GeoHealth Thai Platform: towards a network to gather expertise, knowledge and resources in health geography

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Discussions about methods and challenges of spatial analysis (Figure 2). Trainings already took place in 2014 on Geographic Information Systems and Remote Sensing techniques. Tutorials are proposed to address the difficulties encountered by many individual researchers by:

- understanding of health inequalities
- environmental dynamics of diseases
- interdisciplinary approaches are increasingly being implemented to understand health inequalities and the status of populations and individuals or the needs for health care. It relies, for spatiotemporal analyses, on different tools, including Geographic Information Systems (GIS), geostatistics and remote sensing of satellite imagery.

Although the availability of data is growing, researchers are facing difficulties in identifying and accessing relevant data and, above all, in using these data, resulting in a paradoxically limited use of geographical information. This is the case in Thailand where lots of data is available for research. Nevertheless, these data are highly heterogeneous because of their varied natures (climate and weather data, environmental data including those issued from remote sensing analysis, socio-economic data, demographic data, epidemiological data, etc.), sources (global databases, administrations communities, associations, individuals, etc.), formats (spreadsheets, text documents, databases, geographic files, etc.), and scales (global, regional, national or local) (Figure 1).

**Objectives**

The GeoHealth Thai Platform project aims to promote geographical and environmental approaches in the understanding of health inequalities through the use of Geographic Information Systems and Remote Sensing techniques. It addresses a need expressed by medical researchers in Southeast Asia, aware of the importance of climate and environmental changes and their impact on human health.

**Methods**

It proposes to address the difficulties encountered by many individual researchers by:

- gathering experts and researchers in order to define the needs and identify the barriers to be solved;
- training and providing expertise to researchers for the use of GIS and Remote Sensing techniques;
- building an open geocatalogue to facilitate the access to spatial data.

**Capacity Building**

Trainings already took place in 2014 on Geographic Information Systems and Remote Sensing techniques. Tutorials are made available for any people interested in this project. Workshops were held in conjunction with training to develop discussions about methods and challenges of spatial analysis (Figure 2).

**Development of the GeoHealth Thai Platform**

- An internet watch was set up to survey relevant information in geospatial health (http://www.netvibes.com/geoht). It gathers: 1) the latest articles in scientific journals linked to geospatial health information, 2) links to websites providing data of interest, weblinks to the partners’ websites (Figure 3).

- A geocatalogue is under development (http://geohtp.seas-oi.org): it offers a set of metadata records, accessible by queries (What/When/Where), and describing the existing spatial data and the means to acquire them (Figure 4).

**Perspectives**

This project will be supported by a dedicated website, which will be the meeting point of a network of experts in Health Geography and researchers willing to integrate geographical information in their investigations. This website will integrate online resources (documents, courses, tutorials and datasets) and link to the GeoHealth Thai Platform Catalogue.