UNIVERSITI TEKNOLOGI MARA

EFFECT OF RAINFALL AND TERRAIN TOWARDS OIL PALM TREES IN PASIR PUTEH, KELANTAN USING GIS TECHNIQUE

DZULIYANA BINTI ZAKARIA

Thesis submitted in fulfillment
of the requirements for the degree of
Bachelor Science of Geomatics

Faculty of Architecture, Planning and Surveying

July 2017

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 acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

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

Name of Student	:	Dzuliyana binti Zakaria
Student I.D. No.	:	2014527999
Programme	:	Bachelor of science geomatics and surveying (AP220)
Faculty	:	Architecture, Planning & Surveying
Thesis/Dissertation Title	:	Effect of Rainfall and Terrain Towards Oil Palm Trees in Pasir Puteh, Kelantan Using GIS Technique
Signature of Student	:	.....
Date	:	July 2017

ABSTRACT

Spatial interpolation is the process of using point with known values to estimate values at other unknown points. The study is conducted to determine relationship between rainfall, and slope towards palm oil trees in Kelantan. The data of rainfall distributions were obtained from the Department of Irrigation and Drainage (JPS) has involving the amount of the distributions of year 2013 to 2016. These data were make kriging interpolation technique using ArcGIS 10.3.Next slope map will be produce to know the suitable terrain around palm oil area. For this study rainfall data has been analyzed with the slope and elevation to find out the relationship between this two data that can affected the palm oil trees. This study explained the relationship between rainfalls, slope and elevation data as an input and the palm oil trees as an output inspire of, explaining what happen in between using regression model. The result shows the Rainfall distribution map, Slope map, Regression model between average of rainfall and slope. In conclusion, apart from the analysis of rainfall and slope can be the strong correlation between this two data.

TABLE OF CONTENTS