Cuvelai and Kunene (CUVKUN) Project
Short Training Course on GIS and Remote Sensing

18 – 21 March 2026 (Angola)

Introduction

The Geospatial Information Systems (GIS) and Remote Sensing (RS) training course is specifically designed to enhance the institutional capacity of water professionals in the Cuvelai and Kunene Basins. The course focuses on equipping water sector professionals with essential skills in GIS and Remote Sensing (RS), emphasising their practical application in Integrated Water Resource Management (IWRM) within the Cuvelai and Kunene Basins. The course will empower individuals and institutions in the Cuvelai and Kunene basins to effectively combine GIS and RS techniques to address catchment and water-related challenges, thereby increasing resilience in the region. Participants will gain hands-on experience using GIS and RS tools, such as ArcGIS and QGIS, for informed decision-making.

The CUVKUN Project which is implementing a water security project in the Cuvelai and Kunene Basins is pleased to call for applications for participants from Angola to attend this course on GIS and Remote Sensing.

This course is designed to:

   i.   Equip participants with the ability to define, explain, and apply geographic phenomena and spatial data in water resource management.
   ii. Train Participants to analyse, manipulate, and visualise spatial data, including georeferencing, digitisation, and remote sensing techniques.
   iii. Enable participants to design and manage spatial databases for WRM, including environmental assessments using GIS and remote sensing.
   iv. To ensure that participants apply knowledge about EM radiation processes in the atmosphere and at the Earth's surface to extract land cover and land use information through visual interpretation or digital image classification.
   v.   Apply machine learning digital image classification for information extraction from satellite images.
   vi. To train participants on Watershed Area Delineation.
   vii. To train the participants on how to determine the Effective Contribution Area (ECA) of a LULC class to a designated in-river water point.

Upon completing the course, participants will develop the following competencies:
   a)   Define and explain geographic phenomena, spatial data types, and their relevance in water resources management in the two basins.
   b)   Visualise, manipulate, and analyse spatial data.
   c)   Utilise georeferencing techniques and digitise spatial data for GIS applications.
   e)   Produce maps and spatial outputs relevant to water and environmental management for the Cuvelai and Kunene Basins.
   f)   Analyse RS images for environmental monitoring, including vegetation, water quality, and land cover changes in the two Basins.
   g)   Design and implement spatial databases for managing water resources, and wastewater data in the Cuvelai and Kunene Basins.
   h)   Query, update, and manage spatial databases to support decision-making in catchment management in the Cuvelai and Kunene Basins.

Post-training requirements (application and contribution)
   • Participants are expected to apply the GIS and RS skills gained to support CUVKUN project workstreams and deliver measurable outputs.
   • During the training, participants will be assigned to specific CUVKUN workstreams they will contribute to practical products such as the development of the TDA maps and spatial layers, GIS/RS inputs to economic valuation mapping and analysis, and other required GIS/RS outputs (e.g., basin thematic maps, land use/land cover products, hazard and vulnerability layers, and related spatial datasets).
   • The post-training contributions and outputs will be documented and tracked as part of CUVKUN project monitoring, knowledge products, and evaluation processes.

Who should apply

Expression of interests to attend the course are invited from officials from the following institutions:
   • Ministries and departments responsible for water resources Management, i.e.
       o Ministry of Energy and Water (MINEA), Gabinete Para a Administração da Bacia Hidroeléctrica do Cunene (GABHIC), Angola.
   • Academics from relevant disciplines
   • Officials from the CUVECOM
   • Civil Society and NGOs
   • Private sector
   • Local authorities

Participation Costs

The course will physical. There are no costs associated with the attendance of the course.

Application Process

Those interested in attending the course should express their interest on the following link, https://ee.kobotoolbox.org/x/RR62jra9 by 11 March 2026.