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# Digital and financial inclusion: the classic case of Stree Nidhi

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> *Microfinance has already shown that enabling the poor to empower themselves economically can be a good business. (Pierre Omidyar, Founder of Ebay, 2005, Mongabay News (2005))*

Over the years, the role of microfinance as a tool for poverty reduction has been widely recognized, and the United Nations declared 2005 as the year of microcredit (Mahajan, 2005). Accordingly, microfinance programmes and institutions have become an important component of strategies towards poverty reduction (Hulme, 2000). The long-term association and continuous participation of members in microcredit programmes has helped participant households to earn higher incomes, increase their levels of consumption, and has reduced poverty in Bangladesh (Khandker and Samad, 2014). While some researchers (Hossain, 1988; Remenyi, 1991; Otero and Rhyne, 1994; Holcombe, 1995; Schuler et al., 1997; Khandker, 1998) find that microfinance makes a positive contribution to poverty alleviation, others (Adams and von Pischke, 1992; Montgomery, 1996; Rogaly, 1996; Buckley, 1997; Wood and Sharrif, 1997; Hulme, 2000) show the flip side of microfinance and comment that it cripples the prospects of the poor. Many researchers conclude that microfinance does not reach the poorest of the poor (Scully, 2004) or that they are actively excluded from the system (Simanowitz, 2002).

Nevertheless, microfinance institutions have been growing over the past 20 years. Thousands of microfinance institutions (MFIs) in India are considered effective and essential tools to curb poverty. The institutions range from the keystone of microfinance, i.e. self-help groups, to commercial banks that provide financial and investment services to millions of low-income households and microenterprises. Strengthening the ecosystem, these MFIs receive support from donor agencies, lenders, investors, network organizations, management consulting firms, rating firms, and other specialized businesses. These organizations in aggregate make up the thriving global microfinance industry. MFIs emphasize three major areas: 1) a focus on financial inclusion as the strategic part of their agenda; 2) helping the poor and the unbanked population through social-performance measures, the right mission, and client-protection processes; and 3) becoming an avenue of investments for banks and investors.

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Financial inclusion has always been an important development policy in India. With COVID-19 hitting the country, it became a compulsion to provide digital financial inclusion and literacy to the unbanked or digitally backward rural areas.

Comprehensive financial inclusion involves providing access to basic financial services such as savings, credit, insurance, pensions, and remittances, and also ensuring their usage by leveraging technology. In the era of digital financial inclusion, one of the main challenges faced by policymakers is to provide affordable, instantaneous, and user-friendly access to financial products and services to the average person. Technology offers solutions to overcome these barriers and to accelerate the pace of digital financial inclusion. Gone are the days when only the banks and financial institutions had a captive market in offering financial services to customers; now, financial technology (fin-tech) companies and mobile operators have entered the financial markets with innovative and disruptive technologies. In social sciences, there are many institutional innovations that offer customer centricity, cost reduction, and speed while extending services to the financially excluded.

Let us discuss one such institutional innovation, Stree Nidhi, and examine whether the same can be replicated across the country.

## Review of the literature

MFIs have been great contributors to providing long-term sustainability to rural entrepreneurship. The microfinance industry is diverse, with several platforms providing financial services such as saving accounts, credit, insurance, pensions, money transfers, among several others. Through these services, MFIs have become positive contributors in the alleviation of poverty (Buckley, 1997; Hulme, 2000). With an increasing role in aiding low-income individuals and groups, MFIs are participating in policy formulation and economic development. Fostering economic justice to the ultra-poor, MFIs seek to address the needs of the unbanked by providing financial inclusion. By creating a financial ecosystem for low-income groups, they are working towards social finance that encompasses social enterprise lending (Woller et al., 1999), community investing (Dieckmann et al., 2007), and social impact bonds (Burand, 2012).

In India, MFIs operate in two broad categories: individual models and group models. While self-help groups (SHGs) and joint-liability groups (JLGs) operate under the group model, individual banking is done under the MFI model (Basu and Srivastava, 2005). The SHG-Bank Linkage Programme (SHG-BLP) has changed lives by integrating women and making them partners in our nation-building process. Various studies have shown that the microfinance industry segment has the potential to grow at a Compounded Annual Growth Rate (CAGR) of 40 per cent by 2025 (Gurung, 2020). At the same time, India is also poised to become a US$5 trillion economy by 2025 (Dimri, 2019; Qureshi and Bhanot, 2020). The SHG-BLP is the largest microfinance programme in the world (Mohapatra, 2016): with a total membership of over 11.22 million groups (covering nearly 138 million households) across India, the programme mobilized deposits of

Rs. 374.78 billion, and extended collateral-free loans to 5.78 million SHGs to the extent of Rs. 1.033 trillion as on 31 March 2021 (National Bank for Agriculture and Rural Development, 2021).

Microfinance's ability to incorporate the excluded, particularly India's rural women community (Sinha et al., 2019), by providing them with the correct channels, literacy, and technical knowledge is critical to the economy's future. If digitization was already a high-priority concern for financial institutions prior to the global pandemic, COVID-19 and its social distancing obligations has further exacerbated its urgency. The ability of financial institutions to engage with their customers, continue reconstruction efforts, and even pursue loan issuance is largely determined by their level of digitization (Arunachalam and Crentsil, 2020; Malik et al., 2020). Financial institutions that have already set up digital resources can continue to (partially) operate, whereas those (especially MFIs operating in rural areas) that largely depend on branch-based operations are putting their employees and clients at risk, and may be forced to impede recoveries (Sangwan et al., 2021). In addition, most, if not all, banking and financial services depend on the regulatory situation.

Poor households are vulnerable when approaching unscrupulous moneylenders (Othman and Ibrahim, 2020) for their financial requirements during times of crisis, when their sources of income are limited. To deal with the crisis, these families are likely to resort to undesirable survival strategies (Kusum Mukherjee, 2014; Isaac and Sadanandan, 2020) such as asset liquidation, a reduction in food consumption, and the cancellation of healthcare services. In the midst of the crisis, the improvement and presence of competent financial services may increase their financial difficulties.

MFIs are making efforts to provide digital literacy and digital financial inclusion (Mhlanga, 2020) to targeted rural clients. Even the government, through its digital transformation and inclusion schemes and efforts (Kandpal and Mehrotra, 2019) such as the Digital India Programme and Jan Dhan-Aadhaar Mobile, among others, is making joint efforts along with MFIs. However, complete digital financial inclusion is still a farfetched dream that requires joint efforts (Siddik and Kabiraj, 2020) from all the resources, agencies, institutions, regulators, and the government. A multi-dimensional approach (Draboo, 2020) is required for the success of these digital efforts. To achieve last-mile networking in financial inclusion, human resources should be used by skilling and proactively engaging the unbanked population. To realize the anticipated benefits, penetration and digital literacy should go beyond the privileged clientele in India's tier 1 and tier 2 cities (Kandpal and Mehrotra, 2019). Even though digital financial services are easier and less expensive than traditional methods, it takes time to build customer confidence in them.

MFIs have played an important role in pursuing objectives beyond credit lending and savings deposits for the development of vulnerable sections in remote and rural areas. MFIs such as Micro Units Development Refinance Agency (MUDRA) Bank, the Association of Karnataka Microfinance Institutions (AKMI), Shri Mahila Sewa Sahakari (SEWA) Bank, Stree Nidhi Credit Co-operative Federation Ltd (Stree Nidhi), and many others have played a unique role in creating and developing the MFI network (Nagayya and Rao, 2016).

Stree Nidhi was registered under the Andhra Pradesh State *Co-operative Societies Act* 1964 and was formed specifically to cater for the development of women from rural areas of Andhra Pradesh and Telangana (National Institute of Rural Development and Panchayati Raj, 2021). Stree Nidhi places a strong value on client efficiency, rewarding superior performance with larger limits based on these delivery agencies' ratings. It operates on a small margin of roughly 1 per cent (Raju and Rao, 2020) and utilizes the current networking and technology backbone to keep costs down. The model's advantages are that Stree Nidhi takes account of community banking services without necessitating direct interaction with bankers, and customers can get credit into their accounts within 48 hours. This significantly saves both parties on transaction costs (Mani and Tandon, 2015).

Stree Nidhi's operations rely heavily on technology. The system combines mobile technologies for data collection with a web-based interface for processing and information distribution (Nagayya and Rao, 2016).

With many clients lacking digital literacy and digital infrastructure, capacity building of the digital ecosystem becomes essential to achieve the milestones set by policymakers. The phenomenal success of MFIs' various models demonstrate that every woman could be a fledgling capitalist entrepreneur, and that microfinance may be a potent instrument for releasing billions of entrepreneurs by providing them with just a small amount of capital. Understanding the culture of poverty is the foundation of MFIs' work, and achieving riches at the root of the pyramid necessitates knowledge and empathy.

## Discussion and analysis of Stree Nidhi

Stree Nidhi Credit Co-operative Federation Ltd, a community-owned and managed financial institution, was established as a social enterprise on 7 September 2011 by the then united Andhra Pradesh (AP) government to provide financial services to SHG women. It was established jointly by the federations of SHGs, namely Mandal Samakhyas (MS), town-level federations (TLFs), and the erstwhile government of Andhra Pradesh. Later, as per the AP state *Reorganization Act* 2014, Stree Nidhi was bifurcated into two entities, namely Stree Nidhi AP and Stree Nidhi Telangana. It is a digital innovation in the Indian financial inclusion space since the credit delivery to the poor is enabled through community resource persons (CRPs) by leveraging technology. The unique feature of the Stree Nidhi business model is that it provides borrower-friendly, affordable, adequate, and timely credit. Borrowers obtain general-purpose loans within 48 hours from the time they submit their application to Stree Nidhi through a tablet personal computer (tablet PC) operated by the CRPs.

Stree Nidhi's main objective is financial empowerment of the poor by providing credit and other related services to ensure sustainable income through the creation of livelihoods. It has been providing credit to micro/nano-enterprises, extending project-based lending to enhance livelihoods, and financing the agricultural value chains of farmer producer organizations (FPOs). Stree Nidhi's loans are designed to suit the various needs of the customers, considering the maturity level of the SHGs, be it for consumption purposes, education/healthcare, or any income-generating activity. Brief details of Stree Nidhi's performance in AP and Telangana are given in Tables 1 and 2.

Tables 1 and 2 show the performance of Stree Nidhi since its inception. While Stree Nidhi AP's net worth increased from Rs. 59.26 crore in 2011–12 to Rs. 433.37 crore in 2019–20, Stree Nidhi Telangana's capital increased from Rs.181.98 crore in 2014–15 to Rs. 531.03 crore in 2019–20, reflecting its capital adequacy.

Stree Nidhi AP's capital adequacy ratio was at 21.92 per cent, whereas Stree Nidhi Telangana's capital adequacy ratio stood at 30.40 per cent as on 31 March 2020 (compared to the prescribed level of 15 per cent as per the Reserve Bank of India's (RBI) guidelines in respect of the MFI-NBFC category of institutions). Therefore, there is a lot of scope for increasing its loan portfolio given its excessive capital resources.

While gross non-performing assets (GNPAs) of Stree Nidhi AP stood at Rs. 9.19 crore (0.44 per cent), Stree Nidhi Telangana's GNPAs reached to Rs. 127.32 crore (3.71 per cent) as on 31 March 2020. The bad loans of Stree Nidhi Telangana rose during March 2020, mainly due to the outbreak of the COVID-19 pandemic. However, the asset quality of Stree Nidhi (both in AP and Telangana) was in a far better position compared to all scheduled commercial banks in India, the GNPAs of which stood at 8.20 per cent as on 31 March 2020 (RBI, 2021).

While the management efficiency of Stree Nidhi can be viewed from the size of its loan book, its liquidity profile may be gauged from mobilization of resources from the market. Essentially, a financial institution will have adequate liquidity when it can mobilize financial resources at short notice, which will reflect its credit worthiness in the market (Srikanth and Kishore, 2014). While Stree Nidhi AP had extended credit to 9,30,425 SHG borrowers with a total loan portfolio of Rs. 2,068.32 crore, Stree Nidhi Telangana had 4,56,835 borrowers with a loan book of Rs. 3,431.80 crore as on 31 March 2020. Essentially, Stree Nidhi extended microcredit of over Rs. 5,500 crore to nearly 14 lakh SHG women mainly due to its managerial efficiency, dedicated leadership, and requisite support from the respective state governments.

While Stree Nidhi AP mobilized total resources of Rs. 1,451 crore through collection of deposits and borrowing from the market, Stree Nidhi Telangana mobilized total resources of Rs. 2,661 crore as on 31 March 2020.

Stree Nidhi AP's net profit increased steeply from Rs. 1.44 crore to Rs. 91.14 crore during the period 2011–20, and Stree Nidhi Telangana's net profit steadily enhanced from Rs. 18.51 crore to Rs. 74.92 crore during period 2014–20. Whereas Stree Nidhi AP had a return on assets at 4.06 per cent, the corresponding figure in respect of Telangana was 2.11 per cent as on 31 March 2020, reflecting good profitability.

Furthermore, Stree Nidhi AP as well as Stree Nidhi Telangana have social audit and corporate governance systems in place to ensure end use of loans and to prevent fraud. The services of community audit resource persons (CARPs) are being utilized for this purpose. While Stree Nidhi Telangana accumulated more net worth and a higher loan book than that of Stree Nidhi AP, its net profit was on the lower side as on 31 March 2020.

**Table 1** Performance Indicators of Stree Nidhi AP (Rs. in Crore)

| *Financial year* | *Capital Resources* | *Asset Quality* | *Managerial Efficiency* | | *Earnings* | | | *Liquidity* | |
|---|---|---|---|---|---|---|---|---|---|
| | *Share capital, reserves & surplus, and grants (^CAR in %)* | *Gross NPA (GNPA in %)* | *Size of loan book* | *Number of borrowers* | *Net profit* | *Return on assets (%)* | *Net interest margin (%)* | *Deposits* | *Borrowings from market* |
| 2011–12 | 59.26 (160.02) | 0.00 (0.00) | 62.46 | 54,871 | 1.44 | 1.16 | 1.56 | 0.00 | 0.00 |
| 2012–13 | 146.19 (43.06) | 1.50 (0.25) | 577.51 | 4,04,233 | 16.75 | 3.07 | 2.42 | 21.75 | 325.00 |
| 2013–14* | 154.19 (25.87) | 6.38 (0.63) | 1,012.14 | 5,42,706 | 22.06 | 4.83 | 4.03 | 77.82 | 685.00 |
| 2014–15 | 162.61 (21.54) | 27.95 (4.51) | 618.51 | 2,16,468 | 15.13 | 2.01 | 6.55 | 68.01 | 337.04 |
| 2015–16 | 240.92 (28.31) | 12.36 (1.25) | 989.95 | 3,92,476 | 39.59 | 3.23 | 6.81 | 174.19 | 552.22 |
| 2016–17 | 273.50 (24.47) | 19.53 (1.42) | 1,378.53 | 5,43,399 | 63.94 | 3.96 | 6.36 | 238.28 | 830.38 |
| 2017–18 | 321.30 (32.46) | 25.98 (2.12) | 1,224.31 | 3,62,326 | 76.21 | 4.87 | 7.05 | 307.10 | 529.11 |
| 2018–19 | 385.42 (41.47) | 19.98 (1.80) | 1,111.53 | 1,89,813 | 75.15 | 4.77 | 7.33 | 373.79 | 297.10 |
| 2019–20 | 433.37 (21.92) | 9.19 (0.44) | 2,068.32 | 9,30,425 | 91.14 | 4.06 | 7.29 | 462.85 | 988.21 |

*Source*: Annual Report of Stree Nidhi, various issues

Note: Figures in parentheses represent percentage

^CAR refers to Capital Adequacy Ratio; *combined figures of Stree Nidhi AP and Telangana till March 31, 2014.

**Table 2** Performance Indicators of Stree Nidhi Telangana

| *Financial Year* | *Capital Resources* | *Asset Quality* | *Managerial Efficiency* | | *Earnings* | | | *Liquidity* | |
|---|---|---|---|---|---|---|---|---|---|
| | *Share Capital, Reserves & Surplus, and Grants* | *Gross NPA (GNPA in %)* | *Size of Loan Book* | *Number of Borrowers* | *Net Profit* | *Return on Assets* | *Net Interest Margin* | *Deposits* | *Borrowings from Market* |
| 2014–15* | 181.98 (38.97) | 3.46 (0.44) | 785.91 | 3,36,900 | 18.51 | 3.52 | 4.30 | 164.77 | 457.74 |
| 2015–16 | 220.14 (35.86) | 5.74 (0.43) | 1,330.12 | 4,54,390 | 37.25 | 3.84 | 5.78 | 317.97 | 824.34 |
| 2016–17 | 257.05 (33.73) | 16.03 (0.89) | 1,798.46 | 4,88,078 | 49.96 | 2.96 | 5.68 | 431.40 | 1,152.23 |
| 2017–18 | 334.84 (31.33) | 19.17 (0.79) | 2,427.32 | 6,36,494 | 58.91 | 2.60 | 5.63 | 521.08 | 1,602.29 |
| 2018–19 | 430.32 (28.82) | 16.31 (0.51) | 3,183.55 | 7,01,034 | 66.97 | 2.23 | 4.92 | 597.95 | 1992.80 |
| 2019–20 | 531.03 (30.40) | 127.32 (3.71) | 3431.80 | 4,56,835 | 74.92 | 2.11 | 4.53 | 642.32 | 2018.67 |

*Source*: Annual Report of Stree Nidhi, various issues

Note: *Stree Nidhi was divided into two entities after bifurcation of the erstwhile Andhra Pradesh in June, 2014

Figures in parentheses represent percentage; ^CAR refers to Capital Adequacy Ratio

By leveraging technology and following best practices, Stree Nidhi Telangana is a noteworthy development microfinance model. Overall, Stree Nidhi has witnessed spectacular growth in terms of deposits, loans, capital resources, and number of SHG borrowers during the last eight years.

### *Stree Nidhi: a success story*

Stree Nidhi has granular data in respect of all its members, and disburses credit according to the credit rating of the SHGs. Loan defaulters under the SHG-Bank Linkage Programme do not receive finance from Stree Nidhi. Stree Nidhi has embraced technology to a greater extent in operations such as loan application, documentation, and processing in accordance with the household livelihood plan (HLP) of the SHG members submitted online. Credit risk is minimized by proper assessment of the financial needs of borrowers based on the HLP; furthermore, Stree Nidhi uses social audit mechanisms to ensure the end use of loans and to prevent fraud. Every loan given by Stree Nidhi to its members is covered under the Stree Nidhi insurance scheme. Also, Stree Nidhi has collaborated with community-based financial institutions, banks, and the government to source low-cost funds, thereby improving its operational efficiency. Therefore, the transaction costs of Stree Nidhi are on the lower side when compared to other MFIs.

Stree Nidhi Telangana builds the capacity of SHG members through CRPs; about 300 active members from the SHG community with good articulation skills have been identified and named as Stree Nidhi educating helping activities (SNEHAs). These SNEHAs are trained on all functional aspects of Stree Nidhi and are deployed to create awareness on its financial products and services at the member level in villages and slums. So far, awareness has been created in 1,587 village organizations/slum-level federations in Telangana by utilizing the services of SNEHAs. Another capacity-building effort by Stree Nidhi is through village-level entrepreneur (VLE) points. These VLEs act as business correspondents (BCs) of the State Bank of India and Union Bank of India. Through this, banking services reach even the remotest villages in Telangana. Stree Nidhi prepared project profiles of about 100 livelihood activities, which can be downloaded in the tablet PC and submitted online for sanction of loans. If internet connectivity is not available, the same can be completed offline and uploaded later.

On 19 December 2019, Stree Nidhi Telangana launched the *Mana Stree Nidhi* app, which provides real-time data to its members on loans, deposits, insurance, etc., thereby improving transparency in its operations. The app generates a digital trail of information on clients and their business operations. Stree Nidhi has been sensitizing block-development officers (BDOs) about its financial services so that they can disseminate such information to the local community. Stree Nidhi Telangana shares a portion of its profit with the SHG federations, and has so far contributed around Rs. 150 crore, thereby ensuring the sustainability of the SHG ecosystem.

We learnt from our field studies that SHG members from Stree Nidhi AP are selling popular Kondapalli toys and Kakinada kajas through online portals such as Amazon, Flipkart, etc. Similarly, some other SHG members have been engaged in the saree business through social media (WhatsApp). Their business is successful, since they are selling traditional Uppada sarees. Some SHG members market their products through Mahila E-HAAT.[1] We also observed that several SHG women from the weaving community in the Nalgonda and Suryapet districts of Telangana enhanced their income through the sale of Pochampally (Ikkat) sarees, dress materials, and furnishings.

These SHG members are working on a ‘piece rate contract’ rather than producing and marketing on their own. However, their products are sold online through the master weaver/designer/traders. In the village of Malkapur in the Medak District, Stree Nidhi Telangana provided loans to SHGs for vegetable farming. Stree Nidhi coordinated with the state horticulture department and facilitated marketing of vegetables through Rytu Market, Erragadda, Hyderabad. Stree Nidhi is also involved in ‘credit plus services’ by collaborating with the Society for Elimination of Rural Poverty (SERP) and state government departments for handholding and marketing SHG products and services.

### *Stree Nidhi’s standing in the MFI industry*

Over the years, Stree Nidhi has created a niche in the microfinance industry, with its borrower-friendly, low-cost credit model on a digital platform. It is evident from net interest margins (see Tables 1, 2, and 3) that Stree Nidhi has been levying a lower interest rate than other MFIs during the last decade, and has been fostering digital financial inclusion. Furthermore, Stree Nidhi had a higher capital adequacy ratio (CAR) on its risk-weighted assets than that of other MFIs during the last decade. Its combined GNPA ratio (2.5 per cent) is lower than that of other MFIs (4.90 per cent) as of March 2020. Similarly, its return on assets ratios were higher than that of other MFIs as on 31 March 2020, reflecting the robust financial performance of this community-owned and community-managed microfinance model in comparison to the industry as a whole.

## Policy implications

While evaluating the lending operations of an MFI in a research study based in Hyderabad, India, Banerjee et al. (2015) found that no significant improvement took place in respect of health, education, and empowerment of women members of SHGs. They noticed, however, that their expenditure on ‘temptation goods’ – alcohol, tobacco, betel leaves, gambling, and food consumed outside the home – declined during the study period. Furthermore, their findings suggested that ‘not-for-profit microfinance lending coupled with an affordable rate of interest’ may have a larger positive impact on the poor. Viewed from this perspective, the Stree Nidhi business model may be replicated in other parts of India given its customer-centric features: low-cost credit delivery (12.5 per cent per annum), adequate amount of credit (up to Rs. 3 lakh per member based on the HLP), instantaneous credit (within 48 hours), a user-friendly operating model by making use of the latest technology (tablet PCs and text messages for every transaction), and geo-tagging for credit delivery.

**Table 3** Performance Indicators of MFI Industry in India (Rs. In Crore)

| *Financial Year* | *Capital Resources Share* | *Asset Quality* | | *Managerial Efficiency* | | *Earnings* | | |
|---|---|---|---|---|---|---|---|---|
| | *Capital, Reserves & Surplus, and Grants (CAR in %)* | *Gross NPA SHG (GNPA in %)* | *Gross NPA (GNPA in %)* | *Size of Loan Book* | *Number of Borrowers* | *Net Profit* | *Return on Assets (%)* | *Net Interest Margin (%)* |
| 2011–12 | 21% | 6% | 2.78% | 20,900 | NA | (–) 358 | 2% | 16% |
| 2012–13 | 19.40% | 7.00% | 0.40% | NA | NA | 181 | 1% | 10% |
| 2013–14 | 19.60% | 6.80% | 0.02% | 33,517 | NA | 734 | 1.94% | 10.60% |
| 2014–15 | 19.10% | 7.40% | 0.21% | 48,882 | NA | 1,170 | 1.73% | 10.20% |
| 2015–16 | 19.39% | 6.45% | 0.15% | 63,853 | NA | 1,376 | 2.20% | 10.00% |
| 2016–17 | 21.13% | 6.50% | 0.69% | 46,842 | NA | 1,286 | 2.40% | 8.08% |
| 2017–18 | 22.10% | 6.12% | 1.48% | 68,789 | NA | 1,225 | 1.63% | 9.55% |
| 2018–19 | 23.06% | 5.20% | 0.68% | 1,78,531 | 8.65 | 2,421 | 2.06% | 9.72% |
| 2019–20 | 21.43% | 4.90% | 0.69% | 2,36,427 | 10.85 | 2,076 | 1.64% | 9.90% |

*Source*: The Bharat Microfinance Report 2011 to 2020; NA = Data unavailable

**Table 4** Digital Financial Inclusion

| *Generation of Financial Inclusion* | *Model/Programme of Financial Inclusion* | *Key Features* |
|---|---|---|
| First generation | Nationalization of Commercial Banks/Social banking | Various poverty alleviation programmes of the government |
| Second generation | Integrated Rural Development Programme, Lead Bank Scheme, Differential Rate of Interest, etc. | Savings and term loans, to the poor, along with subsidy |
| Third generation | SHG-BLP 1.0 followed by SHG-BLP 2.0; and MFIs | Savings, term loans and working capital loans to the poor |
| Fourth generation | Stree Nidhi | Savings, term loans, working capital loans and insurance |
| Fifth generation | Convergence of SHG-BLP, Farmer Producer Organisations and Stree Nidhi | Seamless and integrated financial super market for the poor (digital financial inclusion) |

*Source*: Authors' own based on review of literature

As Stree Nidhi has been extending loans to FPOs, convergence of SHGs with FPOs will be a game changer in achieving sustainable development goals. Table 4 depicts the emergence of Stree Nidhi as a viable solution for achieving digital financial inclusion during post COVID-19 conditions.

A high-powered committee constituted by the Government of India recently recommended that community-owned and managed financial institutions like Stree Nidhi are the most appropriate solutions for the alleviation of poverty in India. Bihar, Rajasthan, Tamil Nadu, and West Bengal have already conducted feasibility studies and submitted proposals to the government in order to replicate the business model of Stree Nidhi in their respective states.

COVID-19 has changed the entire world, more specifically the SHG members, who are at the bottom of the population pyramid. A major hurdle in achieving digital financial inclusion in India is low financial literacy (both concept and process literacy) among SHG members. The members' trust should be enhanced while deepening digital financial inclusion by focusing on consumer protection, grievance redressal mechanisms, and handholding support. Stree Nidhi, through its digital inclusion programmes, is able to overcome the digital divide present among SHG members. Stree Nidhi enabled SHGs to operate their cash transactions through electronic banking during the COVID-19 pandemic. SHGs are able to meet their peers on digital media, without meeting in person, and maintain their records on tablet PCs, thereby improving their credit score. SHGs can market their products through e-commerce portals like Amazon, Big Basket, Flipkart, etc., thereby generating more revenue to repay their bank loans on time. Most importantly, SHG members can undertake online training in respect of financial/digital literacy, group dynamics, market linkages, risk management, and ethics. It is no wonder that Stree Nidhi can bring smiles to every SHG member during this pandemic situation.

## Conclusion

The SHG movement needs a next generation of reforms to achieve inclusive growth in India. As the maturity level of SHGs across the country is not uniform and requires tailor-made treatment to expand the programme, the Stree Nidhi microfinance model on digital platforms may be implemented across India to overcome the ill effects of COVID-19. Taking the lead in contactless operations, Stree Nidhi should continue to debug its digital channels, and help to minimize physical contact and safeguard employees and customers through digital initiatives. In the long run, digitization is expected to enhance efficiency and productivity by minimizing costs and maintaining transparency in operations. Through the unique features on its online portal (such as automated validations at the time of loan applications, online/offline appraisal of loans', an online work-done module, a robust Management Information System (MIS), the loan Suraksha module, and the Mana Stree Nidhi app), Stree Nidhi is able to reach more than 14 lakh SHG borrowers with smartphones. With increasing dependence on technology, client protection and building strong fiduciary relationships should be the main focus of Stree Nidhi. With a lack of proper digital and financial literacy, clients may feel insecure in associating themselves with MFIs. Policymakers should focus on this to achieve digital financial inclusion through Stree Nidhi.

## Note

1. Mahila E-Haat is an online marketing platform for women entrepreneurs to showcase their products and services. It is an initiative from the Ministry of Women and Child Development, Government of India to meet the aspiration of poor women.

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