Unitar Online Catalogue

Training on the Use of Geospatial Information Technology for Village Development Planning

United Nations Satellite Centre UNOSAT

Deadline: 19 Jun 2026

Type:	Course
Location:	Nga District, Oudomxay Province, Lao People's Democratic Republic
Date:	22 Jun 2026 to 24 Jun 2026
Duration:	3 Days
Thematic Area:	Satellite Imagery and Analysis
Website:	https://unosat.org/
Price:	$0.00
Event Focal Point Email:	khaled.mashfiq@unitar.org
Partnership:	The Swiss Agency for Development and Cooperation (SDC)

BACKGROUND

The training is part of the GeoCLEAR project, a tailored Geospatial Decision Support System (DSS) jointly developed by the United Nations Satellite Centre (UNOSAT) and the Swiss Agency for Development and Cooperation (SDC). The

initiative aims to strengthen climate-informed and evidence-based decision-making by integrating geospatial information, climate analytics, and socio-economic datasets into Village Development Planning (VDP) processes in Lao PDR.

GeoCLEAR directly supports the Community Livelihood Enhancement and Resilience (CLEAR) Project, implemented by the Poverty Reduction Fund (PRF) under the Ministry of Agriculture and Environment (MAE), with support from SDC and the World Bank. The CLEAR Project operates across seven provinces and seeks to improve rural livelihoods, infrastructure, nutrition, and climate resilience through community-driven development approaches.

Following the GeoCLEAR inception workshop in December 2025 and a scoping mission conducted by UNOSAT in March 2026, stakeholders identified the need to strengthen technical capacity in geospatial information management and mapping. The mission highlighted opportunities to improve the use of geospatial information within Village Development Planning and project implementation processes.

EVENT OBJECTIVES

To address these needs, UNOSAT will conduct a three-day technical training programme for the CLEAR team and relevant stakeholders in Nga District, Oudomxay Province. The training will provide participants with practical skills in geographic information systems (GIS), digital field data collection, and map visualisation using open-source tools and real-world datasets from the CLEAR project.

By strengthening technical skills and promoting data-driven planning approaches, the training contributes to improving the operational use of geospatial information within the CLEAR project and supports long-term sustainability through knowledge transfer and local capacity development.

LEARNING OBJECTIVES

At the end of the course, participants should be able to:

- Explain the role of geospatial information and mapping in Village Development Planning (VDP).

- Use QGIS software to manage, edit, analyse, and visualise geospatial datasets.
- Design and conduct digital field data collection using UN-ASIGN.
- Produce professional map layouts and visualisation products for planning, reporting, and decision-making.
- Integrate geospatial information into project implementation, monitoring, and planning processes.

CONTENT AND STRUCTURE

The course introduces practical geospatial workflows that support planning and decision-making within the CLEAR project. Participants will first learn the fundamentals of geographic information systems (GIS) and gain hands-on experience using QGIS for spatial data management, editing, visualisation, and map production. The programme then introduces field data collection methodologies using UN-ASIGN, including form design, mobile data collection, data synchronisation, and quality assurance procedures. The final module focuses on cartographic design and map visualisation techniques, enabling participants to create professional map layouts and information products suitable for Village Development Planning, reporting, stakeholder engagement, and decision-making.

METHODOLOGY

This is a full-time, in-person course combining lectures, interactive sessions, and hands-on lab exercises using open-source GIS software and real-world disaster risk scenarios (70% lab exercises, 30% lectures and discussions), and collection of geospatial data from the web. This course is divided into 3 modules. The average workload is likely to be around 21 hours. The course is designed in a way to have a balanced approach between theoretical and practical teaching methods consisting of presentations, live demos, videos, interactive sessions, and lab exercises.

TARGETED AUDIENCE

The course is intended for participants nominated by CLEAR Team, with a basic understanding of GIS and remote sensing. Participants may come from diverse professional backgrounds across relevant ministries and agencies. It is

recommended that departments nominate individuals who are motivated to apply the skills gained from this capacity-building programme to their day-to-day work in order to enhance service delivery and project implementation within their respective institutions.

ADDITIONAL INFORMATION

Lab exercises will be based on open-source software and applications.