



Regional workshop and capacity building programme on Role of Earth Observation in Multi-hazard Disaster Risk Assessment and Monitoring Targets of the Sendai Framework

4-8 December 2019

Background

Timely insights into natural hazards and the risks they pose to societies are more critical than ever as the Natural hazards exacerbated by climate change threaten to jeopardize sustainable development around the South Asia. Under a scenario of global warming of 1.5°C, an IPCC special report (2018), says that 'complex disaster risk is a new normal'. Climate risk accounts for 85 per cent of the regional risk landscape. Lesser developed countries are particularly vulnerable to climate induced disasters. Understanding the exposure of people and assets to hazards, forecasting and preparing for the impacts of disasters, and planning emergency response operations require accurate and easy-to-access information. Space technologies such as Earth observation satellites, telecommunication technologies and global navigation satellite systems can provide this information, supporting disaster risk reduction, preparedness, response and recovery.

Asia is particularly struck by disasters; 86 per cent of all people reported as affected by climate-related disasters between 1998 and 2017 were located on the continent¹. Cyclone Fani and Cyclone Bulbul are just two examples of extremely powerful cyclones that recently hit the region.

In order for the SAARC Member States to be able to incorporate the routine use of space technology-based solutions, there is a need to increase awareness, build national capacity and also develop solutions that are customized and appropriate to the needs of the developing world.

The Sendai Framework for Disaster Risk Reduction (SFDRR) has rightly assessed the need to enhance the use of space technology like Geographic Information System (GIS), Satellite based communication for assessment and management of risks and so on. As different nations have different capabilities, the emphasis is

¹ UNDRR 2018



also given on International Cooperation for technology transfer and information sharing for comprehensive understanding of risks in the Region.

Acknowledging the utility of Space Technology in Disaster Management, SAARC countries are engaged in development of applications based on space technology and explore its effectiveness for Disaster Risk Reduction. It is useful for implementation of priorities for action laid down in Sendai Framework for Disaster Risk Reduction (SFDRR) i.e. Understanding Disaster Risk and enhancing Disaster Preparedness for effective Response.

The event is the second regional event in South Asia under the umbrella of SAARC Disaster Management Centre (IU) and United Nations Office for Outer Space Affairs (UNOOSA), through its United Nations Platform for Space based Information for Disaster Management and Emergency Response (UN-SPIDER), in collaboration with International Water Management Institute (IWMI), Sri Lanka and Centre for Space Science and Technology Education for Asia and the Pacific (CSSTEAP), India.

It is built on the outcome of the 1st regional workshop and capacity building programme on 'utilization of space based and geospatial information for assisting achieving the targets of the Sendai Framework', which was held in December 2018 at SDMC (IU).

Objectives

1. Impart skills of using Earth observation techniques in multi-hazard disaster risk, with emphasis on climate induced disasters - flood and drought disasters;
2. Demonstrate a pilot project conducted in one of the Member State on creating spatial data repository for monitoring targets of the Sendai Framework;
3. One day workshop to discuss space and geospatial tools and technologies to support disaster risk reduction and emergency response efforts



Expected outcomes

The expected outcome is the enhanced cooperation and sharing of best practices amongst disaster management agencies and experts in the region, deepen engagement with the countries in the region to serve their specific needs and enhance regional cooperation for better utilization of space based and geospatial information in disaster risk management.

Organisers

- SAARC Disaster Management Centre (IU); and
- United Nations Office for Outer Space Affairs (UNOOSA), through its United Nations Platform for Space based Information for Disaster Management and Emergency Response (UN-SPIDER)

Collaborators

- International Water Management Institute (IWMI), Sri Lanka and
- Centre for Space Science and Technology Education for Asia and the Pacific (UN affiliated), India