

Training Course on “Geo-AI for Forest Information: Advanced RS & GIS Applications in Forestry”; 27–31 October 2025; Karachi, Pakistan

The International Training Course on “Geo-AI for Forest Information: Advanced RS & GIS Applications in Forestry”, scheduled from 27–31 October 2025 in Karachi, was designed as an advanced capacity-building programme for professionals engaged in forest monitoring, natural resource management, and climate analytics. The course emphasized the integration of Artificial Intelligence (AI) and next-generation geospatial technologies to enhance the precision, scalability, and timeliness of forest information systems. 7x ISNET sponsored and 12x local participants attended the course.

The technical curriculum encompassed AI-driven image interpretation, machine learning-based forest type and density classification, biomass and carbon stock modeling, hyperspectral and SAR data fusion for forest structure analysis, and automated species discrimination using deep learning architectures. Participants also explored the application of Geo-AI for climate resilience modeling, enabling evidence-based strategies for carbon accounting and ecosystem restoration.

Delivered through expert-led sessions, demonstrations, and intensive analytical exercises, the course aimed to advance participants’ proficiency in developing end-to-end geospatial-AI workflows—from multi-sensor data processing to predictive modeling and spatial decision support. By the conclusion of the programme, participants were capable of leveraging advanced remote sensing and AI frameworks to generate actionable intelligence for climate-smart forestry, biodiversity conservation, and sustainable land management.

