Water Scarcity Assessment in Thailand River Basin Using Geo-Informatics Technology

*pudtraporn napang¹

1. Kasetsart University

In Thailand, water resources are going to be concerned because the demand for water is increased while supplies decrease which leads to water scarcity and give a negative effect on economic development and food security. Therefore, it is important to consider the amount of water availability and water consumption in each sector. This study purposes the integrated geo-informatics technology as tools to evaluate the water scarcity in 25 Thailand river basins focusing on water consumption in domestic, agriculture, industrial, livestock and environmental water requirement by using the water stress index as an indicator. The result shows the scarcity in each sector mostly occurs in the central part of Thailand as an area of agriculture, industry and densely populated. The study gives an overview of water scarcity in the Thailand river basin and useful for decision-support, planning of water distribution and water management in the future.

Keywords: water scarcity, water consumption