

GEOECOLOGICAL FACTORS AND THEIR IMPACT ON THE POPULATION

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Abstract:

Geocological factors play a significant role in shaping the distribution, health, and livelihoods of human populations. This article explores the impact of key geocological factors, including climate, terrain, soil quality, and water availability, on population dynamics. It discusses how these factors influence population distribution, health outcomes, and economic activities. Understanding the interactions between geocological factors and human populations is crucial for sustainable development and effective policy-making.

Key words: Population, geocological culture, migration, flood, "Ozone hole"

The population is one of the most important anthropogenic factors in the development of the geographical crust, especially in the formation and development of geocological problems, along with scientific and technical progress and production. Population is the total number of people living in a certain area, of different racial-ethnic, age and gender composition. The population is a consumer of food and resources necessary for the development of industry, agriculture, transport, construction and other areas of economic activity. To date, the main indicators characterizing the population as a geocological factor are: 1) population size, 2) population density, 3) population migration.

Population determines the total needs of the society for basic housing, food, clothing and other types of various resources. At the same time, the population directly creates a significant anthropogenic burden on both natural and socio-productive systems, resulting in geocological problems.

Pollution of the natural environment can occur due to natural factors and human activities. The main sources of natural pollution occur as a result of natural processes such as volcanic eruptions, earthquakes, floods, fires, landslides, floods, and strong winds. This type of pollution is directly related to natural processes and does not involve human intervention.

All pollution associated with human economic activity is sometimes called anthropogenic pollution. Anthropogenic pollution consists of such groups as natural components: water, air and soil pollution, as well as geosystem pollution. According to the duration of anthropogenic pollution: temporary and permanent; divided into global, regional and local groups according to the scale of distribution.

As a result of human work, various types of waste are released into the environment. In particular, according to the accounting books of researchers, in the late 1970s, as a result of human economic activity, 23-40 bln. If waste was created, this indicator will reach 105 billion by this time. It was reported that it reached t. Part of the waste accumulates in the air, the other in the water, soil, flora and fauna. The results of the research show that the amount of waste released by the population on the earth is increasing more and more and causing real geocological problems. Among these geo-ecological problems, we can point out the following as examples of the major environmental problems that seriously threaten humanity today: "Greenhouse effect", "Ozone hole", and "Desertification" processes.

The lower layer of the atmosphere, the troposphere, has an average thickness of 10-12 km and contains 80% of the air mass. The average temperature of the earth's atmosphere is determined by the amount of solar radiation, the albedo of the earth, that is, the amount of radiation returned from the earth's surface. At the same time, the "greenhouse" effect is determined by the amount or quantity of various substances present in the troposphere. According to the data, the average temperature of the air in the lower part of the atmosphere is 15oC. Without the greenhouse effect, the temperature could be -30o. According to American expert R. Pomeran, the average temperature on the earth is increasing by 0.2-0.5o every 10-15 years. If the amount of Freon gases released into the atmosphere remains

unchanged, it may cause serious geo-ecological problems on earth.

Another global geocological problem is the expansion of desert areas. The main reason for the sharp expansion of the desert area in the dry climate region since the 1960s is the continuous increase in the number of people in developing countries, as a result of which the unreasonable use of agricultural land. According to YNEP data, 95% of arid and low-rainfall climate regions are on the verge of desertification.

Types of environmental pollution. As we mentioned above, pollution of the natural environment mainly occurs as a result of human economic activity. All anthropogenic pollution is divided into physical, chemical, physicochemical, biological and mechanical types.

Physical pollution is related to changes in the natural parameters of the environment, and the following types are distinguished: heat, light, noise, electromagnetic, radiation, etc. Thermal pollution causes the air temperature to rise. This is due to the release of hot water or smoky gas flow into the environment. As a result of pouring hot water from industrial enterprises into water basins, it leads to a change in the type of organism and the formation of a group of algae. Industrial enterprises, transport, construction, drilling, quarry sites generate noise at different levels. This has a strong effect on human health, especially on the nerves.

Chemical pollution is related to changes in the chemical properties of the natural environment, which is characterized by the introduction of various chemical substances into the area and the excess of the average Clark. For example, the accumulation of heavy metals, pesticides, detergents, organic substances affects the pollution of the environment. Heavy metal pollution is caused by the accumulation of lead, mercury, cadmium, etc. in metal parts, corrosion, internal combustion engine emissions, oil burning, accidents.

Biological pollution is explained by the increase in the area of biomaterials that are harmful to the human body. The introduction of microorganisms into the used

geosystem is called bacteriological contamination. Biological pollution of the environment consists of biogenic and microbiological groups.

To sum up, as a result of the increase in population, huge geocological problems are arising in the regions. A large amount of heavy metals released into the environment leads to atmospheric air pollution.

List of used literature:

1. Baratov P. Nature Protection. Tashkent.: Teacher, 1991.
2. Rafikov A. Geocological Problems. Tashkent.: Teacher, 1997.
3. Tilovov T. Actual Problems of Ecology. Tashkent.: Gafur Gulam, 2003.
4. Tilley E., Ulrich L., Lüthi C., Raymond Ph., Zurbrügg C., 2014. Compendium of Sanitation Systems and Technologies – (2nd Revised Edition). Swiss Federal Institute of Aquatic Science and Technology (Eawag), Duebendorf, Switzerland. p. 175. ISBN 978-3-906484-57-0. Archived from the original on April 8, 2016.
5. World Health Organization, 2006. Guidelines for the safe use of wastewater, excreta, and greywater. World Health Organization. R. 31. ISBN