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

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Contribution of the Dominican Republic

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'

Cuestionarios sobre

El Rol de la Ciencia, Tecnología y la Innovación en la Construcción de las Comunidades Resiliente, incluyendo la Contribución de los Ciudadanos y

El Impacto de los Cambios Tecnológico en el Desarrollo Sostenible

Respuestas:

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?

DR has projects and policies that aim at using STI to build resilient communities. As examples, The National Strategy for Development (END, acronym in Spanish for Estrategia Nacional de Desarrollo), as the umbrella under which all other national projects for policies depend: Strategic Plan for Science, Technology and Innovation 2008-2018 (PECYT 2008-2018, acronym in Spanish for Plan Estratégico de Ciencia, Tecnología e Innovación 2008-2018) of the Ministry of Higher Education, Science and Technology (MESCYT). Policies for the Ministry of Agriculture, Ministry of Environment and Natural Resources, Ministry of Commerce, Industry and Micro, Small and Middle Enterprises (MICM).

Regarding MESCYT (and PECYT 2008-2018), article 94 of the law 139-01 which creates the former Secretariat of State of Higher Education, Science and Technology, now MESCYT, establish the creation of the National Fund for innovation and Scientific and Technological Development (FONDOCYT), which was implemented in 2005, when the firs call for proposals was done. Since then, more than 400 projects have been approved. Because of these projects, there are more papers published in peer review journals. Also, an improvement of the efficiency in agriculture (25% of all the funds have been approved for agrarian projects), for example. In addition, because of those projects, DR counts with high quality laboratories and research groups that are generating international patents (e.g. carbon nanotube, PUCMM, and more efficient batteries, INTEC, as well as other in process regarding natural products).

in agriculture, the results of one project got the first domestication of a native animal to use as pollinator in greenhouse agriculture (it was an insect of the genus *Xylocopa*). Experimental results show this animal as a very efficient pollinator; in addition, to learn more about health, reproduction and population dynamics of the insect, another project has been recently approved.

The main challenges to strengthen the scientific community in Dominican Republic are high-quality scientists are needed; more funds dedicated to understanding and adequate the environment and food security to the climate change, in topics such as water available and its quality, considering biodiversity. Search for new technologies as well as innovations base on science and technology.

From a regional point of view, it is necessary to do more joint projects regarding common challenges. Although there are initiatives in this sense, they are not enough.

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?

Through the foment and spread of science and technology, to help citizenship to understand the importance of science and technology, i.e. why it is necessary to invest in science and technology for a better future and better standard for living. All this project intent to incorporate a gender approach, however more effort is needed in this direction.

The main challenges are to get help from different sectors of the Dominican Society, mainly from the academies and research centers to contribute educating common citizens.

3.-What are the actions that the international community, including 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?

Support the development of regional programs aimed at the establishing and/or strengthening capacities for climate forecast and disaster prevention based in space technology, including early warning for drought. Establishing a multidonor trust fund for Tsunami, disaster and climate preparedness.

Implement more programs to teach, in a dynamic way, how science contribute to build a better word if we understand that science is relevant for peace. Universities, research centers, schools and cultural society should work together.

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 project in this area? We might contact them directly for further inputs or invite some of them as speakers for the CSTD intersessional panel and annual session?

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

Yes. Some of them are:

Local, National Strategy for Development (END) and Strategic Plan for Science, Technology and Innovation 2008-2018 (PECYT 2008-2018), among others.

International, Small Island Developing States (Using Science, Technology and Innovation for the Caribbean Region (http://www.unesco.org/new/en/natural-sciences/priority-areas/sids/sids-conferences/mauritius-conference-2005/themes/science-technology/using-science-technology-and-innovation-for-the-caribbean-region/).

Science, Technology and innovation in the Caribbean (Keith Nurse, 2007).

Ciocca, Daniel R. and Gabriela Delgado. 2017. The reality of scientific research in Latin Ameica; an insider's perspective. Cell Stress Chaperones 22(6):847-852. Science, technology and innovation in Latin America and the Caribbean region (http://unctad.org/meetings/en/Presentation/cstd2013_AMR_Castillo.pdf)