Geographical Information Technologies (GIT) for Flood Risk Management
Satellite Analysis and Applied Research

Course

Georgetown, Guyana

From 30 March 2020 to 3 April 2020

5 days

Environment, Satellite Imagery and Analysis

Website: https://unitar.org/sustainable-development-goals/satellite-analysis-and-applied-

Free

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Background

In the period 2018-2020, UNITAR-UNOSAT in collaboration with CIMA Foundation, under the “Strengthening Women’s Disaster Management Capacities in Guyana and Dominica” project is implementing a nation-wide forecasting and early warning system for extreme flood event (GFEWS). Along with technical set-up of the flood-forecasting platform, capacity development activities will also be implemented to enhance technical skills and knowledge about flood risk of the key stakeholders.

Technical training 1 focuses on the basic concepts and terminology related to Geospatial Information Technology and its applications relevant for flood hazard and risk mapping.

Objectives

Build the capacity of Guyana’s officials to mitigate the impact of future floods in the country.

Learning Outcomes

At the end of the Technical Training 1, participants should be able to:

- Demonstrate an understanding of basic concepts and terminology related to GIS/RS technology;
- Implement main functionalities to display and analyse spatial data;
- Search, identify, access, collect, organize and analyse geospatial data for flood analysis;
- Apply GIS methodologies and use of flood modeling tools to perform flood hazard and flood risk
The course will provide key stakeholders of GNFEWS with the knowledge and skills to recall basic concepts and terminology related to GIS/RS technology and its applications relevant for Disaster Risk Reduction, Flood Management in particular. During this course, participants will enhance their capacities using Geographical Information Systems (GIS) and Remote Sensing (RS) for flood hazard assessment.

This is a full-time, face-to-face course with lectures, interactive sessions and GIS lab/flood modelling exercises using GIS datasets and different case scenarios (60% lab exercises, 40% lectures and discussions). This course is divided into 5 Modules. Each module is structured into 4 sessions of 1.5 hour each. The average workload per week is likely to be around 25-30 hours.

The course is designed to accommodate key stakeholders of Guyana's National Flood Early Warning System project with different professional backgrounds and working experience. Previous GIS and flood modeling experience is not required.

The number of participants is limited to 16