

# Foundational Course on GIT for Sustainable Land Management -Bhutan

United Nations Satellite Centre UNOSAT

#### Deadline: 1 Apr 2024

Туре:	Course
Location:	Thimpu, Bhutan
Date:	10 Apr 2024 to 12 Apr 2024
Duration:	3 Days
Programme Area:	Satellite Imagery and Analysis
Website:	https://unosat.org/
Price:	\$0.00
Event Focal Point Email:	tashi@unitar.org
Partnership:	Norwegian Agency for Development
Cooperation (NORAD), National Land Commission Secretariat	

#### BACKGROUND

The "Strengthening Capacities in the Use of Geospatial Information for Improved Resilience in Asia-Pacific and Africa" project (2021-2024) aims to develop sustainable capacities and implement tailored geospatial solutions to enhance policy and decision-making processes in resilience building. With the support of the Norwegian Agency for Development Cooperation (NORAD), UNOSAT leverages technological advances and innovation to improve decision-making in Disaster Risk Reduction, Climate Resilience, Environmental Preservation, and Food Security in eight target countries: Bangladesh, Bhutan, Fiji, Lao PDR, Nigeria, Solomon Islands, Uganda, and Vanuatu.

Geospatial information technology (GIT) plays a vital role in managing land resources and NLCS has been striving to leverage this technology in effective management of the country's limited land resources. The Land Management Division (LMD) under the Department of Land Administration is mandated with overseeing the distribution, management, and administration of state land within the country. The division has been proactive in exploring the application of GIT for efficient release and allocation of state land on lease, exchange, and substitution.

### EVENT OBJECTIVES

Given Bhutan's current trajectory, particularly with the rapid urbanization and economic pursuits, optimizing the release and management of the limited state land has been crucial. However, the division staffs currently face a capacity deficit in effectively utilizing GIT tools in their work. This gap impedes the seamless integration of GIT into their workflow, thereby affecting the overall efficiency and effectiveness of land management processes. Therefore, UNOSAT will enhance their capacity, as well as that of the other divisions in the department, through a foundational course on the GIT application for efficient land service delivery. The training will also instruct the participants on how to access online resources such maps and satellite data, which can be instrumental in making land related decisions.

## LEARNING OBJECTIVES

Upon completion of the training program, participants will be able to:

1. Recall the basic concepts and terminology related to Geospatial Information Systems (GIS)

- 2. Apply basic methods and functionalities of GIS software (QGIS) to analyse spatial data.
- 3. Gather free geospatial data and satellite image available in the web.
- 4. Produce maps for supporting decision making process.

## CONTENT AND STRUCTURE

This introductory training aims to provide participants with lectures on key concepts on Geospatial Information Technology (GIT) and practical exercises to perform basic operations using open-source GIS software. By the end of this training, participants should be able to prepare maps and perform geospatial analysis.

### METHODOLOGY

This is a 3-day full-time face-to-face technical training divided into 3 modules. This face-to-face course will consist of lectures and GIS lab exercises using GIS datasets and real case scenarios, whereas 70% of the training content will focus on lab exercises while 30% will be lectures and discussions. The course is thoughtfully designed to strike a balance between theoretical and practical teaching methods, incorporating presentations, live demos, interactive sessions, and lab exercises. At the end of the course, UNITAR-UNOSAT will set up a community of practice platform to maximise the learning experience of participants and to provide all required technical backstopping and assistance to training participants during and after the training.

#### TARGETED AUDIENCE

The course is designed to accommodate selected participants with a variety of backgrounds and professional experiences, from the Department of Social Welfare and relevant ministries. The criteria for selection include:

- 50% of female participants.
- No previous GIS or Remote Sensing knowledge or experience are needed. Basic computer literacy is required.
- Commitment to use the knowledge and skills acquired to provide efficient land services

#### ADDITIONAL INFORMATION

The course will be delivered in English