



**SDG LENS**

Monitoring Sustainable Development  
in Eastern Europe & South Caucasus



# SPOTLIGHT REPORT ON THE IMPLEMENTATION OF SDG 15: LIFE ON LAND

IN UKRAINE

**15** LIFE  
ON LAND



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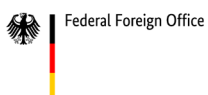
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## SUMMARY

SDG 15 'Life on Land' addresses various issues related to protecting terrestrial wildlife, including natural ecosystems like forests and soils that are vital to humans. Unfortunately, achieving this SDG in Ukraine has been negatively assessed by both the public and the state, with the Russian-Ukrainian war playing a significant role. Due to the influence of the war, Ukraine has had to change its priorities in achieving the SDGs.

Almost half of the area of protected natural territories and a third of agricultural lands have been affected by the hostilities, and their restoration requires time, as well as well-planned conservation and renaturalization measures. However, there is currently no state body in Ukraine responsible for managing conservation areas. Additionally, despite long-term European integration processes, European environmental directives have not been implemented in Ukraine, which significantly complicates effective work on SDG 15<sup>1</sup>.

## THE IMPACT OF WAR

The full-scale phase of the Russian-Ukrainian war, which began on February 24, 2022, has significantly worsened the prospects for achieving SDG 15. Russian troops simultaneously invaded from the north, east, and south of Ukraine, targeting a border strip that contains numerous protected areas (PAs) and crucial ecosystems, including endemic ones.

Ukraine is the only country in Europe that has steppe ecosystems on its territory. The ecosystems of the south and east of Ukraine are full of endemic species and their entire population occupies only 5-15 hectares. Unfortunately, the vast majority of centers of endemism and unique ecosystems have either already suffered from military operations or are currently located in territories occupied by Russian troops.

Overall, more than 900 PAs, comprising about 48% of the area of all PAs in Ukraine, have been affected by the war, including 5 biosphere reserves, 11 nature reserves, and 18 national parks. As of now, the Ukrainian Armed Forces have liberated over half of the territories that were occupied after February 24, 2022. However, the majority of PAs affected by the war still remain in the occupied part of the country.

Forest fires and the aftermath of thousands of shell and rocket explosions have resulted in the destruction of vegetation and the chemical contamination of soil within PAs. As a result of military actions, the territory of protected terrestrial ecosystems has physically shrunk, and the formal indicators for territories with protected status in Ukraine do not accurately reflect the actual state of the protection of terrestrial ecosystems.

# A BRIEF ASSESSMENT AND KEY STATISTICS

At the national level, Ukraine has set four tasks from the 2030 Agenda for Sustainable Development as priorities. Two of them are in the field of ecosystem protection (15.1 and 15.4); one in the field of forest ecosystems (15.2) and the other in the rehabilitation of degraded soils (15.3).

**Ukraine has managed to achieve little progress on only two tasks within the framework of SDG 15:**

- 15.1 - Conserve and restore terrestrial and freshwater ecosystems;
- 15.4 - Ensure conservation of mountain ecosystems.

In order to objectively assess the degree of fulfillment of these SDGs by Ukraine, several indicators have been developed. According to official statistics, out of 13 SDG indicators, some progress has only been made on the 8th one.

## Progress in the creation of nature reserves during 2015-2022.

Actual area, million ha	The percentage of achievement of the benchmarks for three years, %*			Year
	2020	2025	2030	
3,803	60,6	50,4	42	2015
3,986	63,5	52,8	44	2016
3,986	63,5	52,8	44	2017
3,992	63,6	52,9	44,1	2018
4,085	65,1	54,1	45,1	2019
4,105	65,4	54,4	45,3	2020
4,117	65,6	54,6	45,5	2021
4,172	66,5	55,3	46,1	2022

\* target for 2020 - 6,277 thousand ha, for 2025 - 7,545.40 thousand ha, for 2030- 9,053.20 thousand ha

**Among the biggest SDG 15 achievements between 2015 and 2021, the following can be mentioned:**

- **National level.** An increase in the area of nature conservation areas by 314.47 thousand hectares, or by 0.52% of the country's area<sup>2</sup>;
- **European level.** Creation of nature conservation areas of European significance (Emerald Network) with an area of 8,098.2 thousand hectares, or 13.4% of the state area<sup>3</sup>;

- **International level.** Creation of the cross-border Ukrainian-Polish [Roztochchia](#) Biosphere Reserve, and the inclusion of 9 new sites in the UNESCO World Heritage Site 'Ancient and Primeval Beech Forests of the Carpathians and Other Regions of Europe'<sup>4</sup>.

While the creation of nature conservation areas is a significant achievement, it is important to note that this is just the first step in organizing effective nature-oriented management, and does not guarantee the preservation of ecosystems.

## ASSESSMENT OF PROGRESS AND CHALLENGES UNTIL 2030

### CONSERVATION

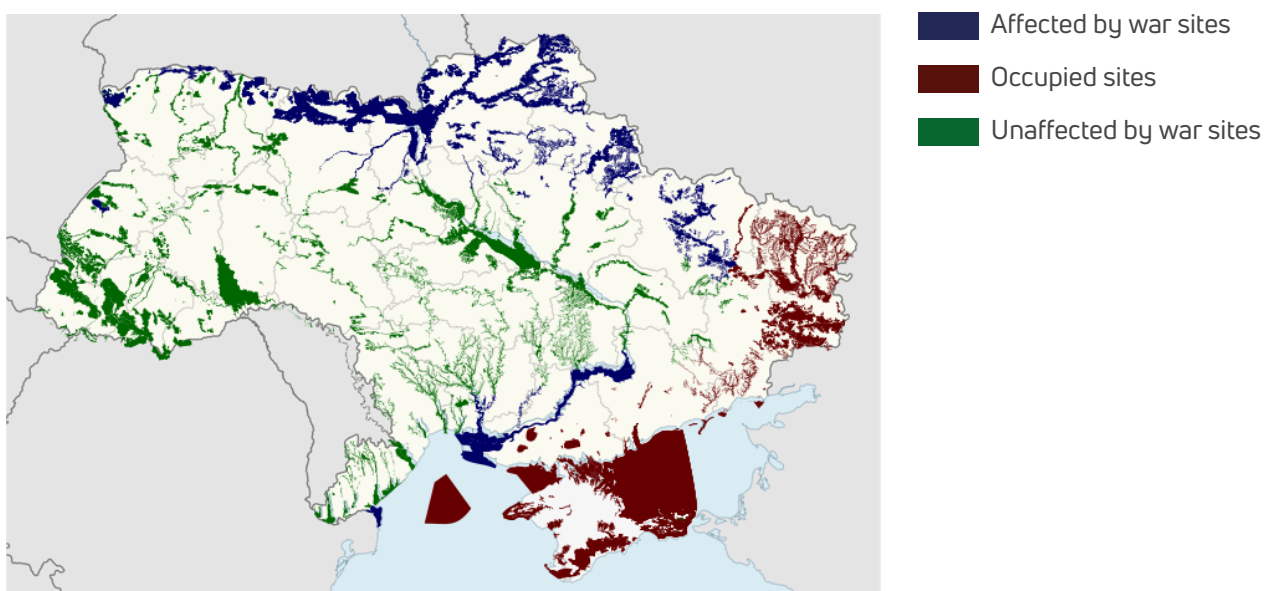
Among the tasks for the preservation and protection of terrestrial ecosystems, Ukraine has prioritized the formation of an eco-network (interconnected natural areas of importance for biodiversity), increasing the total area of PAs in the country and particularly in mountain regions.

However, the Ukrainian eco-network cannot be considered an effective tool for nature protection. Its creation may give the state reasons to report success in its performance of the indicators, but the benchmark for 2030 – 41% of the area of the eco-network in the total territory of the country – is unrealistic due to the lack of natural ecosystems in Ukraine. Additionally, the quality of existing eco-network objects is questionable as they lack defined boundaries, restrictions on use, and responsibility for violations.

It is recommended that Ukraine redirect its priority from the eco-network to the alternative Emerald Network (EN) by 2030. The process of its formation was accelerated by Ukraine's European integration and the active participation of public experts.

Between 2016 and 2019, Ukrainian scientists developed 106 territories of the EN (1.6 million hectares) adopted by the Secretariat of the Bern Convention. An additional 148 territories (2.7 million hectares) were developed in 2020 and currently have candidate site status.

**Map of the emerald sites that are under occupation or were occupied connected with the Russian-Ukrainian war.**



The law 'On the territories of the Emerald Network' was developed in 2020, providing for special measures to reduce the degradation of natural habitats. However, its adoption is being obstructed by certain groups of deputies in the Verkhovna Rada of Ukraine acting in the interests of oil-producing companies. To preserve the existing Emerald Network objects, it is necessary to provide an institutional and regulatory framework and ensure continuous monitoring of their territories.

Unfortunately, Ukraine's activities in priority areas of the economy often contradict the achievements of SDG 15. For example, the promotion of transferring land to private ownership for the cultivation of agricultural products conflicts with the creation of PAs in these areas, such as floodplain meadows and steppe areas (pastures). The transfer of these territories into private ownership results in overplowing, as the owners seek to gain economic benefits as soon as possible.

There are frequent cases of illegal plowing within existing PAs for the cultivation of agricultural products, industrial crops or mining. Effective control over illegal actions is necessary.

As of 2023, the actual area of PAs is smaller than the nominal area.

### Indicators that enhance the progress of Goal 15

Indicator number	Indicators	% of the 2020 benchmark
15.1.1. / 15.1.2.	Area of territories and objects of the natural reserve fund, thousands of hectares and Share of this area fund in the total area of the country, %	12,7%
15.1.3.	Share of the area of the national environmental network in the total area of the country, %	1,19%
15.3.4.	Area of land used for organic production, thousands of hectares	13,1%
15.4.1.	Area of the nature reserve fund in mountainous regions, thousands of hectares	44%
15.4.2.	Share of the area of the nature reserve fund in mountainous regions in the total area of the country, %	44%

Large areas of national natural parks, regional landscape parks, and biosphere reserves are set aside for economic zones, and some nature conservation zones exist only on paper. Although they have a protected status, in reality they are damaged by hostilities or plowed, and do not play a role in protecting biodiversity.

In some regions, the rate of destruction of PAs exceeds the rate of the creation of new ones. For example, in 2020-2022, 1,215 hectares of new PAs were created in the Donetsk region, but as a result of the war in 2022, between 12,000 hectares and 33,000 hectares of PAs were burned. In the Kyiv region, about 300 hectares were created, and 74,000 hectares were burned. In some places, the losses are 300 times higher than the protective measures.

Unfortunately, most of the problems listed are difficult to prevent because Ukraine has not had a specialized state body responsible for objects of the Nature Reserve Fund (NRF) since 2013.

### The main environment protection challenges for Ukraine up to 2030 are:

- the creation of an institutional and regulatory framework for the preservation of the objects of the Emerald Network (adopting the law 'On the territories of the Emerald Network');
- compensating for the territory of nature conservation areas affected by military actions;
- compensating for the territory of plowed nature conservation areas and those on which unsustainable agricultural practices have taken place;
- the creation of a specialized state body that would take care of nature conservation areas and restoration sites.

## ECOSYSTEM MANAGEMENT

Sustainable forest management has been identified as a priority for Ukraine among the tasks connected with the management of nature conservation areas. The indicators for this task are the percentage of forest coverage of the country and the stock of wood in the forests. However, these indicators cannot be measured at this stage, and therefore cannot be achieved.

The reason for this is the lack of a proper inventory of forests. Although the national forest inventory was launched in 2021, it is proceeding very slowly. It is still difficult to calculate even the actual area of forests since a huge number of them – at least 300,000 hectares – are [not legally considered](#) forests<sup>5</sup>. These include self-seeded forests and those that were mistakenly set aside as reserve lands. Additionally, there is a huge amount of unreported logging and fires. Therefore, in contrast to the formal area of territories with the legal 'forest' status, the real area of forest plantations in Ukraine is decreasing, despite measures taken for reforestation.

In Ukraine, there are national programs aimed at increasing the area of forests, such as the ['Green Country'](#) program<sup>6</sup>. However, in order to achieve the goal of planting a billion trees in three years, people often resort to seeding steppes and areas on slopes that are not suitable for arable agriculture. However, these areas contain the entire steppe biodiversity resource of Ukraine, including 30% of all biological species protected in Ukraine. As a result of this approach, rare species and important habitats are destroyed, desertification and soil erosion continue, and forests do not grow equally in the arid steppe zone. In other words, funds mobilized for forestry are actually being spent on the destruction of indigenous biodiversity, especially in the steppe zone, and do not lead to an increase in forest cover. Such actions directly contradict the targets of SDG 15, which focus on the conservation of rare species and unique ecosystems.

Biodiversity monitoring and biotope mapping are not carried out in Ukraine. It is impossible to obtain data on how many and which biotopes there are in the country and the list of species on their territory. To carry out these works, there is an extreme lack of funding for existing organizations (scientific institutes, PA institutions) or for the creation of new ones. The lack of both a forest inventory and biodiversity monitoring is costly for Ukraine: primary forests are being lost. The most valuable forest areas are not properly protected, and are therefore often cut down or planted with monocultures.

The preservation of rare species is further complicated by the absence of biodiversity monitoring and biotope mapping in Ukraine. It is currently impossible to obtain data on the number and types of biotopes and species present in the country. There is a severe shortage of funding for scientific institutes, protected area institutions, or the creation of new institutions to carry out this work.

The absence of a forest inventory and biodiversity monitoring is proving costly for Ukraine, as primary forests – the most valuable forest areas – are not receiving adequate protection and are frequently being cleared or planted with monocultures.

**Therefore, the main managerial challenges for Ukraine up to 2030 are:**

- the completion of an inventory of forests in Ukraine;
- the inclusion of self-seeded forests and forests growing on reserve lands in the arrangement of the State Forestry Agency;
- carrying out the monitoring of biodiversity, especially in primary forests;
- the creation of a mechanism for the protection of primary forests;
- the redirection of programs aimed at increasing the area of forests at the expense of unique steppe territories towards the restoration of forests in the Carpathians and in the northern regions of Ukraine.

## ECOSYSTEM RESTORATION

Problems related to excessive plowing and soil degradation were and will be a priority for Ukraine. Our country is one of the most plowed countries in the world, which unremittingly accelerates the processes of desertification. The indicators determined within the framework of SDG 15 are formulated quite correctly, according to the principle of converting arable land into agricultural land of extensive use (hayfields, pastures).

According to the [data](#) from the State Statistics Service of Ukraine, indicators 15.3.2 and 15.3.3 showed improvement in 2020 compared to 2016<sup>7</sup>. Specifically, the area of arable land decreased by 16.7 million hectares, but the area of plowed lands actually increased during this time, due to the plowing of meadow-steppe landscapes such as pastures and hayfields, as well as self-seeded forests.



In 2016, arable land covered 53.9% of the country's territory<sup>8</sup> according to the State Geocadaastre, but by 2020, this figure had increased to 56.8% of the country's territory according to the World Bank. Therefore, the area of arable land increased by 2.9% of the country's total area or almost 1.8 million hectares<sup>9</sup>.

Achieving the goal of reducing the share of arable land is complicated by the fact that 84% of it, including degraded land, is privately owned. The state lacks legal mechanisms for withdrawing such lands for conservation and ecosystem restoration.

At the same time, the full-scale Russian aggression against Ukraine in 2022 led to hundreds of thousands of hectares of arable land being mined or damaged by ammunition explosions. The owners of such lands will not be able to make a profit, but will have to pay land tax. Such areas should be bought back by the state for their conservation in order to reproduce natural landscapes on them, solving the problem with a 'win-win' strategy.

To achieve this, it is necessary to establish a relevant state body responsible for managing nature conservation and restoration areas. In 2022, the state began developing legislation to create such a body and announced plans to adopt laws simplifying land conservation and landscapes between 2023-2026.

### **The main challenges related to the restoration of ecosystems in Ukraine up to 2030 are:**

- the creation of effective legal mechanisms for withdrawing degraded lands for their conservation and the restoration of ecosystems;
- state buy back of war-affected agricultural lands for their further conservation and the restoration of natural landscapes;
- the implementation of legislation on the simplification of land conservation and the law on landscapes between 2023 and 2026.

## **SUMMARY**

Ukraine has declared its commitment to working on SDG 15, but it appears that this work is being carried out only formally. The appropriateness of some of the current national indicators is questionable and they do not always align with the goal's objectives. For instance, indicators of the success of sustainable forest management have been replaced by formal quantitative indicators of forest cover and wood stock, which do not reflect the state of ecosystems. Working towards the goal of preserving terrestrial ecosystems, Ukraine is creating a national eco-network, but it lacks mechanisms for regulating the use of natural resources.

Regarding the actual state of terrestrial ecosystem protection, it is evident that in recent years, the loss of ecosystems in NRF objects has exceeded new ones created during that time. To address this issue, Ukraine needs to focus on the following:

- increasing the area of NRF objects and restoring those that were damaged by the war;
- conserving degraded lands.

In addition, Ukraine should pay attention to the problem of the loss of unique natural ecosystems due to their having been sowed with monocultures, and with invasive species in particular.

## RECOMMENDATIONS FOR CIVIL SOCIETY

### STATE

- Full implementation of European environmental directives in national legislation.
- Implementation of the law 'On the territories of the Emerald Network'.
- Legislative consolidation of the obligation of land users to preserve and restore at least 15% of the land provided to them for use.
- Approval at the legislative level of the list of invasive plant species prohibited for use and national indicators in accordance with target 15.8 of the SDG.
- Expansion of the area of the Nature Reserve Fund by at least 5% (of the area of Ukraine), at the expense of border, mined or temporarily occupied territories in particular.
- Removal from cultivation and transferring to extensive lands of all degraded arable land and arable land on slopes of more than 5°, as well as those that were damaged during hostilities; creation of compensation mechanisms for landowners' loss of profits.
- Ensuring the restoration of natural complexes on the territories of the NRF, which were damaged by plowing and afforestation.
- Introducing legal bans on the plowing of pastures and hayfields.
- Granting self-seeded forests and forests classified as community reserve lands the status of state forest fund lands.
- Implementation of biodiversity monitoring (plants, animals, fungi, natural ecosystems) and national indicators in accordance with the SDG target 15.5.
- Ensuring the possibility of using funds from state, regional and local environmental protection funds to buy back private and communal degraded (eroded) arable lands at the legislative level in order to reproduce natural ecosystems on them.

## COMMUNITIES

- Including SDG 15 indicators in community development plans.
- Developing instructions for introducing indicators into programs and activities of local government.
- Removing all degraded arable land and arable land on slopes of more than 5° from cultivation and transferring them to extensive lands.
- Prohibiting the auctioning of land plots occupied by pastures, hayfields, and self-seeded forests.
- Informing citizens about the importance of ecosystem services, desertification issues, and the loss of biodiversity.

## NGO, SCIENTISTS

- Advocating for the inclusion of SDG 15 indicators in Community Development Plans.
- Monitoring and recording violations of legislation related to illegal land cultivation on the territory of Nature Reserve Fund objects.
- Raising public awareness about the importance of ecosystem services, desertification issues, and biodiversity loss.
- Updating information on the conservation status of IUCN red-listed species in Ukraine and adding a new set of endemic species under the threat of extinction in Ukraine to the list.

## DATA USED

To prepare this report, the following sources were used: official statistical data received from government agencies, open-access information, own information collected over previous years, as well as the results of an analysis of satellite images conducted by experts.

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