MONITORING THE EFFECT OF LANDCOVER ON URBAN INUNDATION BY REMOTE SENSING AND GIS TECHNIQUE IN CAN THO CITY, VIETNAM

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Abstract: This study revealed some results of the trend and rate of urban expansion by remote sensing and GIS technique and its impact on urban flood inundation in Can Tho City, a hub of Mekong Delta, Vietnam. The result showed that the urban expansion rate has increased rapidly in recent years such as the rate of 1989 - 1997 was 8.1%/year but 2007 - 2012 was 29.2%/year and the trend of urbanization has changed from North-West to South-East and South-West. Moreover, this research detected the important role of landcover changes such as filling up streams and increasing of impervious built-up surface in increasing of flood inundation in the central of Can Tho City after analyzing the terrain. Then some suggestions were provided to mitigate urban inundation and the consideration in planning the future urban development in this city.

Keywords: Remote Sensing, GIS, urban expansion, landcover change, inundation