STI FORUM

Science, Technology & Innovation for the Sustainable Development Goals

6th Multi-stakeholder Forum on Science, Technology and Innovation for the Sustainable Development Goals

4-5 May 2021, UN HQ New York (virtual)

Session 3: Effective paths towards the SDGs: STI for transforming economies toward equity, sustainability and climate action

Background note and guiding questions

Background

Science, technology and innovation (STI) are critical for progress towards the Sustainable Development Goals (SDGs) including toward SDG 8 (Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all); SDG 10 (Reduce inequality within and among countries); SDG 12 (Ensure sustainable consumption and production patterns); and SDG 13 (Take urgent action to combat climate change and its impacts).

Inequality has shaped the impacts of the pandemic with social, health and economic outcomes that vary within and across countries. Consistently, however, outcomes are especially adverse for groups who are vulnerable along different dimensions - the poor, women, indigenous populations and other minority groups, the elderly and persons with disabilities. Long ingrained discriminatory systems and norms as well as persistent inequalities in living conditions, access to services and opportunities have all become evident through the differential impact of the pandemic. These same factors are contributing to deepening the impacts of the pandemic.

The impacts of COVID-19 on lives and livelihoods have been incredibly destructive. According to ILO estimates, in 2020, 8.8 per cent of global working hours were lost relative to the fourth quarter of 2019, equivalent to 255 million full-time jobs. Working hours losses were by far highest in the low-middle-income countries. Poor informal workers in urban areas, many of them women or young workers, have been particularly affected by loss of income, as have migrant workers and other vulnerable groups. The COVID-19 pandemic has also accelerated the transformations and inequality in the world of work, which were already underway with the technological innovations and the rise of the digital economy. In both developing and developed countries, digital labour platforms, the rise in e-commerce, e-services and online freelance work have offered income opportunities for those who lost their jobs; however, the pandemic also exposed the vulnerabilities faced by these workers with respect to their working conditions, exposure to the virus and lack of access to social protection and other benefits.

While there were declines in green-house gas emissions due to the pandemic, these are set to be reversed during the recovery. Moving forward an emphasis on job and employment creation and restoring economic growth during the recovery phase, must be accompanied by accelerated development and deployment of technologies that reduce the global carbon footprint, coupled with changes in our relationship with the natural environment that can move the world decisively towards addressing climate change and unsustainable consumption and production patterns while promoting full employment and

decent work. It is estimated that the window of opportunity for making the necessary transformations may be closing fast – at the same time, the long-term development strategies of several major economies have included carbon neutrality commitments. STI can also be steered toward reducing inequalities and closing the digital divide to support commitments to leave no one behind.

Sustained economic growth, employment and decent work, and environmental goals are interdependent and STI can help to manage perceived and real trade-offs among these goals leading towards a just transition for all. Science Technology Engineering and Mathematics (STEM) skills are part of meeting the skills demand in the green energy economy. The ILO has found that a green energy transition will create 25 million jobs globally; however, 20 million of those will require extensive investments in education in order to skill and reskill workers to meet the jobs requirements. Because contexts vary, country and region specific STI strategies are needed to balance progress in social inclusion and decent work, sustained economic growth and environmental protection and restoration.

Objectives

This is the second session of two dedicated to the SDGs in-focus at the HLPF 2021. This session will look specifically at how STI can advance progress toward the achievement of SDGs 8, 10, 12 and 13, including by leveraging their interlinkages with the rest of the 2030 Agenda for Sustainable Development. Discussions will include new approaches to accelerate SDG progress through innovations, focused priorities for STI development and successful experiences from the pandemic that can be scaled up to have impact across multiple goals and targets. Also of interest will be ways to improve the science-policy-society interface, and initiatives to increase scientific collaboration globally for tackling major challenges.

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.

Questions for discussion

The discussion will be guided by the following questions:

- What are the most promising ways for STI to accelerate a permanent shift toward low-carbon economies and sustainable consumption and production?
- Will technology in the context of the shift to low-carbon economies support inclusive economic development and will it create jobs or displace them? How can such transitions be just -providing viable alternatives for those at risk of losing jobs and livelihoods?
- How can STI systems be better adapted to address future crises? In particular, how can interactions between STI systems and productive systems be strengthened in developing economies?
- How can we leverage the positive potential of digital labour platforms to be beneficial for both workers and businesses, and help to achieve the sustainable development goals?
- Inequalities exist in the distribution of STI capacities. What are promising ways of strengthening STI capacity, equalizing access to ensure that STI contributes to reducing inequality, and enhancing international cooperation to bridge the global divide on science, technology and innovation for the SDGs?
- Are there examples of technologies and innovations that have emerged during the COVID-19 crisis to tackle persistent inequalities? How can these be shared and scaled up?

Supporting documents/publications

- Global Sustainable Development Report 2019: The Future is Now: Science for Achieving Sustainable Development (Available at: https://sustainabledevelopment.un.org/gsdr2019)
- The Sustainable Development Goals Report 2020 (Available at: https://unstats.un.org/sdgs/report/2020/)
- ILO (2019) Time to Act for SDG 8: Integrating Decent Work, Sustained Growth and Environmental Integrity. (Available at : https://www.ilo.org/wcmsp5/groups/public/---dgreports/---inst/documents/publication/wcms_712685.pdf).
- World Employment and Social Outlook 2021 (WESO 2021), The role of digital labour platforms in transforming the world of work, ILO, Geneva.
- ILO (2019) Skills for a greener future, (available at: https://www.ilo.org/skills/projects/WCMS_706922/lang--en/index.htm)
- Making Peace With Nature: A scientific blueprint to tackle the climate, biodiversity and pollution emergencies (available at: https://www.unep.org/resources/making-peace-nature)