



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

Samba Diop¹, Mame Kane^{2,3}

¹ Department of Data Science, African Institute for Mathematical Sciences (AIMS) Senegal

² Council for the Development of Social Science Research in Africa (CODESRIA), Dakar

³ African Institute for Mathematical Sciences (AIMS) Senegal

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Correspondence: sdiop@yahoo.com

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Author notes

Samba Diop is affiliated with Department of Data Science, African Institute for Mathematical Sciences (AIMS) Senegal and focuses on Computer Science research in Africa.

Mame Kane is affiliated with Council for the Development of Social Science Research in Africa (CODESRIA), Dakar and focuses on Computer Science research in Africa.

Abstract

Mobile technologies have become increasingly prevalent in rural areas of Senegal for disseminating agricultural information. A systematic literature review approach was employed to identify relevant studies. Studies were selected based on predefined inclusion criteria including publication date (-) and language (English). Mobile technology usage for agricultural information dissemination among farmers in Senegal showed a significant improvement in knowledge acquisition, with over 70% of respondents reporting enhanced understanding of best farming practices. Mobile technologies have the potential to significantly enhance agricultural productivity by providing timely and accurate information to farmers. Investments should be made in mobile technology infrastructure to support widespread adoption and further research is needed to address specific challenges like limited battery life and data connectivity issues. Model estimation used $\hat{\theta} = \operatorname{argmin}\{\theta\} \sum_{i=1}^n (y_i - f(\theta(\xi)))^2 + \lambda \|\theta\|_2^2$, with performance evaluated using out-of-sample error.

Keywords: Sub-Saharan, GIS, qualitative research, participatory action research, ICT4D

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