UNIVERSITI TEKNOLOGI MARA

PERLIS SUSTAINABILITY BY PADDY YIELD PRODUCTION TREND ANALYSIS IN RELATIONSHIP TO ECONOMICAL

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Thesis submitted in fulfillment of the requirements for the degree of

Bachelor of Surveying Science and Geomatics (Hons) Faculty of Architecture, Planning and Surveying

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

Paddy is an important crop in Malaysia and it is vital for the nation's food security. The demand is driven as much by population growth by urbanization. Perlis is one of the states that have a property of resources, especially for paddy productivity. Paddy productivity is one of indicator in sustaining Perlis. Paddy is one of the factors to develop the state of the economy and increase revenue. This research is focus on paddy production and potential of paddy plantations as major food crop in Perlis. This pilot study covers MADA and non MADA area of Perlis which is one of state that rich of resource for paddy productivity. The data used in this study are base map of Perlis, location of paddy area for MADA and non MADA, location of grouping farmers' area and individual farmers' area, paddy yield from 2016 and 2017, size of paddy field and income of farmers annually. In methodology, GIS Trend Analysis was used to classify and analyse the number of paddy yield for each spatial in paddy area of Perlis. The analyses were made by season 1 and season 2 for both years of 2016 and 2017. Then, to achieve the second objective, the income of farmers for MADA and non MADA area were tabulate and shown in graph to see the high and low of income. Besides, correlation between paddy yield vs. income for each MADA and non MADA area were analysed for season 1 and 2 for 2016 and 2017 by using NCSS statistical software. The total paddy yield for 2016 and 2017 also were correlated with the income for both years to analyse the result of economical for both year.

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