Roadmap to strengthen digital transactions in Bangladesh by 2031

A strategic initiative to support the Bangladesh Bank in accelerating

digital nationwide

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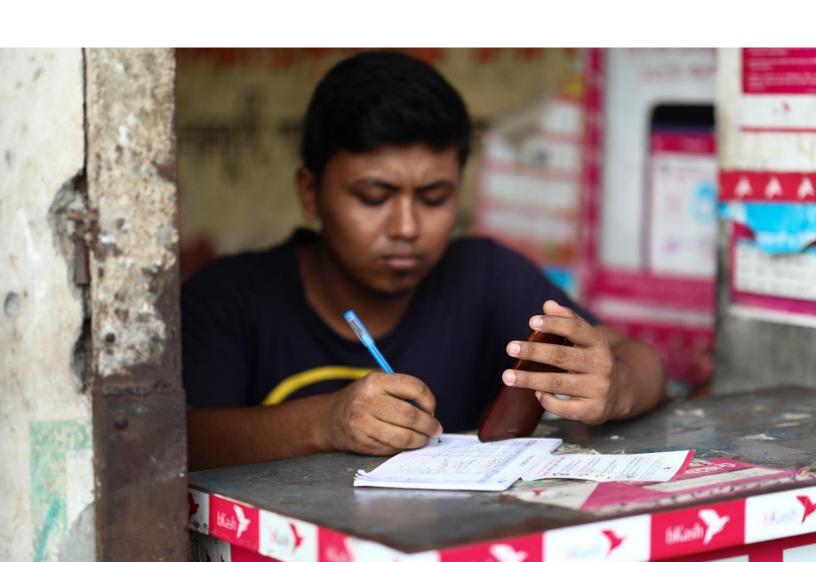
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Executive summary

The scoping study to strengthen digital transactions in Bangladesh seeks to understand the status of digital financial services in the country and draws insights to support a digitally inclusive economy by 2031. MicroSave Consulting (MSC) conducted this study, led by the Bangladesh Bank, with the Gates Foundation's support.

To this end, MSC conducted a year-long microcosm study in Singair Upazila of Manikganj district. The study applied a behavioral segmentation approach. It engaged 12 distinct user groups segmented by income sources. The study explored how individuals and businesses interact with mobile financial services (MFS), agent banking, and national payment systems, such as the National Payment Switch Bangladesh (NPSB), the Bangladesh Electronic Funds Transfer Network (BEFTN), and the Real-Time Gross Settlement (RTGS) system.

The study's findings show that while digital access is nearly universal in Singair and 95% of NID holders have MFS accounts, the actual usage of DFS remains shallow. Only 56% of residents use DFS actively, and digital transactions account for just 10% of the total payment value in the upazila. The highest usage is observed among retail traders and landlords, driven by their need for secure, high-volume transactions, such as rent collection and supplier payments.

Salaried employees, both public and private, typically receive salaries digitally but revert to cash for daily expenses due to limited merchant acceptance and concerns over transaction fees for small payments. Conversely, DFS usage is significantly lower among farmers, gig workers, and daily wage laborers, who have cash-dominated income flows and grapple with the burden of cash-out charges and ongoing trust deficits.

Six systemic barriers emerged from the research:

- Low digital literacy levels, particularly among artisans and farmers;
- A broader ecosystem that is not yet ready for end-to-end digital transactions, especially due to the continued preference for cash by upstream actors, such as suppliers, aratdars, and distributors.
- Affordability challenges from perceived high transaction costs;
- Infrastructure unreliability during peak periods;
- Persistent trust deficits, as many users view DFS as riskier than cash;
- Low perceived value of DFS for certain segments, such as students and small merchants;

Despite these constraints, the study revealed substantial demand-side readiness. Around 20% of residents were willing to use DFS if practical and structural barriers were addressed. Retail traders, students, and salaried workers showed strong latent demand. Notably, gender-based disparities persist: Even with similar access to devices and connectivity, men are 5.6 times more likely to use DFS than women. This points to deeply embedded challenges related to confidence, agency, and decision-making power that extend beyond infrastructure gaps.

The roadmap outlines 12 strategic goals to accelerate the transition toward a cashless economy. These include ways to reduce transaction costs through tiered merchant discount rates (MDR), ensure real-



time settlements, and eliminate hidden fees. It calls for intuitive and accessible DFS applications, designed for low-end devices and supported by USSD and voice-enabled interfaces.

The roadmap prioritizes the expansion of DFS access through affordable smartphones, rural connectivity, and zero-rated data for DFS apps. It addresses consumer protection and grievance resolution through a national DFS service standard. The roadmap also promotes embedded finance models to unlock credit access, incentives, such as cashback and tax rebates, to drive adoption, and the digitization of public payments, which includes subsidies, taxes, and tuition. It also emphasizes the integration of DFS into supply chains and distributor-level payments to anchor adoption in everyday commerce.

Behavioral change is at the heart of the roadmap. It proposes DFS ambassadors, gamified literacy tools, and community-led training to drive trust and usage. It places a special focus on the empowerment of women and informal workers to ensure digital inclusion is widespread and equitable.

This roadmap is digitally focused, inclusive, human-centered, and grounded in field evidence. The Singair microcosm study provides a replicable framework for national scale-up, which highlights what works, what holds users back, and how Bangladesh can advance toward an inclusive, interoperable digital economy by 2031.



Background

Funded by the Gates Foundation, this scoping study was a foundational step to transform the country's financial landscape through full-scale digital inclusion and support the Bangladesh Bank's vision for a Cashless Bangladesh by 2031. Singair Upazila in Manikganj district was selected as the study site to examine a range of payment behaviors and user profiles. The location was chosen for its diverse socioeconomic profile and blend of rural and peri-urban settings, which make it a representative microcosm of broader national realities. The insights from this study will guide the Bangladesh Bank's strategy and help develop a national roadmap to scale the adoption of digital payments.



Figure 1: Singair Upazila

MSC conducted an intensive, year-long research engagement in Singair to understand the drivers and address the barriers to the adoption of DFS payments. The study used a behavioral segmentation approach that categorized the population into 12 groups based on primary income sources, which range from farmers and daily wage laborers to salaried employees, artisans, and microentrepreneurs. It used multiple tools, which include the payment ecosystem profile framework (PEPF), transaction journey mapping, participatory discussions, and qualitative discussions. The study also used secondary data and literature to determine customer segments and research tools.

The tools used in the study helped to:

- Assess the current state of DFS in Singair;
- Map the financial behavioral and payment flow of each user segment;
- Identify behavioral, infrastructural, and systematic barriers to the adoption of digital payments.

The MSC team spent more than 8,512 person-hours in the field to engage with diverse customer segments in Singair. This methodology enabled a deep understanding of how users interact with fast payment systems, particularly mobile financial services (MFS), agent banking, QR-based transactions, and interoperable digital platforms, such as NPSB (National Payment Switch Bangladesh).

The next chapter summarizes the study's findings and provides a roadmap to fast-track the adoption of digital payments.



Key insights

Segment-wise DFS adoption

The adoption of DFS in Singair shows both progress and persistent exclusion. While 56% of Singair's residents use DFS actively, 20% express interest but remain unserved, 14% are unwilling, and 10% are unaware of digital payment options. Demand for DFS is stronger among farmers, gig workers, students, artisans, and the unemployed, who are often digitally adjacent (familiar with digital tools but not yet users of DFS) but face systemic barriers to use.

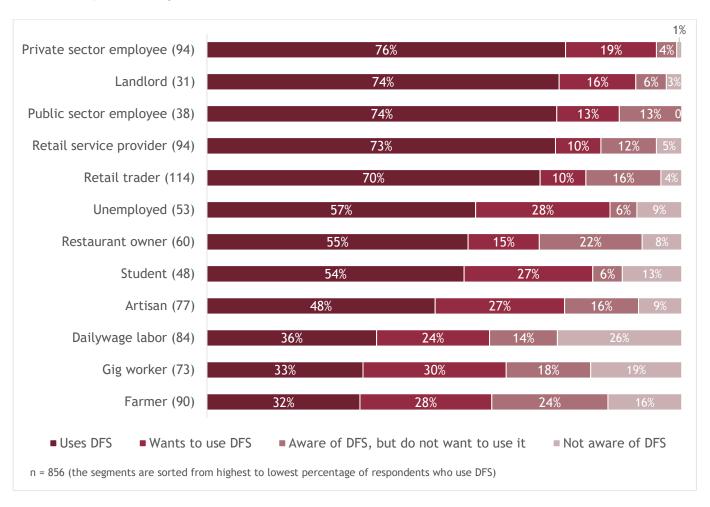


Figure 2: Graphical representation of DFS usage across different segments

Convenience and time savings continue to drive uptake, particularly among informal earners, such as daily wage laborers (30%) and gig workers (22%). Smartphone ownership and basic digital literacy have enabled adoption among students, private sector employees, and small business owners. For example, 39% of students and 28% of private sector employees reported active DFS use, often without external help.

The study also examined how each user segment in Singair interacts with DFS: What they use it for, the tools they prefer, and the specific factors that enable or hinder adoption. This segment-wise overview reveals diverse behavioral patterns critical to the design of targeted, practical solutions tailored to real-world needs.



Sl. No.	User segment	Payment use cases	DFS tools used	Key enablers
1	Private sector employee	Receive salary through DFS, minimal daily spending	MFS (salary), QR or bank use	Smartphone access, literacy, and salary mandates
2	Landlord	Rent collection, utility payments, large-value transactions	MFS, bank transfers	Trust, need for secure transactions
3	Public sector employees	Receive salary through DFS, P2P transfers	Bank (salary), MFS	Salary mandates, familiarity with MFS
4	Retail service provider	Receive payment for providing services, utility payment, and large-value transactions	MFS payments, bank transfers, QR	Digital exposure, agent trust, and convenience
5	Retail traders	Receive payment for selling products, utility payment, and large-value transactions	MFS payments, bank transfers, QR	Digital exposure, agent trust, and convenience
6	Unemployed (homemakers and unemployed youth)	Homemakers: Household purchases, receive remittance Unemployed youth: Occasional P2P transfers	MFS and bank for remittances	Homemakers: Access through male family members, trust in known agents Unemployed youth: Access to smartphones
7	Restaurant owner	Receive payment for selling foods	MFS payments, QR	Digital exposure
8	Student	Tuition fees, online shopping interest, and basic transfers	Interested in MFS, QR for making payments	Digital literacy, DFS incentives and app familiarity
9	Artisan	Payment receives for sales through big buyers, occasional business transfers	MFS, agent point	Community networks, growing awareness
10	Daily wage laborer	Occasional P2P transfers, low transaction volume	MFS, agent point	Convenience, proximity to agents
11	Gig worker	P2P transfers, limited business payments	MFS, agent point	Phone access, peer influence
12	Farmer	Input or output payments (mostly cash), sale of produce	MFS or agent banking use	Proximity to the market, QR for agriinputs

The above patterns confirm that DFS adoption is far from uniform. Usage varies based on need, access, trust, and perceived value. For instance, retail traders and landlords use DFS for high-value transactions driven by security and convenience, while students and artisans engage with DFS as the usage is driven by community. These differentiated behaviors help distinguish between structural barriers, such as infrastructure gaps, and behavioral ones, such as limited trust or digital confidence.



Barriers to DFS adoption

Current DFS barriers: Demand-side constraints

Despite widespread account ownership and awareness, DFS adoption in Singair remains uneven across the segments. Figure 3 below outlines six core barriers identified through field research, supported by segment-specific evidence, and aligned with practical solutions. These barriers, from digital literacy gaps to ecosystem-level readiness, reveal the multidimensional nature of exclusion and underscore the need for coordinated interventions across the financial ecosystem.



Figure 3: Six key barriers to DFS adoption



Current DFS barriers: Supply-side constraints

While challenges faced by users dominate the discourse of DFS adoption, the microcosm study in Singair has also uncovered several supply-side bottlenecks that limit the scalability and reliability of the DFS infrastructure:

1. Fragmented and manual onboarding processes	2. Insufficient staff training	3. Lack of provider follow-up	4. Lack of merchant incentives and value perception	5. Weak agent motivation and retention	6. Liquidity gaps and float management issues	7. Settlement delays	8. Weak B2B integration	9. Confusion on interoperability and MDR
73% of merchants and agents went through manual onboarding without assisted e-KYC support or multilingual forms.	Only two out of eight bank branches in Singair had staff who could explain Bangla QR clearly.	No merchants reported post- onboarding engagement from DFS providers.	64% of merchants reported receiving no tangible benefit, such as cashback, milestone rewards, or reduced transaction costs, after they adopted DFS.	68% of agents in rural and low-volume areas reported no performance incentives or follow-up engagement after the initial onboarding.	59% of DFS agents experienced float shortages due to delayed settlement cycles or lack of real-time top-up options.	62% of merchants reported fund settlement delays of three to seven days, especially for QR transactions.	No digital reconciliation system was available for retailers to confirm payments to distributors.	80% of merchants were unaware that one QR could accept payments from multiple wallets.
The onboarding experience was inconsistent across providers and poorly adapted for low-literacy users.	Agents and field staff lacked training to troubleshoot merchant issues or promote DFS effectively.	No helplines, field visits, or merchant dashboards were offered for tracking or feedback.	Many perceived that DFS offers no clear advantage over cash and cited unclear MDR structures and the absence of loyalty incentives as key deterrents to regular use.	The interviewed agent groups reported a lack of milestone-based recognition or retention support.	Manual reconciliation between the bank and MFS systems frequently disrupted services during peak hours.	Settlement delays discouraged daily reconciliation and created working capital strain.	Distributors preferred cash collection to ensure traceability in high-volume sectors, such as FMCG and pharma.	51% of retail traders cited unclear MDR structures as a reason to avoid DFS, due to the fear of loss of profit margin.

The study finds that Singair's (and Bangladesh's) digital financial potential must be unlocked to address multidimensional barriers through targeted, ecosystem-wide strategies. The roadmap in the next section outlines actionable steps to transform these challenges into opportunities that pave the way for inclusive participation in Bangladesh's cashless future.



Roadmap to strengthen digital transactions in Bangladesh

The roadmap provides a structured approach to overcome digital payment adoption barriers through targeted interventions and implementation strategies.

- 1. **Goal:** Each section of the roadmap table highlights a specific, actionable goal, such as to enhance digital literacy, expand agent networks, or improve user trust, which is designed to address a core barrier to DFS adoption in Singair.
- 2. **Challenges and activities:** For every key solution, the roadmap table identifies challenges and outlines targeted activities, such as training, incentives, partnership development, or awareness campaigns, that are required to implement the solution effectively.
- 3. **Timelines and additional details:** The roadmap further specifies recommended timelines for each action, which indicate short-term (up to nine months), medium-term (nine months to 18 months), or long-term (more than 18 months) priorities. These durations are based on implementation and policy change cycles relevant to Bangladesh's DFS and digital infrastructure interventions. It includes responsible stakeholders, supporting agencies, the expected outcome, and indicators to track progress toward a cashless Bangladesh.

Goal 1: Merchant enablement through improved liquidity, trust, and ease of digital payment acceptance

Challenge	Activities	Key insight	Lead agency	Supporting agency	Timeline	Term	Expected outcome
High merchant transaction costs, limited tailored payment solutions, and low merchant trust in digital payment settlements	Enable flexible, real-time settlement options for merchant payments and QR transactions. Merchants should be able to choose whether funds are instantly settled to their bank account or retained in their mobile wallet, based on their preference. This flexibility builds trust, improves liquidity, and drives wider DFS adoption.	Long settlement periods with providers disrupt cash flow. Delayed fund availability hampers liquidity, which affects	Bangladesh Bank	FSPs, MFS, PSP, PSO, and payment scheme providers	Q3 2025 - Q2 2026	Mid- term	Increased merchant adoption of digital payments is driven by reduced transaction costs, tailored payment solutions, and enhanced trust through faster settlements and



Challenge	Activities	Key insight	Lead agency	Supporting agency	Timeline	Term	Expected outcome
	Collaboration: The Bangladesh Bank can issue regulatory directives that require all banks, MFS providers, and PSPs to ensure real-time settlement for merchant transactions. It should also monitor provider compliance and coordinate targeted outreach campaigns to inform merchants of this feature, reinforcing trust in digital payments.	business operations.					sector-specific incentives
	Engage with DFS providers to digitize payment flows at agricultural input and output points by analyzing farmer purchase and sale patterns. The BB can facilitate digital payments at critical transaction points, such as input retailers and distributors, local agri-selling points, and machinery procurement centers. Collaboration: The Bangladesh Bank can issue sector-specific DFS guidelines and set digital transaction targets for banks, MFS, PSP, PSO, and payment scheme providers, similar to agricultural credit disbursement targets. This will promote the development of customized, farmer-friendly digital payment solutions across the agricultural value chain.	Farmers primarily buy essential inputs from dealers and suppliers in cash, with only 6% using digital payments in urgent situations.	Bangladesh Bank	Ministry of Agriculture, FSPs, MFS, PSP, PSO, and payment scheme providers	To continue	Long-term	



Challenge	Activities	Key insight	Lead agency	Supporting agency	Timeline	Term	Expected outcome
	Collaborate with FMCG and pharmaceutical companies, their distributors, retailers, and DFS providers, to codesign affordable, sector-specific digital payment solutions. It can start by identifying pain points in distributor-retailer transactions, then develop streamlined systems with built-in reconciliation features for transparency and accuracy. It can encourage adoption by advising FMCG and pharma companies to promote digitized payments through discounts, rewards, or performance-linked benefits. It can also align all stakeholders to ensure smooth implementation, increased efficiency, and sustained usage across the value chain.	37% of retailers do not use digital payments because distributors prefer cash payments.	Bangladesh Bank	FSPs, MFS, PSP, PSO, and payment scheme providers, Government of Bangladesh, Ministry of Commerce, FMCG, and pharmaceutical companies	Q3 2025 - Q4 2027	Long- term	
	Collaboration: The Bangladesh Bank can facilitate coordination among FMCG and pharmaceutical companies, their distributors, and DFS providers to cocreate affordable, sector-specific digital payment solutions. The Bangladesh Bank can also issue guidance to integrate digital reconciliation systems, ensure regulatory support, and monitor implementation to promote transparency and adoption.						



Goal 2: Improve the DFS ecosystem performance through provider capacity and full interoperability

Challenge	Activities	Key insight	Lead agency	Supporting agency	Timeline	Term	Expected outcome
Poor training, low awareness, weak interoperability, unclear standards	Enhance employee training on DFS payments across the DFS ecosystem, which includes bank branches, alternative delivery channels of DFS providers, and MFS distribution hubs. This enhancement includes: i. Training bank branch staff and	Landlords find DFS slower and less reliable because they lack awareness of instant bank transfers, such as Real-Time Gross Settlement (RTGS), Electronic Fund Transfer (EFT), and National Payment Switch Bangladesh (NPSB).	Bangladesh Bank	FSPs, MFS, PSP, and PSO providers	Q3 2025 - Q4 2025	Short-term	A stronger, interoperable DFS ecosystem with better-trained providers, wider Bangla QR adoption, improved user trust, and increased usage driven by seamless experiences and fair pricing



Challenge	Activities	Key insight	Lead agency	Supporting agency	Timeline	Term	Expected outcome
	training across all financial institutions, ensure consistent curriculum and quality, and monitor program effectiveness through periodic evaluations and feedback loops.						
	Integrate Bangla QR functionality into widely used digital apps, such as social media, e-commerce, ridesharing, or lifestyle apps. This is similar to how WeChat Pay and Alipay have integrated QR code payments in China.	80% of the Bangla QR merchants are unaware of the Bangla QR benefits.	Bangladesh Bank	FSPs, MFS, PSP providers, and popular app companies	Q3 2025 - Q2 2026	Mid- term	
	Collaboration:						
	The Bangladesh Bank can partner with leading app developers and DFS providers to embed Bangla QR payment capabilities within high-traffic applications. It can also release technical guidelines and co-promote the feature to raise awareness and usage among target user segments.						



Goal 3: Enhance usability and accessibility of DFS platforms across all device types and user segments

Challenge	Activities	Key insight	Lead agency	Supporting agency	Timeline	Term	Expected outcome
Inconsistent UX, device incompatibility, and lack of inclusivity hinder DFS usability across diverse user segments.	Enhance DFS accessibility by optimizing USSD for feature phones to ensure apps are intuitive, vernacular, voice-enabled, and compatible with low-end devices to reduce digital exclusion. Collaboration: DFS providers can jointly improve access by upgrading USSD channels and co-developing user-friendly, multilingual, and voice-enabled app interfaces. The Bangladesh Bank can promote inclusive design standards, facilitate collaboration with FinTech and language technology providers, and monitor the rollout of accessible solutions to ensure usability for underserved and low-literacy user segments.	Retail service providers adopt DFS for time savings (18.2%) and convenience (17.9%), supported by smartphone access and digital literacy.	FSPs, MFS, and PSP providers		Q3 2025 - Q4 2026	Mid- term	Improved accessibility and satisfaction for all users, especially those with low-end devices or limited digital skills, which leads to increased and sustained DFS adoption
	Optimize MFS and banking apps to reduce load times, prevent timeout errors, and design lightweight, userfriendly interfaces. Collaboration: The Bangladesh Bank can issue technical usability guidelines and	Inconsistent app performance undermines trust in DFS.	FSPs, MFS, and PSP providers	FinTechs	Q3 2025 - Q2 2027	Long- term	



Challenge	Activities	Key insight	Lead agency	Supporting agency	Timeline	Term	Expected outcome
	coordinate with DFS providers to ensure app design standards prioritize functionality and accessibility, especially for users in low-bandwidth and low-spec device environments.						

Goal 4: Expand DFS access through digital infrastructure, affordable devices, and inclusive connectivity

Challenge	Activities	Key insight	Lead agency	Supporting agency	Timeline	Term	Expected outcome
High data costs, limited smartphone affordability, and poor rural connectivity restrict DFS access in remote and low-income areas.	DFS providers can improve digital access to DFS through partnerships with mobile network operators (MNOs) to enable zero-rated (whitelisted) access to DFS applications and deploy community Wi-Fi hotspots in underserved areas. These efforts seek to reduce the cost burden of mobile data for users in peri-urban, rural, and low-income areas, which enables broader usage of DFS platforms. Collaboration: The Bangladesh Bank can facilitate partnerships between DFS providers, MNOs, and internet service providers to implement zero-rated access to DFS apps and expand community Wi-Fi infrastructure. This dual approach	Only 16% of internet users among artisans have a strong connection.	FSPs, MFS, and PSP providers	Mobile networking operators and internet service providers	Q3 2025 - Q4 2027	Mid- term	Wider DFS access and usage among underserved populations through improved connectivity, zero- cost access, and affordable smartphones



Challenge	Activities	Key insight	Lead agency	Supporting agency	Timeline	Term	Expected outcome
	addresses the affordability barrier, as many users avoid DFS apps due to mobile data costs and prefer using household or shared Wi-Fi to access digital services.						
	Implement ecosystem-level initiatives to increase smartphone penetration by reducing device costs and promoting affordable smartphones (BDT 4,000-5,000 or USD 32-40) that can run DFS applications efficiently.	41% artisans find smartphones costly.	Bangladesh Bank	FSPs, MFS, PSP providers, mobile networking operators, and mobile device manufacturers	Q3 2025 - Q2 2026	Mid- term	
	Collaboration:						
	The Bangladesh Bank can act as a facilitator to bring together MNOs, DFS providers, and device manufacturers to codesign bundled offerings, which combine low-cost smartphones with DFS-optimized data plans. DFS providers should develop lightweight app versions where needed to ensure smooth functionality on low-end devices, which makes digital access inclusive and practical for low-income users.						
	Review and upgrade rural internet infrastructure to support reliable DFS access.	46% of farmers cited system outages and unreliable	Bangladesh Bank	Bangladesh Telecommunication Regulatory Commission, FSPs,	Q3 2025 - Q4 2027	Long- term	



Challenge	Activities	Key insight	Lead agency	Supporting agency	Timeline	Term	Expected outcome
	Collaboration: The Bangladesh Bank can partner with the Bangladesh Telecommunication Regulatory Commission (BTRC) and DFS providers to identify connectivity gaps and co-develop targeted infrastructure solutions to improve internet reliability in rural and remote areas.	connectivity, especially during the harvest season, as a key barrier to DFS usage.		MFS, PSP, and PSO providers			

Goal 5: Accelerate the integration of DFS into public-sector services and educational institutions to build users' trust, improve convenience, and drive widespread adoption

Challenge	Activities	Key insights	Lead agency	Supporting agency	Timeline	Term	Expected outcome
DFS usage across public services and educational institutions remains low due to poor system integration, fragmented infrastructure, users' mistrust, and additional transaction fees.	Promote end-to-end DFS integration across public-sector platforms by embedding digital payments into government services, such as utility bills, e-commerce, and hospital fees, among others. Link all subsidies and grants to verified DFS accounts and digitize tax payments in partnership with the Revenue Policy Division. Set measurable, time-bound targets to drive accountability and accelerate adoption. For example, by Q1 2026, at least 30% of municipal taxes and government service fees should be collected through DFS channels.	A notable 27% of users consider DFS riskier than cash, which reflects deepseated concerns about DFS security. This wariness is linked to past experiences with fraud or a general mistrust of	FSPs, MFS, PSP, PSO, and payment scheme providers	Bangladesh Bank, different ministries of the Government of Bangladesh, Bangladesh Power Development Board, Bangladesh Water Development Board, Bangladesh Energy Regulatory Commission, Ministry of Health, Ministry of Agriculture, and e-	Q1 2026 - Q2 2027	Mid- term	Increased DFS adoption in public services through trusted, fee-free, and seamless digital payments



Challenge	Activities	Key insights	Lead agency	Supporting agency	Timeline	Term	Expected outcome
	Collaboration: The Bangladesh Bank can set adoption benchmarks, coordinate with relevant ministries and the Revenue Policy Division, and ensure the secure integration of FSPs, MFS, PSPs, and PSOs into public payment and collection systems. It can also mandate subsidy disbursements through verified digital wallets and facilitate platform interoperability to support a seamless and inclusive digital public finance ecosystem.	digital platforms, which makes users reluctant to shift away from the tangible nature of cash.		commerce companies			
	Digitize tuition and campus payments by placing DFS payment options at key payment points in educational institutions to make transactions fast, simple, and accessible. Collaboration: The Bangladesh Bank can coordinate with DFS providers, the Ministry of Education, and local authorities to implement DFS infrastructure in educational institutions. Providers can support adoption through hands-on training, awareness campaigns, and targeted incentives, such as cashback offers.	Public and private sector employees are more financially literate. Yet they primarily use DFS for receiving salary (65% for public and 28% for private sector employees) rather than everyday transactions due to limited	FSPs, MFS, PSP, PSO, and payment scheme providers	Bangladesh Bank, Ministry of Education, Ministry of Public Administration, and district administrations	Q3 2025 - Q4 2027	Long-term	



Challenge Activities	Key insight	s Lead agenc	Supporting agency	Timeline	Term	Expected outcome
	merchant acceptance	·.				
digital payment fees and serving alignment. Collaboration: The Banglades with the Reverstandardize zee payments, and outreach and outr	compared to cash among private sections of these cost-free	Bank t S's ess to	FSPs, MFS, PSP, PSO, payment scheme providers, the Revenue Policy Division, and different ministries of the Government of Bangladesh		Long- term	

Goal 6: Strengthen consumer protection, monitoring, and grievance resolution systems to build trust and ensure accountability

Challenge	Activities	Key insight	Lead agency	Supporting agency	Timeline	Term	Expected outcome
Weak consumer protection, fragmented grievance resolution systems, and inconsistent service quality undermine trust	The Bangladesh Bank can develop a comprehensive standard operating procedure (SOP) to address users' concerns about fraud, system errors, hidden costs, and service quality. The SOP should include: i. Enforcement of consumer protection standards;	42% of gig workers expressed concerns about fraud and transparency in DFS transactions, while 27% of	Bangladesh Bank	FSPs, MFS, PSP, PSO, payment scheme providers, Bangladesh Police, and Cyber Crime Division	Q3 2025 - Q4 2026	Mid- term	A secure, transparent, and reliable DFS environment with improved consumer trust, faster grievance resolution, reduced fraud incidents,



Challenge	Activities	Key insight	Lead agency	Supporting agency	Timeline	Term	Expected outcome
in DFS and limit sustained usage.	ii. Standardized dispute resolution mechanisms across providers;	users viewed DFS as riskier than cash.					and consistent service quality across providers
	iii. A centralized grievance resolution system (GRM) for DFS users;						
	 iv. Continuous performance monitoring across all DFS providers for uptime, delays, and disruptions; 						
	v. Clear thresholds and protocols for law enforcement involvement, such as repeated complaints or unresolved disputes, along with formal penalties for fraud;						
	vi. The SOP should be reviewed and renewed annually to reflect emerging risks and technology changes.						
	Collaboration:						
	The Bangladesh Bank can lead this initiative by coordinating with DFS providers and the Bangladesh Telecommunication Regulatory Commission (BTRC) to establish a unified GRM framework. It can set minimum service standards, resolution timelines, and transparency protocols. The Bangladesh Bank can						



Challenge	Activities	Key insight	Lead agency	Supporting agency	Timeline	Term	Expected outcome
	collaborate with the Bangladesh Police and the Cyber Crime Division to create a dedicated DFS helpline, investigate serious cases, apply penalties, chargeback system for FSPs and MFS providers and strengthen enforcement to ensure compliance and build public confidence.						

Goal 7: Unlock credit access through DFS by scaling embedded finance for last-mile agents, merchants, and small businesses

Challenge	Activities	Key insight	Lead agency	Supporting agency	Timeline	Term	Expected outcome
Limited integration of credit with DFS platforms restricts access to timely, tailored financing for last-mile users and small businesses.	Make microcredit more convenient and accessible through DFS channels for disbursement and repayment. Collaboration: The Bangladesh Bank can work with the MRA to align policy directives, facilitate technical integration between MFIs and DFS providers, and promote client-facing programs that build trust in digital credit transactions.	Some use DFS to repay BRAC MFI loans, but they take help from family members or BRAC loan officers to transact because they have low digital literacy.	Bangladesh Bank	MRA and MFIs	Q1 2026 - Q2 2027	Mid- term	Expanded and safer access to microcredit through DFS, which will enable more inclusive lending to underserved users and improve repayment efficiency via digital channels
	Extend credit support to MFS agents, merchants, and agent banking operators to strengthen their	Transaction delays and extra costs	Bangladesh Bank	FSPs and MFS providers	To continue	Long- term	



Challenge	Activities	Key insight	Lead agency	Supporting agency	Timeline	Term	Expected outcome
	operational capacity and ensure business continuity. Collaboration: The Bangladesh Bank can develop regulatory frameworks, issue risk management guidelines, and coordinate with financial institutions and DFS providers to ensure timely and affordable credit access for lastmile DFS operators.	make digital payments less attractive for businesses that depend on quick cash flow. This has led many to prefer cash transactions to maintain liquidity and control over their finances.					
	Use users' DFS transaction data to assess and support their access to microloans. Target micromerchants, marginalized and underserved populations, general DFS users, and merchants. They can use DFS transaction patterns along with other risk indicators to minimize credit risks. Design loan products that are simple, accessible, and tailored to users' capacities and needs. The Bangladesh Bank can issue regulatory guidelines to allow DFS usage history in credit assessments and facilitate secure data-sharing protocols. It can offer credit	Retail traders, retail service providers, gig workers, restaurant owners, farmers, and artisans use loans to grow their incomegenerating activities.	FSPs, MFS, PSP providers, MFIs	Bangladesh Bank and Microcredit Regulatory Authority	Q1 2026 - Q4 2027	Long-term	



Challenge	Activities	Key insight	Lead agency	Supporting agency	Timeline	Term	Expected outcome
	guarantees or refinancing to encourage providers and supervise market practices to ensure the safe expansion of DFS-linked microloans. It can also revise onboarding communication standards to ensure users are clearly informed about how regular DFS usage can enhance their eligibility for microloans.						

Goal 8: Increase DFS adoption through smart, targeted incentives that make usage affordable, rewarding, and sustainable for merchants and users

Challenge	Activities	Key insight	Lead agency	Supporting agency	Timeline	Term	Expected outcome
High MDR, delayed settlements, tax concerns, low awareness, and weak incentives limit DFS adoption by merchants and users.	The Bangladesh Bank can introduce a tiered MDR subsidy model to reduce merchant transaction costs and encourage small-value QR usage. i. Standard 1.50% MDR across all QR transactions; ii. 100% MDR refund for verified transactions less than BDT 500 (USD 4); iii. 0.75% refund for transactions between BDT 500 and 2,000 (USD 4 and 16.50);	45% of restaurant owners and 58% of retail traders see digital payments as unprofitable due to high MDR and slow settlement periods. They prefer cash transactions to maintain liquidity.	Bangladesh Bank	Government of Bangladesh, FSPs, MFS, and PSP providers	Q3 2025 - Q4 2026	Mid- term	Wider DFS adoption among merchants and users through affordable MDR rates, personalized incentives, and tax benefits, which make digital transactions more profitable, trusted, and rewarding across diverse sectors and income groups



Challenge	Activities	Key insight	Lead agency	Supporting agency	Timeline	Term	Expected outcome
	iv. Align Bangla QR MDR with other market players to avoid misuse.						
	The Bangladesh Bank can establish a robust verification mechanism to validate transaction legitimacy and set up a government-backed incentive fund, modelled after <u>India's UPI framework</u> . This will help finance the subsidy program transparently and sustainably.						
	Collaboration:						
	The Bangladesh Bank can lead the design and regulation of the tiered incentive framework, coordinate with the Ministry of Finance to establish the fund, define transaction verification protocols, and monitor disbursements to ensure integrity and impact. It can also oversee the alignment of MDR structures across providers to promote fairness and adoption.						
	DFS providers can introduce a signing bonus and transaction volume-based incentives to encourage merchant onboarding and active usage. They can also offer a "DFS Pioneer" certification with additional rewards as a motivational tool for merchants	Although 72% of restaurant owners use it for personal purposes, only 12% of restaurant owners see	FSPs, MFS, PSP, PSO, and payment scheme providers		Q3 2025 - Q4 2026	Mid- term	



Challenge	Activities	Key insight	Lead agency	Supporting agency	Timeline	Term	Expected outcome
	who reach defined transaction milestones.	business value in DFS.					
	Collaboration:						
	DFS providers can design and manage the incentive programs, track merchant performance metrics, and promote the recognition program. The Bangladesh Bank can encourage standardized incentive benchmarks and integrate such programs into wider merchant digitization efforts.						
	DFS providers can pilot high-impact incentive programs, such as 5% cashback, reward points, and lifecycle-based incentives. These include incentives, such as free first five transactions, loyalty bonuses after 20 transactions, and reduced MDR after consistent usage. The incentive programs can engage rural users and merchants and encourage regular DFS usage. Collaboration: The Bangladesh Bank can collaborate with DFS providers and the Government of Bangladesh (GoB) to co-finance these incentive programs by establishing a dedicated fund. This support will help offset the cost burden from low MDR rates and	47% of private sector employees highlighted that cashback, dining offers, and credit card benefits motivate them to use digital payments instead of cash. This drives DFS engagement.	FSPs, MFS, PSP, PSO, and payment scheme providers	Bangladesh Bank and the Government of Bangladesh	Q1 2026 - Q4 2026	Mid- term	



Challenge	Activities	Key insight	Lead agency	Supporting agency	Timeline	Term	Expected outcome
	enable sustainable DFS adoption in low-margin, underserved markets.						
	Introduce tax incentives or rebates to encourage DFS usage among all users. It can offer targeted fiscal benefits, such as tax benefits and reduced compliance, for businesses that adopt end-to-end digital transactions across their supply chains. Collaboration: The Ministry of Finance, Revenue Policy Division, Bangladesh Bank, and FSPs, MFS, PSPs, and PSO providers can collaborate to design tax-linked DFS incentive programs to promote wider DFS adoption.	Distributors handle large cash transactions and fear tax scrutiny from digitized records. So, they encourage retailers to use cash instead of DFS.	Bangladesh Bank	Ministry of Finance, Revenue Policy Division, FSPs, MFS, PSP, PSO, and payment scheme providers	Q3 2025 - Q4 2027	Long- term	
	DFS providers can use AI-driven solutions to deliver personalized MDR rates, service charges, cashback, discounts, and bundled offers for customers and merchants. This will enhance user experience, increase engagement, and incentivize sustained DFS usage. Collaboration: DFS providers can design and implement AI systems to analyze transaction behavior, optimize pricing	31% of retail traders experienced that promotions, such as cashback and discount offers, increase DFS adoption.	FSPs, MFS, PSP, PSO, and payment scheme providers	FinTechs	To continue	Long- term	



Challenge	Activities	Key insight	Lead agency	Supporting agency	Timeline	Term	Expected outcome
	strategies, and deliver tailored offers. The Bangladesh Bank can provide guidance on data governance and encourage innovation in responsible AI use for financial inclusion.						

Goal 9: Build trust and boost active DFS use through targeted onboarding, user-centric awareness, and community-led financial education

Challenge	Activities	Key insight	Lead agency	Supporting agency	Timeline	Term	Expected outcome
Mistrust, low digital literacy, poor onboarding, and limited community engagement hinder active DFS adoption.	Activity 1 (Merchant-focused): DFS providers can use customer transaction data to identify high-traffic shops and service points. They can use both e-onboarding and field-agent support to onboard merchants, followed by targeted training on digital payment use, fees, settlement, and troubleshooting to build trust and readiness. Activity 2 (User-focused): They can design and roll out behavior-informed awareness campaigns for users. Through peer influence, they can focus on safety, ease of use, and real-life success stories. They can also incentivize usage through cashback, gamified	Retail traders and landlords benefit from DFS for high transaction volumes, such as rent collection, recurring diverse financial transactions, such as P2P transfers, and the need for efficient, secure money transfers using DFS. Their higher income, broader	FSPs, MFS, PSP, and PSO providers		Q3 2025 - Q2 2026	Mid- term	Higher DFS adoption and trust through improved literacy, merchant onboarding, and community engagement



Challenge	Activities	Key insight	Lead agency	Supporting agency	Timeline	Term	Expected outcome
	rewards, and visible social proof at merchant outlets. Collaboration: DFS providers can lead both merchant and user-focused interventions. Bangladesh Bank can support standardization, monitoring, and cross-sector coordination. Educational institutions, NGOs, and local influencers can help amplify user-side awareness and trust.	spending patterns, and strong social connections drive extensive DFS engagement beyond business-related payment or rent transactions.					
	implement multi-pronged behavior change campaigns to boost DFS adoption among retail merchants. They can combine trust-building communication with targeted incentives. They can also launch influencer-led campaigns to address security concerns, highlight DFS safety features, and share real user experiences. Collaboration: DFS providers can lead the design and rollout of influencer-driven campaigns to implement incentive initiatives. The Bangladesh Bank can provide messaging guidance, facilitate stakeholder alignment, and support coordinated execution to ensure	A notable 27% of users consider DFS riskier than cash, reflecting deep-seated concerns about DFS security. These concerns are linked to past experiences with fraud or a general mistrust of digital platforms, making users reluctant to shift away	FSPs, MFS, and PSP providers		Q3 2025 - Q2 2026	Mid- term	



Challenge	Activities	Key insight	Lead agency	Supporting agency	Timeline	Term	Expected outcome
	consistency, scale, and impact across trust-building and incentive programs.	from the tangible nature of cash.					
	Strengthen digital financial literacy through a multi-layered approach. Train local women and students as DFS ambassadors via MFIs and tertiary institutions and equip them with practical, community-based training tools. Simultaneously, launch mass literacy campaigns using social media, youth platforms, and gamified content while integrating DFS education into school curricula and youth programs to encourage early and lasting behavior change.	Personalized, in-person assistance overcomes literacy challenges, which increases DFS familiarity and builds user confidence.	Bangladesh Bank	FSPs, MFS, PSP, and PSO providers, MRA, and MFIs, Ministry of Education, Directorate of Technical Education, and University Grants Commission	Q3 2025 - Q4 2027	Mid- term	
	Collaboration:						
	The Bangladesh Bank can coordinate with the Microcredit Regulatory Authority (MRA), the Ministry of Education, the University Grants Commission (UGC), DFS providers, and academic institutions to ensure curriculum quality and structured rollout. For mass outreach, it can also engage FinTechs, youth platforms, and content creators to co-develop engaging, age-appropriate content. Bangladesh Bank should oversee delivery, monitor reach and learning						



Challenge	Activities	Key insight	Lead agency	Supporting agency	Timeline	Term	Expected outcome
	outcomes, and ensure that both grassroots and institutional efforts align with national digital financial inclusion priorities.						

Goal 10: Build a reliable DFS agent network with structured supervision and performance monitoring

Challenge	Activities	Key insight	Lead agency	Supporting agency	Timeline	Term	Expected outcome
Limited onboarding support, inconsistent field supervision, and a lack of performance standards hinder DFS agent effectiveness and trust in last-mile service delivery	Expand the role of merchants and PRA holders as DFS agents to widen last-mile access. Enable these agents to offer basic services such as account opening, cash-in and cash-out, and bill payments through e-KYC-enabled systems. Develop agent-level incentives for QR activation and usage. Collaboration: The Bangladesh Bank can issue agent onboarding guidelines (inspired by India's Bank Mitra program) and work with DFS providers to set transaction-based milestones. It can also support tiered incentives to promote Bangla QR usage.	A marginalized merchant who operates as an authorized DFS agent can increase DFS usage in the community.	Bangladesh Bank	FSPs, MFS, and PSP providers	Q1 2026 - Q4 2026	Mid- term	A robust, well-supervised DFS agent network and a fully interoperable digital payments ecosystem that drives increased adoption, reduces cash reliance, and ensures high-quality, secure financial services for users across sectors
	Integrate standardized agent performance metrics, such as account activations, service uptime, complaint resolution, and first-time	Artisans use agent-assisted DFS services, which lead to	Bangladesh Bank	FSPs, MFS, and PSP providers	Q3 2025 - Q2 2026	Mid- term	



Challenge	Activities	Key insight	Lead agency	Supporting agency	Timeline	Term	Expected outcome
	user support, into DFS providers' dashboards. It can use this data to improve field-level oversight, prevent service drop-offs, and build agent trust with customers.	opportunity costs from repeated visits.					
	Collaboration:						
	The Bangladesh Bank can require DFS providers to submit quarterly agent performance reports and include these in a national monitoring framework to improve agent quality and accountability.						

Goal 11: Accelerate DFS adoption through policy innovation and sandbox pilots

Challenge	Activities	Key insight	Lead agency	Supporting agency	Timeline	Term	Expected outcome
Limited innovation hinders effective DFS policymaking.	Leverage behavioral insights and sandbox testing to design tailored DFS solutions. Activity 1: Analyze user behavior and transaction patterns (e.g., subsidy usage, utility payments) to inform product design, such as flexible payment plans, goal-based savings, or small-ticket credit. Activity 2: Conduct sandbox exercises (e.g., Bank Negara Malaysia model) to simulate cashless use cases, test	24% of gig workers lack trust in DFS for external reasons and fear fraud or system failures.	Bangladesh Bank	FSPs, MFS, and PSP providers	Q3 2025 - Q4 2026	Mid- term	A data-driven DFS strategy that accelerates adoption through targeted innovation, which results in measurable increases in digital payment usage and efficiency



Challenge	Activities	Key insight	Lead agency	Supporting agency	Timeline	Term	Expected outcome
	adoption barriers, and identify ecosystem gaps for scale.						
	Collaboration:						
	The Bangladesh Bank can support DFS providers to pilot, test, and scale behavior-driven innovations. It can fund targeted use cases and sandbox simulations. The Bank can ensure that solutions are inclusive, insight-led, and responsive to real user needs.						

Goal 12: Strengthen research and data systems to generate actionable evidence for inclusive, safe, and effective DFS expansion

Challenge	Activities	Lead agency	Supporting agency	Timeline	Term	Expected outcome
Limited availability of localized, evidence-based insights to inform DFS policy and product design.	The Bangladesh Bank can commission a national cost of cash study to quantify the hidden costs of cash usage, such as transportation, handling, time loss, and security risks, for individuals, businesses, and institutions. It can use the insights to inform policy and design targeted awareness campaigns that highlight the economic and practical advantages of digital payments. Collaboration: The Bangladesh Bank can commission this study in collaboration with strategic partners, DFS providers, and sector experts. The outcome can be integrated	Bangladesh Bank	Strategic partners, FSP, MFS, and PSP providers	Q3 2025 - Q2 2026	Mid- term	Bangladesh Bank will gain clear insights to develop targeted policies that increase safe, affordable DFS adoption, optimize tier-based MDR cashback, and raise awareness of cash-related costs, driving faster digital payment uptake.



Challenge	Activities	Lead agency	Supporting agency	Timeline	Term	Expected outcome
	into national financial literacy campaigns and policymaker toolkits to shape more effective interventions and strengthen the public case for digital payment adoption.					
	The Bangladesh Bank can pilot the key recommendations outlined in the roadmap to validate their feasibility, assess operational challenges, and measure real-world impact before scaling nationally. These pilot programs can be conducted in selected regions, sectors, or among targeted user groups, such as small retailers, rural merchants, or public service platforms, to gather evidence on what works and what needs adjustment. The pilot phase should have clear objectives, timelines, success indicators, and a feedback loop to incorporate lessons into the final implementation strategy.	Bangladesh Bank	Strategic partners, FSP, MFS, and PSP providers	Q3 2025 - Q2 2028	Mid- term	
	Collaboration: The Bangladesh Bank can collaborate with strategic partners, DFS providers, relevant government ministries, and private sector actors to jointly execute the pilots. Outcomes from these pilots will help fine-tune technical standards, incentive models, training frameworks, and interoperability protocols, which would ensure the eventual rollout is both scalable and sustainable.					



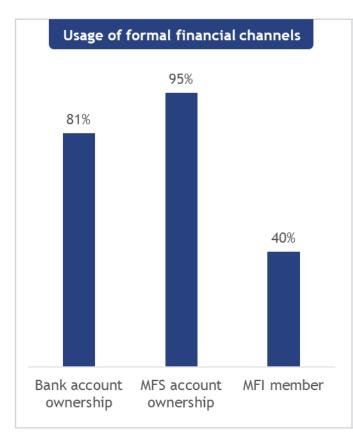
Annex: About Singair's economy and infrastructure

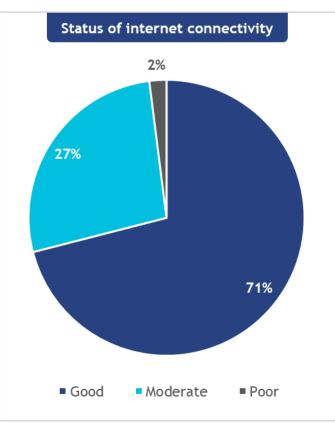
Economy

Singair has a primarily agricultural and rural economy, with paddy, jute, and vegetables as the main crops. The wholesale markets in Singair and Joymontop play a key role in supporting agricultural trade. Remittances are the second-largest contributor to the local economy. The area also reflects a blend of rural and peri-urban lifestyles, influenced by its proximity to Dhaka and Savar.

Network of bank branches, agent banking points, and MFS agent points

- Singair has 20 bank branches of 13 different banks (11 commercial banks and two specialized banks).
- The region has 600 MFS agents, 850 DFS micro-merchants, 11 banking agents with 89 outlets—the highest in Manikganj. Singair's current population is 328,104. Each agent serves around 4,900 people through agent banking services.
- More than 100 merchant points have Bangla QR of different providers (non-exclusive).











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