CLASSIFICATION OF URBAN EXPANSION PATTERN IN BANGKOK METROPOLITAN REGION THROUGH REMOTE SESNING DATA

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ABSTRACT: Urban expansion has different patterns which affect to a land development and police planning. Increasing in the number of population puts the force to expand the built-up areas in the Bangkok Metropolitan Region (BMR) predominantly in vicinity of Bangkok, which causes several problems in terms of physical and social aspects. Therefore, understanding the pattern of the urban expansion is a key challenge to allocate enough infrastructures and respond the land demand for inhabited people in this area. The classification of the pattern of urban expansion analyzed from Landsat5-TM images in 1988, 1993, 1997, 2008, and 2011 respectively. The urban area, built-up construction, was mainly extracted by supervised classification. The result could be found that the origin on the urban area of the BMR was established in the eastern of the Chao Phaya River with a clustered or radial settlement. Each province of the BMR extended the urban area itself from the center of the city and also connected together via the main roads as a linear settlement. Finally, a dispersed settlement could be discovered in the areas which are far away from the road network like an urban sprawl.

Oral presentation