Thematic Review

Empowering people and ensuring inclusiveness and equality
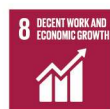
Report of the STI Forum

Friday, 12 July 2019, 12:00 PM–1:00 PM, Conference Room 4

Background Note

Introduction

The 2030 Agenda launched a UN Technology Facilitation Mechanism (TFM), which comprises a United Nations Interagency Task Team on Science, Technology and Innovation for the SDGs (IATT), a collaborative Multi-stakeholder Forum on Science, Technology and Innovation for the SDGs (STI Forum), and an online platform as a gateway for information on existing STI initiatives, mechanisms and programs. The TFM now facilitates multi-stakeholder collaboration and partnerships through the sharing of information, experiences, best practices and policy advice among Member States, civil society, the private sector, the scientific community, UN entities and other stakeholders.

Pursuant to General Assembly resolution 70/1, on 14 and 15 May 2019, the President of the Economic and Social Council, Inga Rhonda King, convened the fourth annual STI Forum. As a 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), bringing together all relevant stakeholders to actively contribute in their areas of expertise. The forum provides a venue for facilitating interaction, matchmaking and the establishment of networks between relevant stakeholders and multi-stakeholder partnerships in order to identify and examine technology needs and gaps, including with respect to scientific cooperation, innovation and capacity-building, and to help to facilitate the development, transfer and dissemination of relevant technologies for the Goals and targets.

An objective of the session is to review the key findings and outcomes of the 2019 Multi-stakeholder Forum on Science, Technology and Innovation (STI) for the Sustainable Development Goals. The President of the Economic and Social Council has transmitted to the high-level political forum on sustainable development the Co-Chairs' summary of the multi-stakeholder forum on science, technology and innovation for the Sustainable Development Goals, available at: sustainabledevelopment.un.org/hlpf/2019#docs. The Co-Chairs of the STI Forum will present the mandated Summary, the theme of which in 2019 was "STI for ensuring inclusiveness and equality, with a special focus on SDGs 4, 8, 10, 13, and 16".

Key messages and general recommendations from the Co-Chairs' Summary

The STI Forum highlighted many practical examples and proposed recommendations for action by the UN system, Governments, businesses, scientists, academia, civil society and others. The necessity of a multi-stakeholder approach was repeatedly underscored. The following issues may be considered by decision makers, in addition to the wider range of recommendations on how to address the challenges in SDGs 4, 8, 10, 13 and 16 and a number of cross-cutting issues.

The TFM constitutes a new one-UN way of working for the UN system which is entirely new, especially in terms of engaging many STI communities and individual experts that are not typically engaged with the UN.

STI for the SDGs

Many insights have been gathered towards SDG-specific technology solutions, including those that help to manage trade-offs and realize synergies. Attention should now move to identify and assess high impact, integrated technology solutions across SDGs, their socio-technical feasibility and potential impact. These should be discussed at the 2020 forum.

Similarly, hundreds of innovators participated in the call for technology innovations for the SDGs every year since 2016. It is time to follow-up, support and create partnerships for supporting the scaling up these and similar other innovations.

The TFM has become the premier multi-stakeholder mechanism in the UN system for advancing STI applications for the SDGs. Existing conferences and events within and outside the United Nations may be associated with and consider presenting their STI findings to the forum. The online platform, as mandated by the 2030 Agenda, is close to operationalisation, but requires further support from donors, the private sector, international organizations and others to reach this stage.

New and emerging technologies

While the TFM has made progress in documenting and analysing the wider societal impacts of new technologies, much better knowledge and also quantitative insights are needed — in both developed and developing countries — in order to prepare for the different scenarios of how these impacts might unfold in the coming years. Supporting the capacities of developing countries to assess and prepare for these impacts and exchange of experiences on public policies and good practices will be needed and should be systematically supported by the UN.

Responsible and ethical deployment of technologies has to be balanced against concerns that "excessive" restraints on innovations might otherwise deprive humanity of many benefits. This requires pragmatic, evidence-based ethical assessments that must derive from the values contained in the UN Charter, the Universal Declaration of Human Rights, the Rio+20 outcome, and the 2030 Agenda. The report of the High-level Panel on Digital Cooperation is expected to provide guidance in this direction.

Holistic, integrated approaches and strategies are needed. They should be conducive to a wide range of forms of knowledge and perspectives, including

those of young people, as well as local, traditional and indigenous forms of knowledge, and also supported by new and emerging technologies.

Extraordinary levels of international cooperation on research, infrastructure, access, and capacities are needed, in order to overcome the technology gaps between and within countries, between men and women, and across social groups — ultimately to avoid long-run, low-technology traps. This requires multi-stakeholder approaches and UN system support.

A forward-looking perspective is needed to understand the potential opportunities and challenges associated with the impact of rapid technological change on the achievement of the SDGs.

In this regard, key emerging issues need to be systematically identified by the TFM. One such example was the call of this year's forum to fully supporting academic and business efforts towards reducing, or even eliminating antibiotics resistance.

STI for the SDGs roadmaps and action plans

STI roadmaps for the SDGs and related action plans need to be developed at the national and subnational levels, ideally with measures for tracking progress and in line with national and global development strategies. They are strategic tools for ensuring policy coherence, linking public and private actions, and optimizing investments. They are also powerful communication tools.

The IATT guidebook provides an outline of the scope and nature of the road mapping process. It was suggested that a group of Member States could lead the way by undertaking serious efforts over the coming year to develop their own versions of STI roadmaps for the SDGs and reporting on their experiences at future STI Forums and the HLPF.

Participation of science communities, funders, academia and the private sector need to be further expanded and deepened, and partnerships are essential. Regardless of the model of involvement, a business case should be made for

private sector investments in innovation for the Goals. Member States were also called upon to support the TFM, both politically and financially.
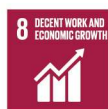
Recommendations from the Co-Chairs' Summary

Going forward, the Forum will continue to strengthen its convening power for dialogues between stakeholders and governments and for sharing ideas and catalysing new initiatives and partnerships. It will continue to help to identify practical means and solutions to foster science, technology and innovation in all countries.

Continued real demand for the multi-stakeholder STI Forum and its science-policy interface function in support of the SDGs is apparent. Given the high expectations for the TFM, Member States and stakeholders should consider strengthening their political and financial support for the Mechanism.

The multi-stakeholder TFM should continue to improve inclusion of stakeholders and associated related events and improve coordination with UN system and other international organizations. Support is needed for even greater participation in the forum by government representatives and innovators from developing countries. Significant support is needed to fully operationalise and expand the TFM online platform into a veritable partnership portal on STI for the SDGs. And support is needed for the expert work at the working level in the various IATT subgroups streams, to better integrate the work streams themselves, and to disseminate and communicate its work.

The IATT subgroup on new and emerging technologies, frontier technologies and rapid technology change should make a special effort to disseminate salient information on and support the knowledge and understanding of STI trends, impacts, good practices, initiatives and public policies for the SDGs. A forward-looking perspective, coherent and plausible scenarios and more robust quantitative approaches could help in this effort.

The TFM should build partnerships and interfaces with universities, innovation incubators and private sector entities that are at the forefront of technological change. In particular, it may want to further pursue the idea of a discovery lab or a network of STI centres to serve as an interface between the policy makers and technology pioneers, facilitating a two-way exchange of real-time information, engagement and policy insights.

The work of the IATT subgroup on STI roadmaps for the SDGs should continue supporting the development of multi-stakeholder roadmaps in interested countries, based on the conceptual approaches outline in the recent IATT guidebook on STI roadmaps. International support, Member State engagement and partnerships with civil society and the private sector will be needed to develop capacities and fill critical gaps in data, finance and effective implementation. UN experts in the IATT, in the 10-Member Group and among TFM stakeholders constitute an important source of technical expertise in this respect.

Similarly, the IATT subgroups on capacity building and on gender and STI need full support and engagement.

In view of the demand for further work streams, the IATT and 10-Member Group is encouraged to take stock of the start-up phase of the TFM from 2015 to 2019, and optimize its focus and working structures, based on the lessons-learnt.

Over the coming 11 years, future forums should learn from and advance the achievements of previous ones. The forum might become the outcome of an annual programme of results-oriented activities in the IATT subgroups in close cooperation with the 10-Member Group.

Issues for consideration

Despite limited resources, significant progress has been made towards a full operationalization of the TFM. IATT membership has increased to comprise 42 UN entities and it essentially brings together more than 100 experts among its staff who in

an informal and voluntary way exchange experiences and coordinate their work at the working level. They also work closely with the 10-Member Group and representatives of the academic, business and NGO communities they represent. Compared to the past, this is an unprecedented level of cooperation on science and technology across the UN. The IATT work is organized in a number of subgroups which focus on key areas of work, including delivering joint training workshops based on resources pooled from across the UN system; support for the platform development; STI roadmaps for the SDGs; new and emerging technologies and the impacts of their rapid change; gender and STI; and the typical Secretariat functions.

In view of the SDG Summit in September 2019 and the expected review of the SDGs this year, the session will take-stock of where we are after more than three years of the TFM and discuss ideas for the way forward and for an effective, science-based, solutions-oriented, multi-stakeholder and collaborative TFM. The TFM 10-Member Advisory Group will further engage in the discussions.

Guiding questions

- What are the key findings and recommendations from the 2019 STI Forum?

- What international collaborations or mechanisms are needed for exchange of experiences and partnerships on STI for SDGs?

- How can we mobilize science, technology and innovation to improve the lives of the furthest behind? How could to raise adequate resources for the TFM of the future?

- What are your three most important recommendations for concrete action, including the ones from stakeholders and Major Groups? What is the best way forward?