

8th annual Multi-stakeholder Forum on Science, Technology and Innovation for the Sustainable Development Goals

<u>Thematic Session 4: Breaking Down Barriers – closing the gender gap in science</u>

and technology

(10:20-11:45 EDT, 4 May 2023)

Background

The 2030 Agenda for sustainable development elevated Science, Technology, and Innovation (STI) as key means that can facilitate the attainment of the Sustainable Development Goals (SDGs). In this context, the Annual Multi-stakeholder Forums for Science, Technology, and Innovation (STI Forum), supported by the Inter-Agency Task Team on Science, Technology, and Innovation for the SDGs (IATT) showcases the role of STI in achieving the SDGs. In the context of the mid-point of implementation of the Agenda 2030, and the comprehensive review of the state of progress on the SDGs that will be discussed during the SDG Summit in September 2023, STI for SDGs has the potential to accelerate sustainable human progress.

The STI Forum is mandated to provide an input to the annual session of the High-level political forum on sustainable development (HLPF) held under the auspices of the ECOSOC. Consequently, its theme is aligned with that of the July HLPF, namely "Science, technology, and innovation for accelerating the recovery from COVID-19 and the full implementation of the 2030 Agenda for Sustainable Development at all levels". Special attention will be devoted to the SDGs that are under review at the HLPF, namely SDGs 6 (clean water and sanitation), SDG 7 (affordable and clean energy), SDG 9 (industry, innovation and infrastructure), SDG 11 (sustainable cities and communities), and SDG 17 (partnership for the goals).

The deliberations at the STI Forum will also serve as a steppingstone towards the SDG Summit in September 2023, including by showcasing solutions and initiatives that can accelerate progress towards the SDGs at this critical time.

Science, technology and innovation have been in the global spotlight during the COVID-19 pandemic proving to be one of humanity's most valuable resources for responding to global challenges and advancing the well-being of current and future generations. Vaccines were developed in record time through knowledge shared across borders and sectors; the application of digital technologies was scaled up to support social and economic systems while social distancing and stay-at-home orders were in effect. The world has seen how much progress can be made through STI in a short time when driven by a common motivation and with strong and open avenues for collaboration. At this conjuncture, the potential of STI

to build resilience against and prevent future crises and to support progress toward realizing the aspirations of the 2030 Agenda for Sustainable Development is clear.

At the same time, the fault lines of inequality were exposed, reflected for one in the unjustifiable circumstances of unequal access to vaccines, unequal access to digital technologies, the rise in gender-based violence and women's disproportionate share in unpaid care responsibilities. The war in Ukraine, the cost-of-living crises and more frequent and severe natural disasters, are among the multiple crises that the world must currently reckon with, many of them further exacerbating inequalities. The Forum will showcase the potential of STI while highlighting the need and strategies for it to close gaps and divides rather than increasing inequality.

Objectives

The session Breaking Down Barriers – closing the Gender Gap in Science and Technology will highlight examples and lessons learned from gender and STI initiatives that are helping to move the needle towards making innovation ecosystems more inclusive and representative and explore what is needed to scale up and accelerate further progress. With the adoption of the 2030 Agenda for Sustainable Development and its SDGs, countries committed to sustainable development that leaves no one behind. This will require significant global transformation in which science, technology and innovation will be the key transformers and enablers. Women and girls make up half the global population and without their full participation, we are losing half of the potential creators, innovators and scientists, and their essential contribution to solving the world's major problems. Closing the gender gap in this area throughout the cycle of education, employment, entrepreneurship, and leadership will be essential. It is also an imperative for women's economic empowerment, enabling girls and women to make their own choices and participate fully in society. Against this background, this session will follow-up to the recent recommendations of the UN Commission on the Status of Women by exploring specific solutions, critically assessing cases and identifying best practices and practical measures on how to shift priorities, investments, and perceptions on women's and girls' place in science, technology and innovation.

Format

The session will be structured as a moderated panel discussion (5 minutes per panelist). After the panelists' interventions, the moderator will take comments and questions from the audience during an interactive discussion. The session will close with a brief presentation of main outcomes of the discussion by the moderator.

Guiding questions

The discussion will be guided by the following questions:

- 1. What are best strategies to break the main barriers to women's and girls' equal participation in technology and innovation. What partnerships, policies and practices can help?
- 2. How can women and girls' transition from STEM education to full participation in the labor market and in entrepreneurship be ensured? What are the societal barriers and what approaches can help? What are new emerging challenges from generative AI and other advanced technologies and what are the best ways to ensure equal opportunities for women and girls?

- 3. Beyond participation, how can women be equally represented in leadership and decision-making roles? What are the main impediments and what are good policies to overcome them?
- 4. What are good metrics of the extent of women and girls' participation in technology and innovation? Is there a need to update the metrics, and how can new technologies and data availability be harnessed for this?

Supporting documents/publications

- Cracking the code: girls' and women's education in science, technology, engineering and mathematics (STEM) https://unesdoc.unesco.org/ark:/48223/pf0000253479
- The Equality Equation: Advancing the Participation of Women and Girls in STEM https://openknowledge.worldbank.org/entities/publication/e663dd8e-bfc2-5d12-a7c2-264dcb8a4061
- UNESCO Science Report 2021: Chapter on Gender in STI: To be smart, the digital revolution will need to be inclusive.
 https://www.unesco.org/reports/science/2021/sites/default/files/medias/fichiers/2022/01/Gender%20chapter%203 EN UNESCO%20Science%20Report%202021.pdf
- Improving Measurement and Policies for Gender Equality in Science, Technology and Innovation. UNESCO STEM and Gender Advancement (SAGA) project. UNESCO: Paris. https://unesdoc.unesco.org/ark:/48223/pf0000266102

The following science-policy briefs have been prepared by TFM stakeholders in support of this session:

- Shaiha Afaal et al., Assessment of policy-society interface to increase female participation: A study of Aerospace engineering in the Maldives, University of the West of England, UK
- Shivani Nayyar et al., Girls and Women as Innovators, UN DESA
- Lorena Lamas, Gender lens into STI policies to effectively address socio-economic development challenges, UN Women, Uruguay
- Valentine Goddard et al., Gender Equality and the Environment in Digital Economies, Al Impact Alliance, Canada
- Aqeela Ashraf et al., Impact of gender inequality and social stratification on antimicrobial resistance in developing countries, Lahore Garrison University, Pakistan
- Rita Luthra, Open Science to Achieve United Nations 2030 Agenda, Women's Health and Education Center, United States