature of reproduction activities is actively influenced by environmental protection issues. The conservation effect is closely intertwined with reproduction. For example, 100 hectares of forest area in the water protection zone preserves 80.3 thousand tons of clean water. Another example is that when one ton of firewood is burned, 1.83 tons of carbon dioxide are absorbed in the process of photosynthesis, 1.23 tons of oxygen are released, and 30 tons of oxygen are released from 1 hectare of pine forest during the year [7].

It was determined that the solution of environmental protection issues can be performed only on the basis of organizing scientifically based monitoring of the environment. It is mainly used to solve issues related to ecological improvement of production and reproduction of natural resources [6]. It is known that monitoring is a developed system of observation and control over the modern state of the environment on various scales. There is an idea of doing it in several stages.

In practice, bioecological-sanitary-hygiene monitoring is widespread. Its main task is to observe the natural environment from the point of view of public health. Next is geosystem, or geocological, that is, natural-economic monitoring. Its content includes changes in the geosystem as a result of anthropogenic influence, as well as observations on the ecological improvement of production in the natural and man-made system [3].

In the future, with the poor development of the economic-ecological system, the reproduction of natural resources will necessarily lead to the non-recovery of the main types of missing resources, and in this regard, high level pollution of the natural environment is unacceptable. It is not only the fact that the total indicators of the wastes thrown into the atmosphere by most of the economic areas and the wastes thrown into the water bodies are still higher, but also the ratio of useful use of natural resources in general is extremely low. It is clear from the research that only 0.5 tons of useful products fall on an average person from 26 tons of different materials produced every year, and the rest returns to nature in the form of waste [6].

According to scientific sources, nature protection and the development of means of production cannot be opposed. In the development of production, means of production require mandatory consideration of environmental principles and factors. Therefore, without improvement of all links of ecological reconstruction of production increased due to the development of oil production and other areas of the economy. This is also brought out of the balance of pollution in a natural way. Radioactive substances are collected in the soil layer and groundwater in the areas where oil product waste is collected, and radon gas is released. When radon is in high concentration, it causes cancer. However, the closed Baku Iodine plant used the Big Shor lake, fed by oil waste water, to buy iodine. These formation waters are rich in radionuclides - radium - 226, thorium - 228 and potassium - 40. Undoubtedly, all these wastes pose an ecological threat to the environment. Besides, radon-rich groundwater is used for treatment in several sanatoriums on the Absheron Peninsula.

It should be noted that environmental protection is carried out in various ways. However, in a number of literature sources, there are methods of environmental protection, such as active, passive, straight and cross, from the concepts used by different researchers (Figure 1.1).

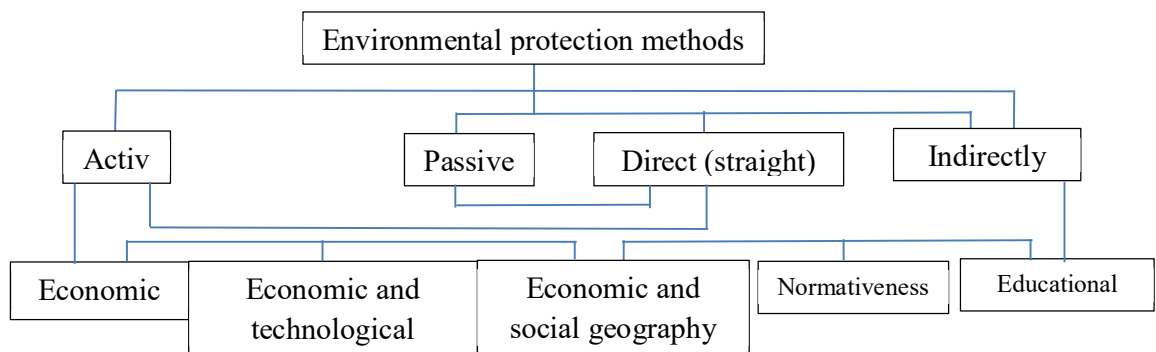


Figure 1. Methods of environmental protection and their interaction

This process is inseparably related to scientific progress, it is its mandatory requirement [11].

One of the main goals of socio-economic development of regions in our country is the ecological improvement of society as a whole, including production. Ecological improvement of production is a multi-stage process of combining the advantages of the market economy, using the most important directions of the achievements of scientific and technical progress. Its main step is the improved open model of

production and the reduction of harmful waste, the creation of specialized treatment facilities due to the improvement of technological methods in order to save natural resources (Figure 1.2).

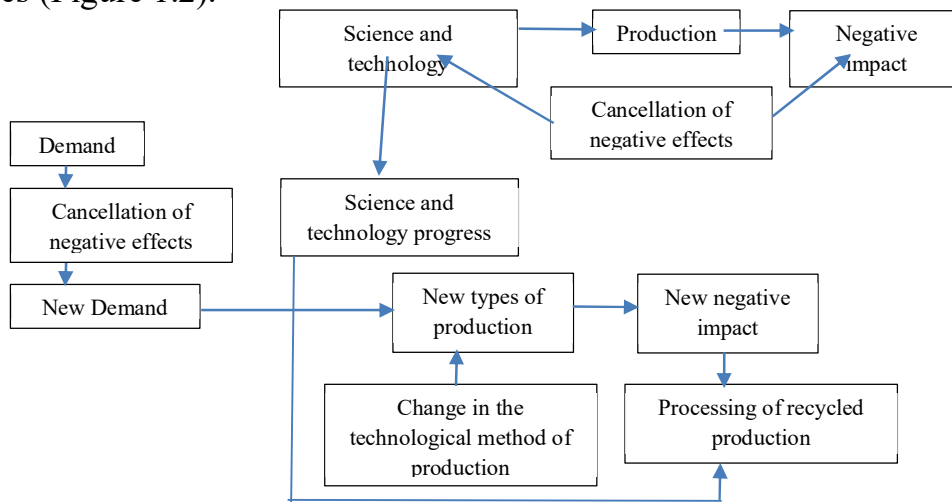


Figure 1.2. The relationship between scientific and technical progress and production

Now, the capacity of water circulation and reuse systems has been increased in a number of production enterprises, waterless water use systems have been developed and developed in enterprises. In fact, chemical enterprises of Sumgait do not waste even 1m³ of waste water, that is, the use of water has a closed cycle. As a result of this, a 35-40 percent reduction in water collection from water bodies was achieved at the same time with a 25-30 percent increase in production in enterprises [5].

In recent years, the specific weight of environmental costs in capital investment and operating costs in industrial production in Azerbaijan has been steadily increasing. It reached 387 million manats in 2019 from 30.8 thousand manats in 1991 [1]. For the efficient use of natural resources and the protection of the natural environment, the funds directed to the fixed capital are also continuously increasing. In 1991, 9.2 thousand manats were spent on these goals, but in 2019, this amount reached 309 million manats. It is typical that, compared to the average costs for all areas of material production, the costs incurred for the protection of the natural environment fall mostly on the share of the energy, chemical, and petrochemical industries of the oil industry, which are developing faster. It should also be taken into account that the overrun in the chemical and oil industry is 2.8 times, and in the electric power industry is 2.3 times [2].

The principles of the methodology of the economic-ecological approach to the territorial organization of the means of production, which affect the socio-economic development of Azerbaijan, are based on the concept of the interaction of society and the natural environment. Economic and environmental problems of the society can be solved only as a result of the correct conduct of the economic policy for the effective management of the processes of ecological improvement of production.

The economic-ecological approach involves the analysis of various events and processes for clarifying the mutual relationships of the objectively existing economic-ecological systems, the set of elements that make them up. A complex approach to

solving economic-ecological problems determines the effectiveness of measures to complete the efficient use of natural resources.

References

1. ENVIRONMENT IN AZERBAIJAN. Official publication. Statistical yearbook (publication). Bakı, 2020, 138 p.
2. Regionların sosial-iqtisadi inkişafı (2014-2018-ci illər). Bakı, 2016, 594 s.
3. Промышленность Азербайджана. Баку: Малое предприятие. №9, 2021, 242 с.
4. Nesrin Özal (2019). Ekoloji Kənd təsərrüfatı və Qlobal Davamlı Məqsədləri. Ankara, Türkiyə
5. Coğrafiyanın müasir problemləri respublika elmi konfransın materialları. 24-25 oktyabr, 2019-cu il / Xəzər dənizinin səviyyəsinin dəyişməsi problemləri. Məmmədov R.M.
6. Иванова С.А. Умный город через призме рейтингов. Тюмень, 2021 г. 192 с.
7. Битюкова В.Р. Эволюция экологической ситуация в регионах Россия 1990-2009 г. Москва: Lambert Academic Publishing. 2017, 135 p.
8. Мамедов М.Х. Функциональное экономика-экологическое структурное развитие как объект устойчивой региональной окружающей среды // Международный журнал прикладных и фундаментальных исследований / Научный журнал №4, част 2. Факто ринц. Москва: Академия естествознания 2016. С. 398-403
9. Мəммədov M.X. Regional konseptual inkişaf: iqtisadi-ekoloji problemlər. Bakı, Elm, 2014, 376 s.
10. Mammadov Malikmammad Khanoglan. Ecological problems of development of the urban settlement in Azerbaijan. European Science Review. Austria, Vienna, 2015, p.12-16
11. Mammadov M.Kh. Ecological problem of development in Azerbaijan/ Turismo: Estvodos Praticas (VERN), Mossoro / RN Caderno Suplementar 04.2020. 1-2 p.

ЛЬВІВСЬКА ТЕРИТОРІАЛЬНА ГРОМАДА: СУСПІЛЬНО-ГЕОГРАФІЧНІ АСПЕКТИ РОЗВИТКУ

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Львівська територіальна громада (ТГ) – міська ТГ України, яка входить до складу Львівського району Львівської області. Її адміністративний центр – обласний центр – м. Львів. Площа громади – 315,6 км², населення (на момент формування, 2020 р.) – 790,5 тис. осіб [7]. Вона утворена 17 липня 2020 р. [8] у руслі реалізації реформи децентралізації [2, 3] на території України.

Львівська ТГ сформована у результаті добровільного об'єднання Львівської міської ради, Винниківської міської ради Личаківського району м. Львова, Брюховицької селищної ради Шевченківського району м. Львова, Рудненської селищної ради Залізничного району м. Львова, Лисиничівської сільської ради Пустомитівського району, Дублянської міської, Малехівської, Грибовицької, Грядівської, Зашківської сільських рад колишнього Жовківського району та Рясне-Руської сільської ради Яворівського району [6].

До складу ТГ входять 20 населених пунктів: три міста – Львів, Винники, Дубляни; два селища – Брюховичі, Рудне; 15 сіл – Великі Грибовичі, Воля-