

Launch of the STRINGS Report: 20 October 2022

Science, technology and innovation is not addressing world's most urgent problems – major new study



Global science research serves the needs of the Global North, and is driven by the values and interests of a small number of companies, governments and funding bodies, finds a major new international study published today. As such, the authors find, science, technology and innovation research is not focused on the world's most pressing problems including taking climate action, addressing complex underlying social issues, tackling hunger and promoting good health and wellbeing.

This is all according to a major new report published today (Thursday 20 October) by an international collaboration led by the University of Sussex, along with the UN Development Programme; the University College London (UCL) Department of Science, Technology, Engineering and Public Policy (STeAPP); the United Nations University; the National Scientific and Technical Research Council, Argentina; the Centre for Research on Innovation and Science Policy, India; Leiden University, The Netherlands; the Graduate School of Technology Management, South Africa; and Nesta, UK.

Changing directions: Steering science, technology and innovation for the Sustainable Development Goals found that research and innovation around the world is not focused on meeting the UN's [Sustainable Development Goals](#), which are a framework set up to address and drive change across all areas of social justice and environmental issues.

Critically, the report finds that research in high-income and middle-income countries contributes disproportionately to a disconnect with the SDGs. Most published research (60%-80%) and innovation activity (95%-98%) is not related to the SDGs.

Illustrating the imbalance, the report found that 80 percent of SDG-related inventions in high-income countries were concentrated in just six of the 73 countries – with the United States alone developing 47 percent of such inventions.

In both the Global North and Global South — and across areas such as health, food or energy — research and innovation funds tend to be spent on technologies that benefit private interests, rather than on those that more directly address social and environmental problems. The research shows that most high-income countries do not prioritise research on the major environmental challenges associated with unsustainable consumption and production patterns.

The research also finds that, even though a majority of stakeholders consider social, policy and grassroots innovations critical to addressing the SDGs, support for these types and forms of innovations, and related research on complex underlying social issues of deprivation, inequality and conflict, lags far behind.

The authors of the [Steering Research and Innovation for Global Goals \(STRINGS\) project](#) are urging science, technology and innovation to be made more democratic, and more closely aimed at achieving sustainability. This includes an increase in evidence and tools, such as those provided in the new STRINGS report, to enable more active debate and exploration of alternative and inclusive science, technology and innovation strategies.

In brief, the report calls for:

- Increasing funding for SDG-related research and innovation, particularly in lower income countries, on underlying social issues, social policy and grassroots innovations, and research relevant to a region or context.
- Promoting a rich diversity of science, technology and innovation pathways to address specific SDG challenges, including social and organisational innovation.
- Designing accountable initiatives that strengthen science, technology and innovation governance and support open and inclusive processes of deliberation and prioritisation.
- Empowering stakeholders to form different interpretations of what counts as SDG-related science, technology and innovation.

Other recommendations from the report also include:

- Funding more research that explicitly investigates tensions and synergies between different aspects of sustainability, including providing greater support for interdisciplinary and transdisciplinary research.
- Including LIC researchers and stakeholders in the advisory and management committees of funders, to ensure their views are considered in planning, defining and evaluating research agendas.
- Ensuring that decisions about which science, technology and innovation pathways to prioritize involve stakeholders affected by those decisions.
- Setting up a global platform observatory to conduct regular surveys of global research and development, its diversity, inclusion, scale, locations, purposes and impacts; bringing together constellations of funders; and creating global funding pools.

To download the report, visit: http://strings.org.uk/wp-content/uploads/2022/10/STRINGS_Changing_Directions.pdf

For a Snapshot of the Report, visit, http://strings.org.uk/wp-content/uploads/2022/10/Snapshot_STRINGS_Changing_Directions.pdf

For a short 11' documentary featuring interviews with the authors and other stakeholders, please see: <https://vimeo.com/761375179>

To know more about the STRINGS Project, visit, <http://strings.org.uk/>

The project was led by the Science Policy Research Unit (SPRU) at the University of Sussex and the Department of Science, Technology, Engineering and Public Policy (STeAPP) at University College London (UCL) in partnership with Centro de Investigacion para la Transformacion (CENIT) of the National Scientific and Technical Research Council (CONYCEP), Argentina; the **Centre for Research on Innovation and Science Policy (CRISP)**, India; the Centre for Science and Technology Studies (CWTS), Leiden University, The Netherlands; Graduate School of Technology Management (GSTM) at the University of Pretoria, South Africa; Nesta, UK; and United Nations University – Maastricht Economic and Social Research Institute on Innovation and Technology (UNU-MERIT), the Netherlands.