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SERVICES, AND AGRI-FOOD INNOVATION

**KNOWLEDGE, ATTITUDES AND PRACTICES REGARDING GENERATIVE
ARTIFICIAL INTELLIGENCE AMONG RURAL EXTENSION AGENTS**

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Agricultural extension is conceived as an instrument to enhance the competitiveness and sustainability of production systems and to improve household well-being through the development of farmers' capacities. The rise of Generative Artificial Intelligence (GAI) presents an opportunity to increase the efficiency of extension services. However, a knowledge gap persists regarding how prepared and willing rural extension agents are to adopt these tools. The objective of this study was to determine the level of knowledge, attitudes, and use practices related to GAI among agricultural extension agents in Colombia. A quantitative, descriptive, and cross-sectional approach was employed, using a questionnaire to assess knowledge, attitudes, and practices in a sample of 102 in-service extension agents. Data were analyzed using descriptive statistics.

Findings indicate that although 55.9% of respondents are aware of the existence of GAI, only 13.7% have received training on its use in agricultural extension. Overall attitudes are predominantly positive, with 88.3% considering that GAI has the potential to facilitate their extension work. Nonetheless, concerns remain regarding rural connectivity, information reliability, and the difficulty of learning to use the tool effectively. Reported practices are mostly limited to information inquiries, idea generation, and the creation of textual instructional materials. The study concludes that, while extension agents exhibit a high attitudinal predisposition toward the use of GAI, a significant knowledge gap persists that limits its effective implementation in agricultural extension processes. It is therefore recommended to implement digital literacy programs and structured strategies for the effective, ethical, and responsible use of GAI in extension services.

Palavras-chave: agricultural innovation; capacity building; digital competence; digital literacy; rural extension.