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Ecological Problems in Ukraine

Fifty years ago hardly anybody was concerned about environmental problems. Industrial and economic development, progress and profit were more important. Large cities with thousands of smoky industrial enterprises appear all over the world today.

The atmosphere adjudged more than 6 million tons of pollutants and carbon dioxide every year in Ukraine. Traditionally, major pollutants are industrial enterprises. However, an increasing number of cars on the roads entailed an increase in harmful emissions. Over the past few years, the number of exhaust gas into the air on the territory of the big cities has grown by 50–70%.

71% of the land resources in Ukraine are used for agro-landscape business. But because of the overuse and misuse of the land the fertility falls every year. Soil ecosystem is destroyed mainly due to the intensive development of erosion in recent years and it has undergone more than 35% of the farmland in Ukraine. The active use of fertilizers has led to the increase in the area of acid soils (2.4 million hectares over the past 15 years). The thickness of the humus layer affects the crop. In addition, almost 40% of the total land resources of Ukraine are contaminated. The critical values of the level of fertility can be achieved in 20–30 years and in some regions even earlier.

All surface waters of Ukraine belong to the Black Sea and Sea of Azov basins. The high population density, heavy industrial development, relatively low freshwater endowment of those basins, and the low governmental priority placed upon environmental protection until very recently, have given rise to chronic and serious levels of water pollution throughout Ukraine.

Acid rain is an acidic precipitation thought to be caused principally by the release into the atmosphere of sulphur dioxide and oxides of nitrogen. It also comes

out of the atmosphere as dry particles and is absorbed directly by lakes, plants. Acidic gases can travel over 500 km a day. Acid rain is linked with damage to and the death of the forests and lake organisms. It also results in damage to buildings and statues.

The human organism consists of water to seventy percent, so it plays one of the most important roles in the life of any organism. However, 80% of Ukrainian population uses water from surface sources, and environmental conditions of these waters gets worse every year. A lack of the wastewater treatment, bad treatment of industrial waters causes that today almost all water bodies of the country are close to the 3rd class of pollution. As a result – eighty percent of water samples show that the quality does not meet the state standards. If we talk about the purest water in Ukraine, it can be enjoyed in Poltava region, where almost all water is taken from the underground sources.

One sixth part of Ukrainian territory is covered with forests. But at the same time the exports from Ukraine is 2.5 times higher than the imports. Forestry consumption leads to the fact that forests are not restored and they lose biological stability (forest area affected by pests and diseases is constantly increasing). Irrational deforestation has increased frequency and intensity of floods in the western regions of Ukraine, especially in the Carpathian Mountains.

A significant part of the gross domestic product connected with extraction and processing of mineral resources (41–43%) is concentrated in the mining regions of Donbass, Kryvbass, and Carpathian regions. Meanwhile, the ecology of these regions suffer not so much from intensive production, but from improper closing of unprofitable and depleted mines and quarries. Ignoring the scientific approaches to this process has led to the activation of floods in the towns and villages, pollution of surface and underground water intake, surface subsidence with harmful elements: sulphur, nitrate, cobalt, arsenic.

One of the most serious environmental problems in Ukraine today is the problem of recovery and recycling of various wastes. The country has about 800 official landfills, the total amount of debris of which exceeded 35 billion tons. Every year, this figure rises by seven-eight thousand tons. The total area of all polygons

with waste is already more than 150 hectares (4% of the country). Substances that are released as a result of chemical reactions are able to turn the territory of Ukraine in a continuous zone of ecological disaster. According to the Ministry of Ecology and Natural Resources of Ukraine, every year average Ukrainian citizen throws out in the trash about 250 kilograms of waste.

The total activity of radio nuclides, moved beyond the Chernobyl accident, April 26, 1986, and in the following days after the accident, exceeded 300 million curies. The accident led to the radioactive contamination of more than 145 thousand square kilometres of the territory of Ukraine, Belarus and Russia. Ukrainian scientists are unanimous that the consequences of the Chernobyl accident will be a very long time to remind. At the same time, radiation situation of the territories around the station has improved significantly for the last 25 years. It was facilitated by natural processes, and conducting decontamination and absence of the population.

An international environmental research centre has been set up on Lake Baikal. The international organization Greenpeace is also doing much to preserve the environment. But these are only the initial steps and they must be carried onward to protect nature, to save the life on the planet not only for the sake of the present but also for the future generations. We must take care of our nature. That's why we must not drop litter in street, we must improve traffic transport, use bicycles, create more parks.

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