



HIGH-LEVEL POLITICAL FORUM ON SUSTAINABLE DEVELOPMENT

#HLPF #SDGs #GlobalGoals



Science, technology and innovation: Triggering transformation and sustaining a science driven recovery

Monday, 10 July 2023, 4:30 P.M. - 6:00 P.M., Conference Room 4

Secretariat Background Note

Background

One of the key functions entrusted to the high-level political forum on sustainable development 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.

At the halfway point of the 2030 Agenda for Sustainable Development, we are not on track to achieve the SDGs. Only 12 percent of the SDG targets are currently on track; progress on 50 percent is weak and insufficient; the world has stalled or gone in reverse on more than 30 percent of the SDGs. Despite these bleak trends, scientific evidence suggests that these goals are still attainable, but only through rapid and drastic action. Science, technology, and innovation (STI) can play a critical role in disrupting business-as-usual practices to help the world change course and get on track to achieve these goals.



HIGH-LEVEL POLITICAL FORUM ON SUSTAINABLE DEVELOPMENT

#HLPF #SDGs #GlobalGoals



Challenges and Opportunities

The current global context is characterized by multiple interlinking crises, including the COVID-19 pandemic, climate and environmental crises, increasing human conflict, and rising inflation and cost of living. Scientific evidence is a critical tool for facing each of these crises. Rapid scientific research and global collaboration led to the development of numerous vaccines to address the pandemic, as well as technologies such as mobile applications to address the economic fallout it caused. Climate resilient technologies such as climate-smart agriculture, renewable energy technologies, and satellite technology for monitoring weather events can help address climate and environmental crises. Similar technological developments can improve efficiency and sustainability to reduce resource scarcity, which is an underlying cause of both human conflict and the rising cost of living.

Science, technology, and innovation have the potential to contribute immensely to advancing sustainability; however, this may require alignment of scientific funding and priorities with sustainability priorities and the 2030 Agenda. This may pose a challenge as research and development are often driven by profitability motives. To support environmental, economic, and social advancement, the international community and national governments can help direct grants and research and development resources toward STI for sustainability.



HIGH-LEVEL POLITICAL FORUM ON SUSTAINABLE DEVELOPMENT

#HLPF #SDGs #GlobalGoals



Social inclusion is another essential element for improving the science-policy-society interface. Overlooking the knowledge and perspectives of women, youth, local communities, indigenous people, and other underrepresented groups has led to critical missed opportunities. Current publishing practices place most data and content behind paywalls and disproportionately limit contributions from underrepresented groups. The scientific community would benefit from reducing the barriers for people to access and contribute to the global scientific discourse and knowledge creation. Improving equity in scholarship and reforming current publishing procedures would help ensure that scientific evidence better serves the global population.

This session will examine scientific evidence, strategies, and case studies to advance sustainability based on the findings of the 8th Multistakeholder Forum on Science, Technology, and Innovation (STI Forum); the Global Sustainable Development Report (GSDR); and other UN initiatives to promote partnerships in STI. This session will consider and build upon the recommendations contained in the co-chairs' Summary of the STI Forum. It may take into account the recommendations and frameworks proposed by the GSDR, and may help advance progress on the implementation of the Technology Facilitation Mechanism under the 2030 Agenda for Sustainable Development, and other related UN processes.

This session will discuss the ways in which trust in science and technology could be enhanced, gender gaps in STI closed, and make



HIGH-LEVEL POLITICAL FORUM ON SUSTAINABLE DEVELOPMENT

#HLPF #SDGs #GlobalGoals



rapid digitalization more inclusive. It will focus on promoting global research cooperation and funding through new partnerships. The session will also examine integrated technological solutions to the energy, food, water, and climate crises, and ways in which we can increase community innovations and make cities smarter, more inclusive and sustainable.

Proposed questions for discussion

- Faced with multiple interlinking crises (pandemic, climate, economic instability, human conflict, etc.) what role can science play in addressing the high level of uncertainty about the future? What can be done to address distrust in science?
- How can we harness the power of science, technology, and innovation to accelerate the pace of change for rapid transformation, rather than incremental advancement? What are some examples of transformative change, and what opportunities are there?
- From an STI perspective, what are some of the key lessons learned on what worked and what did not work, to meet the targets related to SDG 6 on water, SDG 7 on energy, SDG 9 on industry, and SDG 11 on sustainable cities? Taking into consideration the strategies that did not work to meet the SDG targets, how can we overcome barriers in the future?
- How can international cooperation be further strengthened, including North-South and South-South cooperation, to accelerate recovery from the COVID-19 pandemic? What are



HIGH-LEVEL POLITICAL FORUM ON SUSTAINABLE DEVELOPMENT

#HLPF #SDGs #GlobalGoals



some key opportunities to advance innovations created by and for the Global South?

- How can the scientific community better incorporate the perspectives and knowledge of underrepresented groups, including women and girls, indigenous and local communities, young people, and populations in vulnerable situations?