











Science, technology and innovation: Triggering transformation and sustaining science-driven solutions

Monday, 8 July 2023, 4:30 P.M. - 6:00 P.M.

Secretariat Background Note

Background

One of the key functions entrusted to the high-level political forum on sustainable development (HLPF) by Rio+20 and the 2030 Agenda for Sustainable Development is to strengthen the science-policy interface, including through the Global Sustainable Development Report and the Technology Facilitation Mechanism.

Pursuant to General Assembly resolution 70/1, on 9 and 10 May 2024, the President of the Economic and Social Council convened the ninth annual STI Forum – one component of the Technology Facilitation Mechanism (TFM). The Forum is a venue to discuss cooperation in science, technology and innovation (STI) around thematic areas pertaining to the implementation of the Sustainable Development Goals (SDGs). It is mandated to facilitate interaction, networking, and the establishment of multi-stakeholder partnerships. It discusses technology needs and gaps, promotes scientific cooperation, innovation, and capacity-building, and examines the impact of rapid technological change on sustainable development perspectives. The Forum brought together a diverse set of views articulated through both formal and informal statements provided by representatives of governments, the UN-system and diverse stakeholders.













The mandated input of STI Forum to the HLPF will be the summary by the Co-Chairs.

Challenges and Opportunities

Science, technology and innovation are crucial for advancing progress on the 2030 Agenda for Sustainable Development and the Sustainable Development Goals in the face of multiple crises.

As we approach 2030, the Sustainable Development Goals (SDGs) are off track. Developing countries and the world's poorest and most vulnerable people are bearing the brunt of the lack of SDG progress, and they stand to gain immensely from STI-driven solutions across various sectors, from healthcare and education to environmental conservation and economic development. But unleashing this potential will require tackling structural impediments to accessing new and emerging technologies including through scaling up the use of open science, affordable and open-source technology, research and development, including through strengthened partnerships.

The political declaration of the 2023 SDG Summit committed to bridging the science, technology and innovation divides and the responsible use of science, technology, and innovation as drivers of sustainable development. The Technology Facilitation Mechanism established by the 2030 Agenda for Sustainable Development has continued to support the application of science, technology, and innovation for the SDGs including by bringing a focus to the STI challenges and opportunities in Africa, in Small Island Developing States, in Landlocked Developing Countries and in Least Developed Countries. Existing efforts can be scaled up and new partners and STI finance mobilized to catalyze STI for the SDGs in the remaining six years to 2030.













The ninth annual STI Forum featured concrete solutions and innovations to support progress across the SDGs with a focus on Goals 1, 2, 13, 16, and 17, such as AI-driven precision farming, which could increase yields by up to 70% by 2050, and AI-driven efficiency improvements, which could reduce global GHG emissions by 4% by 2030,. Furthermore, youth-led innovations in local communities and beyond were showcased, like inflatable, lightweight flood barriers; portable solar-powered air pollution detectors; off-grid milk pasteurizers and other affordable and accessible technologies. The Forum also discussed specific initiatives, partnerships and policy recommendations to advance, including focusing on a sustainable and just built environment, cooperation among research and development funders, the convergence of AI and biotech in the service of food security, gender equality in STEM, and anticipating scientific and technological futures.

Against this backdrop, this session will examine effective partnerships and concrete policies and programmes that foster innovation ecosystems and induce transformative change based on the findings and key recommendations from the ninth annual STI Forum; and other UN initiatives to advance SDG solutions and partnerships in STI.

Proposed questions for discussion

- What are the key solutions identified from the STI Forum to support achievement of the SDGs?
- How are different stakeholders following up on commitments from the Political Declaration of the SDG Summit on bridging STI divides and the responsible use of STI as drivers for sustainable development?













- What policies and partnerships are needed to incentivize the development, transfer and adoption of technologies that address specific local challenges and contexts, while aligning with the SDGs goals?
- What are some promising ways to foster collaboration between scientific communities, industry stakeholders, financial institutions and policymakers to accelerate the development and deployment of sustainable, science-driven solutions?