## ECOLOGICAL-GEOGRAPHICAL PROBLEMS IN THE RESIDENTIAL AREAS OF KASHKADARYA REGION

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Abstract: Kashkadarya region, located in the southwestern part of Uzbekistan, is known not only for its natural resources, but also for its ecological and geographical problems in rural and urban areas. This region faces such problems as the deterioration of the ecological situation, pollution of soil and water resources, poor air quality, and climate change. In rural areas, flora and fauna are weakening, and in urban areas, industrial waste, water supply, and transport problems are increasing. The article analyzes the ecological and geographical problems in rural and urban areas of Kashkadarya region, reviews the current situation, and makes recommendations for solving these problems.

**Keywords:** Kashkadarya region, rural settlements, urban areas, ecological and geographical problems, water resources, soil pollution, air quality, industrial waste, climate change, transport problems, ecology, social problems.

Introduction: Kashkadarya region occupies the southwestern part of Uzbekistan and is an important center for agriculture and industry. At the same time, there are a number of ecological and geographical problems in the region. In rural areas, problems such as soil erosion, water supply and crop quality decline are rampant. In urban areas, industrial activity, the intensification of the transport system and waste management problems are leading to an increase in environmental problems. This article recommends analyzing the ecological and geographical problems in rural and urban areas and taking the necessary measures to eliminate them.

Soil pollution is widespread in rural areas of Kashkadarya region. The main causes of this problem are the excessive use of fertilizers and pesticides, as well as industrial waste and long-term damage to the soil by cultivated crops. This reduces crop yields and worsens soil fertility. Improper use of water resources, pollution of

water bodies, especially drinking water and irrigation sources, negatively affect the quality of water.

Air pollution in rural areas is mainly caused by emissions from high-intensity agricultural activities and immature industrial facilities. This especially affects the health of the rural population. However, the overall deterioration of air quality significantly increases the gap between urban and rural areas.

As a result of industrial development in urban areas, a large number of polluting emissions are emitted. In particular, the chemical industry, the production of building materials and other industries are causing air, soil and water pollution. These emissions pose a threat not only to nature, but also to the health of the population.

The increase in the number of vehicles in urban areas is increasing air pollution. The gases emitted by many cars and heavy goods vehicles worsen air quality. Overloading of the transport network and insufficient development of road infrastructure are also important problems.

There are problems with clean water supply in urban areas. Along with the growth of the population, the inadequacy of drinking water and wastewater treatment facilities leads to improper use of water and its pollution. This negatively affects the health of the population.

Ecological and geographical problems have a serious impact not only on nature, but also on the health of the population. Water pollution, toxic gases in the air, soil degradation lead to many diseases, including respiratory diseases, allergies, and cardiovascular diseases. The risk is especially high for vulnerable groups such as children, the elderly, and pregnant women. Also, high levels of air pollution affect not only physical but also mental health.

Environmental and geographical problems in the Kashkadarya region, especially in rural areas, are leading to a slowdown in economic development. Pollution of soil and water resources reduces the production of agricultural products. This, in turn, leads to a decrease in the income of the population,

aggravation of economic problems, and an increase in migration processes from rural areas to cities or other regions.

Conclusion: Ecological and geographical problems in rural and urban areas of Kashkadarya region pose a serious threat. Soil, water and air pollution, climate change and industrial waste are affecting not only natural resources, but also the health of the population and economic stability. Systematic measures are needed in all sectors to ensure ecological sustainability in this region.

## Proposals and recommendations

- ✓ Environmental monitoring and efficient use of resources
- ✓ It is necessary to develop an environmental monitoring system and strengthen environmental monitoring mechanisms, constantly monitor the state of soil, water and air. It is necessary to introduce advanced technologies for efficient use of water and reduction of water pollution.
- ✓ Reduction of pollutants emitted from industry and transport. Implementation of modern technologies for recycling industrial waste and preventing environmental damage. Development of the transport system, reduction of vehicle emissions and introduction of green technologies.
  - ✓ Combating climate change and expanding green areas;
- ✓ Taking environmental protection measures to restore forests, increase green areas and combat climate change.
- ✓ Public awareness and environmental education. Informing the population about environmental problems, reducing environmental risks and protecting the environment.

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