## MOBILE MONEY CASE STUDY

# A Closer Look at Opportunities for Mobile Financial Services in the Rice Value Chain in Bangladesh

USAID promotes increased access to and usage of mobile financial services in order to deepen financial inclusion, accelerate broad-based economic growth, and instill transparency into funding flows. This case study is intended to provide insight into how mobile financial services may be used within the rice value chain.



#### **OVERVIEW**

The Rice Value Chain (RVC) project is a 15-month pilot project run by The International Rice Research Institute (IRRI) Bangladesh to support the private sector with the goal of improving the efficiency of the rice value chain. After reviewing a request for technical assistance from IRRI, mSTAR/Bangladesh conducted an <u>assessment</u> to evaluate the transaction flows between various value chain actors in the rice value chain with the goal of identifying opportunities for integrating mobile financial services (MFS) into existing payment streams within the rice value chain to enhance efficiency and transparency.

### THE VALUE CHAIN ACTORS

Consistent with any other agricultural value chain, the rice value chain contains a multitude of actors. Input retailers and dealers cater to farmers' needs for seeds, fertilizers and pesticides. Farmers, in turn, cultivate the land to produce the rice, often relying on hired labor for support. The produce then changes hands through various combinations of forward market actors, such as village level collectors, processors/millers, large scale traders, commission agents, and others. The process ends with the purchase and consumption of rice by the consumer.

## TRANSACTION PATTERNS AND PAYMENT FLOWS WITHIN THE VALUE CHAIN

The <u>assessment</u> found a number of different financial interrelationships between the actors, which provided many interesting insights into their financial behavior. Farmers tend to buy inputs in smaller ticket sizes, but when selling they usually sell in large volumes to forward market actors. Transactions are mainly cash based, with credit extended between actors very common. For input retailers, the transaction pattern is different (i.e. they buy in bulk and sell in smaller quantities to farmers). Transactions with farmers is mostly cash based, with frequent extensions of credit. As for the forward market actors, transaction size and mode depends on the actors they are dealing with. In general, forward market actors have much larger transaction volumes and values compared to farmers and input retailers. Although cash transactions are prevalent among these actors, many of them use the banking channel to make and receive payments, especially for large value and long distance transactions.

## AWARENESS AND USAGE OF MOBILE FINANCIAL SERVICES

Most of the value chain actors have heard about mobile financial services, though awareness about the full extent of services available is limited. Usage of MFS is also mostly restricted to over-the-counter (OTC) transactions through agents and use of individual MFS accounts was seen to be quite low. That said, a few actors have used MFS to make business transactions, especially when their counterpart(s) were located far away. One of the reasons behind low usage of MFS seems to be that most value chain actors reside in the same locality and do not seem to have a problem with transacting in cash.

### OPPORTUNITIES AND RISKS TO MFS UPTAKE IN THE RICE VALUE CHAIN

The MFS industry in Bangladesh is still growing and products specific to the agriculture sector are still mostly nonexistent. Many actors opined that they are withholding from using MFS due to fear of transaction costs. This fear is mostly derived from a lack of awareness about MFS among the actors, particularly when it comes to transactions made directly from an MFS account, which are much more affordable than the unofficial cost of OTC transactions through an agent. Digital payments, whether through MFS or other channels, work best when the money stays digital throughout the different transaction flows. Thus adoption by one influential actor within the value chain can have a knock on effect on other actors as well.

However, there are still ample opportunities for incorporating MFS in the rice value chain as depicted in the table on the following page:

ACTORS & RECOMMENDED MFS ACCOUNT	MFS OPPORTUNITY	RISKS/CHALLENGES	RISK/CHALLENGE MITIGATION
Farmers Personal account	For settling dues after harvest or receiving payment, MFS would eliminate the time and cost of travel to make and receive payments.      MFS would also eliminate concern about dealing with fake notes.	» Farmers may be apprehensive to open MFS accounts due to averseness to new technology and concerns about cost.	» Awareness building on the benefits of MFS and clarifying misconceptions about the true costs.
Input Retailers   Merchant account  Merchant and/or collection account	<ul> <li>By setting up an MFS merchant account, retailers/dealers could receive payments from farmers without visiting them, which is particularly useful for settling dues, as it would be cheaper and would not take them away from their shops.</li> <li>MFS would also help to evade cash carrying risks and concern of dealing with fake notes.</li> </ul>	» Ideally, input retailers/ dealers would need to open merchant accounts, which they may be reluctant to do given the fees.	<ul> <li>Promote the fact that since transaction ticket sizes are smaller with farmers, the fees will not be as high as they may anticipate.</li> <li>Promote that having a digital transaction history may in the future help both farmers and input retailers increase their access to credit.</li> </ul>
Collectors Personal account	» Settle dues with farmers without travel, saving them time and money, as well as eliminating risk of carrying cash.	Collectors may be reluctant to accept paying the transfer fee.      The daily transaction limit may mean that payments to multiple farmers on the same day may not be possible.	» Awareness building on the benefits of MFS in terms of time and cost savings and eliminate misconceptions about charges.
Millers — Agent account	Millers could use MFS for settling small amounts of dues with farmers and collectors from an agent account using the regular cash-in service. This would save them time and travel costs.      Using an agent account means that they will receive a commission on transactions from the MFS provider.	MFS providers may not want to extend agent accounts to millers.      Millers may be reluctant to become agents out of concern that it will hamper their regular business activities.	<ul> <li>If necessary, demonstrate to MFS providers the value of extending their agent networks through millers.</li> <li>Millers have to be sensitized about the benefit of opening an agent account.</li> </ul>
Arotdar/ Commission Agents  Wholesalers  Personal account  Large Scale Traders	» MFS could be used for emergency small value transactions, though not feasible for regular day-to-day transactions due to the large value of most of their transactions.	» Since most of their transactions are more appropriate for the banking channel, they may be reluctant to also have an MFS account.	» Demonstrate the value of having an MFS account to facilitate emergency transactions, as well as for other features, such as airtime top up, bill pay, and payments to friends and family.

You can read the full findings from this assessment in the technical assistance report developed for IRRI Bangladesh, which is available online at: <a href="https://www.microlinks.org/library/mstarbangladesh-technical-assistance-irri-bangladesh">https://www.microlinks.org/library/mstarbangladesh-technical-assistance-irri-bangladesh</a>. Refer to page 49 of the report for more information on types of accounts cited in the table above.

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