UNIVERSITI TEKNOLOGI MARA

ANALYSIS OF PALM FRUITS PRODUCTION IN FELDA TEMBANGAU 2, BERA, PAHANG USING GEOGRAPHIC INFORMATION SYSTEM (GIS)

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Disertation submitted in fulfillment of the requirements for the degree of Bachelor of Surveying Science and Geomatics (Honours) – AP220

Faculty of Architecture, Planning and Surveying Department of Surveying Science and Geomatics

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AUTHOR'S DECLARATION

I declare that the work in this thesis 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 Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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ABSTRACT

Palm oil has two species of Elaeis Guineensis and Elaeis Oleifera. Elaeis Guineensis is from West Africa and Elaeis Oleifera is from Central America. Good palm fruit is made from mature palm trees. Palm fruit is delivered to the plant for processing and then extracted as a product. Palm tree at Felda Tembangau 2 is 13 years old. This means the mature phase of mature palm (main seed) tree Felda Tembangau 2. However, this study related to palm oil has limitations. The purpose of this study was to identify palm fruit area based on defined parameters in palm oil plantation Felda Tembangau 2. To achieve this goal, the objective of this study is to locate palm oil plantation area by block arrangement based on the palm oil plantation area of each Felda Tembangau 2 smallholder, to show the relationship between parameters and palm fruits production, and to produce map of palm oil plantation showing the parameters and palm fruits production. Elements such as palm tree age, palm oil plantation, slope, and drainage condition data will be used. The expected outcome for this study was a map that contained information on the oil palm cultivation area and the parameters used to determine the suitability of the oil palm crop. The resulting map will be associated with the annual production of palm fruits based on data obtained from the office of Felda Tembangau 2.

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