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Digital Financial Services in Agriculture and MSME Sectors



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**Cabinet
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About a2i (Aspire to Innovate)

a2i, a program of the ICT Division of Bangladesh and the flagship program of Digital Bangladesh put forth by the Government of Bangladesh (GoB) has had a central aim to incentivize and provide innovative solutions in the public sector. In conjunction with the GoB the program has leaned specifically towards unlocking the socioeconomic potential of the Bangladeshi citizenry through modern and innovative digital advancement. In line with the SDG's, an important aspect of the work a2i has been to provide decent work and economic growth opportunities for the citizenry and the country alike.

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List of Acronyms

a2i	Aspire to Innovate (formerly Access to Information)	KII	Key Informant Interview
A/C	Account	MFI	Microfinance Institution
ADB	Asian Development Bank	MFS	Mobile Financial Service
AML	Anti-Money Laundering	Mn	Million
AVC	Agricultural Value Chains	MRA	Microcredit Regulatory Authority
BACPS	Bangladesh Automated Cheque Processing Systems	MSE	Micro and Small Enterprise
BB	Bangladesh Bank	MSME	Micro, Small, Medium Enterprise
BD	Bangladesh	NBFI	Non-Bank Financial Institution
BDT	Bangladesh Taka	NGO	Non-Governmental Organization
BEFTN	Bangladesh Electronic Funds Transfer Network	NPSB	National Payment Switch Bangladesh
BFIU	Bangladesh Financial Intelligence Unit	OECD	Organization for Economic Co-operation and Development
BFP-B	Business Finance for the Poor in Bangladesh	PPP	Public Private Partnership
BPSSR	Bangladesh Payment and Settlement Systems Regulations	RAKUB	Rajshahi Krishi Unnayan Bank
BKB	Bangladesh Krishi Bank	RMG	Readymade Garment
Bn	Billion	RTGS	Real Time Gross Settlement System
BPO	Bangladesh Post Office	SFSA	Syngenta Foundation for Sustainable Agriculture
DFS	Digital Financial Service	SME	Small and Medium Enterprise
eFH	eFarmersHub	UNCDF	United Nations Capital Development Fund
EMTS	Electronic Money Transfer System	USD	United States Dollar
GB	Grameen Bank		
GDP	Gross Domestic Product		
GoB	Government of Bangladesh		
ICT	Information and Communication Technology		
IELD	Inclusive and Equitable Local Development		
IFC	International Finance Corporation		
ISP	Internet Service Provider		
JICA	Japan International Cooperation Agency		

Table of Contents

Executive Summary	01
1 Background and Introduction	05
1.1 Objective of the Study	05
1.2 Digital Financial Services (DFS) and Financial Inclusion	05
1.3 Comparing DFS and Traditional Financial Services	06
1.4 Policy Framework and Regulations Around DFS	08
2 Sectoral Overview – DFS in Agriculture	12
2.1 State of Financial Inclusion in Agriculture Sector	12
2.2 Deep Dive into Sectoral Challenges in Introducing DFS in Agriculture	13
2.3 Opportunities for DFS in Agriculture	15
2.4 Potential for Financial Products based on Income and Expenditure in Agriculture Sector	19
3 Sectoral Overview – DFS in MSME	20
3.1 State of Financial Inclusion in the MSME Sector	20
3.2 Deep Dive into Sectoral Challenges - Introducing DFS in MSME	21
3.3 Opportunities for DFS in the MSME Sector	23
4 Recommendations and Intervention Strategies	25

Executive Summary

Bangladesh's growth trajectory over the last decade has been exemplary with consistent economic growth led by RMG export, steady remittance flow, stable forex reserve, private sector consumption and public sector investments. Despite the consistent growth, some sectors are still performing well below their potential such as - Agriculture and MSME.

Agriculture accounts for around 13.6% of the GDP of Bangladesh and employs about 40.6% of the total labor force of the country.¹ The MSME sector is the largest segment of the national economy accounting for 25% of the GDP. Limited access to finance has been one of the core impediments for these sectors' growth.

Between 2011 to 2018, Bangladesh's overall financial inclusion grew by 56.3% fueled by strong policy support from the government, initiatives from the private sector and intervention by the multilateral development partners.² The remarkable growth of Mobile Financial Services (MFS), agent banking services by scheduled banks and Non-Bank Financial Institutions (NBFI), micro enterprise lending programs by Micro Finance Institutions (MFIs) expedited financial inclusion. However, **only 37.2% of the population involved in the agriculture sector are financially included at present, while only 28.4% of the 8.1 Mn MSMEs are being served by the existing formal financial channel.**

Due to the limitations in accessing these segments and high operation cost in serving these customers, traditional financial service providers (FSPs) are not being able to scale up their service delivery model for these sectors and thus the FSPs have integrated digital channels to their current delivery model. While government's initiatives like establishing union digital centers and DFS labs, regulatory support in enabling technology expansion, have accelerated the growth of digitalization, a significant majority within the target segments still lack the necessary knowledge to avail the DFS.

With a view to recommend specific strategies to accelerate DFS adoption by the target groups, this study delved deeper into sectoral challenges and opportunities in consultation with key stakeholder groups – MFS, MFIs, banks, NBFIs, SME digital integrators, development finance institutions and regulators. Some of the major challenges in DFS implementation in the agriculture and MSME sectors are –

1 High Operational Cost

The high costs of serving this particular intersection deters the formal financial institutions to offer customized savings, loan and insurance products customized to these segments. Additionally, the sectoral risks in both agriculture and MSME are too high to make the investment scalable.

1. GDP, Savings and Investment, Bangladesh Economic Review 2019

2. Global Findex 2019, World Bank Group

2 Inability to Measure Creditworthiness:

Even when the initial rapport between the lender and borrower is established, unavailability of credit information acts as a hindrance to offering credit to the borrower.

3 Knowledge Gap and Cultural Beliefs:

The existing level of digital and financial literacy of the target group is well below the global standard. Also, the ingrained cultural values deter people to access products like loans and insurance.

4 Sluggish Tech Adoption:

The number of digital and financial services offered by private, public and development sectors in Bangladesh might not be as large as some of its regional peers, but it is definitely not meagre. However, there is minimal active use of the existing services due to the slow digital adoption rates in rural areas.

5 Emerging Digital Infrastructure:

Although significant strides have been made in both the digital and financial arena, the benefits were made available to only people belonging to middle and emerging income groups located in or near the economic centers. The digital infrastructure is still not fully accessible to the marginalized communities yet.

At the same time there are some unique opportunities within the financial sector that are yet to be leveraged -

1 Interoperable Financial System

If the entire financial ecosystem can be interconnected by facilitating combining databases like national identification card, central bank's credit information, scheduled banks, NBFIs, MFIs and MFS transaction, mobile phone operators recharge and governments' G2C payment transaction, the cost of accessing information and providing services can be curtailed significantly which will ultimately speed up financial inclusion for these sector by 10X.

2 Digital Credit Underwriting for Agri-businesses and MSMEs

In order to speed up the growth of agriculture and MSME sectors, access to finance for the entrepreneurs must be increased. For providing loans at scale, FSPs need to shift from the traditional method to the digital assessment and disbursement method based on digital credit scores of the applicants.

3 Insulate through Insurance

As the risks are higher in both of the target segments in the study, industry experts suggested more micro insurance products through digital media which will not only prevent vulnerable communities from risks but also induce better financial adoption.

4 Facilitating Greater Adoption

Capacity building programs in both financial and digital literacy through the existing government and private sector channels can increase the rate of adoption by the target population.

Additionally, awareness building campaigns will help the sectors to relinquish their traditional beliefs regarding financial services.

5 Strengthening the Digital Infrastructure

The government's focus on digitalization can be even stretched further if the digital infrastructure becomes more accessible and affordable for the target communities. Increasing the penetration rates for internet, smartphones and DFS accounts will only speed up financial inclusion. Initially, the whole country might not be transferred to a digital economy, but some areas with a higher concentration of the target population should be aimed first.

The sectoral challenges and opportunities call forth two to three types of broad intervention strategies. Firstly, adequate access to DFS by the target segments must be in place before introducing any other intervention strategy. Secondly, the financial and digital literacy level of the target communities must be up tiered significantly to accommodate adoption. Lastly, expansion of existing DFS and introduction of DFS should be in place to increase the usage of financial products.

1 Increasing Access and Awareness

▶ Enhance Digital Coverage

Typically overlooked regions where the majority of the target population reside must be aimed for a rapid digitization project. Uninterrupted electricity and internet connectivity is one of the major preconditions for accelerated financial inclusion.

▶ Create a Metadata Platform

An interoperable financial system will regularly generate a metadata platform which will further facilitate initiatives for digital financial adoption.

▶ Digital Credit for Digital Lending

The interoperable database will help generate credit reports for the borrowers within the agriculture and MSME sectors which will improve access to finance for the segments.

▶ Countrywide Financial Literacy Awareness Campaign

Following the format of tax week, a countrywide financial literacy week can be undertaken. Agriculture and MSME sector players located in peri-urban and rural areas do not find a use case for formal financial services and thus they still trust traditional lenders from known circle for financial needs. The process of bank or MFS account opening, loan application etc. are often considered lengthy, complex and cumbersome by these populations. Therefore, a financial literacy week will help creating awareness among people and allow them to understand the need for formal financial services and financial literacy.

2 Incentivizing Adoption

▶ Capacity Building Initiatives

Leveraging the existing facilities (i.e. UDC, DFS Labs) and the existing networks (i.e. ekti bari ekti khamar by Palli Shanchay Bank, micro merchants by UNCDF, Ek-shop entrepreneurs) an initiative to deliver training to improve digital and financial literacy can be explored.

► **Invest in Incentivizing**

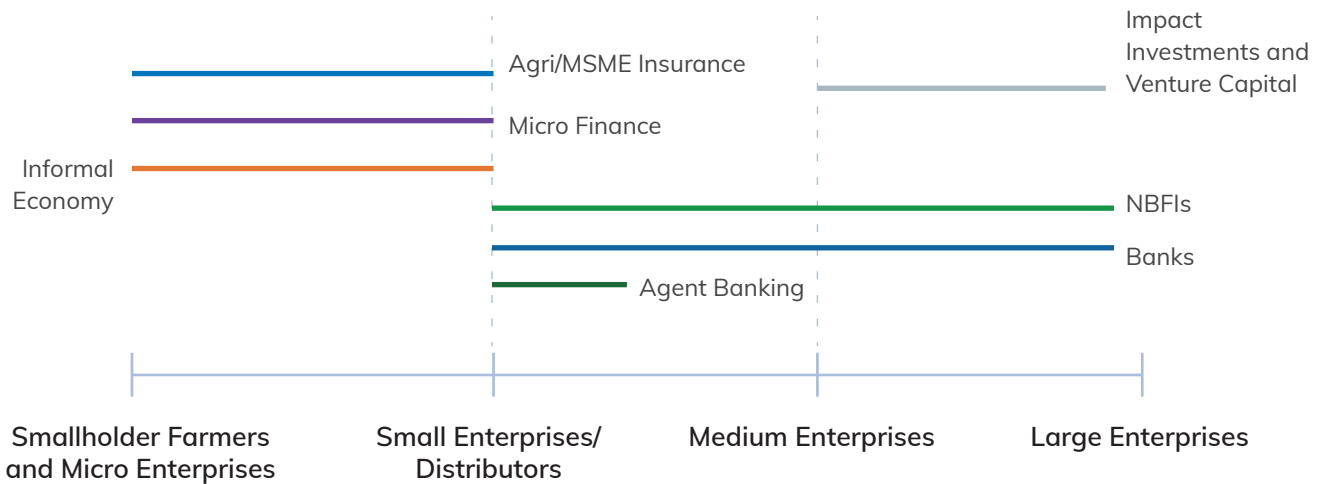
The prices for internet and smartphones need to reduce significantly so that the target groups can purchase these. Following on the examples of development finance organizations (i.e. Syngenta co-finances the smartphones used by their agri-entrepreneurs), the government should also come up with schemes such as small loans and incentives for smartphones.

2 Facilitate Usage

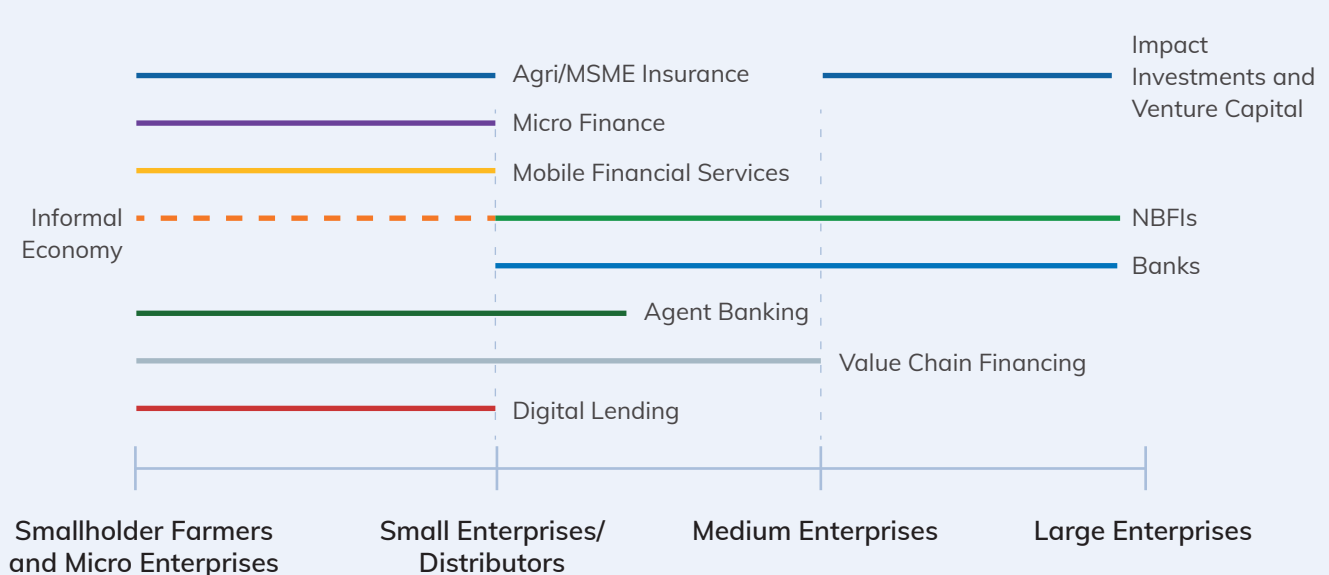
► **Value Chain Financing**

While the banks and NBFIs are focusing on stretching their networks of agent outlets, MFIs are increasing their loan ceilings to cater to the higher value SMEs. As a result, the underserved agri and MSME-based communities are still not being included in the formal channel. Value chain financing will open new avenues for growth for both of these sectors.

Current Financial Services Accessibility Matrix



Desired Financial Services Accessibility Matrix



Chapter 01

Background and Introduction

1.1 Objective of the Study

The goal of a2i (Aspire to Innovate), as the flagship programme of Digital Bangladesh, has been to aid the government in creating innovative solutions to improve the lives of citizens. This study aims to highlight the challenges, opportunities, and recommendations necessary in providing digital financial services and increasing financial inclusion. The specific objectives are –



Agriculture sector

- ▶ To identify the current status and map out the role of DFS in the individual farmer level as well as the overall agriculture supply chain
- ▶ Assessing the scope of intervention by DFS in the agriculture sector in Bangladesh



Micro, Small and Medium Enterprise (MSME)

- ▶ Generating insights by identifying existing gaps/constraints of DFS
- ▶ To gauge the scope of intervention by DFS in the MSME sector in Bangladesh



Recommendations and Interventions Strategies

- ▶ Improving the effectiveness of existing initiatives
- ▶ To introduce new initiatives possible for expanding the role of DFS in agriculture and MSME sectors.

1.2 Digital Financial Services (DFS) and Financial Inclusion

As Bangladesh moves rapidly toward middle income status, to unleash the potential consumer expenditure that comes with that status, it is important to ensure greater access to - payment, savings, loans, insurance, credit scoring among other financial services for every citizen.

Digital financial services help facilitate transactions, provide income opportunities where none existed before and provide last-mile solutions to many finance-related logistical issues. These services are provided primarily through three different means; Mobile Financial Services (MFS), Micro-Finance Institutions (MFIs) and Agent Banking.



Mobile Financial Services

Referring to services provided through mobile and internet means, MFSs provide basic banking and financial services through relevant technologies. bKash, Nagad, Rocket, and more are some of the players operating in the MFS market.



Micro-Finance Institutions (MFI)

financial institutions engaged in the micro-finance sector provide services catered to

agriculture-related operations, small-scale businesses, and cottage industries. Key players in this sector are NGOs like BRAC and collaborative institutions like Grameen Bank, BURO Bangladesh, Shakti Foundation, Sajida Foundation among others.



Agent Banking

Referring to individuals or groups that can provide limited banking and financial services to underserved populations, these agents are able to conduct bank transactions and other services on behalf of a bank.

Financial inclusion refers to granting access to financial services like credit facilities, financial planning, savings accounts, to underserved rural communities. Intermedia and the Bill & Melinda Gates Foundation defines **financial inclusion as “the percentage of individuals with a registered bank, mobile money or NBF account.”**³ Financial inclusion and digitization of financial services being central goals for a2i, Bangladesh Bank, and the GoB, it is important to align the provision of DFS with the challenges faced by those who need greater access to financial services. Granting financial access to underserved populations can provide many opportunities for accelerated economic growth and help achieve important sustainable development goals. Increasing consumer expenditure, allowing innovation and increasing scope of small-scale businesses, and providing more sustainable livelihoods for the working-poor; these are only some of the positive outcomes associated with greater financial inclusion.

1.3 Comparing DFS and Traditional Financial Services

Traditional financial services are outdone in a few key ways by digital financial services; ease of access to funds and payment, efficiency gains in logistics, and security in transactions are among the top benefits of using DFS over traditional services.

Components	Traditional Services	Digital Services
Payment	B2P – salaries and dividends can be paid to employees and shareholders through banks	P2P – person to person transactions through mobile accounts B2P – salaries, dividends, and refunds from business to individuals
	B2B – bank transfers and large-sum payment made from business to business	P2B – utility bill, merchant payments, deposit, loan repayments and insurance premium payments P2G – taxes, fees, levy payments
	P2P – cheques, direct transfers from individual account to other account	G2P - pension payments, old age allowances, freedom-fighter allowances and input subsidies to farmers
	Significant travel costs, transaction costs, paperwork, and bureaucracy	Easy to use, online, and reduced paperwork

3. Intermedia, Bill & Melinda Gates Foundation - Quicksights Report Fourth Annual FII Tracker Survey

Components	Traditional Services	Digital Services
Savings	Traditional savings accounts require manual filling of relevant forms and paperwork, manually providing national ID, travel costs associated with going to nearest bank	Digital services provide at home or digital center access to banking services. No need to go to physical bank branches, leading to reduced travel and time costs and better cash security. Palli Sanchay Bank, Digital Centers by ICT Ministry, bKash (and more) help provide rural access to DFS.
Insurance	Traditional insurance services offer broad products that cater to common issues faced in the agriculture and MSME sectors	Access to more high quality information can help insurance organizations create a portfolio of narrow products catered to specific sector-wise issues
	Significant travel, administrative, and time costs associated with traditional insurance services	Greater monitoring capacity can help prevent fraud and other related issues Digital services in insurance provides greater two-way (insurer/insured) access to information and aids in outreach
Loans	Lack of outreach and desire to provide services to rural areas and communities	Digital services provide greater outreach potential especially to rural communities
	Lengthy and inefficient bureaucratic process to approve, obtain, and repay loans	Greater fund tracking capacity can aid lenders to monitor disbursement and repayment
	High interest rates due to lack of information, collateral or products catered to rural investment	Easy fund disbursement capacity helps lenders and borrowers get funds in a timely and transparent manner. Better access to working capital
Credit Scoring	Lack of access to specific, long-term rural community information hinders the ability to provide accurate credit scores	The ability to digitally monitor financial and operational information more actively helps provide more accurate credit scores

Table 1: Comparing Digital and Traditional Financial Services in 5 Key Components

1.4 Policy Framework and Regulations Around DFS

Bangladesh uptake of digital financial services – particularly mobile financial services – has exceeded expectations. While bank account and mobile financial service registration has steadily grown, the challenge has been to increase usage. Through changes in attitude along with targeted policy and regulatory interventions, several actors in the financial sector can leverage the high MFS registry to change the way finance is done in the country. There have been several advances in DFS regulation, especially in the range of permitted services offered through mobile and online platforms. While the range of digital financial services is growing, allowing many more individuals to engage in the digital economy, issues related to security and accountability persist. The private, public and development sectors have worked in concert to alleviate some of these concerns.

Though these regulations provide a set of guidelines and rules for actors in the DFS sector, further clarification is necessary. Furthermore, these regulations do not make provisions to control the products, securities, and packages MFS providers can market. As such, a negative list of MFS product scope is important but lacking. Altogether, specific definitions, consequences, and oversight scope needs to be addressed to ensure DFS providers operate transparently and offer maximum security to customers. Furthermore, specific regulations regarding how public or commercial banks will adopt and operate DFS need further clarification.

Given below is a breakdown of a few key components of policy and regulations surrounding DFS in Bangladesh:

Components	Regulatory Body	Relevant Regulations – Brief Description	Allowed to Perform
Mobile Financial Services	Bangladesh Bank	<ul style="list-style-type: none"> • Selecting partners and agents who have the technical competence for and track record of the intended role, financial soundness, business reputation and no record of bankruptcy, standards of security and internal control, audit coverage, monitoring and reporting, capability of meeting commitments under adverse conditions and do not have a past criminal record • Anti-Money Laundering (AML)/Combating Financing of Terrorism (CFT) and Know Your Customer (KYC) compliance as outlined in the respective regulations and guidelines - 	<ul style="list-style-type: none"> • Disbursement of inward foreign remittances • Cash in/cash out into mobile A/C through agent/bank branches/ATMs/MNO outlets • Utility bill, merchant payments, deposit, loan repayments and insurance premium payments • Salary disbursements and dividend/refund warrant payments • Loan disbursements to borrowers and vendor payments • Pension payments, old age

Components	Regulatory Body	Relevant Regulations – Brief Description	Allowed to Perform
		<ul style="list-style-type: none"> • The ICT Act 2006 must be followed to ensure authentication of MFS transactions and security. The act also ensures confidentiality, integrity, authorization, and non-repudiation • Interoperability among MFS accounts with existing or new bank accounts and link between different MFS accounts. • MFS providers will be under off and on-site supervision by the Payment Systems Department, Bangladesh Bank 	<p>allowances, freedom-fighter allowances and input subsidies to farmers</p> <ul style="list-style-type: none"> • Taxes, fees and levy payments • Transfer from one mobile A/C to another • Reduced fees and charges related to cash-out and P2P transactions • The GoB offered 15 commercial banks and 2 MFS providers e-KYC compliance services. The ICT Division “launched a gateway for easier and faster verification of national identity cards (NIDs).”⁴
Agent Banking	Bangladesh Bank	<ul style="list-style-type: none"> • Anti-Money Laundering (AML) compliance/Combating Financing of Terrorism (CFT) and Know Your Customer (KYC) compliance as issued by Bangladesh Bank and Bangladesh Financial Intelligence Unit (BFIU), respectively • Internal audit and monitoring from parent institution as outlined by regulations and guidelines • Adhere to Section 45 of Bank Company Act, 1991, and Section 4 of Bangladesh Payment and Settlement Systems Regulations (BPSSR), 2009⁵ 	<ul style="list-style-type: none"> • Collection of small value cash deposits and cash withdrawals (ceiling determined by BB) • Inward foreign remittance disbursement • Facilitating small value loan disbursement and recovery of loans, installments • Cash payment under social safety net programme of the GoB • Facilitating fund transfer (ceiling determined by BB) • Balance inquiry • Collection and processing of forms/documents in relation to account opening, loan application, credit and

4. A. Tiwary, J. Islam – The DFS Ecosystem in Bangladesh, March 2020

5. Bangladesh Bank – Agent Banking Guidelines

Components	Regulatory Body	Relevant Regulations – Brief Description	Allowed to Perform
			debit card application from public <ul style="list-style-type: none"> • Post sanction monitoring of loans and advances and follow up of loan recovery • Receiving of clearing cheque • Collection of insurance premium including micro-insurance
Payment Service Provider (PSP), Payment Systems Operator (PSO)	Bangladesh Bank, Payment Systems Department	<ul style="list-style-type: none"> • Through BPSSR, 2014 the Bangladesh Bank Payment Systems Department issues the PSP and PSO licenses • Regulations on Electronic Fund Transfer Network provides rules and guidelines on fund transfers for mobile services, banks, and other institutions 	<ul style="list-style-type: none"> • Facilitate payments or payment processes directly to the customers and settle transactions through a scheduled bank or financial institution • Able to use BACPS, BEFTN, NPSB, and RTGS facilities
Digital Insurance	Insurance Development and Regulatory Authority (IDRA)	<ul style="list-style-type: none"> • IDRA was formed under provisions made in the Insurance Development and Regulatory Authority Act 2010 to supervise and safeguard insurance policy holder interests • Insurance Act 2010 to develop and regulate the insurance industry⁶ • Must adhere to BPSSR to disburse and collect claims and premiums digitally 	<ul style="list-style-type: none"> • Provide all forms of insurance services, life, crop, livestock, etc. • Insurance claim settlement through digital platforms • Collecting premium through MFS

Components	Regulatory Body	Relevant Regulations – Brief Description	Allowed to Perform
Micro Finance Institutions	Microcredit Regulatory Authority (MRA)	<ul style="list-style-type: none"> • Microcredit Regulatory Authority Act 2006 formed the MRA to license, monitor and oversee MFIs • Refer to Industrial Policy Act 2005 to identify sector definitions and scope • MFIs must register as an NGO under the relevant provisions to do so⁷ • MRA Rules of 2010 provide a set of rules and guidelines for all MFIs. These included regulation regarding operations, organization, personnel, licensing, insurance, receipts of deposits, loan classification and provisioning, among other new provisions not previously considered • All MFIs must separate financial operations from development operations 	<ul style="list-style-type: none"> • Provide microcredit and deposit services • Provide small-scale insurance services • Disburse payments through digital platforms

Table 2: Components of DFS and Relevant Regulatory Bodies and Provisions

7. MFIs can register as an NGO using the following acts: (1) The Societies Registration Act, 1860 (Act XXI of 1860), (2) The Trust Act, 1882 (Act II of 1882), (3) The Voluntary Social Welfare Agencies (Registration and Control) Ordinance, 1961 (Ordinance No. XLVI of 1961), or (4) The Companies Act, 1994 (Act XVIII of 1994)

Chapter 02

Sectoral Overview – DFS in Agriculture

The agriculture sector has played an important role in the Bangladeshi economy. In the country's early years, the agriculture sector provided both food and employment security for the majority of the country's population. Up until 2005 the agriculture sector employed above 50% of the workforce and consistently contributed to above 20% of the country's GDP.⁶ As with any developing economy, however, there was a gradual shift away from reliance on the agriculture sector to more industrial and service-oriented production. This, however, does not diminish the importance of this sector as it contributes in two major ways to the socioeconomic development of the country.



Food security

At its inception, one of Bangladesh's major goals was to sustain the large population's food and nutritional needs. In the early years much of the food required to do this was brought in through foreign food aid from several countries and international organizations. Despite significant positive strides in food production and security for the growing population, the goal has yet to be realized in full.



Employment

Alongside food security, a major concern for the country was to ensure employment for its citizens. In this regard, the economy was largely propped up by employment in the agriculture sector; over 60% of the total workforce was employed in this sector prior to the 2000's.⁶ Currently, RMG forms the backbone of the economy in terms of contribution to GDP and employment. However, employment in the agriculture sector is still significant. It has dropped to 37.7% as of 2020, meaning over a third of the population is still employed in this sector.⁶

2.1 State of Financial Inclusion in Agriculture Sector

The importance of the agriculture sector for social and economic development is not accurately reflected when only considering its contribution to GDP. Rather, as that contribution decreases a stronger case is made for the importance of increased financial inclusion in rural communities that are largely engaged in the agriculture sector. The agriculture sector is growing, as of 2019, at a rate of 3.92%. Compared to the 8.15% growth in the overall economy, this crucial sector is lagging behind.⁸ The slower growth in this sector is a symptom of a lack of technological innovation alongside lack of modernization in agricultural and financial practices. To address this, government and private sector initiatives have committed to financial inclusion and furthered investment in rural communities, and positive effects have been felt. However, challenges with infrastructure, credit information, and accountability among others have resulted in bottlenecks in implementing and tracking these initiatives.

Farmers' use of bank services has increased due to the availability of government agricultural subsidy and credit programs.

Since 2010, farmers have been allowed to open No-frills Accounts (NFAs) with BDT 10 deposits. As of

2018, farmers have opened 9,317,557 NFAs, meaning a small but growing proportion of those employed in the agricultural sector have some access to simple bank or government financial services.⁹

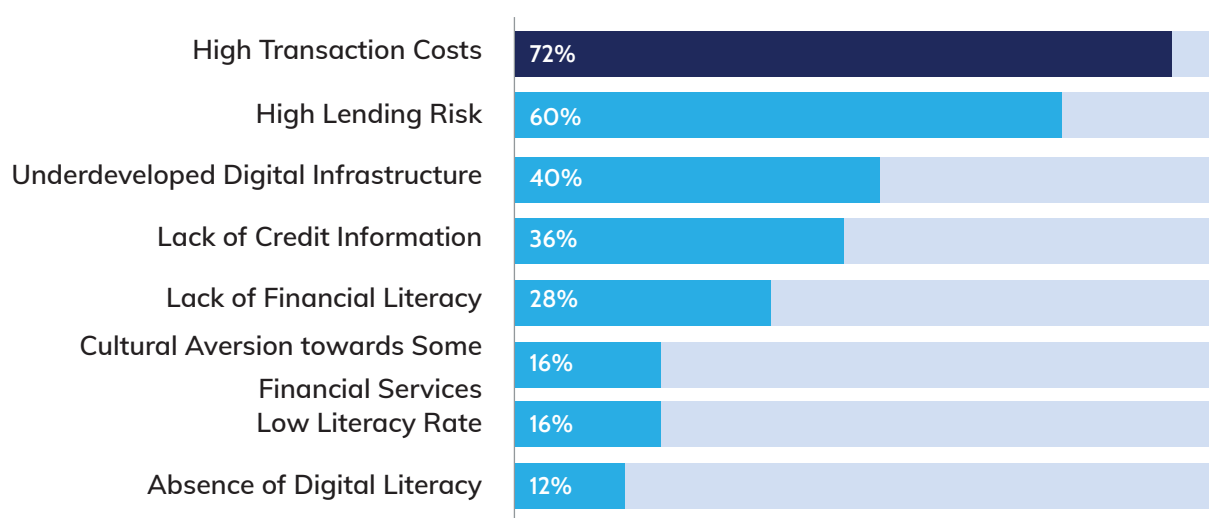
The government, Bangladesh Bank, and several agriculture-specific banks like Bangladesh Krishi Bank have set up and operated funds specifically catered to rural advancement and agriculture-related investment. There is steady growth in these funds, showing the importance the government places on sustaining the agriculture sector. **The bottleneck, however, has been forecasting loan demand, funds disbursement, and tracking after disbursement.** As shown in Table 2, for FY13 – FY16, target disbursement was lower than actual disbursement and overdue loans varied as a share of outstanding value. Bottlenecks such as these have hindered more widespread financial inclusion.

Disbursement (in Bn BDT)	FY13	FY14	FY15	FY16
Target Disbursement	141.3	145.9	155.5	164.0
Actual Disbursement	146.7	160.4	159.7	176.5
Recovery	143.6	170.5	154.1	170.6
Total Outstanding	310.6	346.3	329.4	344.8
Overdue (% of Outstanding)	16.8	21.9	20.4	16.5

Table 3: Agricultural Loan Data from Agricultural Credit Department, BB¹⁰

2.2 Deep Dive into Sectoral Challenges in Introducing DFS in Agriculture

Reported Challenges for DFS in Agriculture



Source: Key Stakeholder Interviews and MSME surveys conducted (n=300), September to November 2020

9. Bangladesh Bank – Annual Report 17-18

10. Bangladesh Bank – Agricultural Credit Department

Challenges on the Supply Side

High cost of transaction and high sectoral risks deter banks and NBFIs

Transaction costs in rural areas are usually higher than those in urban areas due to a more dispersed population with weak infrastructure. Furthermore, the risk factors inherent in agriculture often inhibit financial institutions from lending, which include natural hazards such as droughts, floods and diseases, farmers' weak ability to provide collateral either due to lack of title to land to offer as a loan guarantee or low value of land, and volatile prices of agricultural commodities. Besides, the lack of records and statistics on farming to assess credit suitability is challenging for financial service providers.

Digital lenders' inability to assess borrowers' credit profile due to information asymmetry

The quality and quantity of lending depends on careful screening of loan applications, and quality information is a necessary factor in assessing the borrower's intention to repay. Due to low levels of farmers' education, financial literacy, record keeping, business plans, and bank accounts, it is hard to put together a credit profile for a loan and monitor the loan once it is disbursed. For the same reason, credit-scoring techniques, which would reduce the cost of loan appraisal, are difficult to apply due to a lack of standardized and objective data. High levels of rural poverty also mean that agricultural loans are easily diverted for consumption purposes because business and private are intermingled.

Although, GoB has permitted e-KYC from October 2019 and lenders now have access to "Porichoy" – the government platform that verifies borrowers' information from National ID card database, the cost of accessing the platform is still high.¹¹

Challenges on the Demand Side

Lack of financial and digital literacy

Although the literacy rate has steadily increased among younger populations (aged 15 and above) from 65% in 2015 (average of male and female) to 74% in 2019¹², financial literacy is yet to grow at the same rate; it stands at 28% as of 2018¹³. Many of those who are employed in this sector do not have sufficient financial literacy or are not aware of the financial opportunities they can avail through government or other organizations' programs.

Although Bangladesh's digital ecosystem is growing at a remarkable pace, the rural agrarian community is still living without availing the many uses of digital technology. The prevalent trend has been that technology adoption is typically led by the younger generation. However, in rural Bangladesh, using mobile phones by younger generation is usually frowned upon. As a result, the tech adoption rate continues to be sluggish among these communities.

Inability to foresee farming expense

The traditional weather-based farming method does not let farmers and ag-entrepreneurs forecast their financing need till the very last moment. Therefore, farmers often apply for the loans

11. Shakti Foundation, MFI

12. UNESCO UIS

13. Intermedia, Bill & Melinda Gates Foundation – Bangladesh: WAVE 6 REPORT SIXTH ANNUAL FII TRACKER SURVEY

just two to three days before the farming season begins. Banks and NBFIs cannot process loans this fast leaving only MFIs to cater to that unique need. Although farmers are well aware of the high interest rates on MFI loans, they continue to avail these products as they do not have an alternative source of funds.

Although Bangladesh's digital ecosystem is growing at a remarkable pace, the rural agrarian community is still living without availing the many uses of digital technology. The prevalent trend has been that technology adoption is typically led by the younger generation. However, in rural Bangladesh, using mobile phones by younger generation is usually frowned upon. As a result, the tech adoption rate continues to be sluggish among these communities.

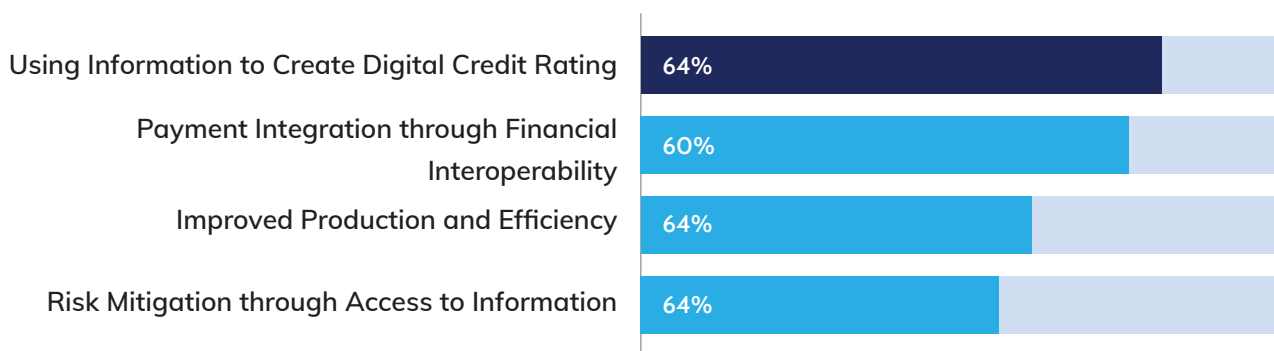
Inadequate access to digital infrastructure

Smartphone penetration rate is still very low in Bangladesh (18.5%).¹⁴ The minimum price of a smartphone stands around BDT 5,000 and is not affordable for a significant portion of the population including the rural farming communities. Additionally, stable internet connectivity is intermittent and the cost is prohibitively high, especially in rural communities.

2.3 Opportunities for DFS in Agriculture

There are several avenues through which the agriculture sector in Bangladesh can be transformed and made more efficient. The most significant transformation can occur as a result of increasing financial inclusion in rural communities and providing digital solutions to do so. As such, the financial, public and development sectors have played and can continue to play a pivotal role in bringing about this transformation.

Reported Opportunities for DFS in Agriculture



Source: Key Stakeholder Interviews and MSME surveys conducted (n=300), September to November 2020

Digital Credit

Through advances in MFS and new regulations surrounding its use and oversight, digital credit has come to the fore as a means through which rural communities can access much-needed financial services. Though smartphone penetration and internet connectivity rates are low, they are slowly increasing. Nevertheless, through Union Digital Centers, many rural communities now have some access to broadband internet connection. This allows them to avail financial services that were once too costly to access. Through the internet, farmers can now apply for loans and

receive digital credit if those loans are approved. The benefit of this is twofold;

1 They have reduced travel time and travel-related costs to access financial services

2 They can receive funds quickly and use them faster.

Importantly, this also allows lenders to more effectively track and monitor fund use and other financial information. Going forward, this ability to access credit and financial information is crucial for sustained financial inclusion, especially in underserved communities.



Information in the Insurance Industry

By leveraging the improving digital infrastructure insurance companies now have access to higher quality information related to farmers' operations and their risks. This is crucial for both insurance companies and farmers engaged in risky agricultural activity (as is often the case in Bangladesh); This helps insurers develop both broad and specific coverage plans pertaining to relevant risks and it helps farmers access risk information (like weather, flood, or other environmental information). The Bangladeshi insurance firm, Green Delta Insurance Ltd., for example, has developed a weather index which it has used to devise specific agriculture insurance plans.¹⁵



Better Management through Better Information

In line with the greater access to information for insurance companies, farmers can leverage this information to better plan their activities. This includes better finance and risk planning as discussed in the 2nd point, but also includes crop and weather-specific information to reduce weather and climate-related disaster risks. Several private and development sector participants have joined to provide farmers greater access to this crucial information.

In 2019, the Bangladesh Meteorology Department and Department of Agriculture Extension offered “timely, short, and specific [3 day] weather forecasts tailored for farmers in each of the nation’s 64 districts”.¹⁶ These messages also included several recommendations for what to do if the forecast predicts heavy rain, rise in water level, etc. This information was disseminated through a network of 30,000 farmers who received messages via text or through a mobile app and in physical locations that had electronic kiosks. This effort (Bangladesh Weather and Climate Services Regional Project) comes as part of a project by the World Bank and other partners.



Financial Interoperability

Financial Interoperability refers to the linkage between several different financial institutions, payment service providers, payment platforms, and other DFSs. With several MFS and other DFS providers operating in Bangladesh interconnectivity and interoperability is crucial. Regulatory and technological steps have been made in this regard. For example, the Bangladesh Bank, has made it a requirement for payment service providers and MFS providers to ensure that payments can be made without issue between different banks, mobile money accounts, and payment platforms. This interconnectivity is crucial for enabling a seamless and transparent DFS sector.

15. Refer to the 2nd case study “Green Delta Weather Index-Based Insurance” in Appendix A

16. A. Belle, World Bank – “Bangladeshi farmers reap the benefits of new weather forecasts”, November 2019

Case Study



Green Delta Weather Index-Based

Agri-insurance

Specific insurance policies and coverage for risk in agriculture helped by digitization

Green Delta Insurance Ltd. has, since 2011, pushed insurance policies and coverage plans specifically catered to the agriculture sector in Bangladesh. The greatest step forward in this context has been through the weather index-based insurance policies they have developed with technological support from finance partner IFC. Through this index, Green Delta Insurance has managed to reach over 40,000 households and provided coverage plans for frequent and serious perils commonly faced in the agriculture sector.



The Problem

Green Delta Insurance found that farmers were largely unaware of or unwilling to purchase insurance policies which left them bearing much of the risk commonly associated with farming in Bangladesh. Furthermore, accurate weather-related information was not widely available, which made understanding the risks more difficult.



The Idea

The goal of Green Delta Insurance was to change views on insurance, gather and analyze accurate risk information, and disburse claims quickly and efficiently. By partnering with local government, NGO, and agriculture officers Green Delta Insurance has increased adoption of insurance policies. Additionally, by gathering NASA satellite data they have ensured faster and higher quality information to create a set of weather index-based policies for farmers in agricultural hubs. Furthermore, by leveraging the existing digital infrastructure, namely mobile internet Green Delta has disbursed claims faster than farmers had expected.

The Next Steps

Moving forward, Green Delta has partnered with several ministries and institutions to further improve the access to and quality of information to better inform risk calculations. In Hawar, in the Northeast of Bangladesh, for example, Green Delta has partnered with the Meteorological Society to better understand weather patterns

Case Study



Syngenta Foundation for Sustainable

Agriculture (SFSA)

Providing information, access to the agricultural value-chain, and increasing return to farmers

Syngenta Foundation operates in several developing African and Asian countries to provide information, negotiating power, and market access to smallholder and community farmers. Through the mobile app, Soluta (also known as eFH (eFarmersHub)), Syngenta Foundation Bangladesh (SFB) provides data entry, tracking, and value-chain access and support to smallholder and community farmers. Overall, their work can be broken down as providing information, providing quality inputs and equipment, and providing market access.

Providing Information

Soluta, the mobile app, helps farmers digitally monitor crop, operation, and other important data so that they can make better decisions faster using basic mobile and internet services. This helps increase productivity for farmers which leads to more sustainable economic outcomes. Using this data helps farmers and buyers with price, quantity, and other related decisions.

Providing Quality Inputs and Equipment

Syngenta Foundation provides timely access to crucial agricultural inputs like seeds and production equipment. Access to higher quality inputs provides higher quality outputs for farmers and the equipment allows them to produce more efficiently. Through this support SFB has created more sustainable economic output for smallholder farmers in the Bangladeshi agriculture sector.

Providing Market Access

Syngenta Foundation, having multiple partners involved, provides buyers and sellers the opportunity to negotiate and moderates those negotiations. They connect supply and demand of agricultural inputs and outputs and offers direct access to both buyers and small-scale producers removing the need for costly and inefficient intermediaries.

2.4 Potential for Financial Products based on Income and Expenditure in Agriculture Sector

Income and expenditure data from Agriculture and Rural Statistics, 2018 by Bangladesh Bureau of Statistics (BBS) revealed an average monthly surplus of BDT 2,435 (USD 29) in rural farming communities. The data was triangulated using the baseline proposed by Household Income and Expenditure Survey 2016 (HIES) by the same organization.

Between 2010 and 2018, the overall household expenditure by farming community has surged by around 18%. The damage caused by climate change and on prevention measures have been identified as one of the key driver of this added expense.¹⁷

As a significant portion of the households' income goes into purchasing agro input products and equipment renting and purchasing, new financial products should focus on easing the burdens while also increasing the overall return.

► Loan products for purchasing agri-input

Bangladesh Agriculture Development Corporation is one of the most reliable public distributor of agri-input products. The organization can partner up with FSPs and disburse digital loans to the smallholder farmers and encourage them to source agro-input products from them. SFSA has been practicing a same growth strategy in Bangladesh by establishing its own network of agri-input sellers and facilitating digital inclusion of farming communities.

► Crop insurance products to reduce risk

As Bangladesh continues to become one of the most climate vulnerable countries, the farmers who follow traditional methods of cultivation will keep losing due to extreme climate conditions. Affordable crop insurance products can reduce cost of damage.

► Digital micro savings products

Majority of the households involved in agriculture can save less than BDT 2,500 a month. In smallholder farmers, the number is even less. Therefore, digital savings products will reduce cost of fund accumulation and management.

17. International Institute for Environment and Development, Bearing the climate burden: how households in Bangladesh are spending too much, 2019

Chapter 03

Sectoral Overview – DFS in MSME

The MSME (micro, small and medium enterprises) sector is the largest segment of the national economy. The sectors together account for 25% of Bangladesh's GDP and generates employment for 87% of the civilian population. The sector plays an instrumental role in resource utilization and income generation for a large portion of the society in two broad ways –



Employment generation and rural development:

Approximately 868,126 micro, 7,172,561 small and 59,312 medium enterprises are creating nearly 40 million jobs all around the country.¹⁸ Apart from utilizing local resources for producing goods and delivering services, MSMEs are also playing a part in decentralizing the economy. Around 65.43% of the total 8.1 million MSMEs are located in rural and peri-urban areas.



Accelerating economic growth:

Apart from contributing to 25% of the total GDP, MSMEs are responsible for creating around 40% of the manufacturing outputs. While RMG and leather and leather goods are the top export earning products, many small and medium producers in these two industries are actually listed under the MSME sector. Almost all the thrust sector announced by the government can be found under the MSME broad category.

3.1 State of Financial Inclusion in the MSME Sector

Agent banking and MFS are the two main drivers in the financial inclusion of this sector. By the end of September 2020, around BDT 10.87 billion worth of loan was disbursed through agent banking channels. MSMEs are the main target groups for some of the banks' agent banking segment. For example, BRAC bank has 400 SME units in their 406 agent banking outlets.

However, among the 8.1 million MSMEs, only 2.3 million are at present being served by 60 banks and 4 major MFIs among the 759 licensed.

Since there is a strong link between the MSME and agriculture sector many of the financial challenges the agriculture sector faces are also faced by MSMEs. Importantly, the MSME sector is a crucial part of the value-chain of cottage and agriculture-based industries. MSMEs are often engaged in logistics, value-added production, and marketing which requires greater up-front capital investment. The informal financial sector plays a notable role in providing investment for MSMEs. Family and local businesspeople provide informal and unregulated financial services like providing loans, cash, financial advice, and more. Due to the unregulated nature of these services borrowers are subject to varying terms and conditions. Importantly, without appropriate financial literacy (defined as basic knowledge of interest rates, interest compounding, inflation, and risk diversification) borrowers in rural communities are unable to discern reasonable financial decisions from poor ones. Altogether, due to this lack of financial literacy and access to professional financial services borrowers are not able to plan and execute according to their business needs.¹⁹

18. Forecasted based on National Economic Census 2013 and interview with Bangladesh Bank

19. Intermedia, Bill & Melinda Gates Foundation - Quicksights Report Fourth Annual FII Tracker Survey

MFI, however, do provide credit facilities and other financial services to MSMEs. In cottage and village industries, crafts and other small-scale producers are eligible for these credit facilities. This has helped these MSMEs to continue production, reach out to clients, and expand operations. Yet, MFI lending has decreased over the years likely due to two reasons; 1. MFI loans were taken as insurance coverage instead of as loans to maintain or expand operations. Specifically, these funds were often used for difficult economic periods, i.e. when production or demand slowed. 2. Due to greater economic growth, the demand for loans decreased.

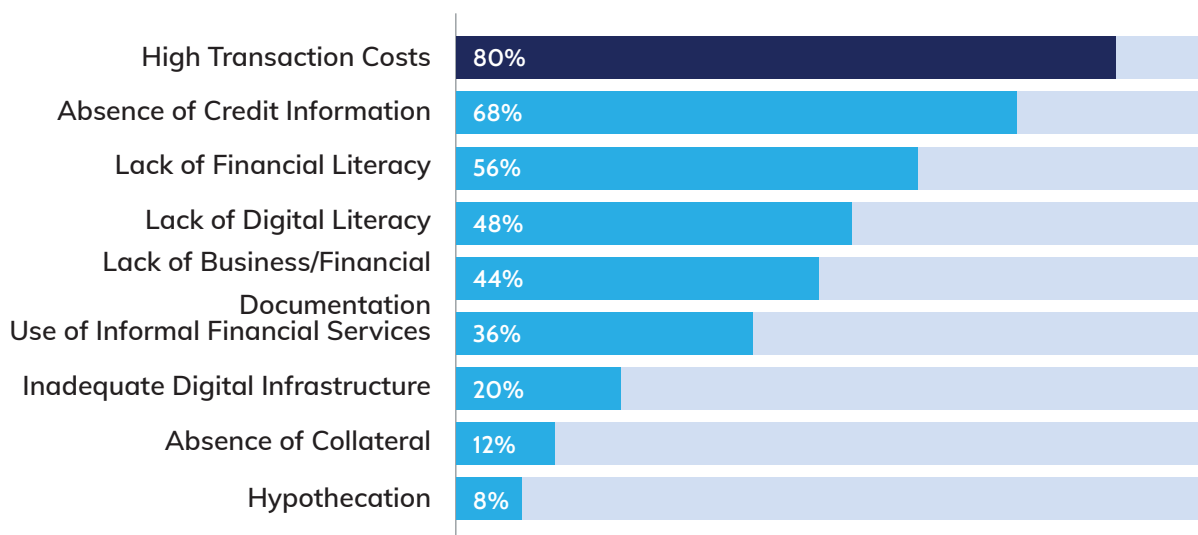
Moving forward, government policy and implementation support must be coupled with private and development sector efforts. In this regard, digitization with financial inclusion in mind is a worthwhile consideration to address the bottlenecks in offering financial services to underserved communities.

3.2 Deep Dive into Sectoral Challenges - Introducing DFS in MSME

The MSME sector has options from various sectors to access financial services; international, local, and development funds like ADB's Funds 1 and 2 for SMEs, JICA two-step loan (TSL) funds, and Bangladesh Bank's equity fund for MSMEs. However, the major roadblocks have been faced in reaching underserved communities, high transaction costs for disbursing funds, and a lack of reliable credit information.

MSME's face similar finance-related challenges to the agricultural sector due to its interconnected nature. MSMEs in Bangladesh are often engaged in agricultural production or related work along the value chain. Furthermore, due to the link between the informal and formal sector, and the high percentage of MSME employees working in or reliant on the informal employment and financial sectors, access to available financial services is further constrained for MSME's.

Reported Opportunities for DFS in MSME



Source: Key Stakeholder Interviews and MSME surveys conducted (n=300), September to November 2020

Challenges on the Supply Side

Absence of credit information necessary for digital lending

The issue for lenders has been in accessing reliable credit information, coordination among the several development sector actors and governing bodies, and reaching micro and small enterprises. The lack of coordination in policy, regulation, and oversight has been cited as a major concern for financiers. Changing policies and the need to go through several bureaucratic administrations and processes has made it difficult to grasp the risks and costs associated with lending in the MSME sector.²⁰

High transaction cost of digitally disbursing loans

At present, only MFIs are disbursing loans digitally. However, the transaction cost charged by MFS providers are too high for widespread use. The cash out charges for the major MFS platforms stands between BDT 11.99 per BDT 1000 and BDT 18.50 per BDT 1000 (between 1-2% with taxes and service charges included). For larger and more frequent transactions these costs are prohibitively expensive, especially for long-term financing prospects.

Challenges on the Demand Side

Lack of digital and financial literacy

Similar to the agriculture sector, rural and peri-urban literacy rates have been increasing among the youth but financial literacy has yet to see that same growth. As of 2018, while financial numeracy (able to perform basic financial calculations) has been consistently high (83%), only 28% of the Bangladeshi population was financially literate. Among those with general literacy this rate increases to only 34%. In terms of digital and financial literacy, an estimated 33% of those with phones are financially literate. Finally, while mobile phone access has been high (around 84% of the population owns or can borrow a mobile phone) most individuals, especially in rural communities, use basic or feature phones instead of smartphones. This makes access to and use of internet and MFS difficult or impossible.²¹

Lack of documentation

Small businesses in the MSME sector, often due to a low level of financial literacy and business education, are often unable to produce reliable and official business documentation. These may include a business plan, cash flow statements, balance sheets, income statements, asset or title documentation, among others. For these businesses, inadequate documentation prohibits them from applying for or securing funds from official financial institutions who are reluctant to approve loans without this important information.

Reliant on informal financial channel

Due to official financial institutions' reluctance to provide loans for various reasons entrepreneurs in the MSME sector are often reliant on informal financial services to secure funding. This includes relying on local businesspeople (mohajon/creditors/moneylenders), informal lenders, and friends and family. These unregulated financial service providers often charge higher interest rates and varying terms and conditions for repayment. Importantly, without these informal financial services

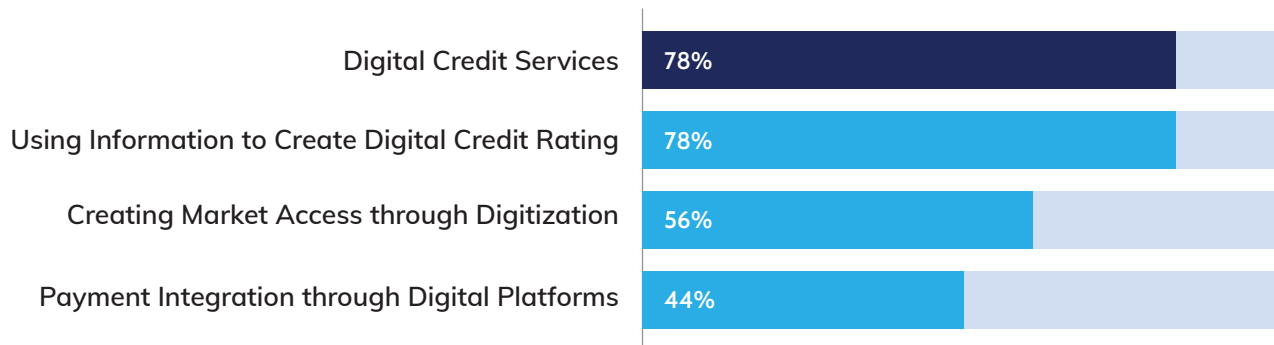
20. World Bank Group, Policy Research Institute – Financing solutions for MSMEs in Bangladesh. 2019

21. Financial Inclusion Insights (FI) Program, Bill & Melinda Gates Foundation, 2018 Annual Report: Financial Inclusion in Bangladesh

MSME entrepreneurs would not be able to access funds needed to maintain or expand their production/operations.

3.3 Opportunities for DFS in the MSME Sector

Reported Opportunities for DFS in the MSME Sector



Source: LightCastle Primary Analytics - MSME Survey (n=300)

► Credit rating

The creation of a digital footprint via digital wallet, e-KYC and other digital financial information can help financial institutions and the government develop a more reliable and transparent credit rating system for individuals and businesses. First, by digitizing transactions and financial services, important financial and operational information can be recorded and accessed by lenders and borrowers. Second, financial institutions can analyze this information to assess credit worthiness. Finally, financial institutions can automate credit rating calculation, and approval and disbursement of funds to reduce administrative and time costs.

► Digital credit for MSMEs

The social and economic shift caused by COVID-19 has forced many sectors to re-assess and re-tool their existing services. For the financial sector embracing DFS is both necessary and beneficial. By supplementing physical branches and agents in rural communities, digital lending can help address both the change caused by COVID-19 and extend outreach and access for both lenders and borrowers in those communities. In conjunction with having greater access to financial and operational information, lenders can more securely and reliably disburse loans and collect payments through a digital platform. Borrowers can get approved for loans and receive funds quicker and financial institutions can reach a wider audience and increase financial inclusion in underserved communities.

► Payment integrator/platforms

For MSMEs, a major challenge is handling payment, i.e. receiving, paying and managing cash. In Bangladesh, digital payment platforms have changed the way payment is done; they have allowed customers to pay for products without having to be physically present. Importantly, these platforms have provided a secure and reliable means through which these payments can occur. In comparison with traditional methods like writing and cashing cheques, paying with cash, or recording credit sales in physical ledgers, using digital payment platforms has made it easier for businesses and consumers to buy and sell their goods and services and for entrepreneurs to manage cash inflows and outflows.

Further adoption, widespread use, interoperability between banks and payment platforms, and security measures can contribute to creating greater economic opportunities in various sectors and locations across the country.

► **Creating market access through digitization**

In line with using digital payment platforms, the marketing capabilities of MSMEs is greater in a digital economy. Given adequate logistics and supply-chain facilities, using digital platforms to market goods and services and receive payment can help many small businesses reach wider audiences. Through digital means businesses can more directly reach consumers that they could not have served otherwise.

With greater access to DFS smaller businesses and the actors in the agriculture sector can avail facilities that larger companies are able to use. Access to more effective payment methods (through MFS) and appropriate credit facilities and can help smaller businesses better control production and cash flow as well as help them expand when necessary.

Case Study

The logo for ShopUp, with 'Shop' in teal and 'Up' in yellow.

ShopUp Digital Credit

Digitizing neighborhood stores across the country and offering digital credit

ShopUp's goal has been to modernize the ubiquitous small-store environment across Bangladesh. The many challenges faced by these small stores are often related to inventory, logistics, and above all working capital. ShopUp has aimed to address these challenges through a full-stack B2B commerce platform, allowing neighborhood stores to access a wholesale marketplace to secure inventory, logistics (including last-mile delivery to customers) and working capital.

Securing significant funding, ShopUp has moved to provide digital credit to these small stores in response to their need for working capital. The rationale is that due to the heavy reliance on credit sales, these stores are often short of capital needed to purchase and maintain inventory. Extending this line of credit provides these stores a lifeline to stay afloat. Leveraging the B2B platform being used by these stores, ShopUp can access important business, finance, and operational information, use this information to assess creditworthiness and disburse funds quickly, securely, and effectively. For the stores using ShopUp's technology, the many challenges they face has been addressed to a large extent in one fell swoop.

Chapter 04

Recommendations and Intervention Strategies

The digital financial ecosystem is still at a nascent stage in Bangladesh. The presence and breadth of DFS are even less in the agriculture and MSME sectors. After careful screening of the information collected from primary and secondary sources, two core intervention strategies are recommended – one is directed at increasing the access to DFS for the mentioned sectors while another is directed at enhancing the usage of DFS.

Strengthening digital infrastructure, capacity building trainings to increase digital and financial literacy, making the financial system interoperable and offering digital credit scores for MSMEs and agri-entrepreneurs are the four recommendations directed at creating the overall digital financial ecosystem more prepared to accommodate the unique needs of the agriculture and MSME sectors. In consultation with the industry players and regulators, the next four specific recommendations are targeted to accelerate DFS adoption and usage. Digital lending, digital commodity exchange, value chain financing and agriculture insurance are the key suggestions provided by the respondents of the study. In each of the recommendation, a2i will act as the core facilitator.

Strategic Recommendation	Core Provisions	Possible Lead and Connected Agencies for Implementation	Ecosystem Outcome	Impacted Sectors	Timeframe
R1: Strengthening infrastructure to facilitate digitization	<ul style="list-style-type: none"> • The price of internet should be mandated immediately so that the target population find it affordable • Local smartphone producers should be incentivized to lower the prices of the low-range phones • Initially, the target group might need subsidies to avail both internet and smartphones • The ISPs and telecoms companies must be brought under a regulation to supply uniform bandwidth and duration. • Region wide internet bandwidth and duration data must be collected from AMTOB for assessing the existing discrepancies in internet connectivity 	<p>Lead: ICT Division (Ministry of Posts, Telecommunications and Information Technology)</p> <p>Support:</p> <p>Public:</p> <ul style="list-style-type: none"> • a2i • Bangladesh Telecommunication Regulatory Commission (BTRC) in mandating the price of internet <p>Private:</p> <ul style="list-style-type: none"> • Internet Service Provider Association of Bangladesh • Association of Mobile Telecom Operators of Bangladesh (AMTOB) in providing the dataset 	<ul style="list-style-type: none"> • Increased internet and smartphone penetration rates • Improved quality of internet • Lower MFS transaction cost 	Agriculture and MSME	Immediate to Medium Term
R2: Capacity building trainings to increase digital and financial literacy of the target group	<ul style="list-style-type: none"> • Assess the current level of digital and financial literacy • Identify the core gaps and design intervention strategies • The aversion towards digital platforms is an outcome of the cultural beliefs. To bring about a behavioral change, implementing agency needs to train and monitor the digital behavior for an extended period of time monitoring to see • Studies across similar markets have shown that trainings across key financial products – payment, savings, loan can 	<p>Lead: a2i – Union Digital Centers and DFS Labs</p> <p>Support:</p> <p>Public:</p> <ul style="list-style-type: none"> • Palli Shanchay Bank (EBEK Project) through their presence in each village • Government sponsored MFIs <p>Private:</p> <ul style="list-style-type: none"> • MFIs through their reach in rural area • Startups – Shop up, Sheba and other MSME integrators through their network of MSMEs <p>Development partners:</p> <ul style="list-style-type: none"> • UNCDF – through their network of micro merchants • Syngenta Foundation for Sustainable Agriculture – through their network of agri-entrepreneurs 	<ul style="list-style-type: none"> • Accelerated financial inclusion • Increased access to DFS for agri and MSME players • Better digital and financial behavior 	Agriculture and MSME	Medium to Long Term

	<p>often initiate the first step towards financial inclusion.</p> <ul style="list-style-type: none"> • Countrywide financial literacy week to demonstrate use case for formal financial channels • Promoting existing products and services to create awareness 				
<p>R3: Interoperable financial system through a national unified platform</p>	<ul style="list-style-type: none"> • Mobile operators' data on 85 million users' recharge, MFS transaction data on 35 million active users, MFIs and MRA data on SMEs credit, bank and NBFIs transaction data and emergency relief package disbursement data all together can create a metadata platform which can later analyzed for creating targeted product and intervention strategies. • The Interoperable Digital Transaction Platform (IDTP) which is aimed at ensuring interoperability, transaction validation, seamless fund routing and security in e-payment and mobile payments, must be brought under an organizational framework for systematic implementation. 	<p>Lead: Bangladesh Bank, Financial Institution Department to facilitate policies enabling interoperability</p> <p>Support:</p> <p>Public:</p> <ul style="list-style-type: none"> • A2i to initiate metadata platform and data protection law • BTRC to regulate all telecom operators • MRA to regulate MFIs • IDRA to regulate insurance companies <p>Private:</p> <ul style="list-style-type: none"> • MFS – (i.e bkaash. Nagad, Rocket, UCash and others) to share their transaction database • MFIs to share their lenders' credit profiles • Telecom companies to share mobile recharge data • Startups – Shop up, Sheba and other MSME integrators to share their credit data <p>Development partners:</p> <ul style="list-style-type: none"> • UNCDF to share their financial inclusion data that they collect through their network of micro merchants 	<ul style="list-style-type: none"> • Accelerated financial inclusion • Better financial products for the target audience can be designed guided by analytics report 	<p>Agriculture and MSME</p>	<p>Immediate</p>

<p>R4: Digital credit scores for MSMEs and agri-entrepreneurs alongside digital lending for smallholder farmers, agribusiness and MSMEs</p>	<ul style="list-style-type: none"> • Bangladesh bank will share the CIB database with the banks and NBFIs • MRA will mandate MFIs to share their CIB database to the financial institutions as well • The government needs to ensure access to NID database by reducing cost <ul style="list-style-type: none"> • Based on the credit profiles of the target group digital loans can be disbursed by scheduled banks and NBFIs • The loans will be disbursed through MFS platforms 	<p>Lead: Microcredit Regulatory Authority (MRA) will coordinate with MFIs to make them submit credit data.</p> <p>Support:</p> <p>Public:</p> <ul style="list-style-type: none"> • Bangladesh Bank, Department of SME and Special Programs will provide regulatory support to MRA • A2i to run the pilot project by mobilizing ekshop network SMEs <p>Private:</p> <ul style="list-style-type: none"> • MFIs – BRAC, BURO Bangladesh, ASA, Sajida Foundation, Shakti Foundation who have the lending data of 1.08 million SMEs <p>Development partners:</p> <ul style="list-style-type: none"> • BFP-B has been assisting MRA to implement the MF-CIB policy as a technical partner. <p>Lead: Bangladesh Bank to devise policy that allows the usage of CIB and MF-CIB database</p>	<ul style="list-style-type: none"> • Potential lenders can easily assess the bankability of the borrowers at a significantly lower cost • Increased access to finance for MSMEs • Paves the way for further credit programs <ul style="list-style-type: none"> • Increased access to finance for target groups • Reduced cost of capital • Accelerated adoption to DFS 	<p>Agriculture (agri-entrepreneurs) and MSME</p> <hr/> <p>Agriculture and MSME</p>	<p>Immediate</p> <hr/> <p>Immediate to Medium Term</p>
<p>R5: Value chain financing for agriculture and MSMEs</p>	<ul style="list-style-type: none"> • The existing bank or MFI based loan programs mostly focus on the expansion of some certain aspect of the business - for instance in agriculture the loans are only provided for production and marketing. New products that can cover the expense for the development of the entire value chain 	<p>Lead: Bangladesh Bank to formulate value chain financing policies.</p> <p>Support:</p> <p>Private:</p> <ul style="list-style-type: none"> • Lenders including banks, NBFIs and MFIs should be partnered with when implementing the policy. • MFS platforms will be used to disburse and repayment of the loans • IPDC Orjon value-chain financing for SMEs 	<ul style="list-style-type: none"> • Value chain players will have increased access to finance and market • New opportunities for growth will be created 	<p>Agriculture and MSME</p>	<p>Medium to Long Term</p>

Table 4: Recommendations and Implementation Strategies

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