

Science for global understanding

Since its founding in 1945, the United Nations Educational, Scientific, and Cultural Organization (UNESCO) has been a leading convener and advocate for the natural and social sciences and the humanities. Every year since 2001, on 10 November, UNESCO's World Science Day reminds us of the importance of science for sustainable development and peace. This year's theme, "Science for Global Understanding," also underpins the debates of scientists and policy-makers from around the world who are convening in Jordan this week at the UNESCO World Science Forum. One of their key concerns is the growing criticism of scientific integrity and denial of scientific findings. Building trust in science and fostering scientific excellence is central to all of UNESCO's work.

Institutions that originated in UNESCO, such as the European Organization for Nuclear Research (CERN) or the Synchrotron-light for Experimental Science and Applications in the Middle East (SESAME), or global science networks such as the UNESCO Chairs, aim both to advance science, technology, and innovation (STI) and to use science to promote understanding and cooperation across nations. One of UNESCO's primary means of engaging the global science and policy community, the UNESCO Science Report, focuses on global trends for STI and regional assessment of the performance of STI systems. The latest edition in 2015, for example, tracks investments in science and participation in the scientific workforce and provides data on the gender gap in science by country and by field. In response to this challenge, the UNESCO project for STEM and Gender Advancement provides a set of tools to assess gender equality in STI systems and to improve related policies to close the gap.

Along with Chad, Egypt, Libya, and Sudan, UNESCO's

International Hydrological Programme is engaged in a project to promote rational and equitable management of the Nubian Sandstone Aquifer System to the benefit of the region's communities, ecosystems, and economies. Science for development of sustainable livelihoods for local communities is also at the heart of the UNESCO Man and the Biosphere Programme. This is particularly important in postconflict situations, such

as in the Trifinio Fraternidad transboundary biosphere reserve located between El Salvador, Guatemala, and Honduras. The first transboundary biosphere reserve in Central America, it represents a regional model for sustainable economic development, reconciliation, and resilience.

Resilience is also at the core of the debate at the UN Climate Change Conference (COP23) currently taking place in Bonn. The growing pressures of climate change and stress on natural resources through pollution, overuse, and mismanagement are fueling conflicts and violent extremism and forcing an increasing number of people to flee their homes. This calls for sound, inclusive STI, cooperative approaches

between the sciences and among different knowledge systems, and standing up to climate change deniers among scientists and policy-makers.

The United Nations' Agenda 2030 for sustainable development recognizes the central role of STI in enabling the international community to respond to global challenges. With the support of all its member states and partners, UNESCO's programs aim at harnessing the full potential of knowledge to bring about transformative change that can lead to a sustainable future. We are reminded on this World Science Day that global understanding calls on all of us to nurture, strengthen, and defend sound science across borders and disciplines.

—Flavia Schlegel



“Science for development... is particularly important in postconflict situations...”



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