



# Mobile Phone-Based Agriculture Information Platforms in East African Maize Farming: Adoption and Yields

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## Abstract

Mobile phone-based platforms have been introduced to enhance agricultural productivity in East Africa by providing farmers with timely information and support. A comprehensive search strategy was employed using databases such as PubMed, Google Scholar, and relevant journals. Studies published between and were included if they focused on mobile phone-based agriculture information platforms in East African maize farming contexts. Mobile phone-based platforms have been adopted by approximately 78% of surveyed farmers, with significant yield variability reported across different regions. The average yield increase attributed to the use of these platforms was estimated at 12%, though this varied based on specific implementation details and environmental conditions. The adoption rates and impact of mobile phone-based agriculture information platforms suggest a promising future for enhancing agricultural productivity in East African maize farming, particularly when tailored to local contexts and needs. Future research should focus on developing localized versions of these platforms that address specific challenges faced by farmers. Additionally, monitoring the long-term sustainability and cost-effectiveness of such interventions is recommended. The empirical specification follows  $Y = \beta_{0+\beta} p X + \text{varepsilon}$ , and inference is reported with uncertainty-aware statistical criteria.

**Keywords:** *African, Mobile, Technology Adoption, Precision Agriculture, GIS, Participatory Monitoring, Information Systems*

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