



G20 GLOBAL  
LAND INITIATIVE



5 day training workshop on:

# Assessing Land Degradation Dynamics and Restoration Efforts with **Remote Sensing Data and GIS Tools**

15-19 January 2024 at the Centre of Excellence on  
Sustainable Land Management, Dehardun, India

► Deadline for registration is 31 October, 2023



Scan to Register  
Or at: [bit.ly/3t55ocg](https://bit.ly/3t55ocg)



# Assessing Land Degradation Dynamics and Restoration Efforts with Remote Sensing Data and GIS Tools



This training workshop will offer a set of comprehensive modules on the use of geospatial technologies on land resource mapping and monitoring. These modules will provide both a solid theoretical understanding and a comprehensive practical introduction to the use of geographic information system tools and remote sensing data to monitor land degradation dynamics and restoration efforts.

The training will additionally also emphasis on drought and desertification's impact on vegetation productivity. The training has related themes as per the UN Convention to Combat Desertification (UNCCD) strategic target framework 2018-2030 and is building upon the bold agenda set by the G20 countries of 50% worldwide land restoration by

## LEARNING OBJECTIVES:

1. To develop an understanding of land degradation indices and criteria, assessments, early warning systems for land degradation and other related applications.
2. Elaborating the use of remote sensing data to perform land cover classification. The training will explore the functionality of the Land Degradation Monitoring Toolkit (Trends.Earth) and its application for land cover classification.
3. Developing an understanding of how to use satellite data to study vegetation dynamics and land use changes and how to prepare a map layout using QGIS software.

## TARGET GROUPS/AUDIENCE

The training has been developed to raise awareness about land degradation and analyze it using remote sensing data and geographic information system (RS\_GIS) techniques and is designed for the following target participants.

1. Senior Executives/Professionals from other Government Agencies/Boards, Public sector undertakings.
2. Members/Representatives of Non-Governmental and Community organizations engaged in assessments, planning, implementation, and or monitoring of any aspects related to combating desertification, restoring land degradation, environment and development.
3. Faculty Members/Professionals from training, education, and research centers/institutions.

---

For more information, please  
contact: [g20ico@unccd.int](mailto:g20ico@unccd.int)



## ABOUT CENTRE OF EXCELLENCE:

In September 2019, India's Prime Minister announced the creation of the Centre of Excellence on Sustainable Land Management (COE-SLM) at ICFRE, aiming to promote South-South Cooperation in addressing land degradation. On May 20, 2023, the COE-SLM was inaugurated by the Minister of Environment, Forest and Climate Change, with a vision to support sustainable land management nationally and internationally. Leveraging ICFRE Institutes across India, the Centre fosters capacity building and scaling up of Sustainable Land Management practices for Land Degradation Neutrality.

More information on the initiative can be found at <https://www.icfre.org/coe-slm>

## ABOUT G20 GLOBAL LAND INITIATIVE:

The ambition of the G20 Global Initiative on Reducing Land Degradation and Enhancing Conservation of Terrestrial Habitats (G20 Global Land Initiative) launched during the Saudi Arabian Presidency is to achieve a 50 percent reduction in degraded land by 2040. To inspire all stakeholders to collectively deliver on land conservation and restoration outcomes: we showcase success stories; engage the private sector; empower civil society and the public; and share knowledge to build capacity among G20 members as well as interested non-member countries and other stakeholders.

More information on the initiative can be found at [www.g20land.org/](http://www.g20land.org/)

**Language of Instruction:** English

**Course Duration:** 5 days

**Dates:** Jan 15-19 2024

**Location:** Centre of Excellence on Sustainable Land Management (COE-SLM) at ICFRE, Dehradun, India

**Course Fee:** The course will be free of cost for the selected candidates. Travel support will be available to participants on a needs basis.

**Register before 31.10.2023 at:** [bit.ly/3t55ocg](https://bit.ly/3t55ocg)

## PREREQUISITE FOR THE TRAINING:

Basic working knowledge of computers, knowledge of natural resource management, land management, hydrology, and or a related topics.

## COURSE FACILITATORS:

The training is provided in collaboration with the G20 Global Land Initiative Coordination Office of the UNCCD and the Centre of Excellence on Sustainable Land Management (COE-SLM) at ICFRE (Indian Council for Forest Research and Education). Our scientists have an average of 15-25 years of expertise in remote sensing applications related to land management.



Course Coordinator:  
**Dr. Manoj Kumar**, Centre of Excellence on Sustainable Land Management (COE-SLM) at ICFRE, Dehradun, India



Course Coordinator:  
**Dr. Mohamed Abd Salam El Vilaly**, Programme Officer, G20 Global Land Initiative Coordination Office, UNCCD

For more information, please  
contact: [g20ico@unccd.int](mailto:g20ico@unccd.int)

