ABSTRACT

Sustainable agriculture is the main focus in addressing global challenges such as climate change and food security. One way to encourage the adoption of environmentally friendly agricultural technology is through the use of digital multimedia. This study aims to assess the impact of digital multimedia on farmers' intention to adopt Agricultural Green Production Technology (AGPT) in West Java, Indonesia. By applying the extended Technology Acceptance Model (TAM), this study also examines how perceived ease of use, benefits, and risks mediate green technology adoption decisions in agriculture.

This study uses quantitative methods with Partial Least Square (PLS) analysis technique to test the relationship between variables. Digital multimedia, which includes digital marketing, digital literacy, and information access, was analysed as the main factor influencing farmers' decision to adopt AGPT technology. The results of this study are expected to provide deeper insights into the role of digital technology in driving the transformation of the agricultural sector towards more environmentally friendly and sustainable practices.

The findings from this study can serve as recommendations for stakeholders, including the government and agricultural industry players, in designing digital-based policies and education programmes. By optimally utilising digital technology, it is expected that the adoption rate of AGPT among farmers can increase, thus supporting agricultural productivity while maintaining ecological balance. This study contributes to identifying digitalisation strategies that can be implemented to accelerate the transition to a more inclusive and sustainable green agriculture.

Keywords: Digital Multimedia, Digital Marketing, Technology Adoption, Technology Acceptance Model, Green Agriculture