Correspondence

Russia is weaponizing water in its invasion of Ukraine

Water supplies are increasingly being targeted during armed conflicts. Since it invaded Ukraine last month, Russia has cut off the water supply to the besieged city of Mariupol to drive it to surrender. It has also destroyed a canal dam that Ukraine constructed in 2014 to control the water supply into Crimea after Russia annexed the peninsula.

Water resources and infrastructure have been attacked in other conflicts. In 2014, the Islamist terrorist group ISIS cut off water to Mosul in northern Iraq and threatened to use the dam there to flood Baghdad. Also in 2014, Syrian government forces targeted the country's ISIS-controlled water plant in Raqqa and, in 2016, they attacked the Fijeh Spring in the besieged Wadi Barada valley (M. Daoudy *Int. Affairs* **96**, 1347–1366; 2020).

It is imperative that international humanitarian law be respected in relation to freshwater supplies. The Geneva List of Principles on the Protection of Water Infrastructure sets out international rules for application during armed conflicts and makes valuable recommendations that go beyond existing law (see go.nature.com/3nnznww). Attempts to override these protective mechanisms should not be tolerated.

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Together, we must help refugee researchers to thrive

Many scientists and engineers fleeing armed conflicts remain in refugee camps or are underemployed in their new host countries (see *Nature* **598**, 527–529; 2021) — a situation of renewed urgency since Russia's invasion of Ukraine. Beyond meritorious efforts to support individuals, we need to work out how best to help displaced scholars to thrive.

In the 1930s, scientists escaping the Nazi horrors contributed enormously to research systems in the United States, the United Kingdom and elsewhere (see, for example, P. Moser *et al. Am. Econ. Rev.* **104**, 3222–3255; 2014). The world should not allow the skills of displaced scientists and engineers to go to waste.

Countries could coordinate to adapt current research institutes or set up new ones to incorporate refugee scientists. Such institutes would restore dignity and create opportunities for those researchers. They would also pay dividends to any host country. This could build on the refugee work of organizations such as the US-based Institute of International Education and the UK-based Council for At Risk Academics. The International Science Council, a non-governmental organization in Paris that unites scientific bodies across the social and natural sciences, stands ready to assist.

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Open access: Brazilian scientists denied waivers and discounts

A study comparing open-access versus paywalled publications finds less geographical diversity among authors who choose open access (see *Nature* https://doi.org/gpkt87; 2022). This does not surprise us in Brazil, where article-processing charges (APCs) typically correspond to many months, or even years, of a scientist's stipend. Yet we are not eligible for waivers or discounts under the open-access initiative Plan S (see go.nature.com/3d1qh), or for research-accessibility programmes such as Research4Life.

Both schemes support publications from low-income and lower-to-middle-income economies. Because Brazil is classed as an upper-middle-income economy, requests for APC waivers and discounts are generally turned down, in our experience. Many of us opt instead to publish behind paywalls. But that might not be possible after 2024, when Plan S transformative agreements will end and journals will transition to exclusively publishing open-access content.

If the open-access movement genuinely favours inclusion, authors in the global south must be able to publish papers as well as read them without barriers. Plan S and the principal editorial companies must consider the extraordinary differences in national scientific budgets and investment. They should offer upper-middle-income countries, such as Brazil, significant discounts or APC waivers upfront (see go.nature.com/3ipsh).

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Chile's science ambitions — three notes of caution

I agree that Chile's new government offers fresh hope for the country's science (see *Nature* **603**, 560–561; 2022). But, as an erstwhile advocate for the Ministry for Science, Technology, Knowledge and Innovation founded in 2018, I sound three notes of caution to help shape its policies for later this year.

First, the ministry must pay more attention to the needs and problems of scientists themselves if it is truly committed to the importance of research. A history of neglect has led to underfunding, extreme competition, loss of research careers and gender inequalities.

Second, the ministry's focus on research proposals aimed at meeting Chile's challenges must not imperil essential basic and curiosity-driven research.

Third, scientific knowledge can help in solving societal challenges only if citizens and researchers have opportunities to build a shared vision. Chances for the public to engage in science policymaking have so far been sporadic and poorly designed, undermining the legitimacy of science policies and public support for them.

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