WORLD TSUNAMI AWARENESS DAY 2021
Concept Note and Programme

LEVERAGING THE POWER OF SCIENCE AND TECHNOLOGY TO REDUCE TSUNAMI RISK FOR CURRENT AND FUTURE GENERATIONS

On-line Event hosted from New York, 8:30am-10:00am, Friday, 5 November 2021

Co-organized by the Permanent Missions of Chile, Fiji, Japan, and Maldives, the Co-Chairs of the Group of Friends of Disaster Risk Reduction (the Permanent Missions of Australia, Indonesia, Norway, and Peru), United Nations Office for Disaster Risk Reduction (UNDRR), the United Nations Development Programme (UNDP), and the United Nations Educational, Scientific and Cultural Organization (UNESCO).

BACKGROUND

Six years ago, the United Nations General Assembly[1] designated 5 November as World Tsunami Awareness Day (WTAD). The General Assembly invited all Member States, the United Nations system, international and regional organizations, as well as civil society, to observe WTAD each year and raise awareness of the risk posed by tsunamis. Linking with the 2021 International Day for Disaster Risk Reduction and the Sendai Seven Campaign, which will focus on Sendai Framework Target F to substantially enhance international cooperation to developing countries for disaster risk reduction, the WTAD on-line event will consider international cooperation for tsunami awareness and risk reduction with a special focus on science, technology, and innovation.

Risk has become progressively more systemic. New interactions between climate change, environmental, economic, technological, biological and seismic risks are emerging in ways that were not sufficiently appreciated. One hazard can trigger another with cascading impacts across systems and borders with devastating impacts on progress towards the Sustainable Development Goals. Entangled with this risk landscape, tsunamis are natural hazards that pose massive threats to human life, assets, and investments in sustainable development. While tsunamis are primarily triggered by seismic events, research suggests that climate change-

[1] A/RES/70/203

induced sea-level rise could amplify the magnitude of tsunami-induced flooding[2]. Moreover, the impacts of climate change and environmental degradation, such as intensified coastal erosion and the destruction of coastal and marine ecosystems, can increase the vulnerability and exposure of communities to tsunamis. It is therefore critical to include tsunami risk within multi-hazard risk assessments and risk reduction strategies that also include climate change, as outlined in the Sendai Framework.

Sendai Framework Target F measures more than financial flows. It includes support for capacity building, including statistical capacities, as well as transfer and exchange of science, technology, and innovation in disaster risk reduction to developing countries. The lack of access to context-specific and innovative science and technology is a substantial barrier to reducing disaster risk in many developing countries. This is especially true for countries and communities living with the threat of tsunamis. Effectively reducing the risk of tsunamis requires significant investments in technology for early warning systems that lead to early action as well as in ocean and seismic science and research. Investments are also critical for the collection and analysis of risk data that integrates both exposure and vulnerability factors, and in the latest technology and scientific research related to coastal defenses, both green and gray, as well as resilient infrastructure.

The Sendai Framework highlights the pivotal role of young people as well as stakeholders working in science, engineering, technology, and innovation in the work of advancing disaster risk reduction. Academic and research institutions in developing countries, in partnership with the global science and technology community, can bring their knowledge and expertise to find home-grown solutions for reducing the risk posed by tsunamis to human life and economic assets. Young people, including youth community leaders as well as young professionals working in academia, engineering and science and technology have an essential role to play in this regard. Inclusive policy and governance frameworks are essential to leverage their skills and knowledge and include them in decision making processes.

OBJECTIVE AND OVERVIEW OF THE EVENT

The objective of the on-line 2021 WTAD event hosted from New York is to highlight the importance of international cooperation in raising awareness of and reducing the risk posed by tsunamis within a multi-hazard approach to disaster risk reduction. Specifically, the event will highlight the critical importance of partnerships and synergies between development cooperation actors, the science and technology sectors, and research and academic institutions. The event will share good practice and innovative technologies in reducing tsunami risk as well as solutions that have been effective in bridging the gap and adapting these technologies to meet the needs of developing countries.

As a contribution to the implementation of approach put forward in the Secretary-General's recent report on "Our Common Agenda", the event will also shine a spotlight on youth and young scientists engaged in disaster risk reduction, including tsunami risk reduction. By engaging young people working in science and technology, the event aims to propose solutions

[2] https://www.sciencedaily.com/releases/2018/08/180815141444.htm

to ensure policy and investment decisions made today do not create risk for young and future generations. The event also aims to leverage the links between World Tsunami Awareness Day activities and the United Nations Decade of Ocean Science for Sustainable Development (2021-2030) which includes tsunami detection and early warning systems as a priority over the next 10 years.

The WTAD New York event will consist of a high-level opening segment and video messages from youth and young professions engaged in tsunami awareness and disaster risk reduction. This will be followed by a panel of experts and practitioners from academia, national and local governments, and the United Nations system to discuss how they are applying the latest science and technology in tsunami risk reduction projects.

GUIDING QUESTIONS

- How can enhanced international cooperation support the transfer and development of innovative technology to reduce tsunami risk (i.e. early warning systems, resilient infrastructure)?
- What opportunities exist to bridge the science-policy-practice interface to facilitate timely evidence-based tsunami risk reduction policies, strategies, and programmes?
- What kinds of partnerships have been most effective around tsunami and ocean-related risk? What were the lessons learnt, and how can they be scaled-up and adapted to local contexts and resources?
- How can tsunami, ocean, and coastal management policies and programmes better capitalize on the knowledge, ideas and solutions of youth and young professionals and mobilize their engagement towards multi-hazard early warning systems?