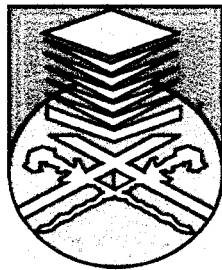# LAND USE CHANGE IN URBAN AREA WITHIN KLANG VALLEY USING REMOTE SENSING

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Thesis submitted to the Universiti Teknologi MARA Malaysia

in partial fulfillment for the award of the degree of the

Bachelor of Surveying Science and Geomatics (Honours)

OCTOBER 2009

DECLARATION

I declare that the work on this project/dissertation was carried out in accordance with the regulations of Universiti Teknologi MARA. The project/dissertation is original and it is the result of my own work, unless otherwise indicated or acknowledged as referenced work.

In the event that my project/dissertation be found to violate the conditions mentioned above, I voluntarily waive the right of conferment of my degree of the Bachelor of Surveying Science and Geomatics (Honours) and agree be subjected to the disciplinary rules and regulations of Universiti Teknologi MARA.

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ABSTRACT

The ability to map and monitor the spatial extent of the built environment, and associated temporal changes, has important societal and economic relevance. Multitemporal satellite data provide the potential for mapping and monitoring urban land use change, but require the development of accurate and repeatable techniques that can be extended to abroad range of conditions and environments. The purpose of this study is to define the land use changes within Klang Valley area. Primary data used is collected from Landsat Satellite Images. The research is performed using the remote sensing and the data processing was done using ERDAS IMAGINE software. The study is detect the area changes and to produce map. The method chosen to investigate the changes is by classification and change detection analysis. Another expectation is to study the trendline model using Microsoft Excel to predict the urban and vegetation area in the future. The prediction model calculates the certain parameter caused by urban and vegetation changes. The parameter changes are obtained from the classification and change detection results obtain from the previous research. Result and analysis from this study can be used as a reference to investigate the urban and the land use changes in other city.

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