

**United Nations Commission on Science and Technology for Development (CSTD)  
Twenty-second Annual Session**

**Panel discussion on Priority Theme 2: The role of science, technology and innovation in  
building resilient communities, including through the contribution of citizen science**

**15 May 2019, 10 a.m.  
Room XVII, E-building, Palais des Nations**

**Concept Note**

## **1. Background**

At its twentieth-first session, held in Geneva, Switzerland in May 2018, the Commission on Science and Technology for Development selected “The role of science, technology and innovation in building resilient communities, including through the contribution of citizen science” as one of its two priority themes for the 2018–2019 intersessional period. In this context, the Commission will convene on the morning of Wednesday, 15 May 2019, a panel discussion on that priority theme to contribute to its better understanding and to assist the Commission in its deliberations at its twenty-second session.

At the beginning of the panel, the secretariat of the Commission will introduce the Report of the Secretary-General on that priority theme, which was prepared based on contributions by the UN system, country case studies by Commission members, relevant literature and other sources. The Report notes that people around the world are continuously affected by shocks; therefore, building resilience is critical for sustainable development. Resilient communities empower their people to absorb and adapt to shocks, have economies that can self-organize to continue functioning at times of crises, and are able to carry out all their activities without harming the environment. Science, technology and innovation (STI) have a critical role to play in each one of these dimensions. Digital technologies have empowered and given voice to people; innovation results in economic diversification, which increases the ability of economies to adapt to shocks; and new technologies are used for resource management and could help to decouple economic development from environmental degradation. A new development is citizen science, which uses new technologies to engage volunteers to carry-out tasks such as data collection in support of science.

There are key technical, social, and market challenges on STI for resilient communities. Technical challenges are related to data and underlying enabling technologies, and the need for prudent use of data acquired during citizen science projects. Social challenges are related to knowledge generation and use, considering that resilience is not neutral but reflects social norms and competing interests within the community. Market challenges are related to scalability and sustainability, highlighting that many technological solutions for community resilience are not developed beyond the prototyping phase. Another key issue is the need to develop STI solutions that are resilient themselves, given that disruption could be extremely harmful for the communities.

International collaboration plays a critical role in the provision of global STI that enables community-based technological solutions for resilience building.

## **2. Objectives**

The Panel has the objective to discuss and examine the suggestions for consideration by Member States and the Commission at its twenty-second session as contained in the Report of

the Secretary-General on “The role of science, technology and innovation in building resilient communities, including through the contribution of citizen science.” The panel aims at presenting evidence and providing recommendations that could assist the Commission in its deliberations.

### **3. Questions for discussion**

The following questions will guide the discussion:

In relation to good practices and lessons learnt on STI for community resilience:

- What are the opportunities and challenges in innovation for building resilient communities?
- What is the role of the private sector and civil society?
- What are the effective policy instruments for diffusion of technology for community resilience?

In relation to the role of citizen science for building community resilience:

- How new technologies are facilitating or could facilitate citizen science for resilience building?
- What are the main barriers for implementation and scaling up?
- Which policies are needed to address these barriers, with a focus on developing country context?

And in relation to the role of international collaboration:

- What are the experiences in international collaboration on STI for community resilience?
- What could be new areas of collaboration to scale up innovations for community resilience?
- What are the actions that the CSTD can take to harness STI for resilient communities?

### **4. Format**

The Panel discussion will begin with the presentation of the Report of the Secretary-General, followed by a video by UNCTAD and UN Major Group on Children and Youth featuring young people involved in citizen science. Following the video, the panel will be structured as a moderated panel discussion. The moderator, Mr. Andrew Revkin (Strategic Advisor for Environmental and Science Journalism, National Geographic Society, formerly of the New York Times), will make a brief introduction to set the stage for discussion, followed by the initial interventions of members of the panel (5-8 minutes), broadly addressing the guiding questions. After this the moderator will initiate an interactive discussion among the panellists, and high-level policy makers and other participants from the floor. The panel will close with a brief presentation of the main outcomes of the discussion by the moderator.

### **5. Supporting documents**

- UNCTAD (2019). Report of the Secretary-General on the role of science, technology and innovation in building resilient communities, including through the contribution of citizen science (E/CN.16/2019/3), [https://unctad.org/meetings/en/SessionalDocuments/ecn162019d3\\_en.pdf](https://unctad.org/meetings/en/SessionalDocuments/ecn162019d3_en.pdf)
- UNCTAD (2018). Technology and Innovation Report 2018, UNCTAD/TIR/2018, [https://unctad.org/en/PublicationsLibrary/tir2018\\_en.pdf](https://unctad.org/en/PublicationsLibrary/tir2018_en.pdf)