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**
- Email: cb@hisp.org
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