

A STUDY ON AGRICULTURE FINANCE AND AGRICULTURE INSURANCE IN MICROFINANCE

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Abstract

Agriculture finance and agricultural insurance are strategically important for eradicating extreme poverty and boosting share prosperity. Globally, there are an estimated 500 million small holder farming households representing 2.5 billion people- relying to varying degrees, on agricultural production for the livelihoods. The benefit of our work includes the following: growing don't come off farmers and agricultural SMEs through commercialization and access to better technologies, increasing resilience through climate smart productions, risk diversification and access to financial tools and smoothing the transition of non-commercial farmers out of agriculture and facilitating the consolidation of farms, assets and production (financing structural changes)

Key messages:

- Agriculture finance empowers poor farmers to increase their wealth and food production to be able to feed 9 billion people by 2050.
- Our work in agriculture finance helps clients provide market-based safety nets, and fund long-term investment to support sustainable economic growth.
- Demand for food will increase by 70% by 2050; at least \$80 billion annual investments will be needed to meet this demand.

There is an ever increasing need to invest in agriculture due to a drastic rise in global population and changing dietary preferences of the growing middle class in emerging markets towards high value agricultural Products. In addition, climate risk increases the need for investments to make agricultural more resilient to such risks. Estimates suggest that demand for food will increases by 70% by 2050 and at least \$80 billion annual investments will be needed to meet this demand, most of which needs to come from private sector. Financial

sector institutions in developing countries lend a disproportionately lower share of their loan portfolios to agriculture compared to agricultural sector's shares of GDP.

On the other side, the growth and deepening of agriculture finance market is constrained by a variety of factors which include

- Inadequate or ineffective policies.
 - High transaction cost to reach remote rural populations
 - Covariance of production, market and price risks
 - Absence of adequate instruments to manage risks.
 - Low levels of demand due to fragmentation and in incipient development of value chain
 - Lack of expertise of Financial Institutions in managing agricultural loan portfolios.
- The development of agriculture requires financial services that can support: larger agriculture investments and agriculture-related infrastructure that require long term funding (given that currently transportation and logistics cost are too high, especially for landlocked countries), a greater inclusion of youth and women in the sector, and advancements in technology (both in terms of mechanizing the agricultural process and leveraging mobile phones and electronic payment platforms to enhance access and reduce transaction costs). An important challenge is to address systematic risk through insurance and other risk management mechanism and lower operating costs in dealing with smallholder farmers.

What we do:

We focus on developing and implementing agriculture finance Strategies and instruments to crowd- in private sector, enhancing access to suitable financial services to farmers- particularly smallholders- and agricultural small and medium enterprises (SMEs) as a way to increase agricultural productivity and income, and facilitating their consolidation/ integration of production and marketing entities in agriculture to achieve Economies of scale and stronger presence in the markets.

We primary work on agriculture finance, agriculture insurance and its linkages with agriculture finance. Our key areas of work are described below-

- **Policies and regulatory interventions agricultural finance:** We conduct diagnostic studies on the state of Agricultural finance within client countries and produced concrete action plans to Reform public policies and regulations in order to create an

enabling environment to mobilize agricultural finance. Some examples of policy and legal or regulatory intervention areas include lending quotas, interest rate caps, bank branch expansion regulations, Prudential regulation impacting agricultural lending, warehouse receipts financing frameworks, and alternative dispute mechanisms for contract farming.

- **Policy (and insurance product development) advisory agricultural insurance:** we advise government on policies for agriculture insurance (example financial incentives, premium subsidies, and the overall role of government to promote agricultural insurance) and on development of effective insurance products. Additionally, we also collaborate with the Global index insurance facility (GIIF) and the disaster risk finance and insurance program (DRFIP) on certain projects and activities.
- **Strengthening of relevant Institutions:** we provide technical assistance to reform and build capacity of public Financial Institutions, to establish commodity exchanges, and to build capacitive of MIFs and other Institutions. We operate a special program focused on financial co-operatives, given the importance of these entities as providers of financial services to smallholder farmers, rural MSMEs and household. This program aims to strengthen the performance as well as to enhance applicable regulations and oversight arrangements to better integrate them into their country's financial system. Furthermore, we design and implement in projects risk sharing mechanism through various instruments, such as partial risk guarantees.
- **Developing innovative products:** we assist in the design and develop a wide range of instruments, either as a Technical assistance or part of leading projects: value chain Finance, inventory finance (example including warehouse receipts, CMA and SMA), partial credit guarantee schemes for agriculture sector loans matching grants, Crop Insurance, price hedging instruments, and gender finance. We also work on developing mobile banking and payment platform to enhance access to finance and reduce transaction cost within the ecosystem. An important focus of our work is in this area has been to develop solutions to reduce the riskiness of agriculture by addressing systematic risk (example production and weather risk through insurance, and price hedging instruments) and also focus on ways to reduce operating costs in reaching to smallholder farmers and SME agri businesses (for insurance, the role of digital Finance technology).
- **Knowledge management and community of practice:** Informed by our in house Research and knowledge production, we carry out activities both at the internal level

(including community of practices and training programs) and at the external level (Global and regional dissemination events, - South exchange and capacity building for policy reforms, among others) we organised to community of practice one on agriculture finance and insurance and another one specific to financial cooperative.

- **Global engagements:** Since 2011, we have served as a technical advisor to the G20 Global partnership for financial inclusion (GPFI) SME finance subgroup on issues related to Agricultural finance and insurance. Also, we have formed a partnership with Rabobank on financial co-operatives that aims to contribute to the Global knowledge on this Institutions and the promotion building on concrete experiences.

Financial Inclusion and microfinance

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About 90% of the 180 million poor households in the region lack access to institutional financial services. Most formal Financial Institutions deny the poor their services because of perceived high risk, the high cost involved in small transactions, and the poor inability to provide marketable Collateral for loans. Promotional financial inclusion is a common development theme for most developing countries in Asia and the Pacific and is key to inclusive and balanced economic growth providing the poor with improved facilities to save and to have better access to credit and insurance helps them manage risk, built assets, includes income, and enjoy better life.

Digital Financial Services

Offering basic financial services through mobile phone point of sale devices, and networks of small scale agents, digital financial services (Dfs) have the potential to reach more people, at a lower cost, and with greater convenience than traditional “brick and mortar banking services”.

With the Rapid global expansion of mobile technology, mobile banking and other digital financial services are helping vast number of previously excluded people access financial services. mobile network operators, governments, and Financial Institutions, ranging from large commercial banks to microfinance institutions, recognise and have begun to leverage

the potential of DFs a number of government and there Central banks have also embarked on “cash –lite” policies to reduce the use, and therefore cost of cash in their economies.

Dfs models are being tested with varying degrees of success around the world. Safaricom’s m-pesa in Kenya is probably the best known and most successful example of mobile banking. Its worst success Spark a wave of start-ups and partnerships that use the services to provide canyons other valuable services, such as utility payments, savings accounts and micro insurance.

Researchers are studying successes and failures of digital financial services to understand the market forces, business models and eco system requirements to support successful Dfs developments elsewhere around the world.

Mongolia finance sector fact sheet:

This fact sheet provides concise information on Mongolia finance sector and summary of ADB- assisted programs, challenges and future directions.

The Asian Development Bank (ADB) as a long history of supporting Mongolian’s finance sector. The first engagement was in 1991, just after Mongolia joint ADB, when advice and capacity building was provided to the Mongolian stock exchange for its operations. Since then ADP as supported Mongolia finance sector through \$130 million in lending programs, \$109 million in technical assistance (T A) projects, and \$98 million dollars in private sector Investments.

Mongolia finance sector, despite several improvements, is still very fragile. The Economist heavy Reliance on the mining sector exposes the finance sector tourist from global price fluctuations in commodities. Risks have been rising and the finance sector currently suffers from high level of nonperforming loans. This is preventing banks from making new loans necessary for economic recovery.

Many improvements have been made in terms of the capacity and the range of financial products and public services, and the strength of the financial Framework. But challenges exist in improving financial access, insuring financial support for small and medium-sized Enterprises (SMEs), and further enhancing sound regulatory oversight.

Grappling with India’s national biometric- based payment system:

The bumpy road to scaling digital financial services with the Aadhaar enabled payment system.

By Rahul Ranjan Sinha and Gaurav chakrabarty Grameen Foundation India, may 2018.

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India's Aadhaar enabled payment system (AEPS) is the world's first national biometric-based payments system. In the two years since its launch, AEPS has revealed both benefit and challenges as it seeks to expand financial inclusion. Grameen Foundation India has experienced these directly as we work to scale digital financial services and financial education.

How does AEPS work?

AEPS was designed to allow individuals to conduct financial transactions across any participating Bank, using just three inputs:

- A number identifying the bank;
- The customer's own national identification number, assigned using biometric data such as fingerprints for identification; and
- The customer's fingerprint, which provides user authentication at the time of transaction.

Transaction can take place at a Bank registered with the system, or at a point of sales (POS) machine setup through banks "business correspondents" such as microfinance institutions (MFIs). This brings access, convenience and cost savings to rural customers who live far from a bank branch.

Grameen Foundation India's experience with AEPS

In a project funded by citi Foundation, we incorporated in AEPS to help expand financial inclusion for Poor and low income women in the state of Uttar Pradesh. With our partner Sonata finance, a leading Indian MFI and oxygen a leading payment solution provider, the project reached out to women through 150 Sonata branches, where trained staff could assist clients in using the digitally- based POS machines.

From March 2017 to November 2017, clients made more than 32000 transactions worth US\$110,448 (INR 74 million) At Sonata branches. They made payments on individual or group loans from Sonata, deposits and withdrawals. More than 58,600 women clients were trained on the AEPS platform, and 15760 made transactions.

An impact study of the project carved out some of the key advantages and challenges faced with AEPS platform

Key Advantages for women client:

- **High trust-** Most of the low income women clients well illiterate: - 76% of clients had completed no more than primary education. When visiting a bank on their own, these women wear dependent on strangers for filling deposits or withdrawal forms the AEPS platform meant there were fewer forms to fill, and women assisted by the trusted local branch staff. This became big incentives for women to adopt digital Financial Services.
- **Convenience and interoperability:** - Clients appreciated being able to make multiple transactions for different accounts at different banks under single roof, saving time and travel expenses. Previously, clients living at a distant location often travelled as a group to do their banking, for reasons of both safety and friendship.
- **Ease of transaction:** - Clients didn't have to provide any document apart from the Adhar number previously they needed bank passbooks and related documents, and just signing the documents could be intimidating.
- **No transaction fees:** - Unlike mobile wallets AEPS does not charge any service fee to the client. Mobile wallet fees could be as high as 1.5 % to 2% of the transaction amount.

Key challenges for clients:

- **High transaction failure rate:** - About 56% of the total transactions conducted during the project period failed, compared to 60% failure rate for AEPS Nationally. This is astronomical by any standards. About 20% of the failed transactions where due to user issues, including in correct Aadhaar number and insufficient bank balance. About 45% wear due to technical glitches, including poor internet connectivity.
- **Biometric mismatch:** - About 35% of the failed transactions were due to biometric mismatch. Most women clients were engaged in job requiring rigorous manual labour which resulted in eroded fingerprints that led to failed fingerprint recognition. This

results in the exclusion of a large section of society, which is unable to reap the immense benefit of this platform.

- **Failed transaction causing balance deductions:** - In many cases, transaction failed to complete, but payment amounts were still deducted from clients' accounts. Furthermore, it took roughly a month for the amount to be reposted. This is a major barrier, especially for low-income households whose small amounts had little margin for error.

Clearly, All through benefits to the system where strong, operational challenges present several limitations to the AEPS system. Due to the regular failure of transactions, many clients expressed feeling discouraged from using the platform.

For AEPS to deliver fully on its promise of expanding financial inclusion in India, these experiences. To the need for several crucial changes AEPS must reduce the number of failed transactions, and expedite the redress of failed transaction. To do so, three main issues must be addressed:

- Finding a practical alternative to fingerprint authentication;
- Continuing to strengthen the internet infrastructure in rural areas ;and
- Complementary efforts to strengthen the digital and financial literacy of low income women such that they enter the banking environment confident and well prepared.

Being smart about mobile money

Leveraging client protection principles for Savings groups in Burkina Faso

By Bobbi Grey and Christian Loupeda, Grameen Foundation, April 2018

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Digital finance evokes images of toping to cell phone and instantaneous transactions. Loans, transfers, and payment we may think of the well-known M-paisa, the mobile phone based money transfer and microfinance service launched by or Vodafone in Kenya and Tanzania, are many similar services across the globe. While sub- Saharan Africa may lead the world in mobile money accounts 21% of adult shave 1 some country still lack the infrastructure and

experience with mobile money. And in these countries, special guests needed to protect new low income Clients who are likely using digital financial services for the first time.

In 2014 in Burkina Faso, for example 15% of men had a formal financial account and 12% of women did. Compared to the average of sub-sahara Africa, only 3.1% of men and women in Burkina Faso had a mobile money account and this was even less among the poorest and this rural areas. However, it was estimated that almost 25% of women in Burkina were saving with some sort of informal savings group (SG), likely accounting for the majority of financial transactions among women as this blog was going to press, the most recent set of global index numbers were updated, suggesting improvements in this number across the board.

Given the popularity of savings groups for Burkinabe women we wanted to know: could they be brought into the formal financial system with savings account access via a mobile phone platform? So we set out to test this idea.

Between 2014 and 2016, Grameen Foundation, with support from UNCDF micro LED launched the bridge to financial inclusion project in Burkina Faso to test whether formal financial service providers (FSPs) could form their own savings Groups for Poor rural women, and link those groups to formal savings account via a mobile phone platform. In collaboration with two Burkinabe FSPs, developing a large network of self-managed savings groups and linking them to a specialised group's savings account through mobile technology.

While both RCPB and SOFIPE provided financial education to the group members and used mobile phone technology to link groups to formal savings account, this was where the similarity of their models ended.

SOFIPE used third party airtel money platform for the mobile linkage of SGS for formal group savings accounts. Whereas RCPB use their own in house application intercaisses (or inter-credit union) which in the past primarily facilitated money transfers for clients within RCPB's credit union system both approaches carried with them a set of risk to the savings group members given the novelty of mobile money, in addition to other risks related to each approach, such as the role of third party actors. Client production, therefore, was integral and necessary to the design of the project.

With additional support from the responsible microfinance fund (RMF), Grameen foundation developed a case study to document how the project leverages the seven existing client production principles from the smart campaign not only to guide product development but

also to assess any risks to client production. The project identified seven main barriers to client protection:

- Client understanding;
- Affordability of the product;
- Network down time;
- Fraud;
- Absence of recourse;
- Insufficient agent liquidity;
- Cultural barriers;

Anyone of these seven risks could result in a bad experience for the savings group members and lots of trust and confidence in RCPB and SOFIPE specifically, and in mobile money, generally. To address these barriers RCPB, SOFIPE, grameen foundation and smart companion trainers met prior to the product development to create work plans that would identify and address risks to client protection.

While this specifics of how each FSP addressed this barriers are documented in the report, the experience demonstrate how the clients protection principles were useful not only for assessing how well financial services protect clients, but also and maybe more importantly for designing responsible digital financial services(DFS) for vulnerable population.

Addressing the risk related to client understanding priority for the project, has most savings group members were Illiterate, poor, lacked mobile phone experience, and many had no prior experience working with all formal FSP. Since mobile phone usage was low, agent's mobile phone were used both to train the SG members as well as to assist them in making the mobile money transactions. Ensuring sufficient liquidity required a great deal of coordination between the SGS and the agents, not to mention the challenge of identifying the right agents to support savings groups.

The bridge to financial inclusion project required much more and holding then probably across in places like Kenya there the DFS ecosystem is advanced and even the remotest of villages use mobile Money.

Burkina Faso is in transition, and no doubt will one day be as active a DFS market as Kenya. for now, as Burkinabe's await a robust DFS infrastructure that promises to facilitate greater financial inclusion, cautions and patient DFS projects and investments are needed to help build trust and readiness for the most excluded. This includes projects that strengthen the

financial and digital literacy of user as well as those that support FSPs to fully incorporated client risk mitigation strategies into their product design and discovery mechanism.

Keeping client protection at the centre of these efforts not only makes good business since for FSPS but also made determine how well and hoe quickly people become active users of the DFS as the market grows.

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