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SCIENCE OF POST-INDUSTRIAL SOCIETY: GLOBALIZATION AND TRANSFORMATION PROCESSES

held on May 12th, 2023 by

NGO European Scientific Platform (Vinnytsia, Ukraine)

LLC International Centre Corporate Management (Vienna, Austria)



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GRAIL OF SCIENCE

№ **27**  May, 2023
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МЕТОДОЛОГІЧНІ І КРИТЕРІАЛЬНІ ОСНОВИ ДОСЛІДЖЕННЯ ФУНКЦІОНУВАННЯ ІНЖЕНЕРНИХ КОМПЛЕКСІВ ПРИ СТВОРЕННІ ЦІЛЬОВИХ ОБ'ЄКТІВ БУДІНДУСТРІЇ Горбатюк Є.В., Тереньєв О.О., Макарчук О.В.	258
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DAMAGE CAUSED TO THE ECOSYSTEM OF UKRAINE ARMED AGGRESSION OF RUSSIA

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Summary: *The article discovers the influence of Russian armed aggression on the ecosystem of Ukraine. Such problems as Deforestation, air and water pollution, mass migration and destruction of housing are caused by the war. Authors tell to the readers different methods ways of the restoration of the ecosystem of Ukraine in future.*

Keywords: *ecosystem, armed aggression of Russia, damage to the ecosystem, ecosystem of Ukraine*

The research analyses the impact of Russia's armed aggression on Ukraine's ecosystem. The main factors of deforestation, air and water pollution, loss of biodiversity and its consequences for public health, agriculture, economy and mass migration are discussed. It also considers measures that can be taken to reduce damage and restore Ukraine's ecosystem. The findings of the study may be useful for those involved in environmental protection and those who wish to contribute to the restoration of natural environments in Ukraine.

Ukraine is a country with a great historical heritage and natural wealth. However, in 2014, it was forced to experience one of the biggest disasters in the history of its independence – the aggression of Russia. In the course of which, in February-March 2014, the Russian armed invasion of Crimea took place with the subsequent occupation of the peninsula by Russia on February 20, 2014. The war in eastern Ukraine, which began in April 2014 with the creation of the so-called DPR and LPR, lasted until the beginning of a large-scale invasion [1]. On February 24, 2022, the terrorist country launched a full-scale war across the entire territory of our Motherland, which led to the temporary occupation of parts of the Kharkiv, Zaporizhzhia, Kherson, Mykolaiv, Donetsk, and Luhansk regions. This war caused serious damage not only to the economy and society, but also to the natural environment of the country. The overall damage to the natural environment has become catastrophic and may have significant consequences in the future.

All of the above shows that the damage caused to Ukraine by the armed aggression of its neighbors is a serious problem for the country's ecological stability. In particular, as a result of hostilities in the East, a significant number of ecosystems were damaged, including forests and agricultural lands [2]. In addition, as a result of the Russian invasion of Crimea, the environment on the peninsula has deteriorated, including pollution of air, water resources and marine ecosystems. There was also a loss of a significant number of various species of animals and plants. The risk of environmental disasters, such as fires and environmental pollution, has increased, which can affect people's health and the country's economy. Therefore, it is necessary to monitor the state of the environment and take measures to prevent and minimize the possible consequences of a negative impact on the ecosystem of Ukraine.

Air pollution is one of the biggest damages caused to the ecosystem of Ukraine. The war led to the emergence of a large number of ammunition and explosives, which played a large role in air pollution. Military activities included explosions, demolitions, and fires that released hazardous substances into the air and polluted it. Many cities and villages in the east of Ukraine are experiencing the problem of dust and smoke, which has caused serious problems with breathing and other diseases. Air pollution also affects the flora and fauna of the region and leads to the destruction of the natural biosphere and threats to the species composition.

Destruction of forests has serious consequences for ecology, as they are a source of oxygen and provide life for many species of animals and plants. According to ecologists, more than 70% of forests in Donbas and Crimea were destroyed or seriously damaged during the war [3]. The forest cover of Ukraine is one of the most important components of its natural environment, providing the necessary resources for the life of animals and plants, and is the main source of oxygen for local residents. The loss of forests also leads to a decrease in the amount of oxygen, which affects human health, which can lead to other serious consequences for nature [4].

In addition, the war also resulted in the loss of natural resources, in particular oil and gas, which are the main source of energy for Ukraine. This caused a serious energy crisis and forced the Ukrainian authorities to look for alternative sources of energy.

In addition to the destruction of forests, the war also caused other serious consequences. For example, it caused soil and water pollution. In many areas of Ukraine, the war has destroyed or damaged infrastructure, including water networks and sewage systems. This led to a decrease in the amount of clean water, soil pollution and aggravation of environmental problems, which has a negative impact on the development of flora and fauna, and also endangers people's health. In addition to the aforementioned damages, war also has serious consequences for people's health. A decrease in air quality can cause diseases of the lungs and cardiovascular system, and water pollution can cause infectious diseases and other health problems.

In addition, the war also led to mass migration of the population due to the destruction of housing, which has a negative impact on the distribution of natural resources. This gave rise to changes in the landscape and changes in biodiversity in many areas of Ukraine [5].

It is important to note that the environmental consequences of war are not limited to those areas where hostilities are actively taking place. Since Russia's armed aggression against Ukraine has also caused aggravation of environmental problems in border regions, such as Transcarpathia and Chernivtsi region. Pollution of rivers and a decrease in the amount of groundwater were recorded there. Pollution of water bodies as a result of Russian aggression can also affect neighboring countries [1].

Unfortunately, the environmental effects of the war will be felt long after its end. For example, the destruction of forests can cause soil erosion, which will contribute to the spread of desert in these areas. Water pollution can lead to the emergence of diseases and epidemics, as well as to the depletion of natural resources.

Conclusions. Therefore, it can be concluded that Russia's armed aggression against Ukraine has worsened the quality of life of the local population and caused enormous damage to the country. Deforestation, air and water pollution, mass migration and destruction of housing are just some of the causes of war that are already felt today, and the consequences may last for many years.

To restore the ecosystem and ensure the stable development of Ukraine, significant efforts and investments are needed, as well as effective diplomatic and

political activity in the international arena. Only then, Ukraine will be able to restore its natural environment and ensure the future for future generations.

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