Development of Flood and Drought Risk Maps at Regional Level Using Satellite Remote Sensing Data

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Objective

To produce flood and drought risk maps at regional scale (i.e regency) using satellite remote sensing data (i.e. ASTER satellite image).

This proposal includes updating the maps (time series map). The maps are generated at regency level then integrated to province level.

Data and Methods

ASTER satellite data or other similar data are main data used in the project. Other data are topographic map at scale of 1 : 50,000 and statistical data.

In general methods of the project are :

- 1. Collection and acquisition of ASTER satellite data and ancillary data;
- 2. Processing of satellite data (extraction thematic information regarding flood and drought, for example surface water, vegetation etc.)
- 3. Producing/printing flood and drought risk maps

Scope of the project

Scope of the project consists of two steps ;

- 1. Collecting, processing, displaying and producing the maps
- 2. Training (how to implement the above activity for local staffs)

Output and Future Activity

The output of the project is flood and drought risk maps at regency/city level.

These maps are then integrated to province level

In the future, the maps are used to develop Flood and Drought Risk Information System based on GIS

