UNIVERSITI TEKNOLOGI MARA

CORRELATION STUDY USING HIGH RESOLUTION SATELLITE IMAGERY ON POVERTY AREA IDENTIFICATION

NOORITA BINTI SAHRIMAN

Thesis submitted in fullfillment
of the requirement for the degree of
Master of Science

Faculty of Architecture, Planning and Surveying

August 2015

CONFIRMATION BY PANEL OF EXAMINERS

I certify that a Panel of Examiners has met on 10 March 2015 to conduct the final examination of Noorita Binti Sahriman on her Master of Science thesis entitle "Correlation Study Using High Resolution Satellite Imagery on Poverty Area Identification" in accordance with Universiti Teknologi MARA Act 1976 (Akta 1973). The Panel of Examiners recommends that the student be awarded relevant degree. The panel of Examiners was as follows:

Kamarul Bahrain Shuib, PhD
Associate Proffesor
Faculty of Architecture, Planning & Surveying
Universiti Teknologi MARA
(Chairman)

Hj Anuar Hj Ahmad, Sr. PhD
Associate Professor
Faculty of Geoinformation and Real Estate
Universiti Teknologi Malaysia
(External Examiner)

Jezan Md Diah, PhD
Senior Lecturer
Faculty of Civil Engineering
Universiti Teknologi MARA
(Internal Examiner)

SITI HALIJJAH SHARIFF, PhD
Associate Professor
Dean
Institute of Graduate Studies
Universiti Teknologi MARA
Date: 30th July, 2015

AUTHOR'S DECLARATION

I declare that the work in this thesis/ dissertation was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledges as referenced works. This thesis has not been submitted to any other academic instituition or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

Name of Student   :   Noorita Binti Sahriman

Student I.D. No   :   2011178379

Programme   :   Master of Science (Build Environment)

Faculty   :   Architecture, Planning and Surveying

Thesis/ Dissertation Title   :   Correlation Study Using High Resolution
                                        Satellite Imagery on Poverty Area Identification

Signature of Student   :   ....

Date   :   August 2015

ABSTRACT

This study concentrates on determining the poverty area using high resolution satellite imagery. Identification of a poverty area using satellite image are well known and widely used in many countries in order to estimate the population, distribution of income and to identify the poverty area itself. Seven visual interpretation elements are included as the guidance in this study. The determination of poverty area is mainly from the visual interpretation method. This is to support the idea of high resolution image that are not suitable with automatic processing. Also it is to prove that visual interpretation does help in determining the poverty area especially in the urban area. The main site of the study area for this research is the urban area full with housing and industrial zone in the town of Puchong, Selangor. The area covered is 5km x 5km based on IKONOS satellite imagery provided by Malaysia Agency of Remote Sensing (ARSM). The spatial resolution of the image is one (1) meter and it was acquired in 2012. The result from poverty map was supported by one hundred questionnaires which are distributed in the study area. The significance of this study is to determine the poverty area and to produce a poverty map which can be applied in many sectors that need this kind of information, especially for developer or government sector in order to reduce poverty or to improve the poverty area.

TABLE OF CONTENTS