

# ***USING GEOGRAPHICAL INFORMATION SYSTEMS (GIS) FOR ANALYSING AND MAPPING HEALTH CARE ISSUES***

## **AIM**

To give health information managers and officers a practical introduction to the Geographical Information System (GIS). This technology can be used to better analyse and display health information in a spatial format.

A free and open source GIS package called Quantum GIS (QGIS) is used. The data sources will vary from Excel tables, Access tables and user-defined queries in DHIS. A key component of the course will explore the link or interface between DHIS and QGIS.

## **TARGET GROUP**

Health related staff and information managers, officers, technicians, IT staff, and system developers/programmers who have experience with the DHIS and who want to increase their technical and operational skills in utilizing the software for mapping purposes.

## **OBJECTIVES**

Many people mistakenly assume that geospatial applications just produce maps, but geospatial data analysis includes computing:

- distances between geographic locations and area
- what geographic features overlap other features
- the number of locations within a certain distance of another etc.

By the end of the 5 day course, participants should be able to:

- Demonstrate an understanding of the basic principles of GIS and mapping: layers, scale, projections, raster/vector, and map types.
- Basic understanding of QGIS
- Produce meaningful maps.
- Extract information from the DHIS or similar systems in format compatible with available background maps.
- Enhance maps through using various analysis options, the Query Builder, and/or background images.
- Integrate maps, tables, graphs, illustrations, and text into reports and slideshows.
- Modify available background maps.
- Demonstrate the ability to assess the quality and accuracy of maps and spatial data.
- Introduction to Web Based DHIS2 - GIS

The course will use real data and will focus on technical issues and skills. Participants will work individually or in small groups in a computer lab.



**NB: The participant is encouraged to please bring some of their own data to map.**

### **PRE-REQUISITE**

- Basic knowledge of and experience with MS Office
- Knowledge of key health issues, including goals, targets, and indicators
- Experience with the District Health Information Software (DHIS)

### **ENQUIRIES**

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