

2.4 Modern Geospatial Methods

Length: 8 hours

Requirements:

- equipments:
 - Laptops
 - Access to Internet
- Softwares: QGIS

Prerequisite:

Introduction:

Modern geospatial methods are a combination of technology and techniques used to collect, analyse, and interpret geographical data. They include technologies like geographic information systems (GIS), remote sensing, and Global Navigation Satellite Systems (GNSS) that enable the collection, storage, management, and analysis of geospatial data.

Learning outcomes: By the end of this day, participants will be able to:

- Introduce object based image analysis.
- Understand the building footprint extraction.
- Extract information from Google building footprint
- Importance of spatial decision support making

Summary Agenda

Min	Example Time	Activity	Description	Presenter
30	08:30 – 09:00	Registration	Participants signing up	
30	09:00 – 09:30	Lecture	Introduction to OBIA	Mustafa
15	09:30 – 09:45	Discussion	Q&A	
75	09:45 – 11:00	Exercise	OBIA in QGIS	Mustafa
30	11:00 – 11:30	BREAK	Breakfast	
30	11:30 – 12:00	Lecture	Buildings Footprint Extraction	Mustafa
15	12:00 – 12:15	Discussion	Q&A	
30	12:15 – 12:45	Lecture	Building Morphometrics	Mustafa
15	12:45 – 13:00	Discussion	Q&A	
30	13:00– 13:30	BREAK	Coffee Break + Pray	
30	13:30– 14:00	Lecture	IDeaMapSudan - The approach and modelling methodology	Fatima
60	14:00 – 15:00	Lecture	IDeaMapSudan- Khartoum state deprivation mapping - exploring IdeaMapSudan system	Wafa


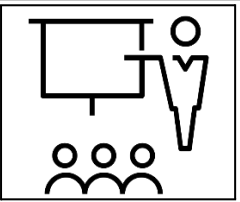

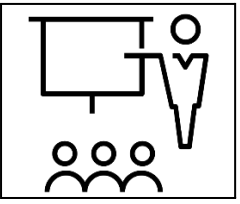
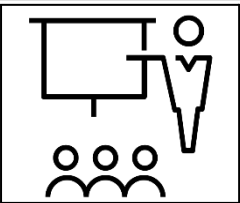
IdeaMapSudan Project
 Training Workshops - GIS Specialist Group
 Advanced GIS & EO Analysis for Decision Making Support
 Date: 3 to 6 -October -2022



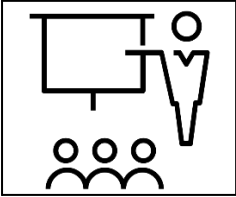
30	15:00 – 15:30	Lecture	Feedback and Open discussion	
15	15:30 – 15:45	BREAK	Coffee Break	
30	15:45 – 16:15	Lecture	Feedback and Open discussion	
30	16:15 – 16:45	Wrap-up	Conclusion & Certificates	

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Guide

Activity / Time	Description	Resources / Materials
Registration 30 minutes	Participants signing up	Appendix 1
	Record the name, contact, and signature of each participant so that you can stay in touch.	Attendance list
Lecture 30 minutes	Introduction to OBIA	OBIA.ppt
		
Demonstration 60 minutes	Buildings footprint extraction	buildingfoot.ppt
		<ul style="list-style-type: none"> • access to Internet • Qgis • laptops
Lecture 30 minutes	Building morphometrics	buildingmorph.ppt
	<ul style="list-style-type: none"> - urban morphology and building morphometrics - morphometrics through RS and Gis - example for morphometrics 	
Lecture 30 minutes	IdeaMapSudan - The approach and modelling methodology	IdeamapIntro.ppt
	<ul style="list-style-type: none"> - Explain the concept of multi level deprivation - Examples of deprivation modelling (UK, Delhi) - IdeaMap conceptual framework for deprivation - IdeamapSudan (study area, selected domains and indicators, analysis) 	Projector (alternatively, make notes on flipchart or whiteboard)
Lecture 60 minutes	IdeaMapSudan- Khartoum state deprivation mapping - exploring IdeaMapSudan system	

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	<ul style="list-style-type: none"> - Explore Khartoum state deprivation maps - Explore Ideamapsudan System 	<p>Projector (alternatively, make notes on flipchart or whiteboard)</p>
<p>Wrap-up 15 minutes</p>		