



المؤتمر العربي  
الثاني للأراضي

Second Arab Land  
Conference

22-24 FEBRUARY 2021  
CAIRO, EGYPT

Capacity Development Progress in North Africa

Enhancing Land Management, Land Development and Construction

Capacity Building on Land  
Governance and Land Tenure Using  
Geoinformatics Techniques

Eltaib Saeed Ganawa, Faculty of Geographical and Environmental  
Sciences, University of Khartoum

ganawagis@gmail.com

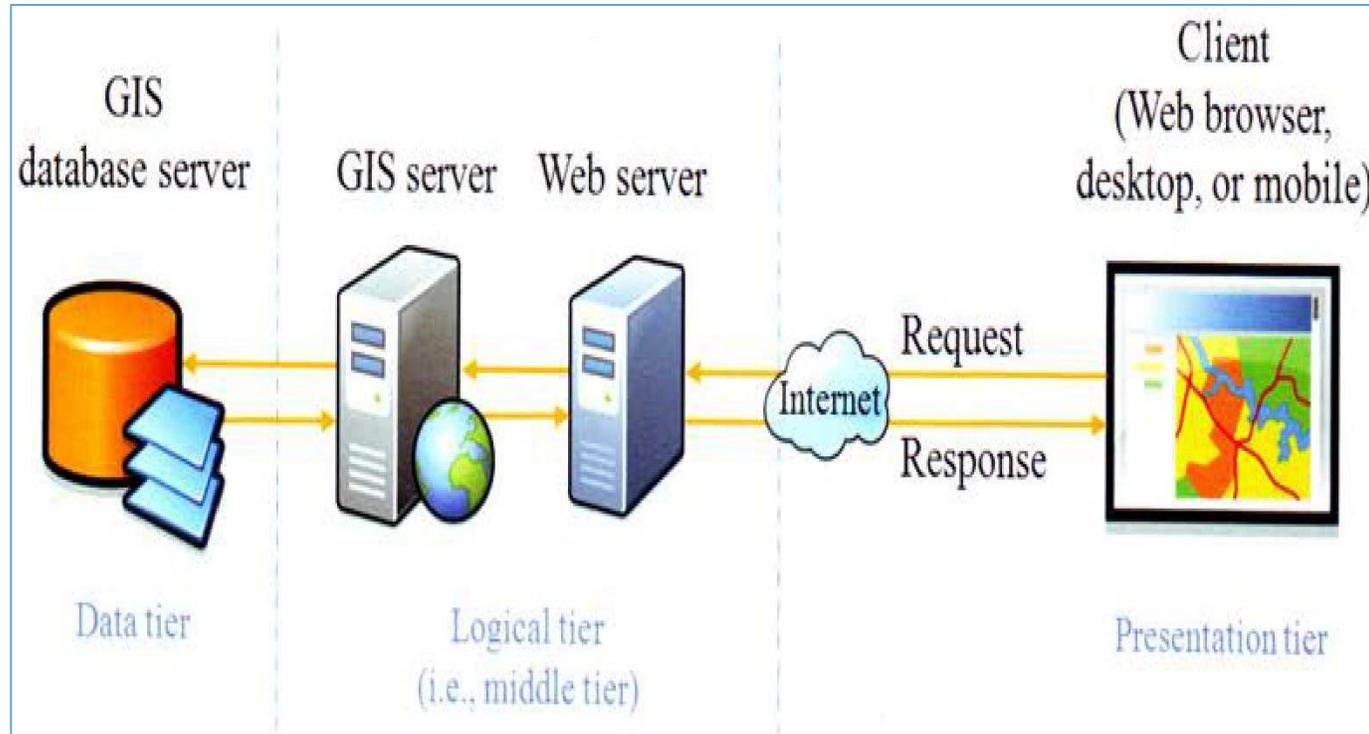
## INTRODUCTION OF THE TOPIC AND MAIN MESSAGE(S)

---

- **The purpose of organizing a NELGA training course for the participants from NELG NA is to present the SLGA program and the role of NELGA in promoting the role of universities and academic institutions in land policy development, implementation and monitoring through advance technologies tools such as GIS/RS and other technologies.**
- **It will be an opportunity to reinforce linkages with professionals from different NELGA NA and Sudanese participants through this training. It is expected that at least one fifteen experts from various countries will attend the training course.**

The expected outcome form these training modules will be:

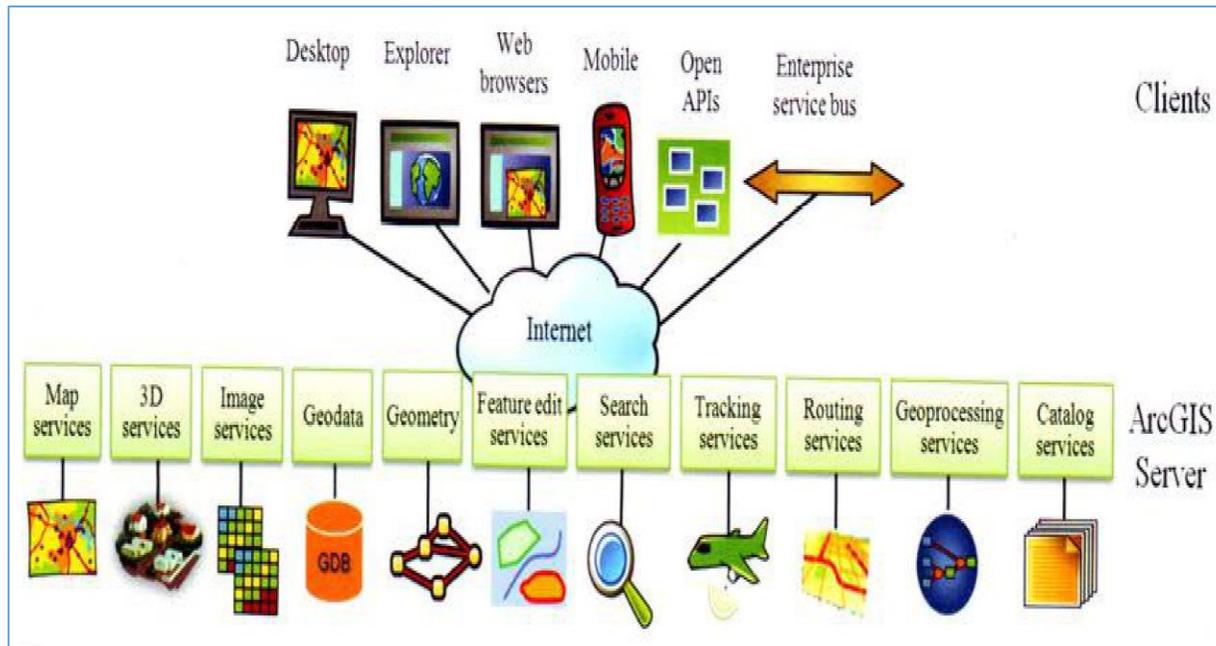
- Basic Knowledge in the GIS and Remote sensing (the student should be able to work with the GIS and remote sensing software for basic purposes.
- Working with analysis tools as mentioned above, the participants should be able to work with analysis tools in the GIS and classification, change detection and NDVI analysis for the image processing also working with the satellite metrological data.
- Uploading the data in the web and uploading (Skills of working with the web GIS tools).
- Present the role of universities and research institutions involved in NELGA in enhancing land governance, in particular their support to



- **Land Tenure Land Governance Geoportal for NELGA**

- **Training and Capacity Building on Web GIS on Land Issues**

## Web GIS and Geoportal, Khartoum, SUDAN



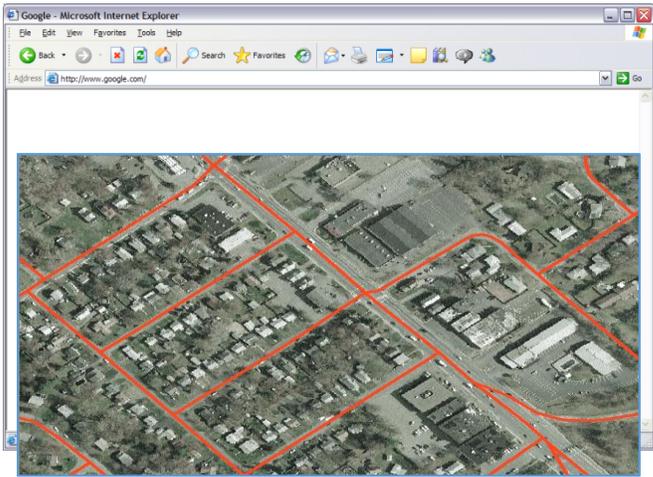
- **Collection of land Data**

- **Compilation of NELGA countries database**

- **Assessing the Database for each countries.**

# Working with Real Data from Satellite Image and Publishing in the Web GIS

## Web Client



1. Creates XML Request

2. Request sent to web service

8. Receives response, parses to extract image and updates map

7. Response sent to client

## Web Server/Map Server



3. Receives request and parses XML

4. Calls the map server to request map

5. Map Server generates map as image file

6. Creates response XML with image file

Web GIS , Khartoum , Sudan

**Web GIS Server for Land Governance in NELGA**

**Data Publishing**

# **Future and Potential of Using the Geoinformatics Technologies**

---

- **Establishing of the Geoportal of NELGA land Systems**
- **Enhance the Capacity Building of Using the Geo Technologies for better presentation of Land Issues in the Region**
- **Data Sharing and Data Accessibility with the Region and Link with other region and International Relevant organizations**

**THANK YOU FOR THE ATTENTION!**