Extension Case Study: Why Paddy Farmers Are Not Inclined to Use a Drone as Part of Mechanisation for Paddy Cultivation

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Drone technology is emerging as a pivotal component in the agricultural sector, particularly in the context of Agricultural Industrial Revolution 4.0 (IR4.0). Its application, especially in activities such as fertiliser and crop protection chemical spraying in the Kemubu Agricultural Development Authority (KADA) granary areas, can significantly enhance the farmers' yields. Despite the positive reception of drone technology, there is a growing phenomenon of technology rejection that requires further exploration. This research aims to investigate farmers' acceptance of drones as a mechanisation tool for paddy cultivation in the Jajahan Bachok, Kelantan granary areas within KADA authority. A structured questionnaire, based on the knowledge, attitude, practice (KAP) model, was administered to 82 farmers surrounding Jajahan Bachok through purposive sampling. Data analysis using SPSS version 26.0 involved Descriptive statistics, Spearman's Correlation, and Reliability tests. The study reveals that paddy farmers exhibit acceptance of drone technology, albeit with a slow adoption rate. The correlations between knowledge, attitude, and practice with drone mechanisation acceptance are significant but negligible at levels of 0.253, 0.866, and 0.69, respectively. This research is vital for both agency and drone vendors to comprehend the factors influencing drone technology acceptance among paddy farmers. Understanding these factors can contribute to enhance the application and adoption rate of drone as next important mechanisation for paddy farming activities among farmers especially in the KADA granary areas.