Mongolia National Training on Digital Technologies for Disaster Risk Management

13-14 October 2022

Background

The Asia-Pacific region is vulnerable to the impacts of natural hazards. The number of disasters caused by natural hazards has increased drastically in recent years. Information and communication technologies (ICTs) have tremendous potential in disaster-resilient development. They can instantly and continuously facilitate the rapid flow of information in real-time. The use of ICTs during all phases of disaster risk management presents substantial opportunities to reduce disaster risks, enhance climate resilience, and facilitate inclusive preparedness and response.

In an effort to strengthen the national capacities of Mongolia, the National Emergency Management Agency (NEMA), ESCAP Subregional Office for East and North-East Asia, and the Asian and Pacific Training Centre for ICT for Development will organize the National Training on ICT for Disaster Risk Management on 13-14 October 2022. The event aims to raise awareness of the role of national stakeholders in addressing the challenge of natural hazards; enhance understanding of the applications of ICTs in resilient development and disaster risk management, and strengthen collaborative partnerships between ICT and DRM professionals to achieve resilience.

Objectives

By the end of the training, participants will:

- Be familiar with disaster-resilient development, disaster risk management and its associated terminologies, including the linkages between climate change and disaster risk management, the 2030 Agenda for Sustainable Development and SDGs;
- Understand how risk information can be used for selecting appropriate disaster risk mitigation and prevention measures at various levels and for making decisions by considering likely scenarios; and
- Understand how ICTs can support resilient development and disaster risk management.

Trainers and Resource Persons

- Prof. Cees van Westen, Department of Earth System Analysis, University of Twente
- Dr. Manzul Hazarika, Director, Geoinformatics Center, Asian Institute of Technology
- Mr. Anish Ratna Shakya, Research Associate, Geoinformatics Center, Asian Institute of Technology
- Mr. Syams Nashrrullah, Program Officer, Geoinformatics Center, Asian Institute of Technology
- Ms. Madhurima Sakar-Swaisgood, Economic Affairs Officer, ESCAP Subregional Office for East and North-East Asia
- Mr. SungEun Kim, Economic Affairs Officer, ESCAP Subregional Office for East and North-East Asia

Target Participants

- Disaster risk management practitioners at national and subnational governments;
- ICT policymakers, managers and officers in the public sector (including those working in information and knowledge management); and
- ICT, DRM, climate change and environment professionals from the private and NGO sector.

For information, please contact:

- Ms. Nuankae Wongthawatchai, Programme Officer, APCICT/ESCAP, wongthawatchai@un.org
- Mr. SungEun Kim, Economic Affairs Officer, ESCAP Subregioanl Office for East and North-East Asia, kim54@un.org

Tentative Programme

DAY1, 13 OCTOBER	
09:00 - 09:45	**Opening** • Welcome remarks by NEMA representative • Remarks by Mr. Ganbold Baasanjav, Head, ESCAP East and North-East Asia Office • Remarks by Mr. Kiyoung Ko, Director, APCICT **Launching of the Asia-Pacific Disaster Report 2022 for ESCAP Subregions – Pathways to Adaptation and Resilience in East and North-East Asia** • Introduction of the report and presentation of key findings – Mr. Sanjay Srivastava, Chief, Disaster Risk Reduction Section, ESCAP • Handing over the report to NEMA **Group Photo**
09:45 - 10:45	**Session 1: Introduction to ICT for Disaster Risk Management** • Introduction to the course and learning objectives • Introduction lecture and applications of ICT for DRM [Nuankae Wongthawatchai/ Anish Ratna Shakya]
10:45 - 11:00	Coffee break
11:00 - 12:30	**Session 2: Data necessary for Disaster Risk Management** • Remote Sensing data • Digital Elevation Model • Spatial Data Infrastructure • Demo of data retrieval from internet [Anish Ratna Shakya]
12:30 - 14:00	Lunch break

14:00 - 15:40	**Session 3: ICT for Risk Assessment & Visualisation** • What is risk? Basic components, hazard, exposure vulnerability • Hazard characteristics & complications • Hazard interactions • Elements-at-risk • Vulnerability • Loss and risk assessment • Different methods for estimation risk • Scale of risk assessment • Demo of RiskChanges [Cees van Westen/Anish Ratna Shakya]
15:40 - 16:00	Coffee break
16:00 - 17:30	**Session 4: Risk and Resilience Portal and Impact-based forecasting** • Risk and Resilience Portal of ESCAP – decision support system for Mongolia • ESCAP's approach for Impact-based forecasting – cases from the Asia-Pacific region **[**Madhurima Sakar-Swaisgood / SungEun KIM**]**
DAY2, 14 OCTOBER	
09:00 - 10:30	**Session 5: National presentations and discussions** *This session will listen to participants and trainees on Mongolia's disaster risk, disaster risk management practices, and challenges.*
10:30 - 10:50	Coffee Break
10:50 - 12:15	**Session 6: ICT for Mitigation, Preparedness and Adaptation** • What is disaster mitigation and prevention? • Risk perception, communication, and evaluation • Risk reduction alternatives and possible future scenarios • What is disaster preparedness? • Early warning systems • Examples of EWS for different types of hazards [Anish Ratna Shakya]

12:15 – 13:30	Lunch break
13:30 - 15:00	**Session 7: ICT for Disaster Recovery and Resilient Development** • What is disaster recovery • Build Back Better / Resilience • Monitoring disaster recovery • Collaborative mapping • Wenchuan earthquake atlas • Recovery/reconstruction monitoring [Cees van Westen/ Anish Ratna Shakya]
15:00 - 15:15	Coffee Break
15:15 - 16:00	**Session 8: ICT for Disaster Response** • What is disaster response • Use of ICT for disaster response • Remote sensing-based disaster response • Flood mapping using SAR data [Syams Nashrrullah/Anish Ratna Shakya]
16:00 – 16:20	**Workshop Evaluation** [Nuankae Wongthawatchai/Sung Eun KIM]
16:20 – 16:30	**Closing**