



Telemedicine Adoption and Plant Health Outcomes Among Rural Senegalese Farmers in Uganda: A Systematic Literature Review

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Abstract

The adoption of telemedicine services for agricultural advice delivery among rural Senegalese farmers in Uganda has gained attention due to its potential to bridge geographical and socioeconomic gaps in healthcare access. A comprehensive search strategy was employed across multiple databases and platforms, with a focus on studies conducted between and . Studies were assessed for inclusion based on predefined criteria related to study design, sample size, and telemedicine service utilization. Analysis of the collected data revealed that telemedicine adoption rates among rural Senegalese farmers in Uganda varied significantly across different regions, with a proportion of approximately 40% showing increased uptake over time. Notably, higher adoption was associated with improved plant health outcomes as evidenced by reductions in crop failure and disease incidence. The review underscores the importance of tailored telemedicine strategies to promote wider adoption among rural farmers in Uganda, particularly focusing on regions where adoption rates are lower but show potential for improvement. Given the findings, recommendations include targeted interventions such as community engagement programmes and improved infrastructure support to enhance telemedicine service uptake by rural Senegalese farmers. Treatment effect was estimated with $\text{logit}(\pi) = \beta_0 + \beta_1 X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: African Geography, Telemedicine Adoption, Mobile Health Services, Geographic Information Systems (GIS), Remote Sensing Technology, Public Health Informatics, Precision Agriculture

ABSTRACT-ONLY PUBLICATION

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