

UNIVERSITI TEKNOLOGI MARA

**TECHNOLOGY TRANSFER BY
MARDI IN AGRO-FOOD BASED
INDUSTRY :**

**A CASE STUDY OF SME
ENTREPRENEURS IN SARAWAK**

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MSc

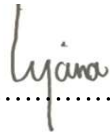
July 2021

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

Malaysian Small Medium Enterprises (SMEs) play an important role in the economy especially in the agro-food sector. The role of Malaysian SMEs is considered as the backbone of the economy. In order to compete with the future global marketplace, full utilization of technologies is needed. Therefore, three objectives were derived to guide this study. The first objective of this research is to explore the mechanisms used to transfer the technology to entrepreneurs in the Agro-food industry in Sarawak. Secondly, the study aims to identify the factors influenced the adoption of technology among the agro-food based Small Medium Entrepreneurs (SMEs) in Sarawak and the third aim is to identify the constraints and challenges faced by SMEs in technology adoption. This study was conducted in Sarawak involving twelve local SME entrepreneurs. A qualitative approach was used as research design and intrinsic case study as types of the research. Data was collected by semi structured interview, observation and documentation reviews. All interviews were audio-taped, transcribed verbatim, and were then analysed for thematic analysis. The findings showed that there were several mechanisms of technology transfer implemented by MARDI Sarawak which are by technical courses and practical training monitoring through the guided scheme by MARDI (e.g., Entrepreneur's Development Program) and dissemination of technology by publication. On meeting the second objective, the factors influenced the adoption of technology among SMEs in Sarawak were identified as the information regarding the technology, the support given by the government, characteristic of the technology, and the recipient's learning intent. Then, the third objective of the study is met by identifying the constraints and challenges faced by the entrepreneurs in adopting the technology. The barriers in adopting technology include the cost of technology, lack of capital, and lack of skilled human capital in technology. The findings indicate that by understanding the factors influencing the adoption of the transfer technology, control measures can be placed by the support agencies to advice and planning to encourage and sustain the productivity and quality of the production of the SMEs. It was also important to identify the factors influenced the adoption and the constraints and challenges faced by SMEs to find solution so they can compete in global market competitiveness.

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