

Evaluating the Role of Digital Financial Services in Enhancing Efficiency and Accessibility of Social Safety Net Programs in Bangladesh

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Abstract

This study examines traditional and existing distribution channels and scrutinizes the effects of Digital Financial Services (DFSs) on delivering Social Safety Net (SSN) benefits. Researchers conducted a field study in the Sylhet Division, which is one of the largest digital areas in Bangladesh; however, there has been a large digitalization drive in the Sylhet Division, especially with the Sylhet City Corporation at the forefront of a mission towards a digital Sylhet. The researchers collected data from 100 respondents, including students, entrepreneurs, government officials, teachers, SSN beneficiaries, and local representatives, using a simple random sampling technique. To improve the theoretical foundation, this study reviewed secondary published materials such as journal articles, books, book chapters, and conference papers. The survey data were analysed using SPSS software, with illustrations of the variables and characteristics. The study

findings revealed that traditional banking channels for distributing SSN benefits were ineffective owing to higher costs, mismanagement, corruption, and complexity. Hence, the digital means of financial benefits to the beneficiaries of SSNs function well with the complement of faster service, cost-effectiveness, and efficiency. However, privacy threats, lack of technical knowledge, and risk management issues are prime concerns for the effective operation of DFS to accelerate the benefits of SSNs. The study findings will help researchers, policymakers, and beneficiaries, as well as overcome the existing challenges of DFS in effectively providing SSN benefits.

Keywords: Digital financial services, social safety net, distribution channel, distribution challenges, Bangladesh

Introduction

In the 21st century, the most discussed and applied model in third-world countries is the Social Safety Net (SSN) program in third-world countries (Saeed, 2023). Therefore, social safety net programs refer to supporting people, families, or destitute people to manage hazards and volatility, backing them from inequality and poverty, creating opportunities for food and jobs, and more specifically access to resources (Bossuroy & Coudouel, 2018). However, safety nets and social welfare programs were inaugurated in developed countries before 1900 and gained remarkable success in helping impoverished people (Fishback 2022). The SSN idea emerged as a special strategy for eradicating abject poverty and supporting destitute populations, incorporating widows, disabled people, aged citizens, the unemployed, landless citizens, poor students, and lactating mothers (Begum et al., 2021). Different types of SSN programs are widely used, including contributory schemes, social assistance, promotion of social security, medical insurance, maternity insurance, welfare for the disabled, welfare for children, and welfare for the elderly (Andrews et al. 2018). The two most used forms of social safety net programs in Bangladesh are monetary support and food for work (Ahmed et al., 2016). Similarly, based on age, there are three segments of the SSN program: below age 14 (14), between age 14-64 and above age 64 (Pradhan & Afrin, 2015). SSNs programs for younger than 14 years include the Primary Education Stipends Program (PESP) and Female Secondary School Assistance Program (FSSAP), which support students with free tuition, free books, stipends, and examination fees and create a strong barrier against early marriage (Hossain & Sarker, 2020). SSNs program for age (14-64) are Vulnerable Group Development (VGD), Vulnerable Group Feeding (VGF), Food for Works (FFW), Rural Maintenance Program (RMP), Income Generation for

Vulnerable Group Development (IGVGD), Rural Employment Opportunity for Public Assets (REOPA), Rural Mother Centre (RMC), Maternity allowance for poor lactating mother, for the rehabilitative of the disable and acid burnt people, allowance for destitute, widow and deserted women (Akand, 2022). SSNs programs for those older than 64 include old age allowances and homes (Haider & Mahamud, 2017). For the first time in 1974, the Food for Work (FFW) program was inaugurated in Bangladesh to cope with poverty, vulnerability, and unemployment, which was a milestone for the government towards SSN programs (Haque, 2023). FFW programs provides 31.5 kg wheat to destitute people (Mustafa et al.,2024).

The distribution channel of FFW was not transparent; as a result, questions arose regarding nepotism and corruption among the local representatives (Ali et al., 2023).

Using different channels, the government provides and manages the benefits of SSN programs, including public institutions, banking networks, and NGOs (Ferdous and Ullah, 2023). However, some incidents and studies indicate that banking networks for providing SSN benefits are not cost-effective and create unnecessary procrastination for both the government and beneficiaries (Isukul & Tantua, 2021). Furthermore, agents' delays, lack of transparency, and accountability of the distribution channel can create artificial problems in providing services to beneficiaries during emergencies (Tran & Corner, 2016). Therefore, to reduce the number of distributions of SSNs in the fastest-growing world, it is crucial to implement direct distribution channels entirely (Pazarbasioglu et al.,2020). Here, the direct distribution channel refers to Digital Financial Services (DFS), which consists of mobile financial services (MFS) such as Rocket, Bkash, Surecash, Nagad, U cash, and other digital transaction modes (Hasan, 2020). As a direct distribution channel, DFS can reduce intermediary interference, corruption, nepotism, unnecessary procrastination, and most importantly, it is possible to respond in an emergency (Bird & Hanedar, 2023). However, most beneficiaries are not connected and are well known of the technology that can generate issues such as data privacy and security (Hasal et al.,2021). To develop a DFS channel in a more effective and efficient manner for distributing SSNs benefits, it is essential to address these challenges by following the proposed strategy (Arner et al.,2020). Based on the study's findings, several recommendations were developed to ensure the best use of DFS channels to provide SSN programs, which can contribute to the government's policy level.

Objectives of the Study

This study investigates the impact of introducing digital financial services to accelerate social safety net programmes in Bangladesh.

Specific Objectives:

1. Identifying the Traditional and Digital Channels of Financial Services in Bangladesh.
2. To explore the usefulness of traditional channels for distributing SSN benefits.
3. To evaluate DFSs in accelerating SSN programs in Bangladesh.

Digital Financial Services in Enhancing Efficiency and Accessibility of Social Safety Net Programs

The Social Safety Net Program has a long history since Ancient Egypt and the Roman Empire has considered it a caring process for poverty-stricken people (Ferdous and Ullah, 2023). Later, developed countries, including the USA, established and implemented strategies for SSN programs to ensure inclusive development (Hoynes et al., 2016). To apply the core principles of development goals such as zero hunger, no poverty, good health and well-being, and quality education, it is crucial to address the issues of financial inclusion and food security (Atukunda et al., 2021). The world's most accepted and implemented model for financial inclusion and food security is the SSNs programme (Din et al., 2023). However, one of the core purposes of SSN programs is to borrow a state-centered model of financial inclusion for all tiers of society (Paul et al., 2021). Generally, this program covers food, health, education, shelter, and security for children, destitute people, aged people, widows, disabled people, and acid attack victims to ensure a better life for all levels of people in society (Yasmin et al., 2018). Therefore, SSN beneficiaries receive cash, food, mental support, and advocacy support (Muhammed 2021). Furthermore, the methods of cash transfer are banking channels; presently, they have become superseded when competing with the development of technology, or more specifically, DFS (Watong & Okwuagwu, 2021). Similarly, creating paid employment for destitute people is also a globally accepted model in SSN programs, where people are paid salaries or food in their employment (Asma et al., 2023). India's one of the core leading social protection packages is the public employment program, in which every person in India who lives in rural areas (i.e., 11% of the world's population lives in India) receives at least 100 days of paid employment (Muralidharan et al., 2023).

The Indian government has also introduced social security pensions and food subsidies, along with a public employment program, as part of an SSN program (Drèze & Khera, 2017). The World Bank has jointly established and executed strategies such as food-for-work (FFW) and social discount rate programs in developing countries. Evidence from six countries shows that these programmes have contributed remarkably to the improvement of underprivileged people (Banerjee et al., 2015). Similarly, to

eradicate hunger and poverty, the central government of Nigeria took initiative on a large scale (Otekunrin, 2019). However, owing to excessive corruption and intermediary expenses, the Nigerian government has failed to implement these programmes (Irwani, 2015).

The cash transfer system was a banking channel; however, the banking channel of cash transfers among impoverished people was identified as expensive, time-consuming, unproductive, and ineffective (Gololo, 2018). Furthermore, the Nigerian government has undergone a new strategic experiment that launched digital financial services (DFS) and mobile financial services (MFS) (Owoeye, 2023). Later, this method was recognized as the most appropriate for cash transfer among destitute people for poverty reduction programs in Nigeria, as it is faster, less time-consuming, and more effective and efficient (Abolade, 2018). Similarly, to support the poorest people in the Global South through social protection programs, the British Department for International Development (DFID) faced challenges in the case of transfers through banking channels (Brooks, 2015). To safeguard the financial inclusion of destitute people, it is necessary to connect them with DFS, such as mobile banking, online banking, ATM, mobile wallets, and cards (Rayhan & Uddin, 2021).

The government can directly transfer cash to beneficiaries through an MFS without interference from middlemen (Kalumeze 2015). In addition, the government can develop a centralized database to communicate and provide services to each beneficiary in a successful and competent manner, which will accelerate financial inclusion (Iazzolino, 2018). In 1974, the government of Bangladesh launched an SSN program that directly provided goods to beneficiaries, known as the FFW program, which became popular in the case of contributing to poverty reduction (Mahmuda, 2015). Nevertheless, the FFW program faced challenges, such as nepotism and corruption, and more specifically, excessive unlawful influence on distribution channels (Ali et al., 2023). Under the SSNs program, different initiatives are now implemented in Bangladesh, such as VGF, VGD, RMP, IGVGD, REOPA, disabled allowance, rural mother centre, allowance for destitute, leeway for widows and deserted women, and stipend for students (Ahmed, 2016). All SSN activities are connected to financial assistance to beneficiaries, and banking channels are traditionally used for cash transfers (Saifur, 2020). However, the banking channels were identified as expensive, methodically difficult, time-consuming, inefficient, and ineffective for the government, and, at the same time, the beneficiaries are not accustomed to the formalities of the banking channels (Hossain, 2023). Consequently, many beneficiaries do not obtain cash because of the fraud of intermediary corruption (Barca & Hebbbar, 2021). Hence, the delivery mechanism faced huge challenges, and the idea of digital financial solutions became known for

transferring cash directly to SSN beneficiaries with suggestions from experts (Danladi, 2023).

Nonetheless, there are no guidelines for using DFS as a channel for cash transfers to beneficiaries in SSN programs in Bangladesh, which has created new challenges because most beneficiaries are not initially connected to DFS or MFS (Rashid, 2020). The Central Bank of Bangladesh developed a framework regarding DFS as a cash transfer system for SSN program beneficiaries to solve the issue of cash transfer mechanisms (Mamtaz, 2024). The specific focus of the framework on MFS is known as the Regulatory Guidelines for Mobile Financial Services (MFS) in Bangladesh, which foster the SSN programs of the government (Sarker & Ony, 2019). However, a question arises regarding the applicability of the traditional transaction system in SSNs programs at present, and similarly, about the success and challenges of MFS in the cash transfer of SSNs programs or service delivery. Furthermore, this study explores the issue of study objectives, and the findings could work as a supporting mechanism for the government to run SSNs activities in the right manner to provide cash and services to beneficiaries without interference or corruption.

Methodology and Methods

In this study, the philosophy of positivism is applied as a purely quantitative approach. The quantitative research methodology employs statistical data to conserve time and resources (Eyisi, 2016). This approach prioritizes numerical information in both the data-gathering and analysis processes (Daniel, 2016). Notably, it can be characterized as having a scientific nature. By utilizing statistical data for research descriptions and analyses, researchers can reduce the time and effort required to elucidate the results (Zuur & Ieno, 2016). The application of scientific methods in data collection and analysis enables generalization within this research paradigm. Interactions within a single group can be extrapolated to a broader context (Saeidnia et al. 2024). Furthermore, the interpretation of research outcomes should not be viewed as a mere coincidence. An additional advantage of this approach is its replicability, which allows for the reproduction of studies under similar conditions (Kedron et al., 2019).

A field study was conducted in the Sylhet Division, which is one of the largest digital areas in Bangladesh; however, there has been a large digitalization drive in the Sylhet Division, especially with the Sylhet City Corporation at the forefront of a mission towards a digital Sylhet (Figure 1). The Sylhet division is bordered by the Indian state of Meghalaya to the north, the communities of the Kishoreganj to the south, and the district of Netrokona to the west. Water bodies such as Surma, Kashiara, Dhamaliya, and Jadukata mainly cover this arena. Most people choose agriculture as

their core profession because of its geographical location. Most of the year, many areas of this region remain submerged in water. Hence, nearly all people suffer from poverty and social vulnerability, including difficult livelihoods and fragile communication with the mainstream society.

Under these circumstances, governments, along with the support of local government bodies, facilitate employment generation programs, incentives for children's education, and financial support for the destitute.

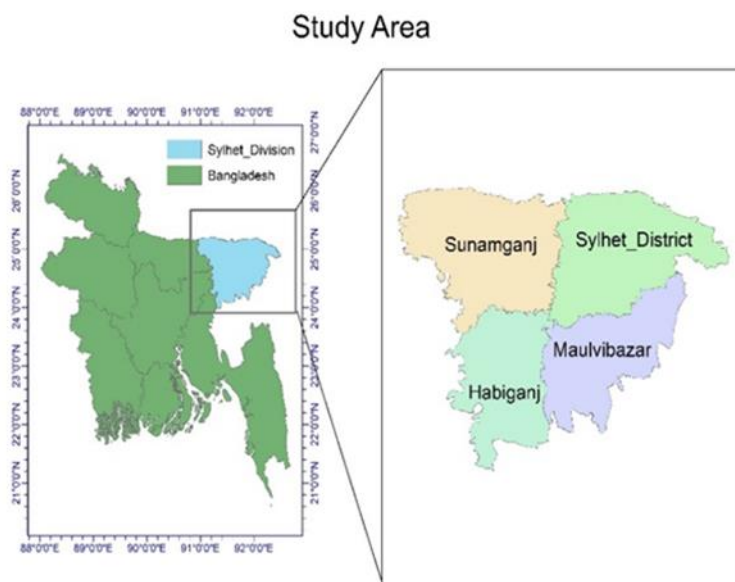


Figure 1: Research area, Sylhet Division

A field survey was conducted using simple random sampling to collect data from 100 respondents, including students, entrepreneurs, government officials, teachers, SSN beneficiaries, and local representatives. A simple random sampling technique was used to select respondents from a sampling list per frame using a lottery method that represented all elements. The survey questionnaire was designed to focus on different aspects, such as identifying the traditional and digital channels used for transferring cash in SSNs programs, the usefulness of traditional channels for SSNs program cash transfers, and evaluating DFS to accelerate SSNs programs in Bangladesh. Field data were collected from July 2023 to December 2023.

To improve the analytical and conceptual foundation, this study thoroughly investigated secondary published materials from the Scopus, Web of Science, and Google Scholar databases, including relevant books, journal articles, conference papers, and book chapters published from 2015

to 2024. The collected raw data were inserted into the database system, and the validity of the data was validated through comprehensive analysis. Survey data were analysed using Microsoft Excel and SPSS software, with illustrations of the variables and characteristics.

Ethical approval statement

Ethical approval for this study was obtained from the SUST Research Ethics Board (SREB), Shahjalal University of Science and Technology, Sylhet (Approval Reference No: DSL-345, Date: 29 January 2025). All procedures involving human participants were conducted in accordance with institutional guidelines and the ethical standards of the Declaration of Helsinki. Informed consent was obtained from all participants prior to data collection.

Findings

Table 1: Traditional and digital Channels of providing SSN programs services

Traditional Channel of cash transfer	Digital channel of cash transfer
- Traditional financial services - Banking channels - Hand to hand cash providing	- Digital financial services - Mobile financial service (MFS) - Online banking. - Mobile wallet.

This study explores the traditional and digital channels of cash transfer systems for SSN programmes in Bangladesh. Traditional financial services for cash transfer systems in SSN programs include banking channels and hand-to-hand cash provisions. Digital financial services for cash transfer systems in SSN programs include Mobile Financial Services (MFS), mobile wallets, and online banking. In the following section, a semi-structured survey questionnaire is analysed using the Pearson Chi-Square test and Likelihood Ratio test.

Table 2: Pearson Chi-Square test & Likelihood Ratio test

Indicators	Pearson Chi-Square test p-value	Pearson Chi-Square test Value	Likelihood Ratio test p-value	Likelihood Ratio test value
Do you know about social safety net programmes?	.014	8.521	.021	7.687
Do you know about digital financial services (DFSs)?	.000	35.85	.000	24.176
Do you know how and for what purpose DFS is used in SSNs programs?	.000	19.403	.000	17.453
Are the existing channels or DFS in	.034	6.791	.023	7.558

providing a social safety net more effective than traditional banking channels in SSNs programs?				
Do you think DFSs are secure and safe for providing services or cash transfers for SSNs programs?	0.054	5.829	0.071	5.278
Do you think DFSs are useful for providing access to affordable financial services for SSNs beneficiaries?	0.853	0.317	0.818	0.402
Do you think it is cost effective for SSNs programs?	.034	3.158	.034	5.156
Do you think DFSs are a speedy way to complete transactions for both the government and beneficiaries?	0.015	8.371	0.055	5.788
Did you find any challenges when using the DFSs?	0.152	3.765	0.125	4.165

p<0.05, for Pearson Chi-Square

p<0.05 for Likelihood Ratio test

However, in Table 2, the authors contained 09 questions in table-2 that were asked to respondents. From those 09, the authors discussed three important items: questions 3, 4, and 5. Of the remaining six items, 03 three items (2, 7, and 8) were significant ($p < 0.05$), and the other 03 three items (1, 6, and 9) were not significant ($p > 0.05$). The respondents' answers to question 3 about the purpose and use of DFS in financial transactions in SSNs programs were significant ($p < 0.05$) according to the chi-square and Likelihood Ratio tests. DFS provides greater convenience and accessibility for individuals who may not have access to traditional banking services. Digital channels such as mobile phones and the Internet can enable individuals to access financial services anywhere and at any time without the need to physically visit a bank branch. This can be particularly important for beneficiaries of SSNs living in remote or rural areas where traditional banking services may be limited or unavailable. DFS can help individuals save money and manage their finances effectively. By providing access to savings accounts, insurance products, and other financial services, DFS can help individuals build financial resilience and protect themselves from unexpected expenses and income shock. DFS provides financial services to underserved populations, including individuals who may not have access to traditional banking services. The use of DFS for financial transactions can be significant for individuals by providing greater convenience, accessibility, and security for financial transactions and helping promote financial inclusion and economic growth in SSN programs.

The respondents answered question 2 about the effectiveness of the existing system or the DFS of providing social safety nets, rather than traditional banking channels. Responses were significantly more effective ($p < 0.05$). DFS can increase the efficiency and effectiveness of SSNs by reducing the costs and time required to deliver cash transfers and other forms of assistance. Using digital channels, payments can be processed more quickly, securely, and at a lower cost than traditional payment methods or banking, such as cash or checks. Traditional banking channels are time-consuming, costly, and systematically complex for both governments. DFS can help improve the targeting and distribution of SSNs by enabling payments to be delivered directly to beneficiaries' mobile phones or digital wallets. This can help reduce leakage and fraud and ensure that payments reach their intended recipients. The existing system for providing DFS to SSNs can be significantly effective by increasing the efficiency, effectiveness, and inclusivity of social safety nets, and promoting financial inclusion and empowerment.

Question -5, which concerns the security and safety of DFS in transferring cash in SSNs programs and the respondents' perceptions about this, was not significant ($p > 0.05$), which implies that they do not feel that DFS is still safe and secure. Because people may think that the use of digital channels for financial transactions can increase the risk of cybersecurity breaches, including hacking, phishing, and identity theft. This can result in financial losses and personal data being compromised by the SSN beneficiaries. Moreover, consumer protection laws and regulations may be weaker or less developed in developing countries such as Bangladesh, which can increase the risk of fraud and abuse by service providers or other actors in the digital financial ecosystem. In addition, many individuals in developing countries may not be aware of the risks and benefits of digital financial services and may therefore be more vulnerable to scams and other forms of fraud. A lack of education and awareness can also limit the ability of SSN beneficiaries to make informed decisions regarding financial transactions. However, DFSs are not always secure or safe from an individual's perspective, particularly in Bangladesh. To address these challenges, SSN programs will require intensive efforts from stakeholders across the digital financial ecosystem, including service providers, regulators, and consumers. One of the insignificant items, one item is that DFS is useful for accessing affordable financial services in SSNs. This is not significant because DFS may not always offer the full range of financial products and services that beneficiaries need, such as credit or insurance. This can limit the usefulness of DFS for individuals seeking access to affordable financial services. Furthermore, many individuals in Bangladesh may lack the financial literacy required to effectively use digital financial

services. This can limit their ability to make informed decisions about financial products and services and increase the risk of fraud and other forms of financial exploitation. Although DFS has the potential to increase access to affordable financial services for SSNs beneficiaries in Bangladesh, several challenges limit its usefulness. DFSs supported the government in providing support to beneficiaries during the pandemic, as using banking channels for financial transactions was extremely risky. These items are insignificant because individuals in Bangladesh face several challenges when using DFS, including limited access to technology, low levels of financial literacy, high transaction costs, cybersecurity risks, limited consumer protection, limited interoperability, and a lack of trust in digital systems. Of the significant items, items 7 and 8 concerned the cost-effectiveness and speed of DFS. These two are significant because DFS can be a cost-effective and rapid way to conduct financial transactions in SSN programs, especially in Bangladesh, where traditional banking infrastructure may be limited.

DFS leverages digital technology to allow SSN beneficiaries to access financial services through their mobile devices, without the need for physical bank branches or ATMs. Moreover, compared to traditional banking, DFS can offer lower transaction costs because it does not require physical infrastructure and can leverage existing mobile networks. In addition, digital transactions can be processed quickly, allowing individuals to send and receive money in near real time. Overall, DFS can offer a cost-effective and rapid way for SSN recipients in Bangladesh to access financial services and conduct transactions, especially in areas where traditional banking infrastructure may be limited. Overall, DFS has the potential to contribute significantly to the effectiveness of social safety net programs by improving the efficiency, transparency, and accountability of aid distribution; reducing transaction costs; and promoting financial inclusion. However, it is important to address the challenges and risks associated with DFS, such as limited access to technology, low levels of financial literacy, and cybersecurity risks, to ensure that the benefits of DFS are realized.

Discussion

DFSs have revolutionized financial inclusion in Bangladesh through their SSN programs. Most people who are aware of DFS consider it to be a speedy, convenient, and cost-effective medium for completing financial transactions. Despite these benefits, users find it challenging to use DFSs in SSN programs because of the lack of financial and digital literacy, awareness, and digital fraudulence activities. The Government of Bangladesh is continuing SSN programs by allocating a specific portion of the budget and the support of different renowned international organizations, such as Australian Aid, UK Aid, and UNDP. The total budget for Social Safety Net

Programs (SNP) was TK.81 865crore in FY-2019-20, which was almost 2.58% of total GDP. In FY2020-21, the SSNP budget increased by 28.51%, which was 3.01% of the total GDP. This significant increase addressed the current economic situation, which is vulnerable to the COVID-19 pandemic. Among the total budget, around USD 3187094 has been announced for various cash-based allowances, such as old age allowances, allowances for widows, deserted and destitute women, financially insolvent, disabled, and others. In addition, USD 386,354 has been allowed for educational and non-educational stipend programs (Social Safety Net: 2019-20 & 2020-21 Financial Year, 2022).

All budgeted costs include considerable costs of training, delivery, and other formalities. This can be significantly reduced by introducing DFSs into the cash transfer delivery mechanism. Along with the underlying costs involved in the banking channel delivery mechanism, this study reveals various drawbacks of distributing SSN benefits in Bangladesh. Currently, coverage of rural banking facilities must be improved to reach all beneficiaries in rural areas. Therefore, the DFS mechanism is more convenient for beneficiaries than traditional banking channels under both good and bad economic circumstances. Again, transparency must be maintained in the existing system, resulting in distribution channel leakage. Additionally, proper guidelines to ensure accountability have led to corruption. Finally, mismanagement of improper coordination saves time and money, and beneficiaries are deprived of benefits. This study explores whether DFSs can create a positive vision and reach the target population by ensuring accountability and transparency to a large extent. Therefore, the government can save millions of dollars, which could occur because of the system loss in the existing system of providing SSN benefits. However, this study also identifies challenges that the government may face when introducing DFSs as a delivery mechanism to distribute SSN cash support. The significant risks include data privacy, risk management, and security issues. Thus, for the successful implementation of DFSs, data privacy and security management risks must be addressed appropriately. Properly framing rules and regulations, developing financial and digital infrastructures, and government commitment can resolve these issues.

Conclusion with policy implications

The introduction of social safety net programs in Bangladesh has contributed significantly to poverty alleviation since 1974. Since its inception, this program has addressed destitute people, widows, the elderly, and deserted women to ensure food and financial inclusion. The strategy and policy regarding the programs have been changed to reach the target beneficiaries and ensure maximum inclusion. However, there are many

criticisms and barriers regarding the distribution of SSN benefits to the beneficiaries. Problems in traditional banking channels, such as the cash distribution of SSN programs, are still in the discussion stage. This study showed that the traditional distribution channel system can only partially reach the target population.

The system is costlier and criticized for its lack of transparency, accountability, and reliability. Therefore, in the banking channel, it is not possible to justify whether SSN benefits reach the target beneficiaries because of intermediate interference, nepotism, and corruption. Furthermore, to effectively reach the target population or beneficiaries, it is necessary to introduce DFS into the distribution of cash-based benefits in SSN programs. Using MFS, it is possible to transfer cash to beneficiaries directly from the central database, and there is a lower chance of intermediate interference, nepotism, and corruption. Therefore, DFSs are a rapid method of cash transfer that manages time for both governments and beneficiaries. However, some issues arise in DFS transactions, such as data privacy, safety, and knowledge of SSN beneficiaries regarding DFS transactions. Furthermore, by considering the above recommendations with the advancement of convenient rules and regulatory frameworks for the digital infrastructure of DFS and, more specifically, MFS, it is conceivable to ensure easy and cost-effective cash transfer to SSN benefits. Finally, it is crucial to ensure substantial support or commitment from government officials for the proper implementation of DFSs to accelerate safety net programs to alleviate poverty in Bangladesh. This study makes the following recommendations regarding the effective operation of DFSs in accelerating SSN programs in Bangladesh.

- To make the SSN distribution more effective, efficient, and well accepted. Government officials must address loopholes in the traditional distribution channels of SSN programmes.
- After addressing the loopholes in existing systems, it is necessary to develop a strategy that involves the necessary steps to introduce DFSs as the most cost-effective and quickest approach to distributing SSN cash benefits.
- The existing rules and regulations must be revised to eliminate all hindrances in introducing DFSs as delivery mechanisms for SSN benefits.
- The government, especially the Ministry of IT, should take more initiative to improve the digital financial infrastructure throughout the country.
- Necessary initiatives are essential for training arrangements, seminars, and campaigns to provide beneficiaries with the knowledge to use DFSs to obtain cash benefits under SSN programs.

- A central digital database of beneficiaries under SSN programs must be developed to ensure rigorous investigation, monitoring, and supervision by concerned authorities.
- A simple, convenient, and transparent procedure needs to be ensured while listing beneficiaries' names and opening accounts in their names for their registered phone numbers.
- Developing DFS channels with high safety, security, and convenience so that beneficiaries feel comfortable.

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Data Availability: All data are included in the content of the paper.

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