

UNIVERSITI TEKNOLOGI MARA

**TECHNICAL EFFICIENCY AND
PROFITABILITY OF PADI
FARMERS IN NKEA PADI ESTATE
PROJECT, MUDA AGRICULTURAL
DEVELOPMENT AUTHORITY
(MADA)**

ALIYA BINTI MOHD AZIZAN

MSc

November 2017

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Thesis submitted in fulfilment
of the requirements for the degree of
Master of Science

Faculty of Plantation and Agrotechnology

November 2017

ABSTRACT

The assessment of efficiency in agricultural production determines the efficiency level of households in their farming activities. Most of the time, farmers in developing countries do not use all the potential technological resources hence making inefficient decisions in their agricultural activities. Therefore, this study is focused on assessing technical efficiency (TE) and the identification of some of the determinants of technical efficiency in Projek Estet Padi National Key Economic Area (NKEA), Muda Agricultural Development Authority (MADA). A total of 110 farmers had been interviewed using a structured questionnaire. The output orientation Data Envelopment Analysis (DEA) was employed for this purpose and it was found that the mean TE constant return to scale (CRS) in the study area was 81 percent while the TE variable return to scale (VRS) was reported at 83 percent. The study demonstrated that the most crucial factors having positive effects on technical efficiency levels were land, farming experience and training. Further, this study also focused on examining the profitability of the paddy farmers in the study area. It was found that the cost of paddy production per hectare per season was RM5158.20 and it was the total labor cost that constituted the biggest proportion of the overall cost of production. Apart from that, the benefit cost (BC) ratio of paddy production in this area was found at 1.40.

ACKNOWLEDGMENT

Firstly, I wish to God for giving me the opportunity to embark on my MSc and for completing this very long and challenging journey successfully. My gratitude and thanks go to my supervisor, Prof. Dato Dr. Hj. Nasuddin Othman and my co-supervisor, Encik Jamaludin Sharif. Thank you for the support, patience and ideas in assisting me with this study. I also would like to express my gratitude to the staffs of the Faculty of Plantation and Agrotechnology for providing the facilities, assistance and knowledge.

My appreciation goes to the staffs of Muda Agriculture Development Authority (MADA) who provided the facilities and assistance during my sampling. Special thanks to my sister, Wafa and my fellow friends, Azian Dakulah, Nurul Hisifbli Ibrahim, Shuanna Mohammad Shokur, Fifi and Tiks for helping me with this study.

Finally, this thesis is dedicated to my parents,
and for the vision and determination to educate me. This piece of victory is dedicated to all of you. Alhamdulillah.

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