

UNIVERSITI TEKNOLOGI MARA

**TECHNICAL EFFICIENCY OF OIL
PALM PRODUCTION AMONG
INDEPENDENT SMALLHOLDERS
AT JENGKA**

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MSc

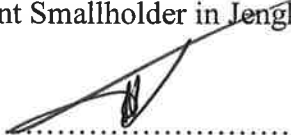
September 2020

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 of 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

Malaysia was once known as the largest producer and exporter of palm oil until its position was taken over by Indonesia. The limitation in Malaysia in terms of land availability for new planting of oil palm has pushed the focus on technology and resources to efficiency and productivity in oil palm cultivation. At present, Malaysia is the second largest palm oil producer in the world and may well be the third in future if no strategy is charted to maintain the position. In 2016, the yield of oil palm had decreased from 98,344,073 tonnes to 86,325,309 tonnes while the area harvested increase. One of the issues of low productivity is caused by independent smallholders that work in less efficient manners and below the economic scale compared to the estate sectors. Thus, there is urgent need to investigate the productivity of the independent smallholders in Jengka. This research aims to study the technical efficiency and socioeconomic factors affecting oil palm production among independent smallholders in Jengka. Data was collected from questionnaires that were distributed at Jengka district in 2017 to 97 respondents were then analysed using DEA to evaluate the technical efficiency. Research found that the smallholders are inefficient with a TE score $VRS = 0.77$ and only 11 smallholders were fully efficient. The variables that are affecting the smallholder's technical efficiency are labour utilization, fertilizers application, herbicides, training and farming experience while education level had no significant on the technical efficiency. It is recommended that the government continues its policy of assisting independent oil palm smallholders in order to maintain or increase their productivity.

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