



EMERGENCY ADVOCACY FACTSHEET 2025

Explosive Ordnance contamination in Ukraine: current and lasting threat for civilians

The ongoing war in Ukraine has inflicted devastating humanitarian impacts across the country. Intense fighting and bombardment in the country have caused widespread civilian casualties – 13 341 people killed and 32 744 injured since 2022¹, mass displacement, but also extensive contamination by explosive ordnance (EO) including landmines, cluster munitions, unexploded ordnance (UXO) and other explosive remnants of war (ERW). These threats will continue to claim civilians' lives in Ukraine even decades after the end of the conflict.

Explosive ordnance contamination in Ukraine is among the most severe in the world, affecting one fourth of the country's land. As the war is in its fourth year, Ukraine faces one of the world's gravest explosive remnants crises, with roughly a quarter of its territory now littered with landmines and other deadly EO. Indeed, as of December 2024, 138,503 km² of land and 14,000 km² of water were at risk of contamination and in need of survey.² EO threaten civilians' lives in 11 of Ukraine's 27 regions: Chernihivska, Dnipropetrovska, Donetska, Kharkivska, Khersonska, Kyivska, Luhanska, Mykolaivska, Odeska, Sumska, and Zaporizka. According to the Landmine Monitor, available casualty data from EO is believed to significantly under-represent the actual situation. Ukraine is also contaminated as a result of conflict in the east of the country since 2014 and EO remaining from World Wars I and II.³ Consequently, a humanitarian needs assessment conducted late 2024 revealed that 5.4 million people require Mine Action assistance.⁴

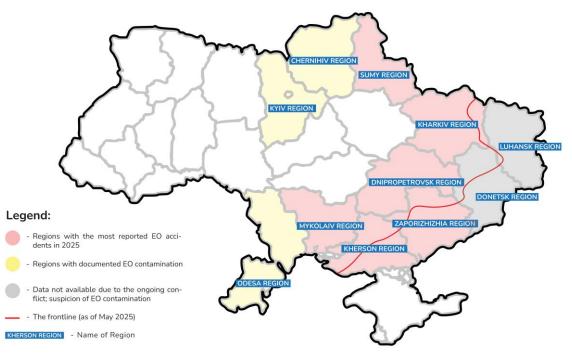
¹ UNHR Protection of civilians in armed conflict – May 2025 available at <u>Ukraine OHCHR may 2025</u>

² However, these figures originate from the <u>National Mine Action Platform</u> have yet to be independently verified and up to date.

³ Landmine Monitor – Ukraine, available at: https://the-monitor.org/country-profile/ukraine/impact?year=2023

⁴ UN Humanitarian Needs and Response Plan Ukraine 2025, p67, available at Ukraine HNRP 2025

Map of Explosive Ordnance (EO) accidents in Ukraine in 2025



^{*}Data was collected by National Mine Action Authority Secretarate for areas under Ukrainian control

Caption: Map of Explosive Ordnance (EO) accidents in Ukraine in 2025. Source: ©HI

"The use of landmines in Ukraine has already left a legacy of human suffering, hampered post-conflict reconstruction, and endangered future generations. The country is facing a decades-long demining effort with an estimated \$29.8 billion for mine clearance".

Adèle Masson, Advocacy Officer, Humanity & Inclusion Ukraine.

1. The human impact of wide scale contamination

As of May 2025, 1497 civilian casualties (442 killed and 1055 injured) due to EO were reported by the United Nations (UN) since Russia's full-scale invasion in February 2022.⁵ This is more than the total of civilian casualties from landmines and ERW recorded from 2014 to 2021. In 2023, the Landmine Monitor reported 580 victims of landmines in Ukraine, making it the 4th country with

⁵ UN Protection of Civilian in Armed Conflict, Ukraine, April 2025, available at Protection of civilians April 2025

the most casualties recorded in that year. 6 In May 2025 solely, 53 civilians were reported wounded or killed by EO in Ukraine – this is more than a threefold rise compared to the average of the previous four months of 2025. 7

"Landmines and cluster munitions do not simply defend borders - they turn them into death traps. They do not protect populations; they endanger them for generations."

Anne Héry, Director of Advocacy and Institutional Relations, Humanity & Inclusion.

People's lives have been profoundly altered by the physical, psychological, and socioeconomic impacts of EO incidents. The impact is both deep and multifaceted: EO continue to pose a deadly threat to civilians, leading to injuries, loss of life, and lasting psychological trauma. The injuries caused by these indiscriminate weapons often result in severe physical impairments, leaving survivors with lifelong disabilities. Beyond the physical impact, the psychological trauma is significant, with many survivors and their families experiencing post-traumatic stress disorder (PTSD), depression, and anxiety. The intangible costs of EO contamination extend beyond individual injuries. Entire communities are affected, deprived of access to essential services, particularly education and socioeconomic opportunities. According to a study led by HI in partnership with United Nations Development Programme (UNDP) and BBC media on Explosive Ordnance Risk Education (EORE),8 18% of responders cultivate gardens or household plots in potentially EO contaminated areas and 25% rate the risk of being affected by EO as high.

Rural populations, rescue workers, deminers, and humanitarian volunteers are obviously among the most affected by contamination, especially men who account for 87% of fatalities and 81% of injuries of overall EO victims in Ukraine. But children are also at risk, with 12% of victims of EO being children in 2023. A study conducted by UNICEF and the Rating Group on explosive ordnance risk awareness and safe behaviour among Ukrainian children and adolescents aged 10 to 17 reveals a troubling paradox: although 97% of adolescents report knowing landmine safety rules, risky behaviours remain widespread — particularly among boys aged 14 to 17 (62%) and

⁶ Landmine Monitor report 2024, p58, available at Landmine-Monitor-2024-Final-Web.pdf

⁷ This number was calculated thanks to a compilation of the protection of civilians in armed conflict numbers from the OHCHR in Ukraine, for the first fifths months of 2025, available at <u>Ukraine protection of civilians - all reports</u>. January: 28, February:4, March:14, April: 19 casualties.

⁸ HI-BBC Media study, data collection 2024, available at <u>"Danger! Mines! How to speak about explosive ordnance (EO) safe behaviours to protect rather than harm?"</u>

⁹ National Mine Action Authority (NMAA) Secretariat of Ukraine, number of EO casualties between 23rd February 2022 and 3rd May 2025.

¹⁰ UNICEF, Press release, Ukraine 2024, available at <u>EO risk awarness and behaviors from young ukrainians</u>

youth from rural areas or low-income families. Already among the most vulnerable groups in times of crisis, children are disproportionately exposed to the deadly legacy of EO.

The Landmine Monitor report¹¹ reveals that EORE and rehabilitation programs are critically underfunded globally, with international aid for Victim Assistance (VA) constituting only 6% of total mine action funding in 2023 and risk education only 1%. There is a paramount need for an increase in resources to address all aspects of mine action effectively and make sure no pillars are forgotten. EORE is sometimes the only way to prevent accidents in areas where clearance is not yet possible or is taking time due to ongoing conflict. The long process of land release and ultimately of EO disposal is also creating frustration for civilians who are witnessing these threats in their daily lives. Even if civilians are aware of the danger, despair and the need to cultivate their land to provide for themselves pushes them to take reckless risks. Low targeted funding for EORE, coupled with the urgency for people to meet their needs, only exacerbates the serious threats to civilians.

"We used to grow grain crops, but everything is contaminated. We've already cleared 200 hectares on our own but 700 are still mined. We took metal detectors and went out ourselves. All on our own."

Oleksandr, a farmer in the village of Velyka Komyshuvakha, Barvinkove community of Izium district, in Kharkiv region.

Available data obtained by HI from the National Mine Action Authority (NMAA) secretariate¹² indicate that despite ongoing EORE efforts in Ukraine since the full-scale invasion, many EO victims had not received EORE beforehand, highlighting the necessity for continued EORE programming.

2. The economic devastation due to contamination

Ukrainian agriculture loses more than \$11 billion annually due to landmines. Indeed, it's one of the world's leading agricultural producers, with 71% of its land agricultural and 56% arable before 2022, the highest proportion of any European country.¹³ According to the World Food Programme, prior to the full-scale invasion Ukraine produced enough food per year to feed 400

¹¹ Landmine Monitor report 2024, p130 available at <u>Landmine-Monitor-2024-Final-Web.pdf</u>

¹² Out of 1000 EO accident up to March 2025, only 267 cases (27%) included confirmed information on EORE exposure—142 victims (14%) had received EORE before the accident, while 125 (13%) had not.

¹³ World Bank Group, Agricultural land in Ukraine, 2022, available at World Bank Group, agricultural land indicator

million people worldwide. However, a joint report by Ukraine's Ministry of Economy and the Tony Blair Institute for Global Change estimates that landmine contamination costs Ukraine approximately \$11.2 billion annually, equivalent to 5.6% of its 2021 Gross Domestic Product (GDP), while losses amount to \$72.7 billion. This figure encompasses reduced agricultural output, diminished exports, and decreased tax revenues. Notably, agricultural and food exports have declined by \$4.3 billion annually due to landmine-related disruptions. The full-scale invasion has had devastating consequences on Ukrainian production, including the abandonment of farmland near the front lines, the conscription of farmers into the military, the occupation of Ukrainian territory by Russia, but also the widespread deployment of landmines on agricultural land. In Kherson region only, where EO contamination is expected to reduce the regional GDP by between 10 and 15%, the situation was exacerbated, in June 2023, by the destruction of the Nova Kakhovka dam, which has spread thousands of landmines and flooded tens of thousands of hectares of agricultural land.

"In Barvinkivska, approximately 17,000 hectares of agricultural land are contaminated, making it impossible for farmers and agricultural enterprises to fully utilize them."

Natalya, deputy of the head of Barvinkivska Urban Territorial Community, Izium district, Kharkiv region.

This unprecedented contamination by landmines and other EO has inflicted severe economic, environmental, and social costs, significantly hindering the country's recovery and long-term development. Additionally, contamination restricts access to agricultural land, delays reconstruction, and limits humanitarian access, triggering negative effect across multiple sectors of society. Beyond the immediate danger, the disruption of soil ecosystems also risks long-term soil degradation, particularly on farming and grazing lands. As a result, rural households and small-scale producers lose access to vital land, increasing their dependence on government and humanitarian support. 19

¹⁴ World Food Programme, Ukraine, available at https://www.wfp.org/countries/ukraine

¹⁵ Tony Blair Institute for Global Change and Ukraine's Ministry of Economy, From Economic Recovery to Global Food Security: The Urgent Need to Demine Ukraine, September 2024, available at <u>urgent-need-to-demine-ukraine-report</u>

¹⁶ FAO Ukraine Emergency and Early Recovery Response Plan 2025-2026, page 9, available at FAO EERRP

 ¹⁷ Tony Blair Institute for Global Change and Ukraine's Ministry of Economy, From Economic Recovery to Global Food Security: The Urgent Need to Demine Ukraine, September 2024, available at <u>urgent-need-to-demine-ukraine-report</u>
 ¹⁸ Ukraine - Fourth Rapid Damage and Needs Assessment (RDNA4) February 2022 – December 2024, p180, available at <u>World Bank Ukraine RDNA 4</u>

¹⁹ FAO Ukraine Emergency and Early Recovery Response Plan 2025-2026, page 9, available at FAO EERRP

3. Barriers to return: the lasting impact of contamination

While the presence of EO in residential areas is one of the barriers to the return of Internally Displaced Person (IDPs),²⁰ alongside economic hardship and difficulties integrating into new regions, Ukrainians have to weigh up the pros and cons of returning to their hometowns, where active hostilities also continue to challenge clearance. Indeed, clearance teams are exposed to compounded challenge: land already cleared of EO may become re-contaminated due to ongoing conflict. This not only undermines clearance efforts but also places landowners and users at renewed risk.

Concerns about safety keep many families away from their homes, prolonging displacement and creating additional social and economic pressures. Clearance of these areas is critical not only to reduce injuries but also to enable communities to rebuild and thrive. As of December 2024, less than half of Ukrainian refugees express a desire to return home, compared to 75% in November 2022. Many who initially intended to return have since reconsidered, now opting to remain abroad. This shift is driven by both military and economic factors and even if EO contamination was not stipulated clearly in the reasons, this threat can fall into ongoing security risks and uncertainty. EO contamination in newly accessible areas has increased demand for clearance operations, which are essential for enabling humanitarian aid, early recovery, and the safe management of EO risks—particularly during rubble clearance and reconstruction

"Even in the framework of a cease fire, if I could go back to my home and found a job in my hometown, in Luhansk region, I would not go back. It is not safe, and it will keep being dangerous for a long time. If one day I have children, I don't want to live in fear for their lives."

Vadym Loktionov, EORE Project Manager for Humanity & Inclusion Dnipro

4. Conclusions and Recommendations

In 2025, amid the ongoing war in Europe between Russian Federation and Ukraine and fearing for their homeland security and their territory integrity, several Eastern European States like Poland, Finland, Estonia, Latvia, and Lithuania, parties to the Mine Ban Treaty, have stated their intention to withdraw from it. **This is a step backwards to International Humanitarian Law (IHL)**,

²⁰ Ukraine - Fourth Rapid Damage and Needs Assessment (RDNA4) February 2022 – December 2024, p184, available at World Bank Ukraine RDNA 4

²¹ Center for Economic Strategy, available at https://ces.org.ua/en/refugees-fourth-wave/

international cooperation and above all protection of civilians as they are the first victims of these indiscriminate weapons. As others international humanitarian disarmament instruments, which prohibit an entire category of weapons, the Mine Ban Treaty's adoption in 1997 was driven by humanitarian concerns: the devastating casualties and human suffering caused by antipersonnel landmines.²² Globally, civilians account for 84% of casualties caused by landmines and ERW. Antipersonnel mines, cluster munitions and ERW can still kill or injure civilians decades later, hindered humanitarian access and strongly impact socio-economic recovery.²³

We call on the Russian Federation to:

- Renounce the use and transfer of banned weapons, such as cluster munitions and landmines.
- Accede to the Convention on Cluster Munitions, the Political Declaration on the use of Explosive Weapons in Populated Areas and to the Mine Ban Treaty.
- Take all feasible measures to protect civilians and civilian infrastructure in the course of the conflict and especially renounce to any military action to attack, destroy, remove or render useless goods that are indispensable to the survival of the civilian population in accordance with Art. 54 of First Additional Protocol of Geneva Conventions.

We call on Ukraine to:

- Ensure full compliance with the Mine Ban Treaty in all circumstances and share
 publicly the results of ongoing investigation on potential landmines use. The Ukrainian
 government should confirm to States parties that remaining stockpiles of PFM
 antipersonnel mines currently in storage awaiting destruction cannot be used in combat
 operations.
- The Ukrainian Mine Action Authority especially to transpose international mine action standards, especially on victim assistance (IMAS 13.10) into the national legislation and operationalize its humanitarian engagements on developing an integrated peoplecentered assistance.

We call on the international community to:

• Strongly advocate for an immediate cessation of hostilities, which is the only way to ensure civilians' protection. Parties to the conflict should take all feasible measures to protect civilians and civilian infrastructure.

²² Landmine Monitor – Ukraine, p22, available at https://the-monitor.org/country-profile/ukraine/impact?year=2023

²³ Landmine Monitor Report 2024, p17, available at <u>Landmine-Monitor-2024-Final-Web.pdf</u>

- Condemn, investigate and prosecute violations to IHL, including the violation of the
 principles of distinction and proportionality, the rule on feasible precautions, the
 prohibition of indiscriminate attacks, the attacks on civilians and civilian objects, and the
 use of internationally prohibited weapons such as landmines and cluster munitions, as
 foreseen by the Anti-Personnel Mine Ban Convention and the Convention on Cluster
 Munitions.
- Denounce any state withdrawing from their obligations under the Anti-Personnel Mine Ban Treaty as sustainable security cannot be built on weapons that kill indiscriminately.

We call on donors funding Humanitarian Mine Action sector to:

- Provide significant funding for a people centered victim assistance, pillar of HMA, alongside efforts of land release, to improve access to rehabilitation and assistive technologies and psychological support and take steps to improve the inclusion of survivors and their families into society. The approach must always be inclusive by paying attention to the most vulnerable groups including children, older people, persons with disabilities and women in all their diversity.
- To continue supporting the implementation of risk education and awareness activities for communities living in contaminated areas to reduce the risk of accidents involving landmines and explosive remnants of war.

Humanity & Inclusion's response in Ukraine since 2022: our comprehensive and specific approach to Victim Assistance.

With its Armed Violence Reduction program, Humanity & Inclusion is striving to participate to Humanitarian Mine Action across Ukraine since the start of the full-scale invasion. This comprises EORE to reduce the risk of death or injury due to an EO accident by raising awareness and promoting behavioural change; VA through broad and specific efforts to address the immediate and long-term needs and rights of victims (survivors, their families and communities) and preparation for Non-Technical Surveys (NTS) to contribute to land release.

Since 2022, HI has organized 8 525 EORE and CPP sessions across different regions in Ukraine, reaching 192 996 people and trained 7 069 people in delivering EORE sessions. Moreover, as a victim focused organization, HI has provided VA services to 224 persons through cash assistance, rehabilitation sessions and mental health psychosocial support, protection counselling and referral.



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