



Mobile Money Integration Assessment for Agro-Inputs Project

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DISCLAIMER

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Overview of Mobile Financial Services in Bangladesh

Bangladesh has a rapidly growing mobile financial services (MFS) industry, with at least 10 providers already offering services on the market, and making up more than 8% of the total registered MFS providers globally¹. All this has happened in less than four years since the launch of the first mobile financial service products in 2011.

MFS snapshot

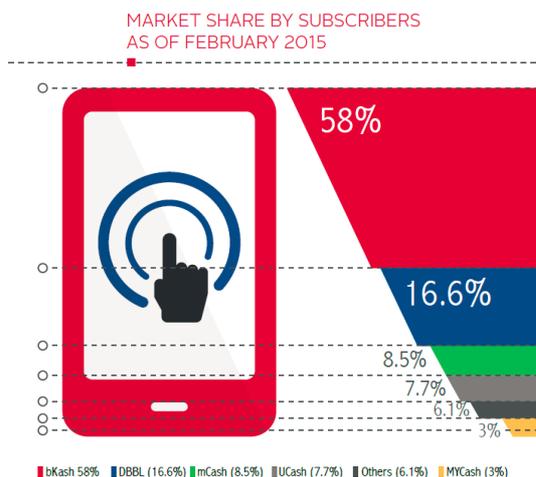


\$47.44 Million
Value of Average Daily Transactions
(as of Feb 2015)



2.57 Million
of Average Daily Transactions
(as of Feb 2015)

In the few years since the launch of the MFS guidelines, the sector has shown significant growth. As Bangladesh is a bank-led model, all of the MFS products on the market are run by banks or their subsidiaries. Bangladesh Bank has allowed 28 banks to offer MFS, of which 19 banks have already



started to work on their MFS products in some capacity. bKash currently dominates the MFS space accounting for more than half of the market, followed by DBBL with about a one-sixth share of total subscribers. The growth of the market has largely benefited from domestic remittances. The most popular transaction types are cash-in (42% of total transactions), cash-out (37%) and

person to person (P2P) transactions (19%). As of February 2015, cash-in transactions totaled US\$ 595 million, cash-out transactions totaled US\$ 523 million and P2P transaction accounted for US\$ 265 million.

¹ Based on estimates from Bangladesh Bank and GSMA's State of the Industry 2014: Mobile Financial Services for the Unbanked.

² mSTAR uses the phrase 'mobile financial services' or MFS when referring to the use of mobile phones for any type of financial service (e.g., money transfer). The term 'mobile money' (MM) is used when referring to the funds being

 Provider	Number of agents	Bank branches	ATMs
bKash	135,000	155	300
DBBL Mobile Banking	116,000*	136	3,005***
mCash	86,238*	294	450
MyCash	95,274**	100	720
UCash	105,000*	156	103
IFIC Mobile Banking	88,891*	120	49
Trust Bank Mobile Money	20,000	152	152

Note: * Includes 65,000 MobiCash agents ** Includes 61,241 MobiCash agents *** Includes 300 FastTracks

The mSTAR team recently published a report covering the state of MFS in Bangladesh, including an overview of the services available, relevant regulations, and the extent to which staff and beneficiaries from select USAID agriculture and health projects are using those services. The full report is available at: [Mobile Financial Services in Bangladesh](#).

Agro-Inputs Project Overview

The five-year (2012–2017) USD 14 million Agro-Inputs Project (AIP) funded by the United States Agency for International Development (USAID) is part of the U.S. Government’s Feed the Future initiative and implemented by CNFA. AIP will improve the supply of safe, high-quality agricultural inputs available to farmers by delivering training to and improving the services of an expanding network of agro-input retailers. Improved availability of agricultural inputs will be vital to increasing smallholder farmers’ yields, incomes, and food security in southern Bangladesh. The key interventions of the project are:

I. Form the Agro-Input Retailers’ Network (AIRN): AIP will establish the AIRN through 3,000 accredited retailers who are trained and committed to making informed business decisions for efficient and ethical agricultural input retail operations. Ultimately, this network of trusted retailers will improve the supply of high-quality inputs to farmers throughout Bangladesh’s southern delta.

The AIRN and the AIRN Certification will achieve the following:

- Enhance farmer outreach and marketing opportunities
- Link input supply companies and their wholesalers in order to improve the security of their supply chains
- Monitor ongoing activities of certified retailers

2. Develop a Market Information System: To increase awareness of quality input products, their availability, prices, and appropriate use, AIP will develop a Geographic Information System (GIS) to analyze and disseminate strategic market information. The system will also map demonstration plots, public and private advisory centers, and other points of interest to both farmers and retailers.

3. Promote Quality Standards & Improve the Regulatory Environment: AIP will work with industry associations, their members, and the Government of Bangladesh to develop industry standards for each of the major crop inputs. Engaging these stakeholders and key partners, such as the International Food Policy Research Institute (IFPRI), assists in the transparent resolution of problems such as low-quality seed, improper fertilizer formulation, and adulteration of crop protection products.

4. Build Capacity of Local Organizations: AIP is building the capacity of three local organizations to better implement activities in support of USAID program objectives. Organizational strengthening and financial assistance will be provided to selected partners along the agricultural inputs value chain.

Purpose of this assessment



AIRN Retailer Outlet in Khulna

The mSTAR team received a request from the Agro-Inputs Project (AIP) on April 29, 2015 to investigate the scope of integrating mobile money² in their project. The mSTAR team conducted a scoping study covering AIP Khulna field office, members of the Agro-Input Retailers' Network (AIRN) and farmers in order to:

- i) Understand the financial behavior of wholesalers, retailers, and farmers during peak and off-peak season
- ii) Map the transaction flow between wholesalers, retailers, and farmers during peak and off-peak season

Assessment Design

The assessment was conducted in multiple upazillas of Khulna division where AIP is operating. The mSTAR team held meetings with AIP program and finance teams at the Khulna Regional Office, focus group discussion (FGDs) with farmers and women retailers, and structured interviews with wholesalers and retailers who are members of AIRN.



Interview with Wholesaler, Dumuria

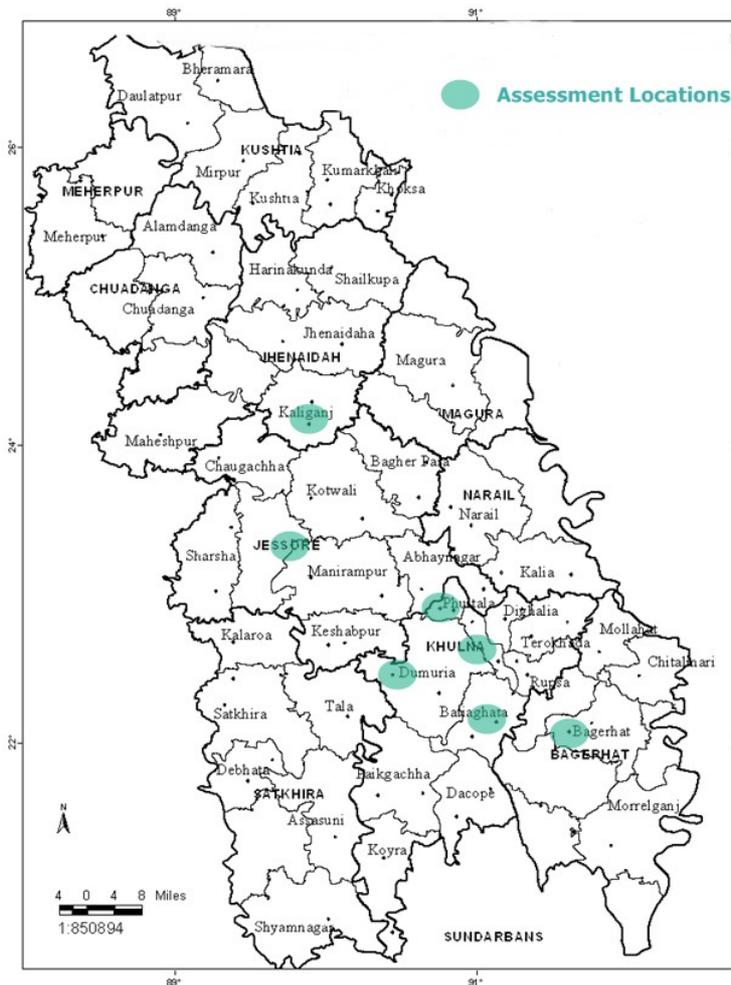
² mSTAR uses the phrase 'mobile financial services' or MFS when referring to the use of mobile phones for any type of financial service (e.g., money transfer). The term 'mobile money' (MM) is used when referring to the funds being used via MFS. In other words, 'mobile money' is to cash as 'mobile financial services' are to banking services.

Structured Interview Respondent Distribution

Region	Gender	Retailer	Wholesaler
Khulna	Male	8	8
	Female		
Jessore	Male	6	5
	Female	2	

FGD Respondent Distribution

Region	Gender	Farmers	Retailers
Khulna	Male	8	
	Female		10
Jessore	Male	7	
	Female		



FGD, Farmers, Khulna



FGD, Women Retailers, Khulna



FGD, Farmers, Jessore

Findings - Structured Interviews with Retailers/Wholesalers

Mobile Phone Usage

All of the wholesalers and retailers have their own mobile phones (mainly basic and feature phones). They use them to make phone calls and occasionally listen to music via the phone's FM receiver. The majority of them do not use SMS. All of them buy airtime via electronic top-ups and scratch cards. Electronic top-ups are preferred more because scratch cards are comparatively more expensive.³

The most popular network among the volunteers interviewed is Grameenphone followed by Banglalink. A majority of the respondents have the SIM cards registered in their own name.

Business Operation

The business operations for retailers and wholesalers vary with the time of year. Peak business season is related to the Boro Season and is in between January to April.⁴

Wholesaler Supply Source, Transaction, & Settlement Mode – Wholesalers purchase their supplies directly from agro-input manufacturers and government warehouses. Wholesalers collect supplies in bulk and the frequency of purchase varies between bi-weekly and monthly. Business transaction between wholesalers is negligible. Wholesalers generally purchase supplies from companies on a 6 month credit period and settle transactions using banking channels.

Retailer Supply Source, Transaction, & Settlement Mode - Retailers purchase their supplies mainly from wholesalers. During peak season they purchase supplies at least 3 times a month on average, whereas during off-peak season they procure supplies less than 2 times a month. The average transaction size is significantly higher during peak season (a majority of purchases are between BDT 100,000–500,000) than during off-peak season (where purchases mainly range between BDT 25,000–50,000). Retailers generally purchase on credit. Even though all of the retailers have bank accounts, they tend to settle transactions using cash rather than via bank transfer. Credit amounts for each retailer during peak season is usually

³ A BDT 20 airtime scratch card is sold for BDT 22.

⁴ Boro season refers to the production of rice during the dry season (October – March).

between BDT 50,000–100,000 and the credit period is between 3–6 months.

Wholesaler Revenue Source, Transaction & Settlement Mode – Selling products to retailers is the main source of income for wholesalers. The majority of the wholesalers, however, do not operate as pure wholesalers. Almost all the wholesalers sell products to farmers directly. Sales to farmers account for almost a quarter of a wholesaler’s total income. During peak season, a majority of the wholesaler’s transact with at least 35 farmers every day. Transaction sizes with each farmer are generally above BDT 25,000 in the peak season, an amount that falls below BDT 10,000 during off-peak season. Transactions are conducted through cash and credit. The credit period is usually for 6 months. The total credit amount given to each farmer is usually between BDT 100,000–500,000 during the peak season. Farmers usually come to the wholesaler’s outlet on ‘Halkata’ to settle outstanding bills. ‘Halkata’ is usually organized twice a year (after harvest) by wholesalers where all their customers are invited to come to their outlets to pay off outstanding bills and the wholesalers treats them to sweets and other snacks. In some cases, wholesalers visit farmers to collect pending bills. During a bill collection day, a wholesaler visits up to 10 farmers, covering 10km and spending BDT 200 for transportation.



‘Halkata’ Invitation Card

I visit a retailers outlet not only to collect payments, but also to strengthen the business relationship. By visiting his outlet i can also push to sell other products.

During peak season, the majority of the wholesalers deal with at least 20 retailers daily, which goes down to less than 10 during off-peak season. The majority of the transactions are above BDT 50,000. More than 75% of the transactions are on credit for a period of 3–6 months (harvest duration). The total amount of credit given to retailers during peak season is usually above

BDT 2,500,000. Wholesalers either visit a retailer's outlet or the retailer goes to the wholesaler's outlet to collect/make payments. On bill collection days, a wholesaler usually visits 10 retailers, covering at least 15km and spending an average of BDT 185 for transportation.

Retailer Revenue Source, Transaction & Settlement Mode - Retailers mainly sell

their products to farmers. During peak season, a majority of retailers deal with 30 farmers, which falls below 10 during off-peak season. The transaction size with each farmer is generally below BDT 5,000 and done on credit. The credit period is for 6 months (harvest duration). Farmers generally come to a retailer's outlet



Retailer outlet, Jessore

on 'Halkata' to pay off outstanding bills. Retailers sometime go to the farmers to collect bills. On bill collection days, retailers visit 7-10 farmers, covering up to 15km and spending BDT 100 on transportation.

Banking

From the visit, it was observed that bank branches are located in every major market in Khulna and Jessore region. All the wholesalers and retailers interviewed have a bank account. Most have an account with Sonali bank followed by Agrani bank. This can be attributed to the strong branch network of the two state-owned banks. Accounts are mainly used for savings and loan repayment purposes. Branches are located within 1km from all of the wholesaler and retailer outlets.

Mobile Financial Services

All of the respondents are aware of mobile financial services (MFS). Most see it as a money transfer service. bKash is most well-known followed by Dutch Bangla Bank (DBBL) Mobile Banking. The majority of the respondents have used MFS for domestic remittances through bKash. They mainly transact over-the-counter (OTC), which does not require having to open an account. Although widely practiced in Bangladesh, this method is not legally permitted as per Bangladesh Bank's guidelines on MFS.

We work in the field all day. Even during evening hours you will see us working in the field holding a torchlight. Visiting the market to purchase supplies is our only source of entertainment.

Agents charge BDT 20–25 for every BDT 1,000 OTC transaction. Transaction charges on registered accounts are lower. Five of the nine MFS service providers are providing cash-in for free, while the other four charge anywhere from 0.5–1%. Cash-out fees at agent points range from 0.8% to 1.85% of the total amount. Among those providers that offer cash-out at their ATMs, two of them offer the service free of charge, while two charge a fee, whereas pricing strategies for cashing out at bank branches range from free, to a flat fee, to a percentage charge. Additional details on provider pricing are available in the [Mobile Financial Services in Bangladesh](#) report.

Findings from the Farmer Focus Group Discussions

Mobile usage – Most farmers own basic mobile phones that they use to make calls. They find mobiles very useful as it saves time to connect with people when needed. All the farmers interviewed have SIMs registered in their own name. The most popular network is Grameenphone.

Income – Farmers are engaged in three types of farming activities every year: rice, vegetables, and fish farming. Rice is cultivated from November to March, whereas vegetable and fish farming take place between April and December. Vegetable and fish farming are more profitable than rice farming.

Business Operation – Farmers usually buy products on credit. They pay back at least 20% of the outstanding bill when they go back to purchase new rounds of supplies. They usually pay BDT 5-10 to travel to a retailer or wholesaler outlet. Farmers generally take loans from MFIs to support their agricultural activities.

MFS – Most farmers are only aware of bKash. They have used bKash for transferring domestic remittances using OTC. They do not see any value in using MFS for their business as they have to go to the retailer's outlet to collect supplies anyways. They find the cash out and person-to-person (P2P) charges to be too high.

Conclusion

From the assessment, it is seen there is no clear scope at the moment for using MFS, although possible benefits are visible in terms of time and cost savings. The value chain ecosystem has not evolved to a stage where MFS can be used effectively in this instance. Most of the business is done on credit. Agro-input suppliers are currently not using MFS to receive payments from wholesalers. Instead, wholesalers pay them through banking channels.

While it is possible for them to receive payments using MFS, a lack of interoperability between bank and MFS accounts mean that suppliers will have to cash out the balance from their MFS account at an agent point and then physically deposit the balance into their bank account. Only Islami Bank Bangladesh Limited (IBBL) and Dutch Bangla Bank Limited (DBBL) have MFS products (mCash and DBBL Mobile Banking, respectively) that are interoperable with bank accounts. However, in order to use mCash or DBBL Mobile Banking in the payments chain, agro-input suppliers would have to open a corporate bank and MFS account with IBBL or DBBL to enable transactions between the two accounts. For example, someone with a mCash account cannot send money to someone with a bKash account. That said, it is possible that this may change in the near future. Other MFS providers are working on the interoperability issue. In addition, an assessment is also being undertaken by Bangladesh Bank to establish interoperable transactions between different MFS providers.

A wholesaler may open a merchant account to receive payments via MFS from retailers and farmers. However, until their suppliers accept mobile money, they would likely have limited use for large amounts of money in their MFS account, instead preferring to keep money in their bank accounts. Due to the current interoperability issues, this would be inconvenient for most wholesalers, since they would have to physically move cash from an MFS agent point to their bank for deposit. The business case for conducting transactions using MFS will make sense if agro-inputs suppliers start using the service, or once all MFS accounts can interoperate with bank accounts so that they can transfer funds between accounts without having to withdraw cash. Since AIP is partnering with some agro-inputs suppliers, a discussion can be initiated with them to see whether they would be willing to pilot an alternative transaction channel with their wholesalers to gauge the benefits of the system.

MFS is not currently addressing any pain points for transactions between retailers and farmers. Farmers purchase products from retailers mostly on credit. Outstanding bills are settled when farmers visit a retailer's outlet to purchase additional supplies. The entire settlement is done during 'Halkata'. Hence, no time is lost or additional cost incurred to make payments to retailers by farmers. Security regarding carrying funds was not cited as a major issue. For maximum utilization of a retailer's MFS merchant account, a wholesaler must accept payments via MFS. Otherwise retailers will have to cash out their mobile money balance and pay

wholesalers in cash. As retailers and wholesalers are mostly located in the same bazaars, bill settlement is inexpensive. Some retailers do use MFS to make payments to wholesalers and receive payments from farmers. However, this is only done occasionally during emergency needs⁵. The business case for conducting transactions using MFS between wholesalers, retailers, and farmers will make sense only if the wholesalers start using MFS actively.

In summary, there is possible scope for MFS within the agro-input value chain if all the actors use DBBL Mobile Banking or mCash. If agro-inputs suppliers who are working with AIP start using MFS, then through a domino effect other actors in the chain will adopt the service. Otherwise, the following changes to the MFS landscape will be needed:

- Ability for individuals to transfer funds between their bank accounts and MFS accounts.
- Ability for individuals to send money from an account with one MFS provider to an account with another MFS provider.
- Additional services are introduced by MFS providers to increase stickiness of an MFS account beyond simple money transfer.

⁵ Retailers generally purchase supplies on credit from wholesalers and then sell it on credit to farmers. In certain instances, wholesalers request their retailers to settle their bills on a short notice. On such occasions retailers ask farmers to settle some of the bill that is owed. The farmers use MFS to instantly transfer money to retailers who in turn use MFS to transfer it to wholesalers.