UNIVERSITI TEKNOLOGI MARA

DETECTION OF PREPARATORY WATER SITE SUITABILITY FOR RICE CROP GROWTH AND YIELD FORECAST

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of the requirements for the degree of
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AUTHOR'S DECLARATION

I declare that the work in this disertation 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

Paddy is one of the main and largest crops especially in northern Malaysia. In this case, paddy has become one of the largest carbon storage in Malaysia. Apart from being a staple food in the country, it also plays a role in reducing the effects of greenhouse gases. Therefore, it is very important to study the contribution of rice of early water supply towards the healthiness and productivity of this crop. This study can be achieved by analyzing satellite images and calculating water boundary areas in the selected study areas for tho different seasons in Malaysia. This study was carried out at a paddy cultivation area in the UiTM Perlis area where there were more than 60 paddy fields. The data used is the image from Spot-7 as well as the data obtained by performing in-situ data collections. For data processing, software ArcGis had been used. The results shows the impact of early water supply during the first growth's stage towards the growth and yield production of the selected paddy field.

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