INTERSESSIONAL PANEL OF THE UNITED NATIONS COMMISSION ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT (CSTD)

Vienna, Austria
15-17 January 2019

Contribution of Peru

to the CSTD 2018-19 priority theme on 'The role of science, technology and innovation in building resilient communities, including through the contribution of citizen science'

United Nations Commission on Science and Technology for Development (CSTD)

Request for inputs for CSTD 2018-19 Priority

Theme 2: "The role of science, technology and innovation in building resilient communities, including through the contribution of citizen science"

Dear CSTD member,

As you are aware, the CSTD 21st annual session selected "The role of science, technology and innovation in building resilient communities, including through the contribution of citizen science" as one of the priority themes for its 22nd session (2018-19 period).

Communities can be affected by shocks from different origins including natural disasters, economic shocks, health emergencies, social conflict and war, which can produce significant and long-term effects in their development paths. Therefore, building the capacity of communities to respond, mitigate and recover from shocks is critical to reduce the social and economic impact of these shocks. New and emerging technologies, particularly, those digitally enabled, have the potential to strengthen the resilience of communities. For instance, they enable citizen science that can crowdsource data to help to gather rapid information about the safety of people during natural disasters and data analytics can help to predict the flux of refugees.

The CSTD secretariat is in the process of drafting an issues paper on the theme to be presented at the CSTD inter-sessional panel meeting. In this context, we would like to hereby solicit inputs from the CSTD members on this theme. We would be grateful if you could kindly answer the following questions based on your experience from your country or region.
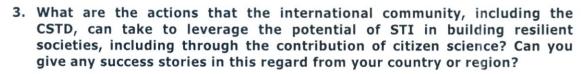
1. **Can you give examples of projects/policies in your country aimed at using science, technology and innovation (STI) to build resilient communities? What are the main challenges confronted while trying to implement these projects/policies in your country or region?**

   In Peru, a discussion has recently begun on the trend of smart cities, what is understood by them and how projects on them are materialized. This understanding and the institutional framework that derives from this, is the main challenge facing the treatment of this issue.

2. **Can you provide examples of policies/projects/initiatives aimed at using/promoting citizen science to build resilient communities? Do these projects incorporate a gender approach? What are the main challenges confronted in implementing these projects?**

   The MTC has successfully articulated two smart cities projects, with cooperation from The Republic of South Korea, in the cities of Piura and Tacna finding in these cities, ideal conditions to materialize effectively, actions that involve the construction or development of a Smart City.

3. **What are the actions that the international community, including the CSTD, can take to leverage the potential of STI in building resilient societies, including through the contribution of citizen science? Can you give any success stories in this regard from your country or region?**

There is cooperation from different countries for this topic. Recently the KISDI Institute of South Korea, together with its experts, has developed an important document that allows us to know the needs and conditions that are suggested, in this matter, for our country.

4. Could you suggest some contact persons of the nodal agency responsible for projects/policies, related to resilient communities, STI and the citizen science as well as any experts (from academia, private sector, civil society or government) dealing with projects in this area? We might contact them directly for further inputs or invite some of them as speakers for the CSTD inter-sessional panel and annual session.

The specialist of networks and spectrum management, Mr. Wilmer Carol Azurza Neyra (wazurza@mtc.gob.pe), official of the Vice Ministry of Communications of the Ministry of Transport and Communications of Peru, (MTC).

5. Do you have any documentation, references, or reports on the specific examples on the priority theme in your country or region?

Currently, there are no specific policies or reports, but there is a Working Document on Smart Cities, issued by the General Directorate of Regulation and International Affairs on Communications of the Vice Ministry of Communications.

Please send your responses and any further inputs on the theme to the CSTD secretariat (stdev@unctad.org) by 6 September 2018. We look forward to receiving your valuable inputs.

Sincere Regards,

CSTD secretariat

Theme 2: The role of science, technology and innovation in building resilient communities, including through the contribution of citizen science.

1. *Could you give examples of projects/policies in your country aimed at using science, technology and innovation (STI) to build resilient communities? ¿What are the main challenges confronted while trying to implement these projects/policies in your country or region?*

   Although there are no specific policies on the use of STI to build resilient communities, the following ones contribute to this issue:
   - The Plan Nacional Estratégico de Ciencia, Tecnología e Innovación Tecnológica para la Competitividad y el Desarrollo Humano PNCTI 2006-2021 (National Strategic Plan of STI for Competitiveness and Human Development) that identifies strategic areas (Environmental Science and Technology, ICTs, Biotechnology, Biodiversity Valorization, Materials Science and Technology, Water Resources Science and Technology, Science and Technology for Energy and Basic Sciences).

   - The National Policy for the Development of Science, Technology and Technological Innovation, which aims at improving and strengthening STI performance in the country.

   - CONCYTEC is developing a new financial scheme that aims at responding to those needs with great social impact.

   The main challenge is the weak articulation between academia, business sector and decision- and policy-makers.

2. *Can you provide examples of policies/projects/initiatives aimed at using/promoting citizen science to build resilient communities? Do these projects incorporate a gender approach? What are the main challenges confronted in implementing these projects?*

   CONCYTEC, through its executive body FONDECYT, and Grand Challenges Canada funded the Project "Mamás del río: mejorando la salud materna e infantil en comunidades rurales de la Amazonía Peruana" (River Moms: improving maternal and child health in rural communities of the Peruvian Amazon). This project had a gender component and consisted of using smartphones to collect and send health information and others of pregnant women of native communities to two medical ships that attend these communities. This project was co-funded by the financial scheme Bold Ideas, which focuses on innovation projects.

   The Instituto de Investigaciones de la Amazonía Peruana – IIAP (a public research institute adjunct to the Ministry of the Environment) has the Research Program for the Use and Conservation of Water and other resources (AQUAREC), Research Program in Integrative Management of the Forest and Environmental Services (PROBOSQUES), Research Program on Climate Change, Territorial Development and the Environment (PROTERRA), Research Program of Cultural Diversity and Amazon Economy (SOCIODIVERSIDAD), and Research Program on Information of the Amazon Biodiversity (BIOINFO). These six programs contribute to the sustainable management and conservation of biodiversity, socio-diversity and Amazon economy. Through these programs, the IIAP develops scientific knowledge, adaptation and use of technologies, products and methodologies

appropriate for the efficient and organized use of natural resources and the Peruvian Amazon territory.

The main challenge is the great biological, geographical and cultural diversity in the country, that requires specific approaches to meet the needs of the regions.

3. *What are the actions that the international community, including the CSTD, can take to leverage the potential of STI in building resilient societies, including the contribution of citizen science? Can you give any success stories in this regard from your country or region?*

The Project "Mamás del río" was the result of the cooperation between Grand Challenges Canada – GCC and CONCYTEC and its objective was to reduce maternal and child mortality in remote communities of the Peruvian Amazon through a combination of social and technological innovation methods.

4. *Could you suggest some contact persons of the nodal agency responsable for projects/policies, related to resilient communities, STI and the citizen science as well as any experts (from academia, private sector, civil society or government) dealing with projects in this area? We might contact them directly for further inputs or invite some of them as speakers for the CSTD inter-sessional panel and annual session.*

From CONCYTEC, we suggest the specialist in environmental science and technology, Tania Peña (alternate Paul Soplín).

Among the experts, we suggest Dr. Dennis del Castillo from IIAP and Dr. Magaly Blas-Blas from the Universidad Peruana Cayetano Heredia.

5. *Do you have any documentation, references, or reports on the specific examples on the priority theme in your country or region?*
To the best of our knowledge, there are no specific documentation with examples on the priority role of STI in building resilient communities, including the contribution of citizen science.