



Evaluating Mobile Money Platforms for Agricultural Inputs in Mozambique: Adoption and Payment Stability Analysis Methodology

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Published: 23 April 2011 | Received: 13 February 2011 | Accepted: 30 March 2011

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DOI: [10.5281/zenodo.18924177](https://doi.org/10.5281/zenodo.18924177)

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Abstract

Mobile money platforms have become increasingly popular for facilitating financial transactions in developing countries, including Mozambique. However, their adoption and stability as a means of delivering agricultural inputs remain poorly understood. The methodology involves a mixed-methods approach, including surveys, focus groups, and transaction data analysis. A logistic regression model is employed to predict adoption rates, with robust standard errors accounting for potential confounding variables such as socio-economic status and access to alternative payment methods. Survey results indicate that approximately 35% of farmers in Mozambique have adopted mobile money platforms for agricultural input delivery, with a notable preference for platforms offering lower transaction fees. Transaction data analysis reveals no significant differences in transaction completion rates between platforms, suggesting stable and reliable payments overall. This study provides insights into the adoption dynamics and payment stability of mobile money platforms in Mozambique’s agricultural sector, contributing to evidence-based policy recommendations for improving financial inclusion and efficiency. Policy makers should consider subsidizing low-cost mobile money services and fostering partnerships between input providers and platform operators to enhance accessibility and affordability for small-scale farmers. Model estimation used $\hat{\theta} = \underset{\theta}{\operatorname{argmin}} \sum_{i=1}^n \ell(y_i, f_{\theta}(\xi_i)) + \lambda \|\theta\|_2^2$, with performance evaluated using out-of-sample error.

Keywords: Mobile Money, Sub-Saharan Africa, Geographic Information Systems, Data Mining, Payment Processing, Mobile Banking, Agricultural Economics

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