

## Agricultural Technology Adoption: The Role of Socioeconomic and Institutional Factors in Developing Economies

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**Abstract :** The main purpose of this study is to examine the socioeconomic and institutional determinants that affect farmers' probability of agricultural technology adoption. Primary survey data was gathered from 350 small household farmers of developing economies, and the empirical analysis was completed by exploiting a logit and probit model. The outcomes of this research emphasize that socioeconomic factors such as farmers' age, education level, and farm size impact farmers' behavior in adopting digital farming technology. The results show that cooperative membership and institutional characteristics such as access to credit and extension services have also affected small farmers' use and adoption of agricultural technologies. Digitalization also helps farmers by increasing their understanding and improving their decision-making abilities. Some policy implications and future directions are discussed.

**Keywords :** digital agriculture technologies, socioeconomics, institutional, developing economies

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