GIS fundamentals | Training Course **Agenda**

The use case of animal diseases monitoring, Accra, Ghana, 10-14 October 2016

Day 1

INTRODUCTION

- Course objectives & setup [lectures & practical classes]
- Course resources and materials

FUNDAMENTAL GIS CONCEPTS

- Geographical data representation: vector, raster (image)
- Layers & Geometry types (points, lines & polygons)
- Coordinate Reference System (CRS)
- Notion of scale
- Different maps for different purposes: thematic mapping, Digital Elevation Models, topographic, …

QGIS

- Set up
- Handling GIS layers (opening, overlaying, selecting features, basic styling and saving as project)
- Handling Coordinate Reference Systems (CRS)

Day 2

- Importing data from Excel files & overlaying it over Google Maps
- Handling QGIS plugins
- Managing data attributes
- Creating buffers (zoning)

Day 3

- Collecting geographical coordinates
- Editing an existing layer (add, update, delete features)
- Mapping number of cases in a grid
- Dissolving polygons

Day 4

- Mapping number of cases by administrative boundaries

ONLINE MAPPING WITH CARTO (CARTODB)

- Introduction & data upload
- Create & disseminate an animation of disease spread over time

Day 5

- Practice your skill with a new dataset
- Course wrapup