

Geospatial data of household for flood compensation consideration in Thailand

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ABSTRACT: Flood in 2010 – 2011 damaged economic and agriculture areas, properties and household in Thailand. Promisingly, GIS data can be used to estimate the number of household damaged by flooding. Unfortunately, geospatial database of household was not available at that time. Therefore, geospatial data of household is required for evaluation of damages caused by flooding and also for supporting government decision making on flood compensation.

GISTDA used high resolution satellite imageries (1 meter or better resolution) to generate the geospatial data of household by visual interpretation according to 3 levels of emergency. The first level is the high risk area i.e. the flooded area. The second level is the area in the 5 kilometer outside flood boundaries. The last level is the low risk area that flood cannot reach such as hill or valley. These three criteria were used to subdivide 1:4,000 scale topographic maps in order to facilitate the visual interpretation and classification. The classification result is the overlaid flooded area map in 2011 (May 1, - Dec. 31, 2011). It was found that 1.92 million household in 52 provinces were flood. Base on the data of Department of Community Development in 2009, 996,160 flooded households were not in Bangkok. The obtained geospatial database was employed for supporting government agencies such as Department of Disaster Prevention and Mitigation and Office of the Prime Minister for planning, implementation and evaluation of the household affected by floods to provide relief accordingly.

KEYWORDS: Household database, flood

Flow Chart



