Mobile Technologies in Agricultural Information Dissemination in Senegal: A Systematic Review

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Abstract

Mobile technologies have been increasingly adopted in agricultural information dissemination across Africa to improve farmers' productivity and livelihoods. A comprehensive search strategy was employed using multiple databases including Web of Science, Scopus, Google Scholar, and local journals. Studies published between and were included based on predefined inclusion criteria. Mobile applications significantly enhanced farmers' access to agricultural information, with a notable increase in adoption rates from 45% in to 70% by . The review highlights the potential of mobile technology as an effective tool for enhancing agricultural productivity and sustainability in Senegal. Investment should be directed towards developing culturally relevant content, improving data privacy, and fostering community-based initiatives to maximise benefits from mobile agriculture platforms. Model estimation used $\hat{\{\theta\}} = argmin\{\theta\} sumiell(yi, f\theta(\xi)) + \lambda lVert\theta rVert 2^2$, with performance evaluated using out-of-sample error.

Keywords: *African geography, Mobile communication systems, Information dissemination, Agricultural productivity, Mobile services, Geographic information systems, Participatory technology assessment*

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