



UNIVERSITI TEKNOLOGI MARA

**ASSESSING LAND SUITABILITY
PLANTATIONS IN PERAK**

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Thesis submitted in fulfilment of
requirements for the degree of
Bachelor of Surveying Science and Geomatics (Hons)

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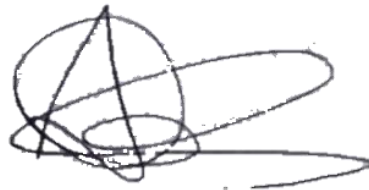
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AUTHOR'S DECLARATION

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 Postgraduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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ABSTRACT

Agriculture is amongst the most critical commodities in Malaysia, as it is a significant part of the animal and human food. This study assesses the potential area of the agricultural sector to the economic growth in Malaysia for paddy and oil palm because a few issues high competition from nearby countries, ageing trees, biodiversity, plant infections palm oil and paddy industry in Malaysia. Therefore, the study aims are to estimate suitable agriculture land (oil palm and paddy) in Perak, Malaysia. Therefore, the production of paddy and oil palm in Malaysia will be increasing for the future. In order to achieve the aim of this study, there are two objectives have been determined which are to., i) To carry out AHP method for selection of conditioning factors ranking for agriculture crop., ii) To determine suitability for the agriculture land of the Perak. The data research using satellite images provided by USGS earth explorers such as Landsat 8 (OLI), rainfall data, p.H soil data, which is soil grid, climate and soil fertility, will be used in this study. The second phase is data processing by using geospatial and Remote Sensing (RS), which are Reclassification, and Analytical Hierarchical Process (AHP). For the third phase, the result is the analysis of the AHP method based on the characteristic from the calculations, and from that, the land suitable of the Perak plain for both agricultures has been produced by map. This study is beneficial to increase their production of oil palm and paddy helps the development agriculture for both planting.

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