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ENVIRONMENTAL PROBLEMS IN UZBEKISTAN

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Abstract

Ensuring the ecological purity of water, protecting water resources from pollution, conserving aquatic wildlife, using water resources rationally, artificial irrigation of land, recognizing water as the common property of all people, and other urgent tasks are responsibilities that humanity must address.

Keywords

ecology, industry, clean water, clean soil, human factor, acid rain, greenhouse effect, nature, ecological culture.

Today's current food systems need profound changes, as it is known that this system cannot meet the basic food needs of a certain part of the world's population, as a result of which humanity puts an unusual burden on the surrounding nature and environment. With the world population expected to reach 10 billion by 2050, the demand for food is expected to increase by 50% compared to 2013, which will also require a change in the nutrition system of the population, especially in low and middle-income countries. Unless the food system or food production processes in the world's kitchens are radically transformed, future food demand will increase greenhouse gas emissions, further increases the demand for rational use of land and water and leads to cross-border conflicts, social unrest, and intercontinental migration.

Due to the economic crises that have occurred in the world since the beginning of the pandemic and some social unrest today, the dynamics of the number of undernourished and semi-starved people continues to grow, acording to FAO, in 2018, there were more than 820 million people suffering from malnutrition, and in 2022, the number of undernourished people will reach 2 billion. If we look at the demographic data in Uzbekistan, we can see that the population is growing every year. Therefore, providing food for the population, which is increasing every year, is always a priority for our government. Secondly, the life expectancy of residents in the Republic is increasing, and with this we are getting closer to meeting world standards.

If foods contain nitrates, pesticides, acids, oxides of heavy metals, radioactive and carcinogenic substances, they are considered unfit for consumption. Fruits and vegetables grown near railways and major highways, in particular, have a high concentration of hydrocarbons, nitrates, and heavy metals, such as mercury, cadmium, and lead. However, in recent years, we have seen a significant increase in the number of railways and highways we are poisoning ourselves and the people around us by planting crops or trees in nearby fields, harvesting and consuming products from them as a result of urbanization, trees are cut down, which reduces the oxygen-producing sources is decreasing, desertification and soil salinization are rapidly rendering large areas unusable around the world. Uzbekistan is not immune to this

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problem, and from year to year, many areas in our country are becoming unusable for growing agricultural crops.

The recent sharp increase in the number of industrial enterprises and machinery in our republic indicates the need to pay great attention to industrial ecology. Industrial ecology cannot be imagined without economic diversions and financial investments of nature users. In order to protect Mother Nature from the effects of anthropogenic and man-made factors, it is necessary to follow the working program developed by the State. If industrial ecology is neglected in large cities, it will cause great harm to people living in nature and to the atmospheric air pool, soil, and drinking water.

Ecology has now gone beyond the scope of a specific region or republic and has become a universal problem, as we can see in the following problems. The "Ozone Hole" that is troubling people all over the world is one of the most global problems in nature conservation. The ozone layer is 3-5 mm thick, located 12-50 km above the Earth, and protects people from ultraviolet rays from the sun. If the rays from the sun pass directly, they will kill all living organisms. The ozone layer used to be a thin shield for man, but later, as a result of the development of man-made factors by intelligent man, a hole appeared in the thin shield. If the rays from the sun pass directly, they will kill all living organisms.

Anthropogenic influences are releasing large amounts of fluorine, chlorine gases, freons, and nitrogen oxides (NO2) into the atmosphere. Today, the ozone hole has formed in a smaller area in Antarctica and in the Arctic. The ozone layer over large cities is also thinning day by day. Another major problem is acid rain, which is caused by human activities that release ozone, carbon dioxide, sulfur dioxide, and other gases from the upper atmosphere back to Earth as precipitation. Wherever acid rain falls, it enriches the soil with toxic substances, disrupts the activity of microorganisms in the soil, and plants that grow in this soil take some of these toxic products with them, thus entering the human body and causing serious diseases. Also, after animals consume these plants, their products become unfit for consumption or pass from non-ecologically clean products to the human body.

The third problem -is acid rain, which is common in industrialized cities. Acid rain causes respiratory and skin diseases in people. Wherever ozone, carbon, and sulfur dioxide have entered the atmosphere, human health deteriorates in such rainy weather.

The fourth problem -is the "greenhouse effect," which refers to the thick layer of gases containing carbon dioxide rising up and enveloping the earth, blocking sunlight from reaching outer space, resulting in warming of the air on earth and leading to climate change. According to the latest data, the Arctic and Antarctic ice sheets will melt in the near future (50-60 years). The biggest environmental tragedy in Uzbekistan is the drying up of the Aral Sea. The volume of the Aral Sea has decreased from 67.5 sq. km to 17.6 sq. km. Once home to hundreds of large ships and canneries, its current state is extremely deplorable. Salts from the Aral Sea have increased the salinity level in the soils of the Khorezm and Karakalpakstan republics by 75%.

In these areas, the level of drinking water pollution is high, and the yield of all agricultural crops has decreased due to the salinity of the river water. The content of salt in the agricultural products grown is high. In Khorezm and Karakalpakstan, childhood diseases are more common than in other regions. Volatile compounds (methane, benzene, chlorine, fluorine, carbons - 15%) are considered. Particulate matter (dust, soot particles, asbestos, lead salts, arsenic, sulfuric acid, oil, dioxins) affects the human body in an amount of 15%. The air we breathe cannot be considered clean due to the presence of hydrogen peroxide and radioactive substances in the atmosphere. The high temperatures from burning various types of waste

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produce the most harmful or super-ecotoxin gases, or what can we say about the sand and dust storm that took place in Tashkent on November 2-6, 2021. No one remembers that such an event happened. The dust made it impossible to see more than 100 meters away. How many people have shortness of breath, allergies and rheumatism? If the dust storms happen again, it will lead to a number of serious dangers. Because we do not understand nature and do not think about preserving it at all. But nature reminds us of its existence, that it is always fighting to preserve itself. In fact, nature is a living organism, every living organism tries to preserve itself. Nature has its own organs - water, air, soil, plants and animals, and we are strangers to nature.

In fact, nature is a living organism, every living organism tries to preserve itself. Nature has its own organs - water, air, soil, plants and animals, and we are strangers to nature. We humans, for our own pleasure and selfishness, have killed the most beautiful animals in nature, cut down the most rare trees, polluted the waters, poisoned the soil, and released toxic gases into the atmosphere. Thanks to countless vehicles, we have released harmful gases into the atmosphere and caused the temperature to rise around the world. According to the World Health Organization, the impact of environmental pollutants on the human body can be described as follows: accumulation of pollutants in organs and tissues changes in the body's vital functions physiological signs of disease illness death. Sulfur oxide also poisons the respiratory tract. Carbon monoxide is the most dangerous of these toxic substances, causing death in humans even in very small quantities in the air.

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