

PRESS RELEASE

Ukraine: Restoring scientific infrastructure will cost over \$1.26 billion (UNESCO)

Paris, 11 March 2024 – A study released by UNESCO estimates the cost of restoring Ukraine’s public scientific infrastructure at more than \$ 1.26 billion. It reveals that 1,443 buildings and laboratories, as well as 750 pieces of scientific equipment, have been damaged or destroyed since the start of the war in February 2022. Ukraine’s scientific community has experienced significant setbacks and a drop in scientific funding.

[Read the full study here.](#)

"As the situation becomes more and more critical for the scientific community, we must protect and support their research in Ukraine. Scientists, engineers and other experts will be essential to the country's recovery, not to mention what this sector represents as a valuable source of innovation and discovery for the rest of the world," said **Audrey Azoulay, Director-General of UNESCO.**

Before the Russian invasion, Ukraine was internationally renowned for its important contributions to fields like Computer Science, Nuclear Physics and Astronomy. From 2015 to 2019, the total volume of scientific publications (excluding social sciences, arts and humanities) increased by 45%. In AI and Robotics alone, Ukraine produced 6,214 publications between 2012 and 2019 ([UNESCO 2021 Science Report](#)).

According to the new study published today by UNESCO and the Junior Academy of Sciences of Ukraine, a total of 1,443 buildings belonging to 177 scientific institutions have been damaged or destroyed in the past two years. Restoring these buildings will cost more than \$ 1.21 billion – including \$ 980.5 million for universities alone as these have suffered the greatest losses.

The Kharkiv region's scientific infrastructure has been the most severely affected, with the highest damage costs borne by the Yaroslav Mudryi National Law University (\$ 116.5 million) and the O. M. Beketov National University of Urban Economy (\$ 104.1 million).

Much essential equipment has been destroyed or stolen

In addition to the buildings themselves, over 750 pieces of scientific and technical equipment have been damaged, with 643 items damaged beyond repair. This includes equipment used in a wide range of research activities. The total cost to restore this essential research equipment is estimated at \$ 45.9 million.

The temporary occupation of territories by Russian forces is also having a major impact: 18 scientific institutes have had to relocate, some of which were conducting studies on local biodiversity and ecology which cannot continue remotely.

The situation around the Institute for Safety Problems of Nuclear Power Plants, near Zaporizhzhia, is of particular concern. Essential equipment for monitoring the state of the nuclear industry has been stolen or destroyed, including a unique radiological laboratory which controls radiation levels. The loss of this monitoring equipment represents a major security threat for the wider region.

A significant setback for Ukraine's scientific community

The war has dispersed Ukrainian scientists across the country and even abroad, and their working conditions have deteriorated. In February 2022, the public research sector employed 88,629 researchers. Since then, 12% (10,429) of these researchers and professors from 524 institutions and universities have been forced to either relocate elsewhere within Ukraine (4,887) or abroad (5,542). Germany and Poland currently host the highest number of Ukrainian scientists in exile. The number of scientists employed by Ukraine's public research sector has dropped by 4,958 (5,3%).

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About 30% of Ukraine's scientists are now forced to work remotely. This includes both emigrants and internally displaced personnel, such those forced to flee areas most affected by the bombardments: Kharkiv, Kyiv, Sumy, Dnipro, Odesa and the Zaporizhzhia region.

A growing lack of funds

Funding for science has also been significantly reduced. According to the UNESCO Institute for Statistics, gross domestic expenditure on research and development shrank by 38.5% between 2021 and 2022, from \$ 2019.5 million to \$1242.1 million.

Since 2021, the National Academy of Sciences of Ukraine, representing 450 affiliated institutes, has seen a 48% reduction in its budget. This has forced the suspension of multiple research programmes and led to the weakening of many research groups and teams. Average monthly salaries have dropped by 39% and many researchers have been forced to work part-time.

Over the past two years, the displacement of scientists and budget cuts have affected Ukraine's scientific output, including publishing activity, as well as the level of collaboration with member states of the European Union, members of the Euro-Atlantic Partnership and countries in Africa and Asia.

On 11 March, UNESCO is convening a meeting at its headquarters (Paris, France) at which scientists from Ukraine and beyond will discuss the study's findings with the Organization's Member States, and consider the next steps in UNESCO's support for Ukraine.

- [UNESCO's "Analysis of War Damage to the Ukrainian Science Sector and its Consequences"](#)

About UNESCO

With 194 Member States, the United Nations Educational, Scientific and Cultural Organization contributes to peace and security by leading multilateral cooperation on education, science, culture, communication and information. Headquartered in Paris, UNESCO has offices in 54 countries and employs over 2300 people. UNESCO oversees more than 2000 World Heritage sites, Biosphere Reserves and Global Geoparks; networks of Creative, Learning, Inclusive and Sustainable Cities; and over 13 000 associated schools, university chairs, training and research institutions. Its Director-General is Audrey Azoulay.

“Since wars begin in the minds of men, it is in the minds of men that the defenses of peace must be constructed” – UNESCO Constitution, 1945.

More information: www.unesco.org

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