Application of Geospatial Information Technology for Disaster Risk Management and Decision Support (Nepal)

　　　　　　

:	Course
:	Kathmandu, Nepal
:	7 12　 2020 to 10 12　 2020
:	4 Days
:	Satellite Imagery and Analysis
:	http://www.unitar.org/unosat
:	US$0.00
email:	khaled.mashfiq@unitar.org
:	UNRCO

　　　　

Geographic locations and Information about these locations show us where social environmental and economic conditions occur, where people at risk from natural hazards are located, how many people need assistance following a conflict, and do not have access to good health care, education, freshwater or public transports. Over the last two decades Geospatial Information Technology (GIT) has rapidly developed and is now being also called an "enabling technology" due

to the benefit it offers across different application domains. GIT can help us to analyse and to better understand why and where things have happened in the past and it can also show us why and where they might happen in the future allowing us to make informed decisions and make better use of our resources.

Geospatial Information Technology (GIT) can be a very useful tool for the whole disaster risk management cycle starting from the preparedness phase, mitigation to response, recovery, and reconstruction. GIT has proven to be efficient for implementing coherent disaster risk reduction (DRR) activities at regional, national, and local scales. Quantifying risk and expected future losses are key steps in any disaster risk reduction program. Also, the outputs and scenarios of a risk assessment contribute to structuring overall risk reduction policies and planning. Geospatial risk assessment can be performed with GIT tools and techniques which can quantify risk and identify the locations in need of risk reduction measures. The role of GIT does not stop there; in the immediate aftermath of a disaster, satellite-based rapid response analysis enables the emergency response agencies to respond in a better and coordinated way

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The overall aim of the course is to provide training participants with introductory concepts of geospatial information technology and geospatial methodologies for risk assessment.

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- Define and describe the basic concepts and terminology related to Geospatial Information Technology (GIT),
- Apply basic methods and functionalities of GIS software ArcGIS to manage and analyse spatial data,
- Identify, search, collect, organize geospatial data/information,
- Explain the role of geospatial information technology for enhanced disaster risk management,
- Develop landslide susceptibility maps using terrain analysis,
- Utilise satellite imagery for flood exposure analysis,

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The course will provide participants with a theoretical understanding of basic principles of Geospatial Information Technology and develop basic skills for spatial analysis. Participants will also be challenged to solve DRR problems by developing decision support products.

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UNOSAT Experts: Remotely Connected using Microsoft Teams or Zoom

Offline: Recorded Video and Handbooks in English for Practical Exercises

Contents: 4 Technical Training Modules

Local Facilitator: Once experienced local GIS specialist will be hired to assist during the 4 technical exercise with live interpretation. In this case local facilitator will be present in the training venue for the full duration.

The main technical contents will be delivered through total four days of blended training session. Each technical module will be comprised of 30 minutes lecture, 30 minutes on-screen demonstration, 6 hour long guided exercise resulting a total learning load of 7 hours per day. To maintain the learning flow, the four modules will be delivered in 4 consecutive days from a locally arranged training room in Kathmandu, Nepal where participants will gather. The instructors will join using teams with support from a local expert.

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The course is designed to accommodate participants from a variety of backgrounds and professional experiences, with little or moderate GIS expertise.