

Factors Adoption Sustainable Agricultural Practices Among Aboriginal Oil Palm Smallholders in Malaysia

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Abstract

Developing countries have low adoption levels of sustainable agricultural practices (SAP). The knowledge of sustainable agricultural practices is a major challenge among aboriginal oil palm smallholders who often find it difficult to accept modern science and technology-based practices. Therefore, this study aims to analyze the relationship between predictor factors influencing the practice of sustainable agricultural practices among aboriginal oil palm smallholders. This study uses a quantitative approach as well as qualitative methods through FGD interviews with 20 aboriginal oil palm smallholders to strengthen the validity of the study's findings. A total of 303 aboriginal oil palm smallholders were stratified randomly selected in the districts of Rompin and Pekan, Pahang. Quantitative data were analyzed using SPSS version 24 software using descriptive statistics (mean, standard deviation, and frequency distribution) and inference. The data analysis used in this study is Spearman rho correlation and multiple linear regression. The results of the data analysis showed that there was a relationship between six predictor variables, namely socioeconomic, agroecological, institutional, psychological, perceived attributes and local knowledge on the practice of sustainable agricultural practice knowledge. The results of the stepwise regression analysis found that local knowledge, psychology, information (social media), agroecology (average yield) and institutional factors (the role of the government) contributed to the formation of a model for sustainable agricultural practices of aboriginal oil palm independent smallholders. The findings of this study also show that local knowledge is a key factor influencing the improvement of yields and the decision-making process of the management of sustainable agricultural practices among aboriginal oil palm smallholders. The conclusion of this study is that the dissemination of information and innovation of sustainable agricultural practices among aboriginal oil palm independent smallholders can be achieved through the integration of local knowledge in the knowledge of sustainable agricultural practices. Stakeholders and policymakers need to hybrid local knowledge with modern knowledge in sustainable agricultural production.

Keywords

Aboriginal, Local Knowledge, Oil Palm, Smallholder, Sustainability