

1st Annual Multi Stakeholder Forum on Science, Technology, & Innovation Toward the SDGs

June 6-7, 2016 UN HQ

The following are statements written collectively by the UN Major Group for Children and Youth, delivered during the 2016 Multi-Stakeholder Forum on Science, Technology and Innovation for the Sustainable Development Goals.

<u>Session 2:</u> Enabling environment for Science, Technology and Innovation

Delivered by UC Riverside PhD candidate and UN MGCY participant Pedro Piqueras:

We have a few points to raise and hope these will be reflected in the summary outcome of the forum. Research and funding incentives need to be aligned with interventions needed to fulfill gaps in the SDGs, through a data based and community driven approach. All publically funded research should belong to and be made available to the public, through inter alia, mandating sharing of knowledge via open source research and development. An appropriate enabling environment also needs to realize the context of the application of STI (Science Technology Innovation). As Matt Damon said at the MIT graduation a few days ago "not every problem has a high tech solution. We cannot science the-you-know what out of every problem.

Additionally, not all STIs are necessarily good in the context of their application. In this regard, it is essential that we put in place community based tech assessment structures. These would determine environmental, social and economic impacts before deployment.

Additionally, we cannot have a serious conversation about developing STI working for SDGs, if we ignore the foundational dimension of enabling access to these technologies. The Intellectual properties regime needs a serious overhaul. The provisions in TRIPS (Trade-Related Aspects of Intellectual Property Rights) need to be enhanced and made easier for countries to have access.

Session 3: Realizing the potential of science, technology and innovation for the SDGs

Delivered by UN MGCY Science-Policy Interface Platform Focal Point, Donovan Guttieres:

Thank you for giving me the floor. I would like to provide a few relevant comments on behalf of the UN Major Group for Children's & Youth. At the organizational and individual level, it is crucial for STIs to fit within appropriate contexts, capacities, cultures, resources, and priorities. STIs must be purpose-driven, human-centered, environmentally friendly, and context-appropriate.



However, saying this is the easy part. We are more interested in seeing how to operationalize this coherently with the substantive content of the TFM (Technology Facilitation Mechanism). To overcome barriers - there must be progress in legal frameworks surrounding intellectual property, technology transfer, and comprehensive impact assessments on the social, economic, and environmental dimensions of technology.

While the STIs can be crucial to achieving equal rights for all individuals and provide opportunities for all segments of society, especially people in isolated areas, it also has the risk of widening the digital divide.

Another major challenge in harnessing the potential of STIs is ensuring that STIs being developed and investments made are based on the needs identified within the SDGs and gaps in implementation, rather than the view that any widget will help move SDGs forward. We are not here to adapt the SDGs to STI, but the other way around.

Finally, failure to build coherence between science and technology roadmaps / processes for different sustainable development agendas will lead to unnecessary overlap in efforts and resources, especially if countries are to report on national plans during reviews at the HLPF (High Level Political Forum). Seeing STIs as cross-cutting within the SDGs and throughout the sustainable development spectrum is crucial to adequately identify opportunities and challenges of STIs."

Session 4: Transformative technologies for SDGs

Delivered by UC Riverside PhD candidate and UN MGCY participant, Ashley Vizenor:

As a PhD candidate in Chemical and Environmental Engineering at the University of California, Riverside, I am a young scientist engaged in the science-policy interface.

An example of an emerging technology relevant to improving the health of citizens are air quality sensors. These sensors are a relatively new technology that is gaining traction in the world. Air pollution is the number one greatest health risk, as one in eight total global deaths is directly attributable to air pollution, according to the World Health Organization. Sensors are low-cost and robust, and allow for remote monitoring of atmospheric pollutants such as particulate matter, carbon monoxide and nitrogen oxides (NOx). These sensors are also able to be operated by inhabitants, and can provide insight to air pollution in more remote regions of the globe.

For adequate integration into society and scaling within local capacities, the direct and indirect social, economic, and environmental impacts of technologies is crucial during the design, transfer, use, and disposal of technologies.

To that end, I would like to raise a question to Arjoon Suddhoo regarding your proposed aquaculture. How do you evaluate the potential health and environmental risks of this innovation pertaining to nitrogen containing compounds in run-off?"

Session 5: Creating shared value: How do we make it work?

Delivered by UN MGCY Regional Focal Point for Europe on Disaster Risk Reduction, Lydia Cumiskey:

Thank you Mr. Moderator, I would like to speak on behalf of the UN MGCY. We would like to ask a question on the GIE (Global Innovation Exchange). But before doing so, we would like to share a few



suggestions to ensure a multi-stakeholder and inclusive environment for the TFM in general and STI Forum more specifically.

We have several concrete recommendations to maintain the momentum of this 1st STI Forum and strengthen the participatory and multi-stakeholder nature it needs, to reach its full potential. We want to ensure that the theme of the High Level Political Forum (HLPF), "Leaving No One Behind", is not forgotten but rather re-emphasized in these discussions.

To achieve genuine, relevant multi-stakeholder engagement - we propose more systematic, institutionalized mechanisms for engaging civil society throughout the planning, participation, and follow-up of the Forum. We propose the establishment of a regular mechanism for engaging civil society and MGs and other stakeholders in the deliberations of the TFM, particularly this could be used to provide inputs to the Inter-Agency Task Team (IATT) on STI and the 10-Member Group that supports the TFM in the design of the annual STI Forum and the soon-to-be-established online platform, and to provide recommendations to the work of the TFM in general.

Going to a question on the GIE, we would like to know if the Global Innovation Exchange has found examples of innovations at the local level that bring together the formal and informal, indigenous knowledge and types of partnerships/collaborations that are needed to do this to embed these innovations in society.

Session 7: The experience of Youth in using Science, Technology and Innovation for Sustainable Development

It is clear that young scientists have a critical role to play. However, the popularization of youth inclusion does not always lend itself to meaningful outcomes or opportunities for genuine impact. This especially relevant for young scientists, as they are often unconventional in their thinking and perspectives. In the context of this conversation and forum, we are interested in formal institutional space for young scientists in the TFM and its resulting activities.

How can young scientists, engineers, and practitioners contribute to the Technology Facilitation Mechanism through designated institutional spaces, and contribute positively to the SDGs through their role in tech-facilitation, transfer and innovation?"

What challenges do you feel young scientists specifically face in multi-stakeholder avenues such as this, and more specifically in the process of applying their science based solutions?

Technology transfer and access to science/data is crucial for implementing the SDGs, however, the social/economic/political context of local settings has a major influence on determining which are appropriate. When there is no "one size fit all" solution, how can we effectively innovate while still integrating local practices and traditional knowledge?

A partnership with young scientists is critical to the process of continuity and preservation of traditional and indigenous knowledge systems. How can we work with young scientists to enhance interest in indigenous knowledge to solve local level problems?

Women and indigenous knowledge are two crucial segments of society that must not be left behind to reach truly make STI effective for society. How can the gender gap better be addressed? How can informal knowledge be given increased importance and integration in innovation/technology?



Do you think that the traditional structure of school-based education (focused around the evaluation with grades in a set curriculum) discourages youth and children in schools from becoming involved in the scientific and innovation community? And if so how do you think this be changed?

