

Digital Financial Services Insights and Loan Repayment in Microfinance Institutions: A Study of Small Scale Dairy Farmers in Nakuru Municipality, Kenya

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Abstract: The challenge of agricultural finance for most of the financial institution dealing with small scale farmers in the sub Saharan Africa is the high cost of financing rural smallholder farmers. The dairy industry in Kenya contributes 14 percent of agricultural GDP and 3.5 percent of total GDP GOK, (2008). Milk production is predominantly by small scale farmers, who own one to three dairy animals, and produce about 80 percent of the milk in the country KDB, (2009). Mobile money payments by farmers provides the transactional leveraging on branchless banking distribution channel for mobile banking credit, savings and micro insurance products. This study sought to fill the gap in the literature on financial inclusion by analysing the contribution of mobile use in payments of their loans among small scale dairy farmers in the microfinance sector Nakuru County, Kenya. The study sample comprised of 165 dairy farmers' borrowers from Micro Kenya. Data was collected through questionnaire, focus groups, and key informant interviews and both qualitative and quantitative methods were used to analyse the data. The study findings made an attempt at predicting current mobile payment channels have the potential to improve the repayment rate of small scale dairy farmers by cutting down travel costs and increase in accessibility. The study findings indicate that mobile phones have significantly changed the way financial institutions conduct their services. The bulk of current users say they use mobile money to help them manage short-term ups and down in cash flow as well as to save for short-term goals. From the study mobile money have contributed positively in improving small holder dairy farmers with fast and easy modes of payment, with improved payment have increased their ability to borrow financial access,

Keywords: Mobile Money, Microfinance, small Scale dairy farmers, Loan repayment.

I. INTRODUCTION

The biggest challenge facing Kenya today is high levels of poverty among its citizens. Poverty has been persistent in Kenya despite government's effort to combat it through national development programs. Forty two percent of its population of 44 million, live below the poverty line. This is reflected in the rising number of people without access to food, and inadequate access to other necessities Mango et al., (2009). The dairy industry in Kenya contributes 14 percent of agricultural GDP and 3.5 percent of total GDP GOK, (2008). Milk production is predominantly by small scale farmers, who own one to three dairy animals, and produce about 80 percent of the milk in the country KDB, (2009). Small-scale dairy production systems range from stall-fed cut-and-carry systems, supplemented with purchased concentrate feed, to free grazing on unimproved natural pasture in the more marginal areas Scholtz and Grobler, (2009). Upgraded dairy breeds tend to be kept in stall-feeding units, crossbred cattle in semi-zero-grazing systems, and zebu cattle in free-grazing systems Techno Serve, (2008).

Branchless banking through mobile phones (M-banking) is probably the most promising innovation in rural finance in the last few years. Using a network of retail agents and the existing mobile phone infrastructure, potentially even distant and sparsely populated areas can be reached with reliable banking services. The dairy industry is the single largest agricultural sub-sector in Kenya, larger even than tea Muriuki et al., (2004). Economic growth cannot be attempted without the active involvement, promotion and development of this sector of the economy. One of the most crucial and leading factors is limited access to financial capital and credit especially from the formal lending agents. MFIs have been reluctant to provide loans to Small Scale farmers because; they consider them as involving high risk factor, not dependable and involve excessive administrative costs.

Therefore, an analysis of factors affecting loan repayment performance and effects of flexible repayment schedules on loan default of small-scale dairy farmers would help policy makers to formulate successful credit policies and programs that enable them to allocate scarce financial resources to the development of basic sectors of the economy. Revision of its criteria in favour of credit worthy borrowers could also alleviate the financial constraint of small-scale farmers which are potentially efficient but could not be able to fulfil the MFIs lending requirements. Dairy farming remains a major concern in rural households especially in Kenya. Most dairy farmers face seasonal income due to agricultural activities; especially dairy farming. However, innovative market-oriented products that combine flexibility features with digital financial services may enhance small scale dairy farmer's repayment by smoothening their income flow to the flexible repayment schedule. However, there is no empirical evidence on the effects of flexible repayment digital financial services in MFIs. Thus, this study sought to fill the gap in the literature on financial inclusion insights by analysing the contribution of mobile money services among small scale dairy farmers in their loan repayment in Nakuru County

2. MATERIALS AND METHODS

The study adopted a qualitative and quantitative case study research design. The primary data was collected from a sample of small scale dairy farmers through structured questionnaires prepared for the study. Information pertaining to the respondent household demographic and socio-economic characteristics was obtained directly through the microfinance loan application forms that were held at the branch office of Nakuru. The target population was all small scale dairy farmers who obtain loan from micro finance -Micro Kenya limited (MKL) Nakuru branch in the study area formed target population. We have approximately 1418 borrowers in MKL within municipality with an average of 281 small scale dairy farmers as borrowers (Micro Kenya loan book). The focus was analysis of the questionnaire which was used to guide the interviewer of the sampled respondents. A part from this 5 key informant from MKL; 4 ministry of livestock officials and 1 officials from Kenya dairy board were included in the study population.

3. RESULTS AND DISCUSSION

The overview of the demographic profile of clients from micro Kenya demonstrates that there is a higher number of MKL clients who are using mobile money services than the dairy farmers. While more than 60 percent of mobile money users who are clients of MKL were able to recall using the mobile money services, only 12 percent said they were using the service. The group of farmers who are aware of the mobile money services but did not use the service The farmers were somewhat dominated by the traditionally disadvantaged populations farmers, those living in rural areas and those below the poverty line. The farmers were older with only half reporting secondary. Farmers had 100% ownership of the mobile phones though they were feature phones. All had bank accounts and this was due to the requirement of Micro Kenya for their clients to have bank accounts.

Products and Services in Micro Kenya -Group Lending Loans:

These are loans extended to dairy farmers who lack traditional collaterals. They form groups with a membership ranging from five (5) to thirty (30) individuals. Members self-select each other and during the period, members are inducted on the best practices of group lending and the co-guarantee mechanism. Once the induction sessions are complete to the satisfaction of MKL, the group is able to access loans. Neither formal collateral nor a credit history is required to qualify for a loan, but the co-guarantee mechanism and peer pressure must function for each lending structure to mitigate on lending risks. The key requirements to qualify for the group product were: Have a national Identification Card, Be a member of a group with an average of 10 members and each member should have been operating a dairy farm business for a minimum of 6 months. Loan terms range from one (1) to Eighteen (18) months, while loan amounts range from Ksh10, 000 to 1,000,000. Clients are required to maintain a loan guarantee fund, equivalent to 15% of the loan disbursed. Most of the dairy farmers had taken this product to purchase the animal feeds and working capital.

Features that made payment with mobile phones appealing:

Mobile money allowed farmers to consolidate their activities by providing savings and borrowing tools. Interactions/ transactions between M-PESA were smooth, all the farmers said it was easier for them to make payments using the pay bill number provided by Micro Kenya. They said the confirmation message made them to build trust in the mobile money services which they did not have initially they did not have. Even those stranded in remote areas in the middle of the night can get access to a loan or their saved funds. Users do not need to go to a MFI branch, wait until they open and stand in a queue to be served to pay for the loans. Security of their money was the most important. Neither outsiders nor family members or friends can find out whether and how much a farmer is loaned with, even if they gain access to their mobile phone.

The study findings indicate that mobile phones have significantly changed the way small scale farmers make payments of their loans. Of 109 respondents who answered the question on the contribution of mobile phones to their businesses, nearly three quarters (72.6%) reported that their business activities were positively (improved or greatly improved), instead of travelling to Nakuru town, farmers could arrange payments through Mpesa. This saves the unnecessary cost of travelling and time. This has also improved the savings for the smallholder farmers as the money is sent immediately to the Micro Kenya account it is earned from the sale of milk, this helps farmers to plan better.

4. CONCLUSION AND RECOMMENDATION

Overall, mobile money was well liked by the smallholder dairy farmers, most of the farmers did not completely understand how to navigate their phone well, and they were not clear about all of the features and rules about use (how to borrow and the repayment periods). Comprehensive educational efforts combined with a promotional campaign to encourage small scale farmers be aware on how to access the financial services on their mobile phones can resolve confusion about its services and use, and encourage both Dairy farmers who are users and potential smallholder farmers who want to use the mobile users.

The suggestions from the smallholder farmers were hard to come by of how to make the mobile money more user friendly. However, those who did provided suggestions for improving the user experience, half suggested more interaction's with the provider of the mobile network providers In particular, small scale dairy farmers suggested the mobile network operators to organize promotional campaigns to explain how mobile money works. They also wanted to see an active customer service effort to work with borrowers to help them develop a repayment plan and to initiate reminder calls about repayment deadlines.

REFERENCES

- [1] Government of Kenya (2008). Sessional Paper of the National Livestock Policy
- [2] Mango, N., Kristjanson, P., Krishna A., Radeny, P. & Johnson, N. (2009). *Understanding poverty dynamics in Kenya*. Int. Dev., 22(7): 978-996
- [3] Scholtz, M.M. & Grobler S.M. (2009) A systems approach to the South African dairy
- [4] TechnoServe (2008). The dairy value chain in Kenya. *Project report for the east Africa dairy development program*.
- [5] Muriuki, et.al (2004). The policy environment in the Kenya dairy sub-sector: A review.
- [6] Safaricom, (2010). M-Pesa customer and agent numbers" [online]. Available at http://www.safaricom.co.ke/fileadmin/M-PESA/Documents/statistics/MPESA_Statistics_Jan2011.pdf, accessed 11 July 2011.
- [7] Zeller, M., (1998). Determinants of repayment performance in credit groups. *The role of Program Design, Intergroup Risk Pooling and Social Cohesion*, Economic Development and Cultural Change, 46(3):10-21
- [8] Peake, C. (2012). 'New frontiers: *Launching Digital Financial Services in Rural Areas*'. The Brookings Blum Roundtable Policy Briefs.
- [9] Penicaud, C. & Katakam, A. (2014). 'State of the industry 2013: *Mobile financial services for the unbanked*'. GSMA: Mobile Money for the Unbanked.
- [10] Statham, C., Pfeiffer, K. & Babcock, L. (2013). 'Key lessons for mobile finance in UNCTAD. 2012. *Mobile money for Business development in the East African community: A comparative study of existing platforms and regulations*'. United Nations Publication.