IdeaMapSudan Project

Training Workshops - Non-GIS Specialist Group

GIS Main Concepts and its Importance for Decision Making

Date: 19 to 21-September -2022

Day One

1.1 Introduction to GIS and Spatial Data & Methods

Length: 8 hours

Requirements:

- Equipments for the duration of the training:
  - Smartphone, Laptop or tablet
  - Access to Internet
- Softwares/Applications:
  - Browser / Google earth/OSM

Prerequisite:

Introduction: Data is one of the most powerful tools that humans can use to develop and improve their countries, analysing the current situation in addition to expecting future results.

- Spatial data and spatial analysis methods allow us to understand geographic patterns and relations of socio-economic, physical or environmental conditions.

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

- Acquire insights about data types.
- Perceive the reusability of existing data of other stakeholders and benefits of data sharing.
- Explain what GIS is and its main concepts.
- Understand spatial data and Explain how geographic phenomena can be represented as spatial data (point, lines, polygons and raster data).
- Access existing spatial applications (secondary data) and know how to display and identify geographical objects on maps.

Summary Agenda

Minutes	Example Time	Activity	Description	Presenter
30	08:30 – 09:00	Registration	Participants signing up	
30	09:00 – 09:30	Icebreaker activity	Welcome and introduction to IdeaMap Sudan Project	Arch. Wafa Abdulsakhi
20	09:30 – 09:50	Lecture	Introduction to Data and its Importance	Julia
20	09:50 – 10:10	Discussion	Open discussion: The use of data in our organisations	Julia
50	10:10 – 11:00	Lecture	Introduction to GIS and Spatial data	Musaab
30	11:00 – 11:30	BREAK	Break fast	
30	11:30 – 12:00	Lecture	Why location matters	Monika & Charlotte
15	12:00– 12:15	Discussion	Q&A	

IdeaMapSudan Project

Training Workshops - Non-GIS Specialist Group

GIS Main Concepts and its Importance for Decision Making

Date: 19 to 21-September -2022

30	12:15– 12:45	Lecture	Using Secondary Data	Wafa
15	12:45– 13:00	Discussion	Q&A	
30	13:00– 13:30	BREAK	Coffee Break + Prayer	
60	13:30 – 14:30	Demo	Spatial Methods - Open data sources (Google Earth & OSM)	Wafa
30	14:30 – 15:00	Discussion	Q&A	Wafa
15	15:00 – 15:15	BREAK		
75	15:15 – 16:30	Exercise	Exploring data in OSM	Wafa
15	16:30 – 16:45	Wrap-up	Q&A and Conclusions	

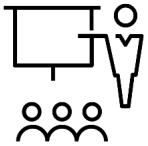
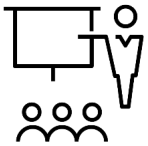
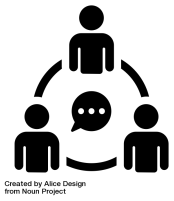
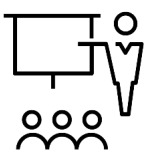
IdeaMapSudan Project

Training Workshops - Non-GIS Specialist Group

GIS Main Concepts and its Importance for Decision Making

Date: 19 to 21-September -2022

Guide

Activity / Time	Description	Resources / Materials
Registration 30 minutes	**Participants signing up**	**Registration List**
	Record the name, contact, and signature of each participant so that you can stay in touch.	
Icebreaker activity 30 minutes	**Welcome and introduction to IdeaMap Sudan Project** https://docs.google.com/presentation/d/1snaO6N2PaxeheHLhtYtztAB_q6Cvzrr6/edit#slide=id.g14b789d1134_0_116	**Ideamapintro.ppt**
	Brief about IdeaMapSudan project and the training workshop plan Icebreaker activity: ask participants to indicate their level of knowledge about GIS	• Projector (alternatively, make notes on flipchart or whiteboard)
Lecture 30 minutes	**Introduction to data and its importance** https://docs.google.com/presentation/d/1AuZSDr7gM_zfPKg0DRHWdgmPWiXVaQH-xjI8LL9pB5c/edit	**Introdata.ppt**
	The introduction lecture will provide a basic understanding of data, its importance, types, examples of data used by communities and data sharing.	• Projector (alternatively, make notes on flipchart or whiteboard)
Discussion 20 minutes	**The use of data in our organisations (questions link)**	**mentimeter.com**
	Discussion about the use of spatial data in the participants organisations. Importance of data for each participant's institution and their types Know which kind of data is available in each organisation of participants.	Display answers on screen
Lecture 40 minutes	**Introduction to GIS and Spatial Data** https://docs.google.com/presentation/d/1AuZSDr7gM_zfPKg0DRHWdgmPWiXVaQH-xjI8LL9pB5c/edit	**GIS&spatialdata.ppt**
	Explain how geographic phenomena can be represented as spatial data (point, lines, polygons and raster data) (What is a map? Explain GIS and it main concepts and components	• Projector (alternatively, make notes on flipchart or whiteboard)

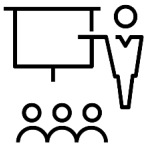
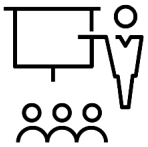
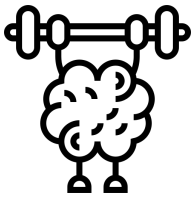
UNIVERSITY OF TWENTE. | ITC | ULB | APHRC African Population and Health Research Center | Nuffic meet the world

IdeaMapSudan Project

Training Workshops - Non-GIS Specialist Group

GIS Main Concepts and its Importance for Decision Making

Date: 19 to 21-September -2022

Discussion 30 minutes	**Expert Lecture**	**Lecture.ppt**
	Why location matters	● Projector (alternatively, make notes on flipchart or whiteboard)
Lecture 30 minutes	**Using Secondary Data** https://docs.google.com/presentation/d/1xnNH8S9qpcuPLGtqkbjLE8Bo0m85PtkX/edit?rtpof=true	**Secoandrydata.ppt**
	- Using secondary data (what is it?) - institutional data - crowd-sourced data - exploring secondary data	● Projector (alternatively, make notes on flipchart or whiteboard)
Demonstration 90 minutes	**Spatial Methods -Open Source (Google earth - OpenStreetMap)** https://docs.google.com/presentation/d/1zhdlJpN81WMZTCLgrXwglei_Bo_ctKdw/edit?rtpof=true	**DemoVideo**
	- Participants will get an overview of different types of geographic phenomena and how they can be represented as spatial data (e.g., points, lines, polygons). - overview of Google Earth (Learn the basics of using Google Earth, including how to "fly" around the globe, how to use mouse controls, how to turn layers on & off and what the layers do) - overview of OpenStreetMap	https://www.youtube.com/watch?v=klK27l3unng&ab_channel=TechnologyforTeachersandStudents https://www.youtube.com/watch?v=Ir-3K0pjwOI&ab_channel=MapGive
Exercise 30 minutes	**Visualisation of OpenStreetMap data**	
	- In small groups explore Open Street Map (Data Types) different data types and identify missing data in your neighbourhood. - Use OSM to check how different geographic phenomena are represented - Brainstorm about different types of geographic phenomena - Which geographic phenomena are shown in OSM? - List examples of fields and objects in OSM - how are they represented?	
Wrap-up 15 minutes		