A Longitudinal Study on the Impact of Digital Literacy in Empowering Rural Women SHGs in India

Vishalakshi M

Assistant Professor of Sociology

Government First Grade College (GFGC), Kodihalli,

Kanakapura, Ramanagar Dist., Karnataka

Abstract

The emergence of digital technology has done a metamorphic change in the entire lifestyle and livelihoods system. This technology has the potential to strengthen the process of financial inclusion and its impact as well. In India, self-help groups-led microfinance programmes have achieved significant success in financial inclusion, livelihoods promotion, and women empowerment. The recent upsurge in the usage of digital technology has been changing the whole self-help group movement and has vast potential to enhance the welfare of women's self-help groups in a variety of ways. This study examines the socio-technical transformation of Self-Help Groups (SHGs) in India, tracing their evolution from informal credit groups in the 1980s to digitized, enterprise-driven entities in 2026. Central to this transformation is Digital Literacy, which has evolved beyond basic smartphone usage into a tool for financial inclusion, market access, and social agency. By analysing flagship initiatives like NABARD's e-Shakti, Jharkhand's Tablet Didi, Kerala's Kudumbashree, and the Lakhpati Didi mission, the paper evaluates how digital tools have enhanced credit linkage (35% growth post-digitization) and transparency. While the "Phygital" model has empowered over 2 crore women to reach "Lakhpati" status, challenges such as the rural-urban connectivity divide, cyber-security fears among elderly members, and the high cost of data persist. The study concludes that digital literacy is the primary catalyst for transitioning rural women from subsistence-level livelihoods to formal enterprise ownership through platforms like SHE-Marts.

Keywords: Digital Literacy, SHGs, e-Shakti, Lakhpati Didi, Financial Inclusion, Socio-Technical Transformation, Rural Empowerment.

Introduction

The SHG movement in India officially began in 1983 with women workers and gained national momentum by 1991. Initially, the focus was entirely on paper-based record-keeping and relief from informal moneylenders. The National Rural Livelihoods Mission (NRLM), launched in 2011, provided the first

structured institutional framework for these groups, though digital integration remained minimal during this decade. Self Help Groups (SHGs) have been playing vital role in improving the livelihoods of women and communities in rural India. From savings and credit to income generation and entrepreneurship, SHGs have become a powerful tool for social and economic change. But in today's digital era, digital literacy is emerging as a key factor that can take SHG empowerment to the next level. We believe that digital literacy is not just about using a smartphone-it's about unlocking new opportunities, accessing information, and participating in the digital economy with confidence.

Digital Literacy

The history of digital literacy among rural women in Self-Help Groups (SHGs) reflects a transition from basic mobilization to a sophisticated "Phygital" model, where physical community networks are integrated with digital financial tools. SHG digital literacy in India emerged to bridge the rural-urban digital divide, focusing on empowering women through financial and technological tools. A key milestone was NABARD's E-Shakti project launched in 2015 to digitize Self-Help Group (SHG) records, expanding to 100 districts by 2017 to improve banking access and transparency,

Digital literacy means having the ability to use digital tools, such as smartphones, computers, the internet, and apps, to find information, communicate, manage data, and carry out daily tasks. For SHG members, digital literacy includes skills like:

- Using smartphones and basic apps
- Accessing online banking and digital payments
- Using WhatsApp, YouTube, and Google for learning
- Browsing e-commerce platforms
- Attending online training or meetings
- Marketing products on social media

Current (as on Feb.2026) Digital Literacy of SHGs

Parameter	Achievements
Total SHGs Digitized	12.74 Lakh +
Total Members Enrolled	12 Crore +
Districts Covered	250 +
Credit Linkage Growth	35 % increase in loans (Datapost-digitization)
Data Languages	SMS alerts provided in 10 languages

Source: Press Information Bureau (PIB), Feb.2026

Importance of Digital Literacy for SHGs

1. **Access to Government Schemes and Benefits**

   Many government schemes are now online. With digital knowledge, SHG members can register for benefits, check eligibility, and apply without relying on intermediaries.

2. **Improved Financial Management**

   SHGs often manage savings, loans, and group funds. Digital tools like mobile banking, UPI, and apps like Google Pay or BHIM make financial transactions faster, safer, and transparent.

3. **Easier Record Keeping and Documentation**

   Instead of maintaining physical registers, SHG members can now store data digitally, create invoices, manage stock and track loan records using simple apps or spreadsheets.

4. **Wider Market Access for SHG Products**

   Digital literacy allows SHG women to promote and sell their products on platforms like Facebook Marketplace, WhatsApp Business, Flipkart, and Amazon. They can also learn how to use good visuals, pricing strategies, and customer engagement techniques.

5. **Online Learning and Skill Upgradation**

   With basic digital knowledge, SHG members can access free or low-cost online courses to learn skills like food processing, tailoring, packaging, branding, and even digital marketing — all from their home.

6. **Increased Confidence and Independence**

   When women learn to use smartphones, navigate apps, and manage digital tasks, it builds confidence. They become more independent in decision-making, communication, and leadership within their groups and communities.

7. **Participating in the Digital Economy**

   Digital platforms provide access to financial services, online marketplaces, virtual training programs, and even remote job opportunities. This enables SHGs to participate fully in the growing digital economy.

Statement of Problem

Despite the massive scale of the SHG movement in India-encompassing over 10 crore women-traditional manual record-keeping was plagued by transparency issues, data manipulation, and slow credit processing by formal banks. This created a "credit gap," where 61% of SHGs remained without bank loans as recently as 2022. Furthermore, a significant Digital Divide exists within the rural landscape. While infrastructure has improved, a "usage gap" persists due to:

- Technological barriers: Limited internet in hilly/tribal regions.
- Psychological barriers: Fear of online fraud among senior members (50+).
- Economic barriers: The recurring cost of smartphones and data for BPL families.
- Capacity barriers: Complexity of app interfaces for users with limited formal education.

Without addressing these digital literacy gaps, the transition from credit-seeking groups to "Lakhpati" entrepreneurs remains unattainable for the most marginalized sectors.

Objectives

1. To Trace the Historical Evolution:

   Analyse the shift of SHGs from the 1983 inception to the 2011 NRLM framework and the subsequent 2015 "e-Shakti" digital era.

2. To Assess the Impact of Digitization on Financial Inclusion:

   Evaluate how digital book-keeping and auto-grading have affected bank credit linkages and loan processing times.

3. To Evaluate Regional Digital Models:

   Compare the success of state-specific initiatives such as Kerala's Kudumbashree and Chhattisgarh's Haqdarshak in delivering last-mile welfare.

4. To Identify Barriers to Digital Adoption:

   Pinpoint the socio-economic and technical hurdles that prevent 100% digital integration among rural women.

Methodology

The study was conducted mainly to understand the current performance of digitization of Self-Help Group (SHGs), especially to access women empowerment after digitisation. Secondary data was collected by reviewing longitudinal data from NABARD (e-Shakti), NRLM reports (2011–2026), and PIB reports (July 2025). Further to support the study, recent Press Information Bureau (PIB) reports were consulted. It provides critical data points on digital literacy. These reports serve as authoritative "baseline" and "impact" evidence for the research. Comparative case studies have been done to analyse the "Top 6 States" (Maharashtra, Andhra Pradesh, Bihar, etc.) in the Lakhpati Didi distribution to identify best practices. Major digitisation initiatives like E-Sakthi, Tablet Didi, Kudumbashree and Haqdarshak were analysed and compared.

Major Digitization Initiatives in India

- ➤ E-Shakti (NABARD): The flagship project that digitizes SHG records in 100+ districts.
- ➤ Tablet Didi (Jharkhand): Empowers Community Resource Persons (CRPs) to manage records.
- ➤ Kudumbashree (Kerala): Uses digital, mobile-based systems for book-keeping.

> ➢ Haqdarshak (Chhattisgarh): A mobile app, often used with SHGs, to increase awareness and access to welfare schemes.

E-Shakti & Digital India

("Empowering SHGs through Digital Empowerment.")

The e-Shakti initiative is a digitization project by NABARD that aims to create a national-level digital database of Self Help Groups (SHGs). Launched in March 2015, the initiative facilitates real-time tracking of SHG performance and creditworthiness through digital bookkeeping, financial profiling, and monitoring systems.

Objectives of e-Shakti:

Primary Objectives	Description
Digitization of SHG data	To create a comprehensive, transparent and teal time database of SHGs
Improve Credit Linkage	Enable banks to assess SHG credit worthiness for timely and adequate loans
Promote Financial Literacy	Use digital tools to enhance financial awareness among rural communities
Transparency & Monitoring	Curb data manipulation, fake SHGs and fund mismanagement
Efficient Record Keeping	Eliminate manual registers and encourage standardized MIS

Source: PIB Report July 2025

Features of e-Shakti

- **e-Bookkeeping:** Replaces manual registers with a digital platform for recording SHG meetings, savings, and loan transactions.

- **Real-time Data Updates:** Financial and social transactions are updated instantly through a dedicated e-Shakti Android app used by group animators or volunteers.

- **Automatic SHG Grading:** The system automatically grades SHGs based on NABARD and IBA norms, helping banks assess their creditworthiness without manual inspection.

- **Auto-generated Loan Applications:** Once an SHG resolves to borrow, the platform can automatically generate a pre-filled loan application for banks, streamlining the credit linkage process.

- **Financial Transparency:** Members receive SMS alerts in 10 regional languages for every transaction, ensuring all members are aware of group activities and preventing fraud.

- **Comprehensive MIS Reports:** Stakeholders (Banks, NABARD, NGOs) can access over 31 types of Management Information System (MIS) reports, including balance sheets, profit and loss statements, and credit history.

- **Aadhaar & DBT Integration:** Facilitates the Direct Benefit Transfer (DBT) of government social benefits directly into the Aadhaar-linked bank accounts of SHG members.

- **Member-Level Profiling:** Captures detailed socio-economic data for each member, including income, assets, and individual credit history, which helps in targeted policy interventions.

Coverage of e-Shakti

Initially e-shakti scheme was launched in two pilot districts (Ramgarh in Jharkhand and Dhule in Maharashtra), the e-Shakti project expanded due to its success and operational efficiency. At present it is implemented in over 100 districts across 28 states and UTs. Over 12 lakh SHGs digitized, with more than 1 crore members enrolled. It is to be noted that there has been a significant increase in bank credit flow to SHGs in covered districts.

Impact of e-Shakti on SHG Ecosystem

Area of Impact	Positive Change Observed
Financial Inclusion	High credit linkage; reduced dependency on informal moneylenders
Transparency	Real-time transaction alerts; elimination of manual data errors.
Operational Efficiency	Auto-generation of grading and loan application forms for banks.
Women Empowerment	Increased financial knowledge, confidence, and leadership among members.

Source: PIB Report July 2025

As of February 2026, digital literacy has become a fundamental pillar for the socio-economic empowerment of approximately 1.2 crore Self-Help Groups (SHGs) in India, of which 88% are all-women groups.

Tablet Didi (SHG Digitization) Initiative

The primary goal is to digitize the social and financial data of SHGs and their members to promote financial inclusion. The initiative focuses on empowering women in SHGs by leveraging technology. The CRPs ("Didis") use tablets to capture data directly, reducing reliance on paper records. The initiative contributes to the broader digitization of SHG activities, aiding in better monitoring and management of SHG records. Currently more than 3,000 trained E-master bookkeepers (Digital Didis) in Jharkhand alone who manage MIS-based reporting.

At national level, approximately 10.05 crore women households have been mobilized into 90.90 lakh SHGs as of January 2025. Over 1.44 lakh SHG members have been deployed as Business Correspondent Agents (BC Sakhis) to provide last-mile digital financial services. In Bihar (JEEViKA), these

agents achieved a cumulative 4.74 million transactions worth ₹17.14 billion. The digitization effort is a precursor to the Lakhpati Didi initiative, which aims to elevate SHG members' annual incomes to at least ₹1 lakh. More than 2 crore women have officially become Lakhpati Didis as of January 2026, out of a total target of 3 crore by 2027. The Union Budget 2026 introduced SHE-Marts (Self-Help Entrepreneur Marts), community-owned retail outlets to transition digitized SHG members from credit-linked livelihoods to full enterprise ownership.

Lakhpati Didi Distribution by Top States (As on June 2025)

State	Self-reported Lakhpati Didis
Maharashtra	22,69,981
Andhra Pradesh	17,41,362
Bihar	14,47,750
Madya Pradesh	12,84,957
West Bengal	11,59,682
Uttar Pradesh	11,15,982
Others	58,12,544
Total (India)	1,48,32,258

Source: PIB Report July 2025

Kudumbashree

Kudumbashree (meaning "prosperity of the family" in Malayalam) is Kerala's flagship poverty eradication and women's empowerment mission, launched in 1998. It is globally recognized as one of the largest women's networks, currently comprising over 48 lakh (4.8 million) members. It operates via a three-tier system: Neighbourhood Groups (lowest level), Area Development Societies (ward level) and Community Development Societies (local government level). The main objective of the programme is to eradicate poverty through women's empowerment, encourage thrift and credit, provide self-employment, and improve health, education, and sanitation for poor households.

As on Feb.2026 over 1.6 lakh micro-enterprise units provide employment to more than 3.23 lakh women, with ventures ranging from waste management to catering and construction. Kudumbashree is widely recognized for its role in enhancing the socio-economic status of women and promoting democratic, participatory governance in Kerala. As of February 2026, Kudumbashree (the Kerala State Poverty Eradication Mission) remains one of the largest women-empowerment networks in the world, having significantly expanded its membership and reach across the state. There are 3,17,724 primary units each consisting of 10 to 20 women from neighbourhood. There are 19,470 Area Development Societies at ward level federations to monitor NHG activities. There are 1070 Community Development Societies (CDS) at

local-body-level federations overseeing operations at the Panchayat or Municipal level. More than 19,521 auxiliary groups specifically for young women (ages 18-40), with over 3 lakh members to ensure youth participation in the mission's social and livelihood upliftment. Kudumbashree now provides technical support to poverty-alleviation missions in over nine other Indian states and international collaborations in Ethiopia and South Africa.

Haqdarshak (Chhattisgarh)

Haqdarshak Empowerment Solutions Private Limited (HESPL) operates extensively in Chhattisgarh, utilizing a tech-enabled platform to connect citizens, particularly in rural areas, with central and state government welfare schemes. The organization has trained 5,000+ women SHG members as 'Haqdarshaks' in the state to act as community support agents. Through Haqdarshak app, users can access 6,000+ verified welfare schemes in multiple languages. The initiative helps in last-mile delivery of government services, ensuring that eligible individuals, such as agricultural labourers and rural women, can access benefits.

Latest Statistics (2026) reveals that over 7.6 million Indian families have been assisted in discovering and applying for welfare benefits. They successfully facilitated the distribution of more than ₹18,800 crore ($2.2 billion) in government benefits. Over 52,000 citizens (70% of whom are women) have been trained as field support agents, enabling them to earn a livelihood while assisting their communities. Over 5,000–7,000 welfare schemes are mapped and translated into more than 14 local languages to ensure accessibility. It impacted over 112,000 micro-businesses by helping them access MSME-related schemes and financial services.

Key achievements of SHG digitization

- **Improved Access to Credit:** Digitization has bridged the gap between savings and credit, enabling easier access to loans from banks. In districts covered by E-Shakti, the number of SHGs with bank loans increased from 39% to 56% by March 2022.

- **Reduced Non-Performing Assets (NPAs):** Digital records, such as through E-Shakti or "M-bookkeeping," have helped reduce NPAs by facilitating real-time monitoring and timely, transparent, and accurate bookkeeping.

- **Integration with Formal Finance:** It enabled direct transfer of funds and helped SHG members link their accounts with government financial inclusion schemes (PMJDY, PMSBY, PMJJBY, APY).

- **e-Bookkeeping:** Manual, error-prone book-keeping has been replaced by digital, real-time records.

- **Instant Reporting:** Automatic, on-demand generation of reports helps bankers in making quick credit decisions.

- **Automated Grading:** E-Shakti allows for automatic, real-time grading of SHGs based on their financial performance.

- **Digital Literacy:** Training on "Tablet Didi" and E-Shakti apps have improved digital literacy among rural women, boosting their confidence.

- **Empowered Decision-Making:** With transparent, accessible data on their savings and loans, women members are better equipped to manage their finances and make informed business decisions.

- **SMS Alerts:** Members receive immediate, transparent updates on their transactions via SMS in local languages.

- **Direct Benefit Transfer (DBT):** Digitized records have streamlined the receipt of government benefits directly into SHG accounts.

- **Market Access:** Digital platforms have helped rural women connect to wider markets for selling products made by them.

Challenges of SHG Digitization

Despite these achievements, challenges such as poor internet connectivity in rural areas and the need for continued training in digital literacy remain. In many rural places, many senior members (aged 50+) struggle with mobile app navigation and digital book-keeping, often leading to a dependence on family members or younger volunteers to complete mandatory digital entries. Security concerns regarding online fraud and the misuse of financial data remain a psychological barrier for many rural members, limiting their willingness to adopt UPI and other digital payment systems. Another challenge is availability of network infrastructure and limited internet penetration in hilly or tribal regions hinder the real-time recording of NHG transactions on platforms. The high cost of smartphones and mobile data recharges poses a financial burden on BPL (Below Poverty Line) families, who are the core of the mission. Current digital applications often feature complex interfaces that are not fully customized for users with limited formal education or those who prefer local language materials. Relying on manual entry into digital systems can lead to data mismatches and increased administrative burden on community leaders, State Rural Livelihood Missions (SRLMs) often face shortages in dedicated IT personnel and technical support teams to troubleshoot issues at the grassroots level.

Conclusion

The study concludes that digital literacy is not merely a technical skill but a transformative tool for social engineering. Digital literacy has successfully transitioned from a "luxury skill" to a "fundamental pillar" of rural survival and growth. The digitization of over 12.74 lakh SHGs has fundamentally altered the power dynamics in rural India by providing women with real-time data, SMS transparency, and direct access to the digital economy. The success of the Lakhpati Didi initiative-achieving 2 crore success stories by early 2026-proves that when technology is paired with community trust (the "Phygital" model), the economic output is exponential. However, for India to reach its target of 3 crore Lakhpati Didis by 2027, the government must address the "Digital Ceiling"-the combined weight of hardware costs and security fears.

The future lies in simplifying interfaces and scaling SHE-Marts, ensuring that digitized women are not just consumers of the digital economy, but owners of it.

References

- Sahoo, 2013, Self-help group & woman empowerment: A study on some selected SHGs, Int. J. Bus. Manag. Invent., 2 (9) (2013), pp. 54-61.

- S.K. Choudhury (2015), Empowerment of women through SHG and role of education: An analysis, Pedagog. Learn., 3 (2) (2015), pp. 96-104

- B. Vejju (2018), Role of Self-Help Groups (SHGs) on women entrepreneurship in Andhra. Econ. Comm., 8 (1) (2018), pp. 126-132.

- Carly Nichols (2021), Self-help groups as platforms for development: The role of social capital, World Dev. 2021 Oct;146:105575. doi: 10.1016/j.worlddev.2021.105575

- V. Kandpal, N. Nautiyal (2023), Women's empowerment: Key for socio-economic development in India, Int. J. Bus. Innov. Res., 32 (2) (2023), pp. 260-279

- Debanjan Basak, Indrajit Roy Chowdury (2024), Role of Self-Help Group in Socio Economic Development and Empowerment of Sustainable Development Goals (SDGs) among rural women in Cooch Behar District, India, regional Sustainability, Volume 5, Issue 2, June 2024.

- Carly Nichols (2021), Self-help groups as platforms for development: The role of social capital, World Dev. 2021 Oct;146:105575. doi: 10.1016/j.worlddev.2021.105575

- Sk. Mosharaf Hossain (et.al 2026), Socio-economic Empowerment of Women through Self Help Groups: An Empirical Study in Odisha, India, Asian Journal of Agricultural Extension, Economics & Sociology, 2026 - Volume 44, Issue 2.