

UNIVERSITI TEKNOLOGI MARA

**FACTORS INFLUENCING
THE IMPLEMENTATION OF
SUSTAINABLE AGRICULTURE
PRACTICES AMONG PEPPER
FARMERS IN SARAWAK**

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MSc

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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

Sustainable agriculture practices (SAPs) are crucial to be implemented on every farm that produced foods to enable the supply of hygienic, safe food products and as a solution of pesticide-residue problem towards a healthier lifestyle. Descriptive analysis, Factor analysis, and Ordinal regression were used to accomplish the objectives of this study. Data collection is through interviews using a structured questionnaire administered on registered farmers under the Malaysian Pepper Board (MPB), planted at least 1 hectare or 2000 pepper trees in Bau and the District of Serian, Sarawak. Systematic stratified random sampling method was used based on the two different districts selected. The Theory of Planned Behaviour (TPB) is used as the conceptual framework to explain the farmers' behaviour towards SAPs. Socio-demographic variables such as age, ethnicity, marital status, income status, farming experience, land ownership, and type of peppers significantly affect farmers' intention towards Sustainable Agriculture Practices (SAPs) in Pepper cultivation. The result shows that 50.7% of the pepper farmers have awareness of the SAPs. However, only 3.4% responses they definitely consider to implement the practices in the future. The attitude, subjective norm, and perceived behavioral control found to have positive relationship on the intention to implement sustainable agriculture practices in pepper cultivation, with significant value at (0.080), (0.003), and (0.051), respectively. The log-likelihood ratio test has a value of 301.731 with a level of significance of $p < 0.001$. The goodness of fit shows Pearson's chi-square statistic based on the deviance value 301.731 with a significance of 1.000 (> 0.05). This finding concludes that the model predictions are similar, and the model fits the empirical data well. The results of Pseudo R-square show the independent variables are able to explain dependent variable. The Pseudo R-Square of Nagelkerke is 53.0% explained the independent variables, which are able to explain the intention of pepper farmers towards SAPs. Thus, it indicates that the observed data were consistent and the model can explain the intention towards SAPs among the Pepper Farmers in Sarawak. The findings provide the pepper farmers invaluable insight on the advantages of adopting sustainable agriculture practices to expand their business locally and intentionally.

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