Factors influencing Malaysian vegetable farmers attitude towards ICT usage

ABSTRACT

Background: The development of ICT, gadgets and mobile applications has expanded exponentially and hence nobody in the country from children to elderly leave home without a gadget. This development is also being observed among farm producers either for both personal uses as well as in their production. This research attempts to identify the current level of ICT, to explore the types of ICT that Malaysian vegetable farmers used and factors influencing them to use ICT in their farm production. Materials and Methods: This research employed modified Technology Acceptance Model (TAM) in an attempt to assess Malaysian vegetable farmers' attitudes toward ICT usage. Face to face interviews were conducted on 300 farmers using a standard questionnaire. Descriptive, chi square analysis, factor analysis and regression analyses were employed to obtain the required results and objectives. Results: The average farmers' age, farm size are 41 years old and 2.0 hectares. The mean farming experience is 12.67 and the ICT use per day is 96 minutes. The majority of farmer have up to secondary school education. Most used ICT tools by vegetable farmers are hand phones, smartphones, fixed line, tablet, computer, and fax machine. They are used to get agriculture information, and sharing knowledge with others. The result have answered the hypotheses that null hypotheses are rejected and directly indicated that perceived usefulness, perceived ease of use, subjective norm and facilitating condition factor have a significance relationship with the attitude of vegetable farmers to use ICT. Also the result of the regression analysis shows that education, area planted and farming experience are significant of ICT use. Conclusion: In order to increase ICT usage and encourage farmers to used ICT, agencies or related departments should provide them with training in ICT courses. The relevant departments should also facilitate access to information through mobile phones applications such as WhatsApp, Facebook or other social media.

Keyword: Tam; Regression; Vegetable farmers