HARNESSING STI FOR DISASTER RISK REDUCTION WORKSHOP

29 February - 01 March 2024 | Metro Manila, Philippines

Joint initiative of the

Department of Science and Technology (DOST) of the Republic of the Philippines, the Department of State of the United States of America, and the United Nations Conference on Trade and Development

Under the Philippines' and United States of America's Membership in the United Nations Commission on Science and Technology for Development (CSTD)

CONCEPT NOTE

Rationale

The United Nations Office for Disaster Risk Reduction (UNDRR) defines disaster as *a "serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability and capacity, leading to one or more of the following: human, material, economic and environmental losses and impacts."* [1] Disasters can cause immediate damage and may affect societies in the aforementioned aspects that may also result to deaths, injuries, and diseases. Harnessing science, technology and innovation (STI) into disaster mitigation, response, and recovery can reduce losses, speed-up needed assistance, and enhance long-term resilience. STI capabilities that include resilient and secure digital ecosystems and enabling environment to support Geographic Information System (GIS) and remote-sensing, meteorological, toxicological, geological, biological, and engineering expertise, as well as social and computer sciences can be brought to bear in disaster situations to reduce the short- and long-term risks from these disaster events.

The 2030 Agenda for Sustainable Development recognizes and reaffirms the urgent need to reduce the risk of disasters and considers it as a critical element in social and economic development. One of the highlighted related topics under Sustainable Development Goal 11 "Make cities and human settlements inclusive, safe, resilient and sustainable" is disaster risk reduction (DRR). [2]

The Sendai Framework for Disaster Risk Reduction 2015-2030 (Sendai Framework), adopted at the Third United Nations World Conference on Disaster Risk Reduction held on 14-18 March 2015 in Sendai, Miyagi, Japan, states that *"Reducing disaster risk is a cost-effective*

[1] United Nations Office for Disaster Risk Reduction. (n.d.). Disaster. UNDRR. Retrieved January 9, 2023, from https://www.undrr.org/terminology/disaster

[2] United Nations Department of Economic and Social Affairs. (n.d.). Disaster risk reduction. Sustainable Development. Retrieved January 10, 2023, from https://sdgs.un.org/topics/disaster-risk-reduction

investment in preventing future losses. Effective disaster risk management contributes to sustainable development." [3]

According to UNDRR, as stated in the Sendai Framework, the effect of disasters may range from affecting only local communities which require assistance beyond the affected community (small-scale) to affecting a society which requires national or international assistance (large-scale). Paragraph 40 under the International cooperation and global partnership section of the Sendai Framework reflects that *"addressing economic disparity and disparity in technological innovation and research capacity among countries, it is crucial to enhance technology transfer, involving a process of enabling and facilitating flows of skill, knowledge, ideas, know-how and technology…"*

The role of science, technology and innovation (STI) in building resilient communities was also discussed at the 22nd United Nations Commission on Science and Technology for Development in May 2019. In the resultant resolution, (E/RES/2019/25[4]), Member states recognized that STI could contribute to building resilient communities by empowering and giving a voice to people, including those most vulnerable, through, among others, extending access to education and health, monitoring environmental and social risks, connecting people and enabling early warning systems. The resolution recommended member States to *"design and implement science, technology and innovation policies and other relevant policies to make them responsive to building resilient communities".*

In the UNISDR Science and Technical Advisory Group Report 2015: Science is used for Disaster Risk Reduction; the general recommendation is to encourage science and technology to demonstrate that it can support policy and practice. Specifically, the following priority areas for actions were also recommended to help strengthen DRR policies, initiatives, and community:

1. Share knowledge for action;
2. Use a multidisciplinary approach to research; and
3. Build systems resilience through local, national, regional and international partnership.

The Report also emphasized the need to share and disseminate scientific information and technological advances that will inform policies and regulations. It has also recognized that collaborations between scientific and technology communities, DRR practitioners, and policymakers are integral to addressing the needs and gaps in science, technology, and innovation for DRR. [5]

Related Sustainable Development Goals

[3] United Nations. (2015, March 18). Sendai Framework for Disaster Risk Reduction 2015–2030. Retrieved January 9, 2023, from https://sdgs.un.org/sites/default/files/publications/2157sendaiframeworkfordrren.pdf

[4] Link to E/RES/2019/25: https://unctad.org/system/files/official-document/ecosoc_res_2019d25_en.pdf

[5] Aitsi-Selmi A, Blanchard K, Al-Khudhairy D, Ammann W, Basabe P, Johnston D, Ogallo L, Onishi T, Renn O, Revi A, Roth C, Peijun S, Schneider J, Wenger D, Murray V. 2015. UNISDR STAG 2015 Report: Science is used for disaster risk reduction. Retrieved from http://preventionweb.net/go/42848

SDG 11 – Sustainable cities and communities
SDG 13 – Climate action
SDG 14 – Life below water
SDG 15 – Life on land
SDG 17 – Partnerships for the Goals

Overview of the Workshop

The "**Harnessing STI for Disaster Risk Reduction Workshop"** will then serve as a platform for the CSTD Members to introduce science, technology, and innovation (STI) solutions that support the United Nations' and its Member States' recognition of the crucial role it plays in Disaster Risk Reduction.

The Workshop will be co-organized by the Department of Science and Technology (DOST) of the Republic of the Philippines, the United States of America, and the United Nations Conference on Trade and Development (UNCTAD) through the Philippines and United States' Membership in the Commission on Science and Technology for Development (CSTD). The Workshop will be held at Crimson Hotel Manila, Alabang, Muntinlupa City, Metro Manila, Philippines on **29 February to 01 March 2024**.

Participants

The Workshop will welcome participants from CSTD Member States. The Member States shall send one (1) representative each. Currently, there are forty-three (43) Member States.

The participants from Member States are expected to be innovators, policymakers, disaster specialists, engineers, urban and environmental planners, and other experts involved in the research, development, and or utilization of technologies and innovation for disaster risk reduction.

Objectives

The general objective of the workshop is to identify at least three (3) policy recommendations in harnessing science, technology, and innovation (STI) in the field of disaster risk reduction. More particularly, the workshop aims to be a platform for CSTD Member States to:

1. Showcase their success stories in developing and utilizing STI in disaster risk reduction, including practical application of early warning systems;
2. Determine STI needs of Member States;
3. Determine common challenges in harnessing STI for DRR; and
4. Provide recommendations to help Member States effectively harness STI for DRR.

Expected Outputs

The expected output of the workshop is the list of at least three (3) policy recommendations on harnessing science, technology, and innovation for disaster risk reduction. A summary of the common challenges, opportunities, and best practices of the CSTD Member States would also be provided.

Format

The workshop proper will have three (3) segments: plenary sessions, working group/breakout group discussions, and a poster presentation through a World Café format. Attached is a copy of the *draft* programme.

Plenary Session

The plenary sessions will be held at both the opening and closing segments of the Workshop. In the opening segment, a keynote speech will be delivered and presentations will be given by qualified speakers in the field of STI in disaster risk reduction. The speakers will discuss the science, technology, and innovation for DRR landscape or ecosystem in their region.

At the end of the entire workshop, a closing segment will be held where representatives of the working groups may share the highlights of their discussions and a synthesis will be presented by the moderator, highlighting policy recommendations for harnessing STI for disaster risk reduction as output of the workshop.

Poster Presentation through a World Café format (Breakout Groups)

After the opening segment and plenary session, the participants will break out into four (4) groups. The participants will then join a World Café where presenters (one expert from the Philippines, one expert from the United States of America, and one per Regional Group) will discuss the poster of their DRR-focused innovation and experiences related to policy that encouraged their innovation. The presenters may also mention challenges that they have encountered as well as opportunities that made their innovation possible.

Working Group Discussions

After the plenary sessions and the World Café, the participants will be engaged in working group discussions to exchange insights about the presentations at the plenary session, the innovations during the poster presentations, their countries' best practices, the challenges and needs in harnessing STI for DRR, and recommendations on policies that will widen and multiply opportunities.

Tour at DRR Facilities

The participants will be guided to a tour at selected disaster risk reduction-related facilities in Metro Manila to give the participants in-person demonstration on how the Philippines conducts some of its DRR operations.

Logistics

The Workshop will be held in physical format in Metro Manila, Philippines. Understanding the financial barriers that may inhibit participation, the hosts have allocated a limited fund to assist the attendees with their accommodation, meals during the day, airport transfer, and airline ticket expenses.

The accommodation and airport transfer of one participant (including the nominated poster presenter) and the nominated speakers per CSTD Member State will be funded by the Department of Science and Technology of the Philippines. Lunch and light snacks during the day will also be provided to all attendees.

If a nominated participant and speaker feels that airline ticket costs might prevent him/her from attending, please indicate it in the online registration form. The U.S. Department of State of the United States of America shall assess requests on a case-by-case basis and strive to support as many participants as possible within the constraints of budget.

All participants are required to complete the online pre-event registration for confirmation of attendance and gathering of necessary data. All registrations are required to be supported with a **Note Verbale** from the representative's respective Permanent Mission to the United Nations in Geneva, Switzerland. Online registration should be accomplished at **bit.ly/STIDRRWorkshopReg by 15 December 2023.**

Focal Persons

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