Empowering Self Help Groups Through Digitisation Initiatives in Chhattisgarh

THE CURRENT LANDSCAPE

ABOUT IWWAGE

INTRODUCTION

Digital tools hold the promise of accelerating women's empowerment, enhancing the effectiveness and efficacy of existing initiatives, providing new tools to improve knowledge, and creating new opportunities for women to connect and share information.

Over the past year, the Initiative of What Works to Advance Women and Girls in the Economy (IWWAGE), an initiative of LEAD at Krea University, has been working with the Government of Chhattisgarh and other partners to map the current digitisation initiatives for women's empowerment in the state, understand their effectiveness, and identify potential opportunities for improvement.

Most of these initiatives revolve around Self-Help Groups (SHG)[1], which are social support groups known for empowering women through social mobilisation and financial inclusion. The SHG ecosystem in Chhattisgarh is managed by the state chapter of the National Rural Livelihood Mission (NRLM). Chhattisgarh's State Rural Livelihood Mission (SRLM or CGRLM). Also known as Bihan[2], it was created in 2012 and, among its other responsibilities, has been serving as a Self-Help Promoting Agency (SHPA). As such, Bihan has led initiatives to empower women collectives by improving their financial and market linkages, promoting access to entitlements, and providing capacity development support. Other non-governmental SHPAs active in the state include PRADAN.

IWWAGE aims to assist Bihan in its efforts to strengthen the SHG ecosystem, promoting and testing digital solutions that will allow women's collectives to leverage their skills to access markets and services more effectively. This document serves to capture IWWAGE's efforts with respect to summarising and understanding these digitisation initiatives, identifying gaps and barriers, and proposing potential use cases.

CONTEXT

Chhattisgarh is a state located in East India with a total population of 25.5 million[3].

Female ownership of bank accounts in Chhattisgarh is characterized by a significant gap in urban and rural areas and also their employment status.

In Chhattisgarh, Bihan organizes SHGs into a federated structure: SHGs are grouped into Village Organization, which are, in turn, grouped in Cluster, Block, and District level federations.

Currently, as shown[9] in figure 1, there are 321 Cluster Level Federations (CLFs) that are active in Chhattisgarh.
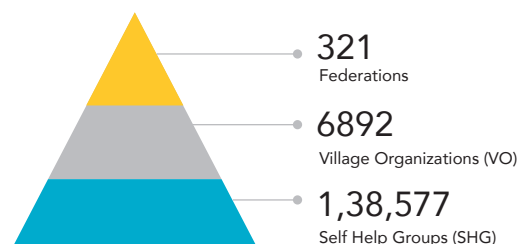
79% of population is rural[4]

~50% of population is female[5]

1 in every 2 women own a bank account that they themselves use[6]

54.2 % of women are employed[8]

321 Federations

6892 Village Organizations (VO)

1,38,577 Self Help Groups (SHG)

Figure 1.

---

1. The Self-Help Group (SHG) model was pioneered in India by several NGOs in the 1980s, and was later scaled up by a few state governments and the central government under NRLM. The purpose of such groups is to mobilize poor, rural women by getting them to pool their resources like savings to enable resilience and mutual support. Today SHGs, which normally comprise 10-20 women, are seen widely in rural areas, where they have led to significant improvements in women's social and financial inclusion, enabling them to build social and financial capital and bringing improvements in their livelihoods. Information accessed at: https://www.microfinancegateway.org/library/history-and-spread-self-help-affinity-group-movement-india-role-played-ifad

THE LANDSCAPE OF DIGITISATION INITIATIVES IN CHHATTISGARH

To know about the varied digitisation initiatives within the SHG ecosystem in India, IWWAGE undertook a detailed landscape assessment of such initiatives.[10] The study, undertaken in 2018, covered the state chapters of NRLM and SHPAs across Andhra Pradesh, Chhattisgarh, Haryana, Jharkhand, Maharashtra and Tamil Nadu, to understand the level of digitisation in each state. This section discusses the observations and findings from the study for Chhattisgarh.

1. DIGITISATION OF THE MANAGEMENT INFORMATION SYSTEMS OF SHPAS

Bihan

The M&E systems for SHGs in Chhattisgarh are set up by Bihan to optimise resource allocation, mitigate information asymmetry among stakeholders and address capacity constraints by identifying scope for training for SHG members. Bihan's digitisation efforts and the use of technology are therefore motivated by its desire to reduce complexities in the monitoring processes in order to streamline the aforementioned inputs, resulting in potentially significant positives being accrued in the domain of livelihoods, financial inclusion and digital literacy, through benefits derived by the SHG members from each programme under-taken by the SHPA.

Bihan has made significant progress in terms of digitising its M&E systems for monitoring SHGs in the state. It has, for instance, developed digital tools to capture **transactional, programmatic, financial and monitoring** data to measure the overall health of each individual SHG. These tools have helped Bihan to capture timely information on the accounts, transactions, operations, credit/market linkages and overall activities of an SHG.[12]

The IWWAGE study[13] shows that the use of data from the digital Management Information System (MIS) remains largely internal to Bihan, except for financial data (see below). SHGs and its members do not have direct access to the data nor do they receive any communication pertaining to the information generated from it. However, Bihan uses this information at two levels:

- *First*, the information collected is available on a monthly basis for review by the Sub-block, Block, District and State level units.[14] This helps Bihan to assess the overall progress of the programme at the block and district level units in the state.[15] This is crucial for Bihan to develop its annual action plans and to design targeted interventions.

- *Secondly*, Bihan allows these data points to be utilised by banks as part of their KYC assessment processes.

However, the usage of MIS data by stakeholders other than banks and Bihan has been observed to be low.

PRADAN

Bihan's work in Chhattisgarh is complemented by large SHG programmes, such as those led by Profession-al Assistance for Development Action (PRADAN), which in part functions like an SHPA. PRADAN's mode of functioning is similar to Bihan's, where SHGs are created and monitored by the programme. However, PRADAN leverages its own Community Resource Persons (CRPs)/block officers as information dissemina-tion points to communicate information to the SHGs.[16]

2. Bihan means "dawn" in Chhattisgarhi.
3. This is 2.11% of India's total population.
4. IWWAGE. Chhattisgarh Situational Analysis, May 2019
5. Census 2011
6. t is a significant increase from NFHS-3 (2005-06), in which case the ownership of bank accounts by women was 8.1%3. This is 2.11% of India's total population.

7. National Family Health Survey (NFHS-4) (2015-16). Accessed at: http://rchiips.org/nfhs/pd-f/NFHS4/CT_FactSheet.pdf
8. PIB Bulletin, dated 30th July, 2018. Accessed at: https://pib.gov.in/newsite/PrintRe-lease.aspx?relid=181172
9. IWWAGE. Chhattisgarh Situational Analysis, d May 2019
10. Singh, A., J. Jose, K. Chouhan, P. Agarwal, and V. Kurian. 2019. Digitisation of SHGs in India: Roadmap for SRLM led initiatives. Chennai: IWWAGE..

Like Bihan, PRADAN has initiated a digital streamlining of its processes in order to gain timely information on the functioning and financial health of its SHGs. Such a mechanism aids PRADAN in making course corrections through timely interventions. For this, PRADAN has set up digital platforms which collect basic, transactional, programmatic, financial and monitoring information from SHGs under its aegis.[17]

PRADAN's mode of data collection is quite similar to that of Bihan. First, SHG group leaders enter the data manually in registers. A copy of these registers is sent to the block office by field coordinators where data entry operators directly input this data in an online software (PRADAN MIS).

Data is also collected on how the group functions as an entity[18] through a separate cadre of women functioning as community data collectors. These women are trained by MIS officers and PRADAN staff to collect data on a tablet. The data collected twice a year pertains to various indicators, such as group health[19], livelihood participation, income, and outputs from livelihood activities. The modules are designed specifically for PRADAN by their in-house IT team using the online android platform called *Commcare*.[20] Both the MIS data as well as the group health data are used similarly to how Bihan uses its data, as described above.

2. CHALLENGES[21]

Digital solutions can support the work of SHPAs and improve the impact of SHGs. However, there are some obstacles that stop the system from taking full advantage of these opportunities.

First,[22] **lack of skilled manpower** to manage data collection and compilation is a key obstacle. It can lead to data contamination, thus compromising the reliability of the data collected, besides preventing the data to be compiled in a timely manner. Presently, both Bihan and PRADAN are struggling with this issue.

Second,[23] even though there are digital lines of communications (through Whatsapp) between staff at different levels within the State, **technical issues with the software are redirected to the NRLM** resulting in delays in troubleshooting. Such roadblocks have the potential of affecting SHPAs' planning thereby leading to possible delays in carrying out targeted interventions to solve a particular problem.

Third,[24] in the case of Bihan's MIS, only block level data operators can edit details of new members and members who have left the group. This results in a **time lag between field notifications and actual updates in the software**, leading to backlogs. These challenges have a direct bearing on the capability of a SHPA to carry out interventions in a timely manner.

Evidently, all of these issues pose a fundamental challenge for the **timeliness and reliability** of the data collected by SHPAs, thus undermining the rate at which the SHPA can target interventions to solve issues in the field.

11. Usually lags by a month.3. This is 2.11% of India's total population.
12. Singh et al (2019)
13. Ibid (10)
14. The review system takes the form of monthly review meetings; regular thematic reviews; and video conferencing by the SMMU with DMMU and BMMU staff
15. This involves an assessment of the programme staff
16. Singh et al (2019)
17. Ibid (10)
18. This information pertains to discussions happening at meetings, issues discussed in the meeting and the movement of those issues.
19. Number of members, group activities, repayment history, number of loans taken by each member, delinquency.
20. Field notes from Singh et al (2019) Commcare is an android software development platform developed by Dimagi Inc. This platform can be used to create and design digital applications.
21. Singh et al (2019)
22. Ibid (10)
23. Ibid (10)
24. Ibid (10)

3. BUILDING FINANCIAL LINKAGES THROUGH DIGITISATION

In terms of **building financial linkages** through digital initiatives, Bihan's emphasis has been on the Bank Sakhi programme. This Banking Correspondent (BC)-based model draws on community women to strengthen financial linkages within communities and leverage SHG members for digital inclusion. The Sakhis act as financial touchpoints to solve issues of access to financial services in remote areas using tools such as laptops, biometric devices, printers, and micro ATMs.[26]

4. BUILDING MARKET LINKAGES THROUGH DIGITISATION

Digital solutions to drive market linkages remain at a nascent stage. These innovations are small in scale, their potential being programme and context-specific. A case in point is **Bihan Bazaar**, an enterprise created to allow improved market access to SHGs. It allows SHGs to sell products created by them to consumers. Bihan Bazaar has tie-ups with various digital market platforms, such as Amazon Saheli and Flipkart, to help the SHGs to cater to a wider consumer base.[27] However, existing Bihan linked SHGs have failed to effectively leverage digital marketplaces due to limited logistics management driven by lack of understanding of consumer demand. Digital solutions that cater to the ever-evolving training needs of the collectives' also need to be developed and tested.

5. DIGITAL LEARNING AND COMMUNICATIONS

SHGs receive extensive livelihood development support through in-person trainings from SHPAs and other partners.[28] Refresher trainings are essential to ensure that trainees understand and retain these concepts fully. While digital media provide an effective way to reinforce capacity building initiatives, learning through it has been observed to be currently quite low in Chhattisgarh.

However, digital modes for communication are commonly used within the Chhattisgarh SHG ecosystem. Whatsapp groups of SHG leaders and members with their programme heads are operational across the state, with the aim of receiving and disseminating information related to functioning and training. This medium is also used by Bihan's employees at the Village, Sub-block, Block and District levels for real-time troubleshooting of issues by the technical team at Bihan/ NRLM and Bank Sakhis and to communicate with bank officials and their programme managers.[29]

---

25. These community women are trained on using digital tools such as laptops, biometric devices, printers and micro ATMs.
26. Singh et al (2019)
27. IWWAGE's internal field report.
28. These skill trainings include but are not restricted to handicrafts, eatables, digital literacy trainings etc
29. Singh et al (2019)

DEVELOPING USE CASES
FOR CHHATTISGARH

Given the untapped potential to promote the uptake and usage of digital solutions in Chhattisgarh, IWWAGE, in partnership with the Government of Chhattisgarh (GoCG) and Dalberg Global Development Advisors[30] developed and started testing "**use cases**" for digital solutions that could potentially enhance the effect of SHGs and further empower their members through financial and market inclusion. (Use case in the context of IWWAGE's involvement in Chhattisgarh refers to how specific tools/technology will be put to use by the target population i.e. women's collectives). These solutions look to leverage SHGs' potential as change agents in Chhattisgarh, with the ultimate objective of scaling these solutions to address other needs across the SHG ecosystem in the country.

SANCHAR KRANTI YOJANA (SKY)

Chhattisgarh is at the lower end of the spectrum in India with respect to mobile penetration (28.58% as per Census 2011). This has led the state government to launch the Sanchar Kranti Yojana (SKY) initiative, which aims to break the access barrier to digitisation, through the provision of smartphones to women with the purpose of increasing mobile penetration and improving the mobile network connectivity in the state. As of now, approximately 3 million smartphones have been distributed to women in Chhattisgarh and 1,000 cellphone towers have been constructed.

The SKY initiative demonstrated the commitment of the government of Chhattisgarh to use digital solutions to promote women empowerment and is one of the reasons why IWWAGE chose to work in this State.

---

1. EXISTING DIGITAL SOLUTIONS

The IWWAGE-GoCG-DALBERG partnership was initiated to prototype smartphone-based solutions that work for women. Under this partnership, Dalberg conducted preliminary investigations in the field involving 87 women and 21 men across the Mohandi, Bartori, Bhadseona, Barauda, Khaira, Kunra, and Bodara areas of Chhattisgarh to understand the access, willingness and ability barriers to usage of smartphones by women.[31]

These investigations revealed that women were more likely to use smartphones to improve health, education and welfare of their immediate family. Consequently, Dalberg identified two priority areas for use cases revolving around:

- **Entitlements**, i.e. "Understanding of and Access to Government entitlements"; and

- **Infotainment**, i.e. "Access to digital modes such as videos for education and informational purposes".

These use cases were accompanied with field insights that identified two key enablers:

- Men/elders in the rural communities who play an important role in removing barriers to access for women. Preliminary findings from the field showed that men in the household enable trust in their immediate family and social circles by supporting women in their journey of use-cases that are socially acceptable[32]; and

- Social circles and key community people, both of whom are essential for troubleshooting digital solutions and gathering information.

---

30. Dalberg Global Development Advisors are a strategic advisory firm working in India and other countries. Link to the description: https://dalberg.com/what-we-do/dalberg-advisors
31. "Amplifying the Impact of SKY" – Solution Design, PowerPoint presentation by Dalberg dated 13th November, 2018.
32. Sentence borrowed from IWWAGE and Dalberg's Preliminary Insights document on the Chhattisgarh SKY initiative.

Moving forward, Dalberg identified two potential partners to further develop and implement these use cases:

- Haqdarshak Empowerment Solutions Private Limited (HESPL), a social enterprise that facilitates access to government schemes; and

- Chhattisgarh's Department of Public Relations through its infotainment app, GOTTH.

Subsequently, the Dalberg team conducted in-depth interviews, co-designed workshops and prototyping sessions with consumers in rural Chhattisgarh and technology partners over three design sprints. All of this was aimed to understand user experiences and issues with the applications with the goal of further refining them. The lessons gleaned from this exercise were in turn used to develop eight design principles, which now serve as a guideline to develop user-centric smartphone-based applications that aim to serve rural women. These design principles are[33]:

Leverage community to build trust

Test design elements to maximize discovery

Design for multiple users

Guide users through features

Use prompts

Visible milestones to engage end users

Use familiar models in messaging; and

Engage men/elders to support phone use.

---

33. "Smartphone solutions that work for her" - Design Principles, PowerPoint presentation dated 28th November, 2018
34. The information in this section has been summarised from the Dalberg and IWWAGE internal study document titled *"Empowering women in Chhattisgarh through digital initiatives for Women Empowerment Collectives – Methodology document"*
35. Details about this process are provided in the annexes.

2. POTENTIAL NEW SOLUTIONS[34]

Dalberg and IWWAGE, through their partnership with the Bill and Melinda Gates Foundation and Bihan, also explored potential new use cases for digitisation to promote women's empowerment in Chhattisgarh.

Adopting an iterative and collaborative multi-phase approach[35], Dalberg identified two promising use cases in consultation with SHG members, potential technical partners, experts, and government representatives:

- **Market Sansaar**, a digital solution that provides market information to inform production decisions/planning, pricing and quality with skills training. It aims at reducing information asymmetries, and opening new markets and opportunities for SHG members, thus improving income for both the SHGs and their members.

- **Samooh Shakti**, a digital platform that aims at improving SHG-Panchayat collaboration using a goal-setting approach to planning and tracking of community projects.

The table below (Adapted from "Empowering women in Chhattisgarh through digital initiatives for WECs – Methodology document") summarises some key insights about these two use cases

	MARKET SANSKAR	SAMOOH SHAKTI
NEED	SHGs members participating in SRLM livelihood initiatives often produce goods that don't match market demand, leading to losses and high rates of drop-offs in such initiatives.	There are no formal mechanisms to promote collaboration between SHGs and their communities.
CONCEPT	Market Sansaar combines the need to understand markets and aggregates market information to inform on production, pricing and quality with business skills training.	Samooh Shakti addresses the need for SHG goal setting and joint community planning. This use case looks to providing technological solutions to help map SHG women's skills and assets against the needs of the community while promoting collaborations. It will also enable tracking of activities and their progress, thereby aiding women to achieve their goals in a transparent manner.
IMPACT POTENTIAL	Overcoming information asymmetries and providing the tools to improve incomes of individual women and the SHG as a collective.	This use case can improve SHG-Panchayat collaboration and the role of SHGs as a powerful community institution, while creating local synergies to achieve shared objectives.

Samooh Shakti and Market Sansaar were further subject to a multi-stakeholder brainstorming exercise to add details to the concepts and develop pilot plans. Specific attention was devoted to take into account the Chhattisgarhi context, specifically user needs and aspirations, access to and usage of technology, network infrastructure, and partners' capacity.

---

36. Information borrowed from the Haqdarshak Pre-Pilot Assessment proposal developed by Dalberg
37. CHiPS organized a Hackathon where they took demand from various government departments. The Hackathon invited interest from organizations that could adapt to the demand of the government departments on different areas.

FUTURE SCOPE OF WORK

ASSESSMENT OF THE HAQDARSHAK APPLICATION[36]

As mentioned above, Haqdarshak Empowerment Solutions Private Limited (HESPL) was chosen as the top solution provider to address the "Understanding of and Access to Government entitlements" use case.[37] In this context, a pilot intervention has been designed in partnership with IWWAGE to test HESPL's potential in increasing access to government-based entitlements, while keeping SHG members/leaders as the last mile touchpoints.

This intervention aims to train 5000 women in Chhattisgarh as *Haqdarshikas* using HESPL's smartphone/tablet application to collect household level information from citizens to identify which services and entitlements they are eligible for. As Haqdarshikas, the women will levy a small fee for their services, thus generating an income for themselves to contribute to their economic empowerment.

The Haqdarshak application also provides a checklist of documents required for applying to each entitlement and aids in the application process through linkages with existing Common Service Centres (CSCs) in the state.[38] The design of the pilot has been contextualised for Chhattisgarh in partnership with Dalberg Global Development Advisors and other stakeholders.[39]

IWWAGE is engaged in developing an evaluation of the Haqdarshak programme in order to gather further insights on the effectiveness of this initiative in the Chhattisgarhi context and beyond. The evaluation will begin in early 2020.

UNDERSTANDING INFORMATION FLOWS AMONG WOMEN COLLECTIVES AND THE ROLE OF TECHNOLOGY

IWWAGE is supporting a study to map information flows within women's collectives to assess if and how group dynamics change depending on whether information is exchanged in-person or online. The study will involve providing an in-person and a digital-based business training to compare how knowledge is spread and retained among trainees as well as among their SHGs. Specifically, the research will aim to answer the following questions:

- Can digital training be successful in enhancing business skills?

- How does information flow among members of women collectives and what is the role of technology?

- Do demographic factors (caste, age, etc.) affect the usage of digital communication platforms?

Specifically, this project will work with Village Level Organisations (VLO), to form production collectives. The Women Economic Collective (WEC) will be composed of women from the VLOs who express interest in the business training offered. The WECs will be formed in a way that at last one woman in each WEC owns a smartphone. Through the training, the women will learn how to make a product, along with understanding how to divide tasks among the members of their production WEC. Half of the production WECs will be provided this business training in-person and the other half will be provided training through a smartphone.

---

38. CSCs are front-end service delivery points enabled with Information and Communication Technology (ICT) established to deliver essential public utilities and non-government services to the end consumer. Common Service Centre scheme is a scheme under the Digital India Program. It is a significant part of the National e-Governance Plan (NeGP) which was formulated by the Department of Electronics and Information Technology (DEITY), Ministry of Communication and Information Technology, Government of India.
39. Bihan, Village Level Entreprenuer (VLEs) under the CSC scheme, DigiPay agents and PRADAN.

The study will involve in-person interviews with the women in the production WECs as well as observation of the meetings of production WECs to map and understand the dynamics between the women and how information flows. In addition, it will also involve in-person interviews with SHG women, where one of the members received the business training, and also women in those SHGs where women did not receive the business training even though they were part of the eligible VLO. These interviews will give insights into the information flow processes within the larger community.

HOLD THE PHONE: EVIDENCE TO UNLOCK THE GENDER TRANSFORMATIVE POTENTIAL OF MOBILE TECHNOLOGY

IWWAGE is supporting another study to assess the long term impacts of a smartphone distribution programme along with testing a use case to encourage the use of phones by women.

As per the Socio-Economic Caste Census Data of 2011, Chhattisgarh had the lowest mobile phone penetration in India at 28% compared to the national average of 68%. The SKY programme launched by the Chhattisgarh government in 2018 aimed to distribute 5.5 million smartphones to women and students from low-income households.

The programme was aimed at bridging the digital and gender divide in the state by issuing the smartphones in the names of the women of the households. While the SKY programme addresses the issue of access to mobile phones for women, access is only the first barrier. There are various behavioural, normative as well as structural barriers that prevent women from using mobile phones.

This study will measure the long term impact of the SKY programme since it is now a little more than a year in its implementation. It will involve one-on-one interviews with women to understand their mobile engagement, networks, economic activities, social norms and gender attitudes. This study will also test a use case to evaluate whether it can increase women's engagement with their mobile phones. Additionally, it will measure whether introducing an economic incentive with the use case affects the results. The use case involves sending information about good health practices and government services via "push" phone calls, while also collecting information from women on the delivery of services via "pull" calls.