



Safeguarding Rural India Through Critical Digital Literacy



An Endline Assessment Report

Published in 2024 by the Digital Empowerment Foundation (DEF)

© Digital Empowerment Foundation 2024

This publication is available under the **Creative Commons Attribution 4.0 International License** (CC-BY 4.0). By using the content of this publication, users agree to be bound by the terms of the Creative Commons License. No part of this publication may be reprinted, reproduced, stored in a retrieval system, or transmitted in any form by any means, electronic, mechanical, photocopying, recording or otherwise, without the publishers' prior permission in written form.

The designations employed and the presentation of material throughout this publication do not imply the expression of any opinion whatsoever on the part of DEF concerning the legal status of any country, territory, city, or area or of its authorities or concerning the delimitation of its frontiers or boundaries.

Suggested citation: *Safeguarding Rural India Through Critical Digital Literacy Endline Assessment Report*. Digital Empowerment Foundation. New Delhi, 2024.

Prepared by:

Dr. Suruchi Kumari, Maitri Singh

Data Collection and Image courtesy:

Shruti Narula and Ashraf Jawaid

Design & Layout:

Satish Kumar

For permission requests, write to the publisher at the address below:

info@defindia.org

Acknowledgement

The endline study report “Safeguarding Rural India Through Critical Digital Literacy” is based on the Digital Empowerment Foundation’s work with grant support from HP and ASPEN Institute. We owe a huge gratitude to the women learners who agreed to participate in this study. We are also thankful to our state and district coordinators, who have helped us in collecting data for this study. The report would never have been published without their help. Their serious attitude and commitment to work are greatly appreciated.

Table of Contents

List of Abbreviation	6
List of Tables and Figures	7
Executive Summary and Key Findings	8
1. Introduction	11
2. Overview of the Project's Activities	15
3. About Endline Assessment Study	19
4. Activities	21
5. Findings	25
5.1 Socio-Economic Landscape	25
5.2 Functional Digital Literacy	29
5.3 Financial Digital Literacy	31
5.4 Critical Digital Literacy	32
5.5 Access to Citizen Services	34
5.6 Relation between Education, Age, Earnings, and Digital Literacy	36
6. Project Effectiveness	41
7. Challenges	45
8. Conclusion	47
References	49

List of Abbreviation

- ICT** - Information and Communication Technology
- DEF** - Digital Empowerment Foundation
- SHG** - Self Help Groups
- ANM** - Auxiliary Nurse and Midwife
- ASHA** - Accredited Social Health Activist
- CSC** - Common Service Centers
- DSP** - District Service Provider
- NFHS** - The National Family Health Survey

List of Tables and Figures

Table 1: Project Locations for ‘Safeguarding Rural India through Critical Digital Literacy’, Digital Empowerment Foundation

Table 2: List of Coverage area and Direct Impact (in numbers)

Figure 1: Educational level of Women Learners in Endline Survey, State wise (in percentage)

Figure 2: Occupation of the Women Learners

Figure 3: Earning Status of Women Learners

Figure 4: Access to Digital Devices by Women Learners

Figure 5: Modes of Digital Access by Women Learners

Figure 6: Ability to operate smartphones by Women Learners

Figure 7: Use of Digital Payment Services by Women Learners

Figure 8: Purpose of using payment services by Women Learners

Figure 9: Women Learners with awareness of fact-checking mechanism

Figure 10: Ways of Fact Checking

Figure 11: Accessibility of Sochnapreneur Centres

Figure 12: Benefits availed by Women Learners from Sochnapreneur Centres

Figure 13: Challenges faced by Women Learners in availing entitlements

Figure 14: Comparison of Baseline and Endline Study

Executive Summary

Digital Empowerment Foundation implemented this project to safeguard rural India through critical digital literacy in four northern states of India. The project aimed to create a web of women changemakers in rural areas to facilitate rural digital literacy. In this project, DEF engaged with the women in the community work to safeguard rural India by ensuring critical digital literacy to fight against misinformation, disinformation, and fake news regarding relevant socio-political aspects. Although the claim of the government and various private telecommunication operators suggests that rural India has better access to digital infrastructure in terms of access and skills. However, the work of DEF shows that meaningful connectivity is relatively absent even in hyper-connected people. The most crucial crisis that DEF has recognised is the challenges of poverty, social exclusion, societal norms, and poor public infrastructure to have meaningful connectivity.

This endline assessment study attempts to show the changes that have taken place in rural settings, where women have been ensured access to mobile phones. They were trained with digital literacy modules, including– functional digital literacy, digital financial literacy, citizens' access to entitlements and critical digital literacy models. The end-line assessment results are based on a survey of 90 rural women who received digital literacy training from DEF. The end-line assessment presents the changes in their knowledge of digital literacy. Ultimately, this study also highlights the challenges faced during program implementation and the barriers to providing access to digital literacy training to rural women in the states where this study was conducted. Recognising these challenges would also guide the organisation's further project designs and interventions towards empowering the rural community.

The study surveyed 90 women learners across four states: Uttar Pradesh (21), Chhattisgarh (30), Jharkhand (21), and Bihar (18). The findings from the Endline Assessment Study are as follows:

- **Education Status of the Learners:** In Uttar Pradesh, most learners have educational qualifications below class 10. In Chhattisgarh, 41% completed education up to class 12, while 31% of learners in Jharkhand and 29% in Bihar hold undergraduate qualifications.
- **Occupation Status of the Learners:** Most learners are homemakers. Their proportion in the endline study increased to 57% from 46%, which was reported during the baseline study. 80% of learners do not earn, with 20% reported to be earning members. Among earners, 39% have an annual income of 10k-50k, and 61% earn less than 10k annually. This is a significant increase in low-income earners from 8% in the baseline survey. Additionally, Jharkhand has a higher proportion of earning learners than other states.
- **Access to Digital Devices and Functional Digital Literacy:** Access to digital devices among learners has increased, with 92% of learners reporting device access and 75% owning their devices. Smartphone usage has also improved, with 97.59% having access and 83.13% being proficient in its operation. Post-training, it has been noted that 73% of learners use digital devices for financial services, 16% use them for social media apps, and 11% use digital devices for gaming.
- **Digital Financial Literacy:** There has been a positive increase in digital financial literacy

among learners since the training of the financial literacy module. Digital payment usage increased from 53% in the baseline to 91% in the end-line survey. For digital transactions, UPI transactions are the most common, with 74 learners using digital payments for money transfers. The most frequently cited reason for not using digital payments is a lack of funds, as reported by 37 learners in the end-line survey. This is a slight decrease from 40 learners in the baseline survey.

- **Critical Digital Literacy:** Awareness of fact-checking increased from 59 learners in the baseline to 82 in the end-line survey.

While 34 learners used discrepancy checks, compared to 54 relying on Google searches at baseline, social media platforms like WhatsApp became the primary news source for 69 learners, up from 40 in the baseline. This reflects the urgent and continuous need for critical digital literacy.

- **Access to Citizen Services:** Awareness of government entitlements rose to 89% from 69% in the baseline survey. Additionally, the presence of Sochnapreneur centres near learners' homes also increased from 24% to 47%. Learners use Sochnapreneur centres to access benefits such as loans, insurance, ration, and health benefits.



चलो डिजिटल साक्षरता प्राप्त करें

स्कीमों की जानकारी पाएँ

शहर काम अब गाँव में इंटरनेट

स्कीमों की जानकारी पाएँ

स्कीमों की जानकारी पाएँ

स्कीमों की जानकारी पाएँ

WISDOM TREE

स्कीमों की जानकारी पाएँ

1. Introduction

As the digital space is increasingly becoming a crucial part of everyday lives, concerns related to the digital divide at individual and organisational levels have become one of the critical concerns globally. Technological progress and unequal access to information and communication technology (ICT) add new dimensions to the persisting socioeconomic divide, especially in Indian contexts (Laskar, 2023). Whereas people or organisations with the privilege of advanced digital devices and uninterrupted internet connection are reaping the benefits of the digital space, the marginalised sections of society—who remained digitally unconnected—are likely to be lagging. Studies highlight various socio-economic factors, e.g., caste, gender, class, occupation, educational level, region, etc., that determine the access to ICT and the persistence of the digital divide (Bala & Singhal, 2018; Tewathia et al., 2020; Rajam et al., 2021; Sharma & Banerjee, 2022). Recently, Oxfam's report on the digital divide in India (2022) highlighted that only 31% of the rural population uses the internet in a country where 70% of the population lives in rural areas. On the contrary, 67% of around 30% of India's urban population have Internet access. In addition, a 30% gap has been highlighted in the access to ICT devices between women and men, which leads to further problems like information poverty, lack of independent decision-making, lack of support networks or health services, etc.

Rural India is undergoing several transformations – the diversification of non-agriculture activities, the expansion of physical infrastructure, a decline of agricultural land, and the penetration of ICT (Information and Communication Technology). Consequently, it has also seen tremendous Internet use, and DEF has been working in the field of digital empowerment in the rural areas of India. Over the years, it has been found that the rural community is increasingly using

smartphones, and the post-COVID period has also seen a sharp increase in the consumption of smartphones and the internet. In this project, DEF has done community work to safeguard rural India by ensuring critical digital literacy to fight against misinformation, disinformation, and fake news concerning everyday living of people, especially in rural India. As previously discussed, there exist many challenges, from the absence of meaningful connectivity to increased costs of internet, inadequate cellular network as well and slow internet speed. In areas where these things are relatively better, citizens cannot use them to access welfare policies as they lack proper digital training and the skills necessary to navigate the digital world safely.

One of the crucial social issues that DEF has identified has been recognising the backwardness of women, particularly rural women coming from historically marginalised communities. Rural women have been identified as key changemakers, and their capability to develop has the potential to lead the development of the community. Studies in India and other developing countries show community empowerment by ensuring women's digital literacy after using information technology communication skills to build cadres for community empowerment (Hufad et al., 2019).

If an inclusive digital literacy framework is envisioned, where digital empowerment is extended to include issues of access, affordability, skilling, and critical knowledge for the women's community, then community development can be ensured in various fields like health, education, finance, and other areas of development. Despite various efforts by the government and non-governmental organisations to ensure digital inclusivity, it has not succeeded at a good rate. There are rural, caste, class, and gender divides in access to digital inclusion. Rural women

community members coming from oppressed caste and class backgrounds have been deprived of accessing digital tools and other skill-upgrading education. By ensuring digital literacy to the women members, their social, and cultural capital will be enhanced and will lead them to earn their livelihood either by starting their enterprises or engaging in community development work. Chatterjee (2024), in her study on DEF, has shown that women entrepreneurs are more inclined to social missions than men. She also found in her study, based on her research on the women Soochnapreneurs (Infopreneurs), that they use locally available resources to start their enterprise, which she borrowed from Levi Strauss (1966), known as bricolage.¹

Women residing in rural areas have little internet access, and this trend is associated with social factors. In rural areas, women face barriers in accessing services like health, education, technology, and land rights. Limitations to the use of technology by women are in terms of literacy level and permission from in-laws for using digital services. Sustainable goal five talks about Gender Equality with the target of enabling technology to promote women's empowerment (The Bridgespan Group, 2020).

¹ Bricolage is the method in which the social enterprises use the locally available resources to solve their problems and run enterprises.

Rural women as changemakers has been a successful model where the women act as agents of change by earning their income and doing community service. Rural women in a few of the northern states in India were trained to not only upgrade their skills, but they also received training to fight fake news and misinformation. The project worked towards achieving a holistic critical digital literacy to ensure that a cadre of rural women entrepreneurs could become changemakers for rural India.

Given such a scenario, this project - Safeguarding rural India through Critical Digital Literacy was implemented to build the **capacities** of 480 **rural women** across four northern Indian states, who will then build the capacities of local communities to produce, disseminate, and **consume digital content critically**. The goal of the project was also to nurture a cadre of 120 rural women entrepreneurs who can **generate income** by providing digital services and facilitating access to citizen services to the local communities. This endline report is prepared to show the impact of the project in raising **critical digital literacy in rural India** along with **functional digital literacy and digital financial literacy**.

The report is divided into 5 sections. Section 1 gives an overview of the Project, as well as the purpose and scope of the endline assessment. The section 2 deals with the methodology used for endline assessment. The section 3 deals with the findings of the endline assessment. The section 4 deals with effectiveness and efficiency. The last section deals with challenges and the conclusions of the study.





Introduction to Cyber Crime Safety

In this session, we will discuss the various types of cyber crimes and their prevention and detection.

By Shri. Anand

RETI
M
Introduction
Definition
Aims/Purpose
Installation
Steps of P...
Termination
Conclusion

2. Overview of Project

The project aimed to build the capacities of individuals and communities in rural India to critically engage with digital content and platforms. We selected 30 infopreneurs from four Indian states and trained them using a contextualised curriculum. We also provided laptops and printers to these women, through which they expanded their mobile/tablet-based services. These 30 women, in turn, trained 15 women (a total of 450 women) and trained them to become information entrepreneurs. The activity-based curriculum used for training had components of functional digital literacy, digital financial literacy, critical digital literacy (cyber laws, privacy, and consent, ways to identify fake news, identifying biases and how to counter them, tactics of mis/disinformation such as emotional language, financial incentives and

influence operations) and facilitating access to citizen services.

Thus, a cadre of rural women equipped with critical digital literacy who can form a rural fact-checking ecosystem was built. 90 women from these 450 women were given digital devices to start their centres (this would also act as an incentive). Through this project, we also intended to incorporate our existing curriculum on misinformation – both content and delivery-wise. There are also indirect beneficiaries of digital literacy training through influence spheres. Local community members also benefitted from digital services. Project funds were spent on curriculum development, capacity building, monitoring, and evaluation.

Table 1: List of locations for Project ‘Safeguarding Rural India Through Critical Digital Literacy’.

S. No	State	Districts	No. of Centres
1	Bihar	West Champaran	24
2	Chhattisgarh	Durg & Raipur	40
3	Jharkhand	Ramgarh, Khunti & Bokaro	28
4	Uttar Pradesh	Bhadohi, Jaunpur, Prayagraj, Chandauli & Varanasi	28
Total			120

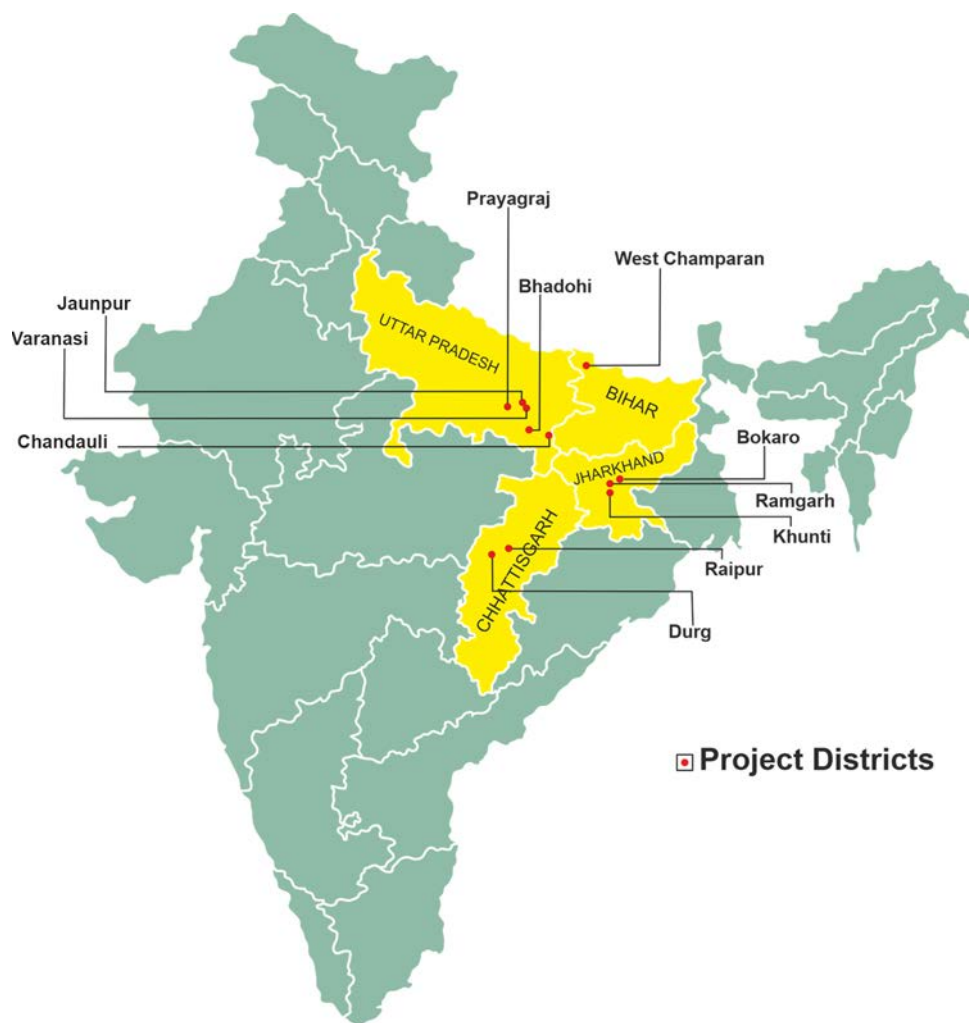


Figure 1: Project Locations for ‘Safeguarding rural India through Critical Digital Literacy’, Digital Empowerment Foundation

Table 2: List of Coverage area and Direct Impact (in numbers)

Coverage Area	In Numbers
States covered	4
Districts covered	11
Panchayats covered	120
Villages covered	360
Infopreneurs identified and trained	120
Women Learners Identified & Trained	360
Community Members Outreach (till 31st March 2024)	131440



समीक्षात्मक डिजिटल साक्षरता द्वारा ग्रामीण महिलाओं का सशक्तिकरण

कार्यात्मक डिजिटल साक्षरता

डिजिटल वित्तीय साक्षरता

समीक्षात्मक डिजिटल साक्षरता

नागरिक सेवाओं की जानकारी एवं पहुँच



delindia.org



3. About Endline Assessment Study

This End-line assessment was conducted to understand the effectiveness and impact of project implementation. An online survey was done to collect data on the parameters of functional digital literacy, digital financial literacy, access to citizen services and critical digital literacy. A comparison from the Baseline study was done to understand the project's effectiveness. The end-line study was done to identify changes in

functional and financial digital literacy post-intervention by DEF. Various quantitative analytic methods, such as pre & post-tests, were done to study the effectiveness of the project. The data was analysed using Excel and STATA. An analysis of the activities, module training, and their impact on rural women was also conducted for the end-line study.

गौर योजना शिविर

(गौर एवं सरकारी योजनाएं)

बजे से शाम 4 बजे तक

आवेदन कर सकते हैं

सुकन्या योजना पेंशन योजना

कर सकते हैं और आवेदन कर सकते हैं



USAID Kishoree DEF



4. Overview of Project's Activities

Module-based training was one of the integral activities of this project. The modules were conceptualised and designed at DEF, and laptops and printers were provided to these women so that they could expand their mobile/tablet-based services. The activity-based curriculum used for the training included:

Module 1 - Functional digital literacy

In functional Digital literacy, training was given to introduce the women learners to operate Laptops/PCs, Smartphones, the internet, and social media. In this module, messaging, using WhatsApp, sharing live location, and web browsing on smartphones were given. Training was also given regarding the hardware and software of the computers and laptops.¹

Module 2 - Digital Financial Literacy

In this module, training was provided to introduce the learner to using various digital channels for financial management. The women learners were trained on mobile banking, digital wallets, and awareness of financial inclusion schemes.²

1 Digital Empowerment Foundation, "Module 1: Functional Digital Literacy." More details can be accessed at <https://www.defindia.org/wp-content/uploads/2023/09/Module-1-Functional-Digital-Literacy-ENG.pdf>

2 Digital Empowerment Foundation, "Module 2: Digital Financial Literacy." More details can be found at <https://www.defindia.org/wp-content/uploads/2023/09/Module-2-Digital-Financial-Literacy-ENG.pdf>

Module 3 - Facilitating Access to Citizen Services

In this module, women learners were trained to use various digital channels to facilitate access to citizen services. They were also trained to use e-governance to ensure financial inclusion, ensuring access to financial products and services needed by vulnerable groups at an affordable cost in a transparent manner by institutional players.³

Module 4- Critical Digital Literacy

In this module, women learners were trained to produce and consume digital content critically, identify and fight against false news and information, fact-check information, and identify misinformation /disinformation.⁴

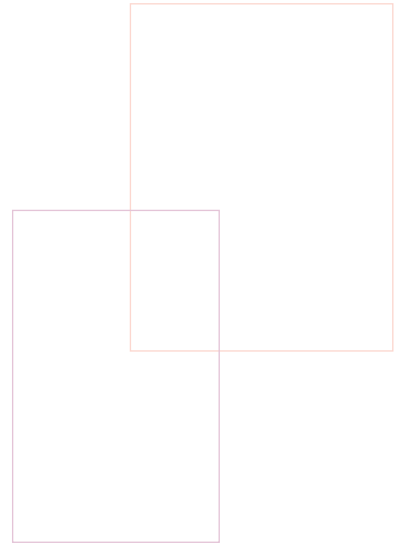
The beneficiaries (**450 women**) were local government representatives, teachers, rural agricultural extension officers, community resource persons trained under the National Rural Livelihood Mission and SHG, ANM, and ASHA workers. These women were selected based on social security and better community access. Infopreneur Centre was set up with the objective of "Safeguarding Rural India through Critical Digital Literacy", facilitating access to government schemes and citizen services, and critical digital literacy to address tactics behind misinformation and disinformation.

3 Digital Empowerment Foundation, "Module 3: Facilitating access to citizen services." More details can be found at https://www.defindia.org/wp-content/uploads/2023/09/Module-3_Facilitating-access-to-citizen-services.pdf

4 Digital Empowerment Foundation, Module 4: Critical Digital Literacy." More details can be found at <https://www.defindia.org/wp-content/uploads/2023/09/Module-4-Critical-Digital-Literacy-ENG.pdf>

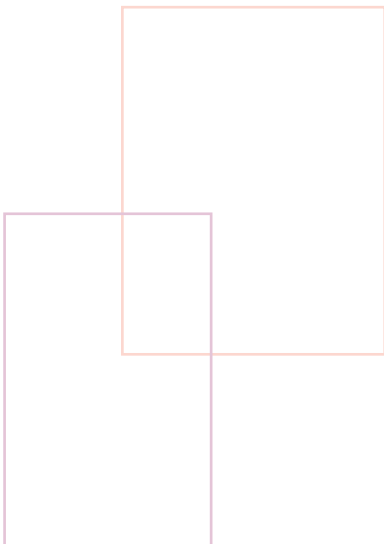
मॉड्यूल-1

कार्यात्मक डिजिटल साक्षरता



मॉड्यूल - 2

डिजिटल वित्तीय साक्षरता



मॉड्यूल - 3

नागरिक सेवाओं तक पहुंच को सुगम बनाना



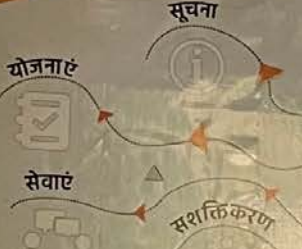
मॉड्यूल - 4

समीक्षात्मक डिजिटल साक्षरता



सूचना प्रेत्योर

सूचना, योजनाएं, सेवाएं



defindia.org soochnapreneur.in

सरकारी अफसरों से संपर्क करना हुआ आसान

काम गाँव में इंटरनेट के लिए

चलो डिजिटल साक्षरता

ALUMINIUM PARTITION PANEL

5. Findings

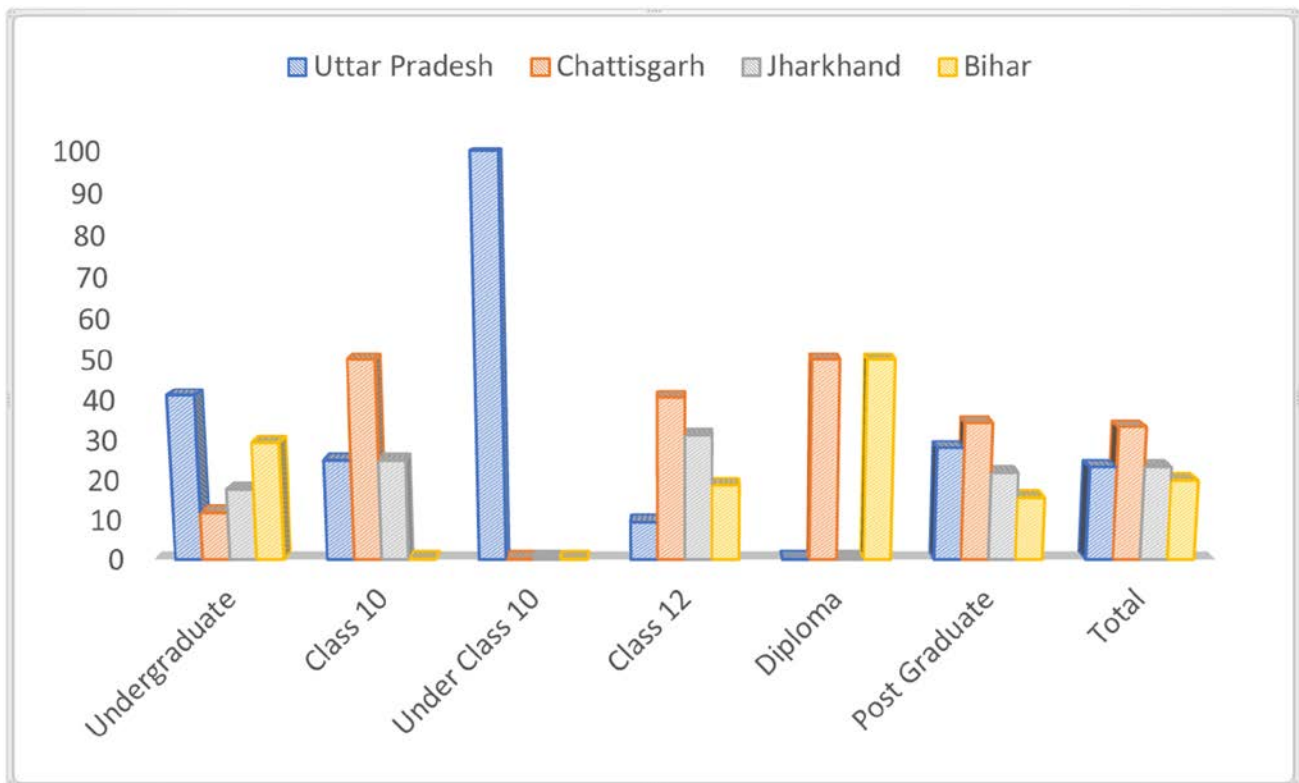
5.1 Socio-economic landscape

In this section, the socio-economic landscape of women learners and infopreneurs is discussed. The socioeconomic data on state-wise, education, occupation, earning status, income status and statewide distribution of earning status of women learners. As previously mentioned, in the end-line assessment study, a total of 90 women were surveyed. They were distributed across the states as follows: Uttar Pradesh (21), Chhattisgarh (30), Jharkhand (21), and Bihar (18). The initial step of the study was to assess and identify the educational levels of women learners across these states. Studies indicate that although on the national level, gender disparities in literacy rates between men and women have narrowed down in the past few decades, there remains a 14% gap in literacy rates between men and women in India (Gupta et al., 2023). This disparity is particularly evident in the North Indian states. As per the 2011 census, female literacy rates were highest in the western coastal regions, the North Eastern states, and certain northern states such as Delhi, Himachal Pradesh, Uttarakhand, Punjab, and Haryana. In contrast, states like Odisha, Chhattisgarh, Andhra Pradesh, Madhya

Pradesh, Arunachal Pradesh, Jammu & Kashmir, Uttar Pradesh, Jharkhand, Rajasthan, and Bihar reported lower female literacy rates, all falling below the national average of 65.46%. Moreover, Rajasthan and Bihar had female literacy rates just slightly above 50%. The latest NFHS-5 data also reiterated that in Bihar, the literacy rate for women aged 15 to 49 is 55%, as compared to 76.4% for men in the same age group, with a difference of 21.4 percentage points between men and women (Kaur, 2023). To understand female literacy rates, it is essential to examine them in conjunction with male literacy rates. This approach helps identify lagging areas and socio-economic factors impacting both genders and clarifies why focusing on marginalised groups is necessary for effectively addressing these gaps.

This study found that the states with lower literacy rates as per census 2011 still had lower literacy rates among women. The study found that in Uttar Pradesh, most women learners have educational qualifications below class 10. In Chhattisgarh, 41% of women learners have completed education up to class 12. In Jharkhand, 31% have achieved education up to class 12, while in Bihar, only 29% of women learners hold undergraduate qualifications (see Figure 2).

Figure 2: Educational level of Women Learners in Endline Survey, Statewise (in percentage)



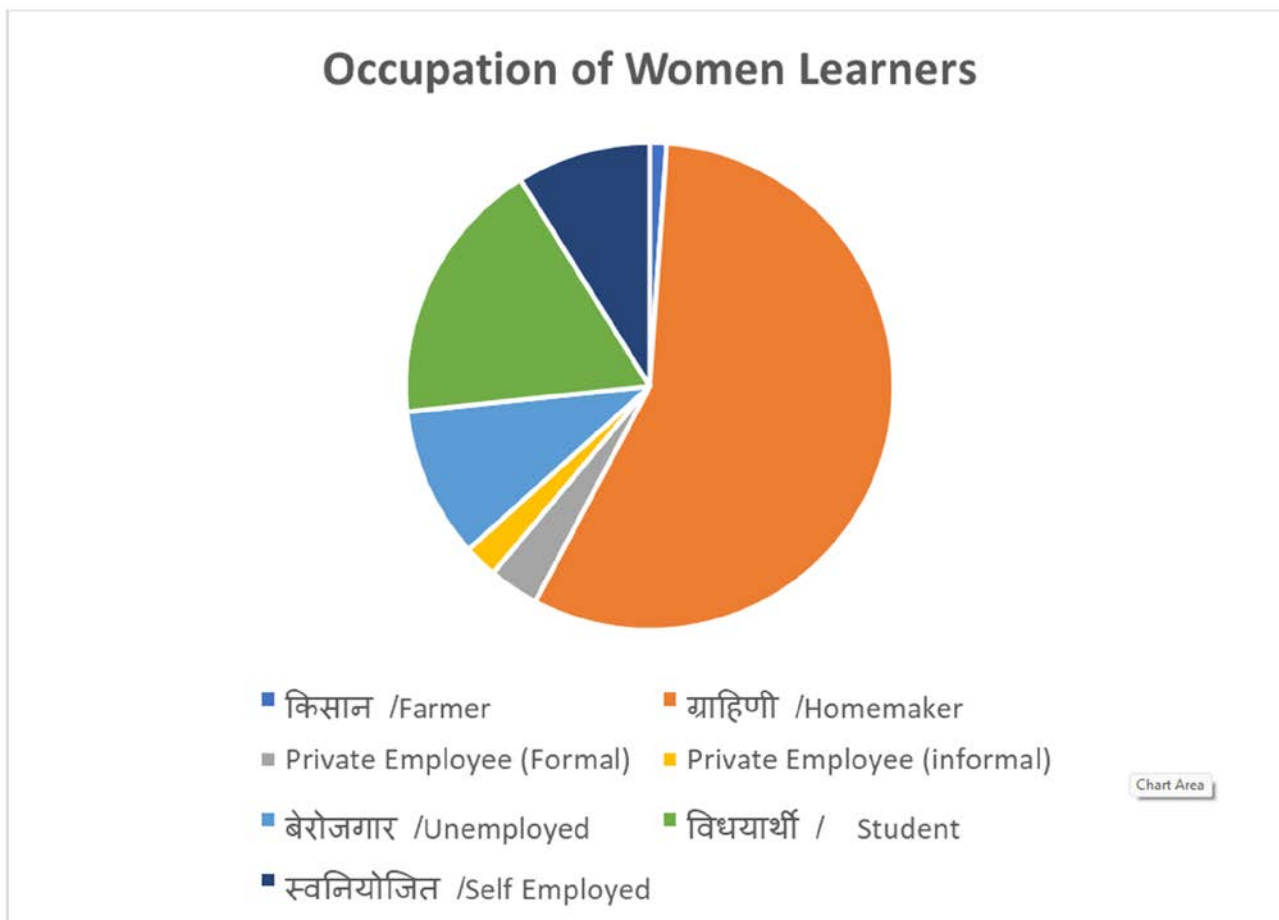
Source: Primary Data, DEF

Studies have established that high dropouts among girls compared to boys and higher education among women in rural has not seen an increase yet (Radiowala & Molwane, 2021). This existing pronounced gender disparity in literacy also reflects the broader cultural context of male dominance in India, where progress in female education is often viewed as a subtle marker of societal transformation (Singh, 2016).

As a result, women’s literacy rates significantly influence their future employment prospects and financial status. Research from around the world has also consistently shown a strong positive link between women’s education and the economic development of the nation as well as the household, i.e. improvements in

female literacy levels are closely correlated with increases in Gross Domestic Product (GDP) (Khan et al., 2020). However, this becomes a complicated issue for countries like India, as a specific sex is comparatively more involved in unpaid housework. This unpaid work is not only characterised by its informal nature, invisibility, and lack of economic remuneration or social recognition but also offers little or no access to social protection. Studies show that globally, women spend significantly more time on unpaid domestic work than men. This disparity is even more pronounced in India, with women spending around 297 minutes per day on such tasks compared to just 31 minutes for men (Singh & Pattanaik, 2020). Figure 3 highlights this division of labour with more clarity.

Figure 3: Occupation of Women Learners

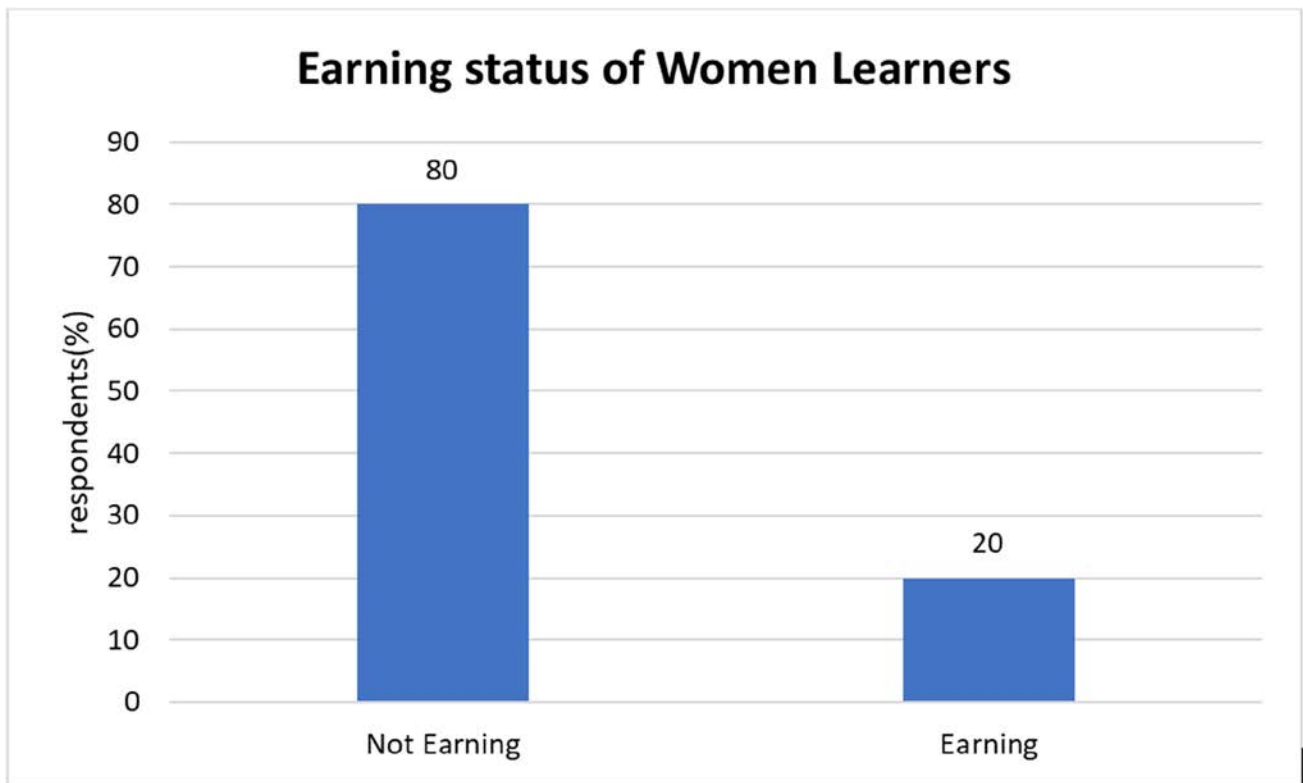


Source: Primary Data, DEF

Figure 3 shows that the majority of the learners are homemakers. This is similar to the baseline survey but the number has increased from 42 (46%) to 51(57%) learners. The endline survey shows that around 57% of women are homemakers, about 18% of students and only 1.11% of farmers. This is followed by students with a share of 16 learners during the endline survey and 24 during the baseline survey. While the unpaid labour contributes in the nation's economy significantly, but its invisibilisation not only reflects social norms but also exacerbates

economic disparities and limits women's income and financial independence. This further hinders their entry into the labour market and reinforces the existing gender inequalities. As previously mentioned, lower literacy rates not only limit women's employment prospects but also their financial status and stability. Due to the patriarchal structure of Indian society, the absence of the latter also hinders the agency and decision-making power of individuals, especially women in the household.

Figure 4: Earning Status of Women Learners



Source: Primary Data, DEF

In 1978, an American sociologist, Diana Pearce, coined the term “feminisation of poverty”, explaining how, historically, women have always faced higher levels of poverty than men. Stephen Jenkins also links the concept of poverty with the ‘individual right to a minimum degree of potential economic independence’ (Sharma, 2012). In other words, it can be argued that people who are financially dependent upon others can be considered more vulnerable to poverty. Their primary education, health care, employment and other crucial decisions lie with the earning members of the household. This becomes concerning for most women in India as a large number of women are engaged in unpaid housework and agriculture, primarily the production and processing of food. In this survey, 80% of women learners responded that they do not earn, while 20% reported that they were earning. Of those women learners who are earning members, 39% have an annual income of 10k-50k, and 61% have less than 10k annual

income. Additionally, for the baseline survey, 8% reported earning less than 10k annually. Although the female work participation rate in the rural areas has seen an increase in the last few decades and the Periodic Labour Force Survey of 2022-23 also recorded an increase of female work participation to 41.5% in 2022-23 as compared to 24.6% in the year 2017-18 (Ministry of Statistics and Programme Implementation, 2023). However, the percentage of non-earning women still remains a considerable challenge. Interestingly, it was found in this survey that women learners in Jharkhand have more earning learners than in the other states. Those women working the highest percentage of working women are in the State of Jharkhand, but the regular salaried job is less (Endow & Dutta, 2022). There could be a variety of reasons for the same, including as more men migrate from rural areas, women are often left to manage both family and agricultural work on their own. However, households led by women,

especially in rural areas, are also more likely to experience poverty, partly because women often receive lower wages and have limited access to financial, technical, and other support services as compared to men. Following the same, we studied whether women learners in these states have access to digital services and whether or not they possess the digital literacy to function the same.

There is a variety of factors that cause many women to still face a significant digital divide in India. First, there is a rural-urban digital disparity, with rural broadband penetration at just 29% compared to the national average of 51%. This means that women in rural areas are less likely to own mobile phones. Second, there is an income-based digital divide. Given that the average cost of data is \$0.68 per GB in India, low-income households (earning less than \$2 per day) spend about 3% of their monthly income on one GB of data. In contrast, middle-income households (earning \$10–\$20 per day) spend only 0.2% (Nikore, 2023). Thirdly, intra-household gendered discrimination also limits women’s equitable access to digital devices within the home. Even when women are granted access to mobile devices within the household, male household members frequently regulate their online activities. Before marriage, mobile phones are often perceived as a threat to a woman’s reputation, while after marriage, their use is seen as a disruption to caregiving responsibilities. Due to prevailing social norms and fear of judgment, women generally avoid taking phone calls in public and prefer to converse privately at home. This social framework has increasingly marginalised women from the burgeoning digital economy in the post-COVID-19 era, affecting their opportunities for online education, skills training, entrepreneurship, and employment. This bias further restricts women’s opportunities to engage fully and benefit from digital technologies (Nikore, 2023).

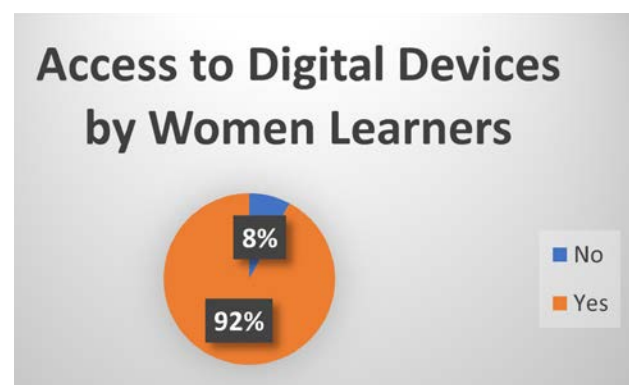
A recent state-level analysis study concerning the Gender-Gap in Internet Literacy in India revealed that while Bihar has the lowest percentage of

Internet literate women, Chhattisgarh ranks second among the states with a significant gap in Internet literacy with a percentage gap of 29.6 between men and women. Uttar Pradesh ranks 6th with a 28.5% gap, while Jharkhand places at 11th and has a 26.6% gap (Gupta et al., 2023). This shows that in locations where this study has been undertaken, internet literacy and digital accessibility of women require serious efforts of digital transformation.

5.2 Functional Digital literacy

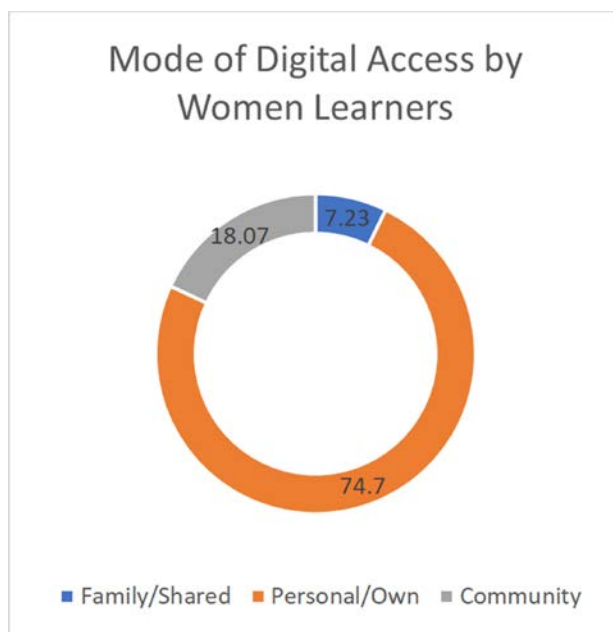
To understand these disparities in more detail, we included questions that address access to digital devices by women learners. The study concluded that 92% of women learners have reported having access to a digital device, with 75% having devices of their own. The baseline survey also indicated that personal devices were the most common means of accessing ICT, with 57 learners using them, followed by family and community devices. Additionally, 97.59% of learners have access to a smartphone, and 83.13% of learners have the ability to operate it quite well, which is a development from the baseline survey, as only 37 were able to use it efficiently. The rise in digital device access among women is indeed a positive sign of transformation (Sengupta & Sharma, 2022). It was also observed that most women learners were using their digital devices for financial purposes.

Figure 5: Access to Digital Devices by Women Learners



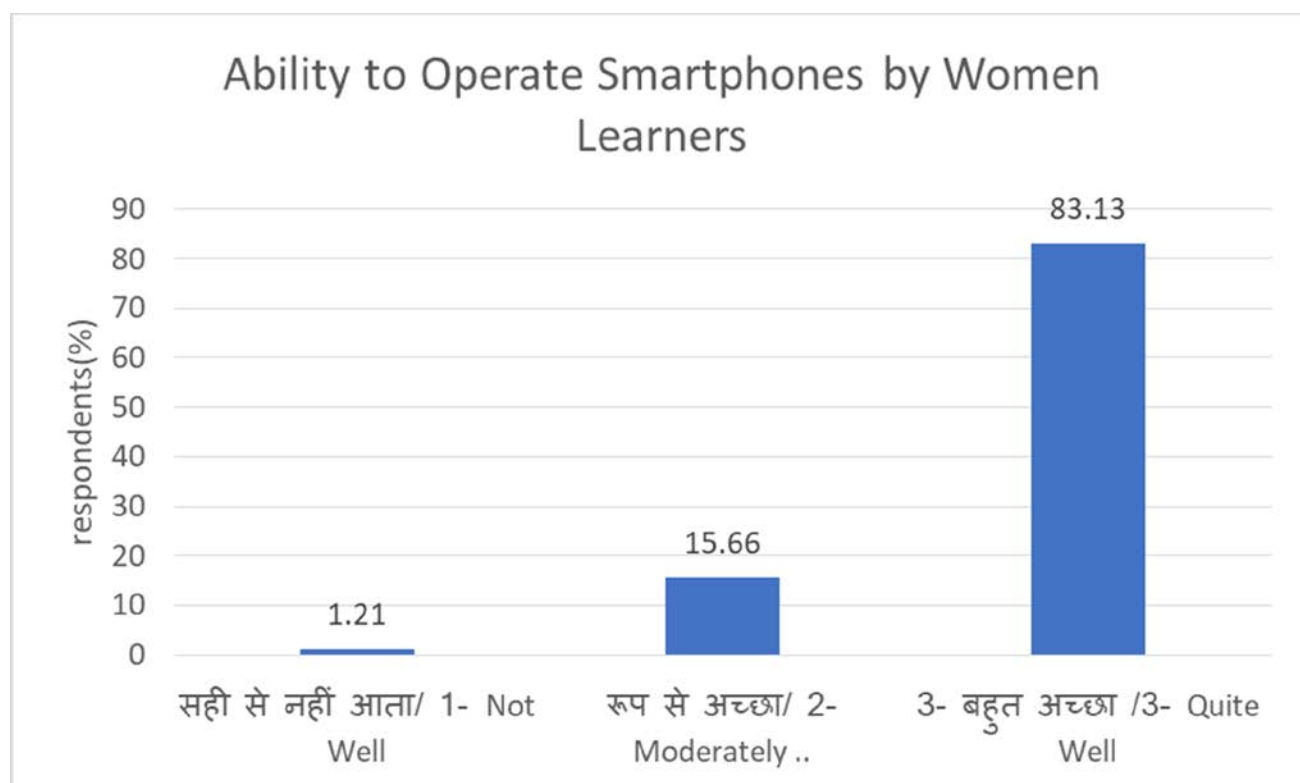
Source: Primary Data, DEF

Figure 6: Modes of Digital Access by Women Learners



Source: Primary Data, DEF

Figure 7: Ability to Operate Smartphones by Women Learners



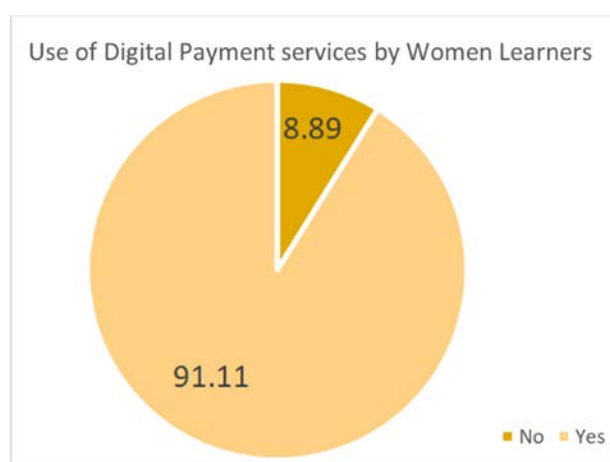
Source: Primary Data, DEF

To improve the functional digital literacy of the learners, a module that covered the parameters of functional digital literacy, such as access to digital devices, methods of using these devices, various modes of digital interaction, and the advantages offered by digital technologies, was taught. The module begins with foundational digital literacy skills by focusing on identifying and using different digital devices like smartphones, computers, and the internet. It includes the essential functions and applications of these devices using symbolic representations and procedural instructions. The module provides a comprehensive overview of operating digital tools, including artificial intelligence (AI), email, websites, and daily-use applications like WhatsApp. The aim of the training module was to equip learners with the knowledge needed to use these technologies in their daily lives and how to leverage technology for personal and professional activities. The study found that after training, 73% of respondents used financial services, 16% used social media apps, and 11% used digital devices for games. This represents a significant improvement from the baseline survey, where digital devices were primarily used for entertainment and social media apps. This demonstrates that the learners of this project have engaged with digital beyond social media communications and entertainment purposes. This enables rural women learners to climb the ladders of digital engagement, which would help them accelerate their capacity to build their agency and achieve self-reliance. In addition, while a few learners mentioned difficulties navigating the complexities of the internet, most learners reported little or no significant issues with internet use in both the baseline and endline surveys. The results post-training in digital financial literacy were similar.

5.3 Digital Financial Literacy

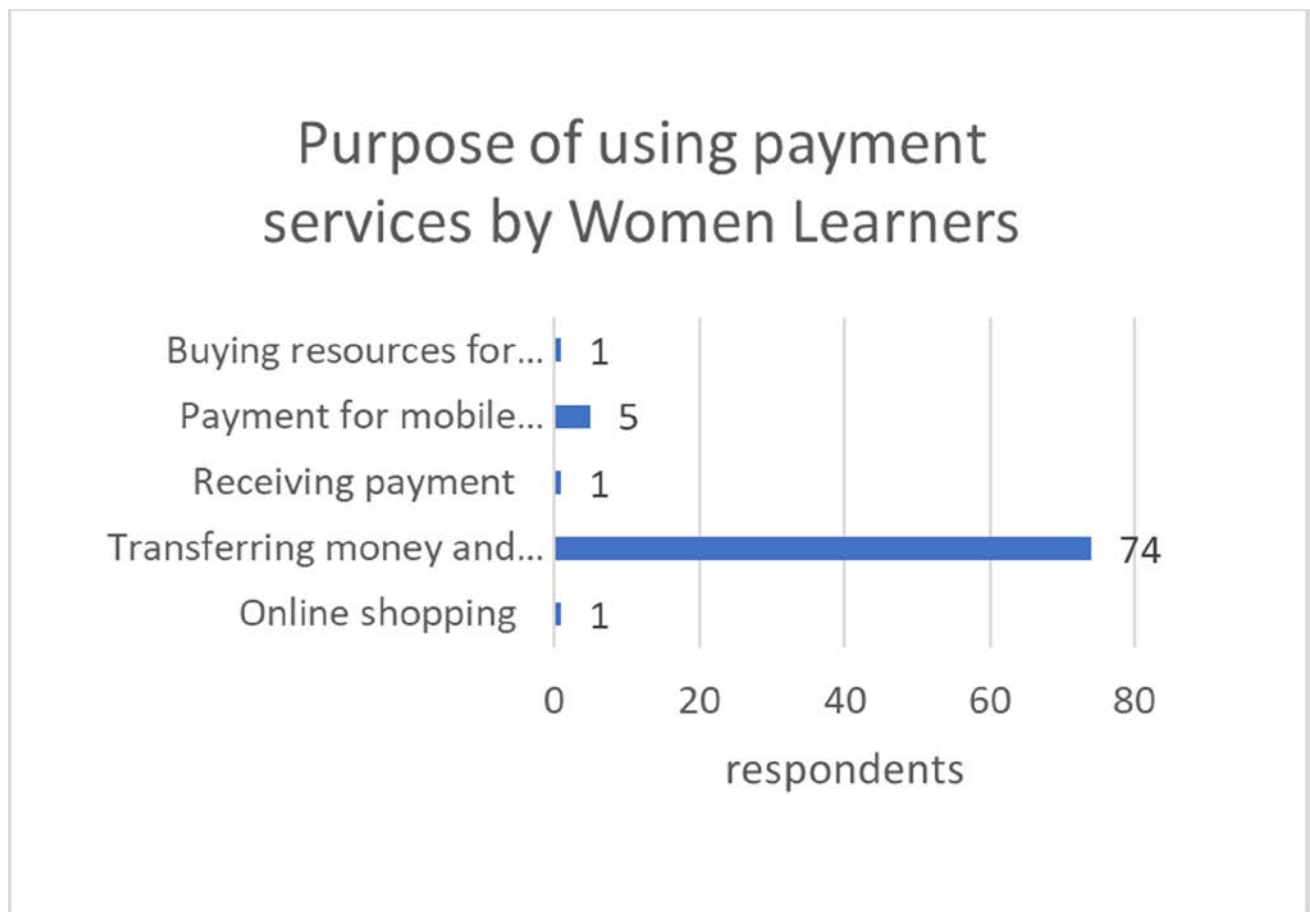
The Digital Financial Literacy module included basics of financial terminologies such as Unified Payments Interface (UPI), Bank, Debit card, ATM, Loan, Mobile Banking, etc, as well as their advantages and disadvantages. To make the process more engaging, the module uses symbols and test questions to explain the steps to understand the same quickly. Another crucial component of the module is awareness of schemes of financial exclusion provided by the government for both businesses and individuals. It covers schemes such as Pradhan Mantri Jan Dhan Yojana, Atal Pension Yojana Pradhan, Pradhan Mantri Vaya Vandana Yojana for individuals and Stabd up India Scheme Venture Capital Funds Pradhan Mantri MUDRA Yojana for businesses—the module aimed towards increasing women’s participation in the digital financial space. As per the baseline survey, 53% of respondents used digital payment services, which increased to 91% in the end-line survey. Most women learners use digital payments primarily for UPI transactions, with few using net banking, debit cards, or mobile wallets.

Figure 8: Use of Digital Payment Services by Women Learners



Source: Primary Data, DEF

Figure 9: Purpose of using payment services by Women Learners



Source: Primary Data, DEF

Figure 9 shows that more learners i.e. 74 use digital payment services for purposes such as transferring money. In the baseline survey, 36 learners used digital payments for mobile recharges, while 26 used them for transferring money. In both surveys, the lack of funds in the account was a common reason for not using digital payment services, as 37 learners cited this issue in the end-line survey and 40 in the baseline survey. Apart from affordability, many women still feel underconfident using the digital space due to online frauds, fake news and misinformation. A persistent fear surrounds these practices, making the module on critical digital literacy, designed to help learners navigate the digital space safely highly essential.

5.4 Critical Digital Literacy

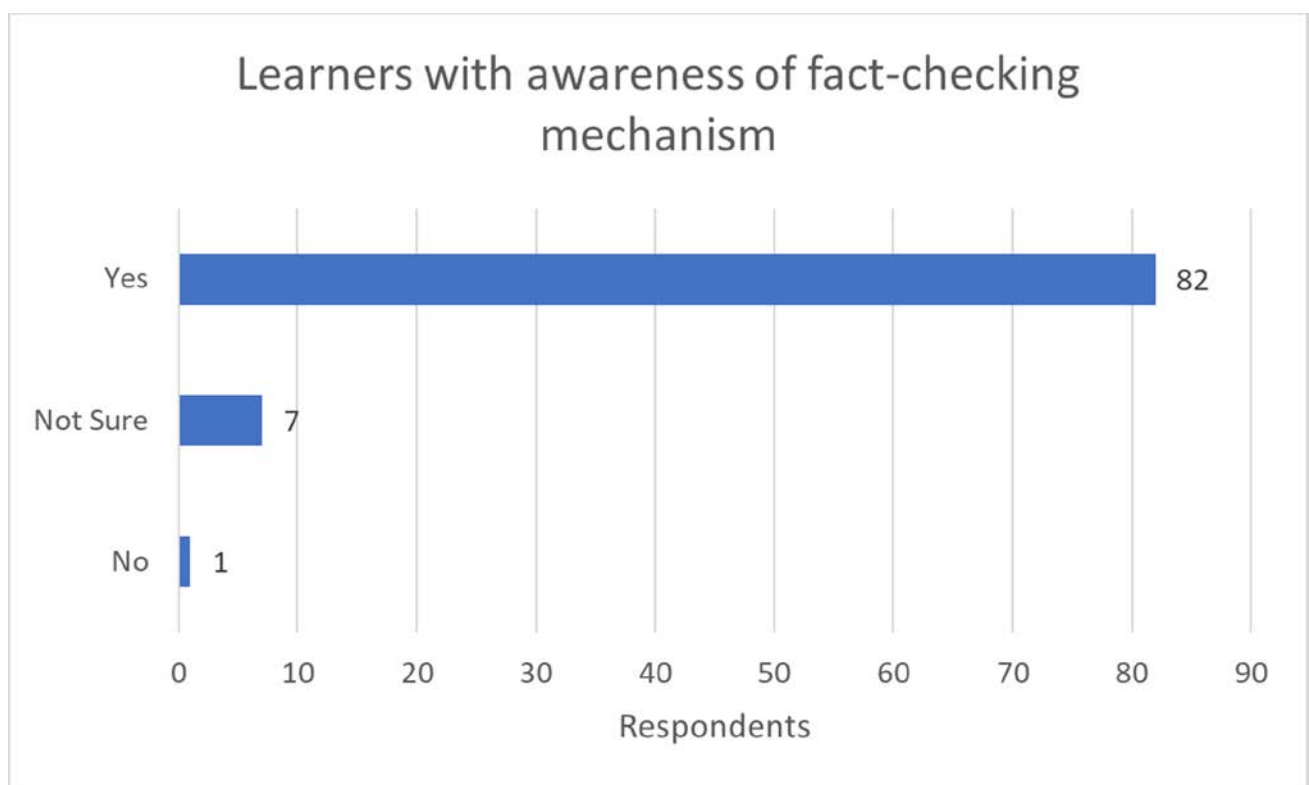
Even today, women are less likely to own a mobile phone or internet than men and are subject to further marginalisation due to the urban-rural digital disparity (Sheokand & Sulfath, 2024). Therefore, when women have little or no access to digital, they often seek help from others, including common service centres (CSC), relatives or even strangers. Not only this undermines their autonomy, but dependency on others also leads to higher chances of them being target of fake news, fraud, misinformation, disinformation, online cognitive biases as well as logical fallacies. Such attacks have the ability to target women's public participation and mobility, as they reiterate the

existing patriarchal perception among both men and women that women fall for more fraudulent activities than men in the household. Therefore, the existing digital divide and absence of critical digital literacy about navigating the digital world further perpetuate their vulnerabilities and deepen the digital divide.

To address this concern, the module on Critical Digital Literacy focused on how to produce and consume the digital content in a way where one is able to identify reliable and accurate online content. Alongside, it also addresses the ethical responsibilities of the digital citizens. The module uses symbols and narratives to explain ways to protect oneself via verifying information, keeping track of digital footprint, using the

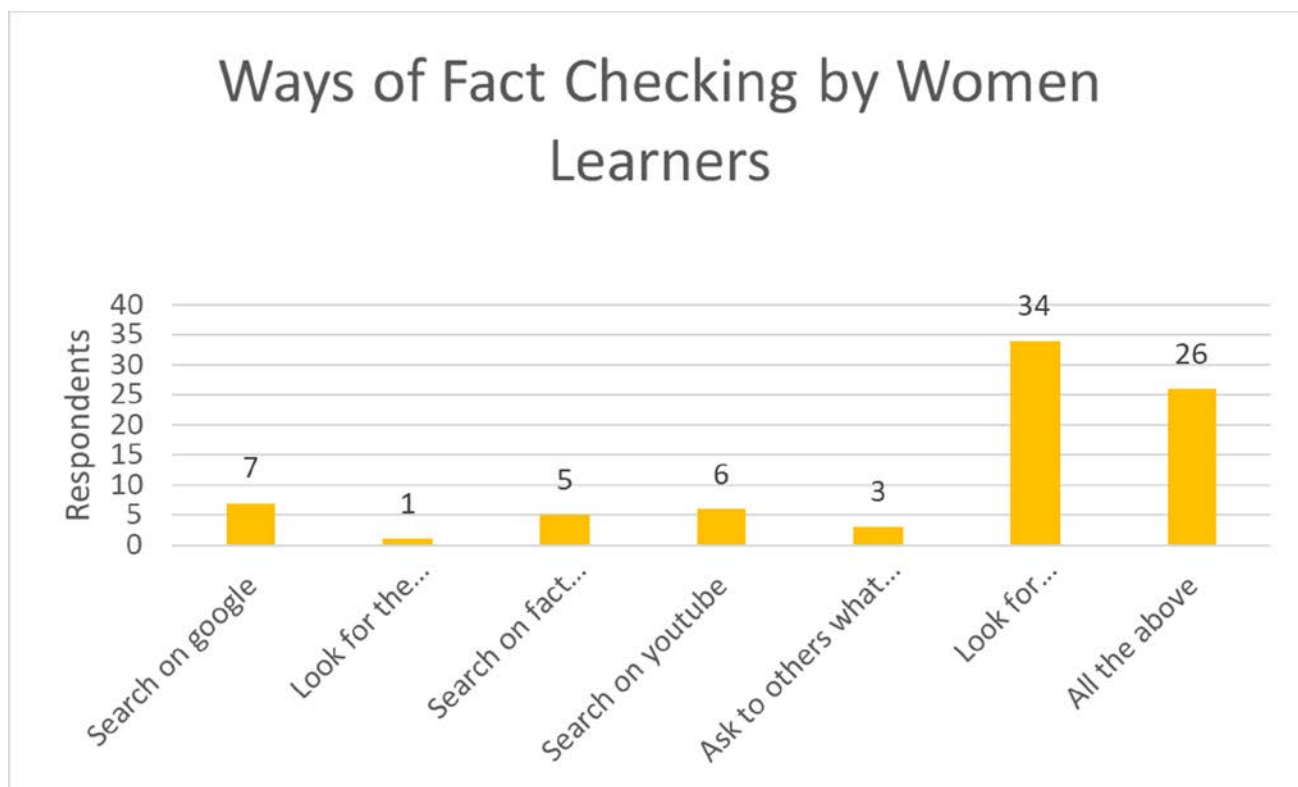
ABCDE framework, tips for evaluating new as well as action tips against fake news. The module proved to be of great help to learners. During the baseline survey, 59 learners responded positively to being aware of fact-checking, and in the endline response, an increase to 82 learners was recorded (see Figure 10). In the end-line survey, 34 learners reported using discrepancy checks as their method for fact-checking information. This approach contrasts with the baseline survey results, where 54 respondents primarily relied on Google searches for verifying facts. This shift indicates a change in the strategies employed by learners to ensure the accuracy of information after receiving training in critical digital literacy (see Figure 11).

Figure 10: Learners with awareness of fact-checking mechanism



Source: Primary Data, DEF

Figure 11: Ways of Fact-Checking by Women Learners



Source: Primary Data, DEF

However, when asked about their news sources, 69 learners reported using WhatsApp and other channels, whereas the baseline survey indicated that 40 learners relied mainly on social media for news. This indicates that as social media becomes increasingly accessible, people tend to depend on it for news, compared to traditional methods such as television or newspapers. This shift highlights the need for more reliable and user-friendly sources of accurate information that cater to regionality and language preferences.

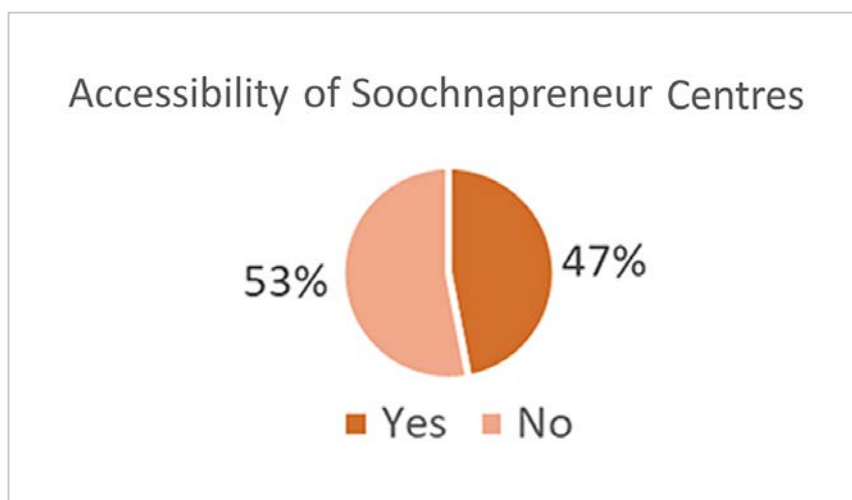
5.5 Access to Citizen Services

The last module of the series was Access to Citizen Services. This module aimed to facilitate access to government services and improve the efficiency of citizen satisfaction offer digital solutions and service delivery of schemes. It takes a user centric approach to cater to marginalised

groups including women. Through pre-assessment questions, it attempts to understand the user profile and their level of proficiency with the digital space. Thereafter, it explains the eligibility for government services, the application process, features, benefits, documents required, and benefits and caution steps. After completing the module, 89% of learners reported having an awareness of government entitlements compared to the 69% during the baseline survey. It also discusses the role of Sochnapreneur centres in empowering women. In the study, 47% of learners responded to having Sochnapreneur Centres (a type of Common Service Centre) near their house as per the endline survey, compared to only 24% as per the baseline survey (see Figure 12). The Common Service Centres is part of the National e-Governance Plan, which was launched in September 2006. Up to March 2024 the total functional CSCs in the country are 585411 of

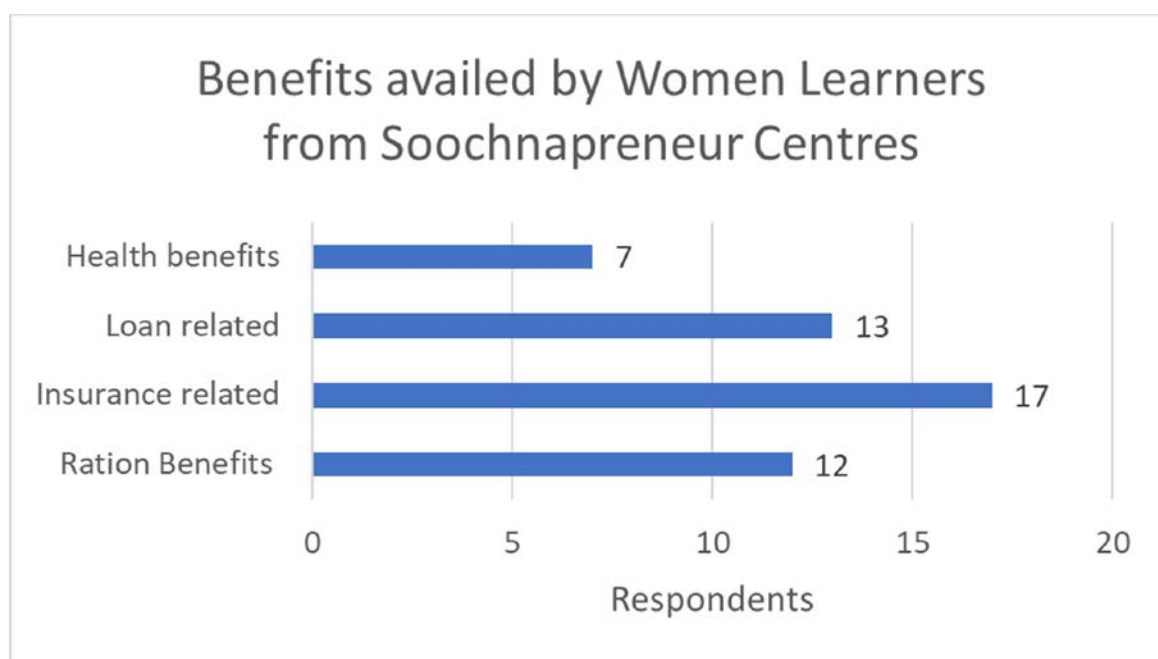
which 472111 are based in rural areas and 113300 are based in urban areas. The total transactions through the DSP were Rs. 436.29 lakh and Rs. 243.18 lakhs through non-DSP¹. The Sochnapreneur centres by DEF have therefore been instrumental in helping women access their citizen services and entitlements.

Figure 12: Accessibility of Sochnapreneur Centres



Source: Primary Data, DEF

Figure 13: Benefits availed by Women Learners from Sochnapreneur Centres



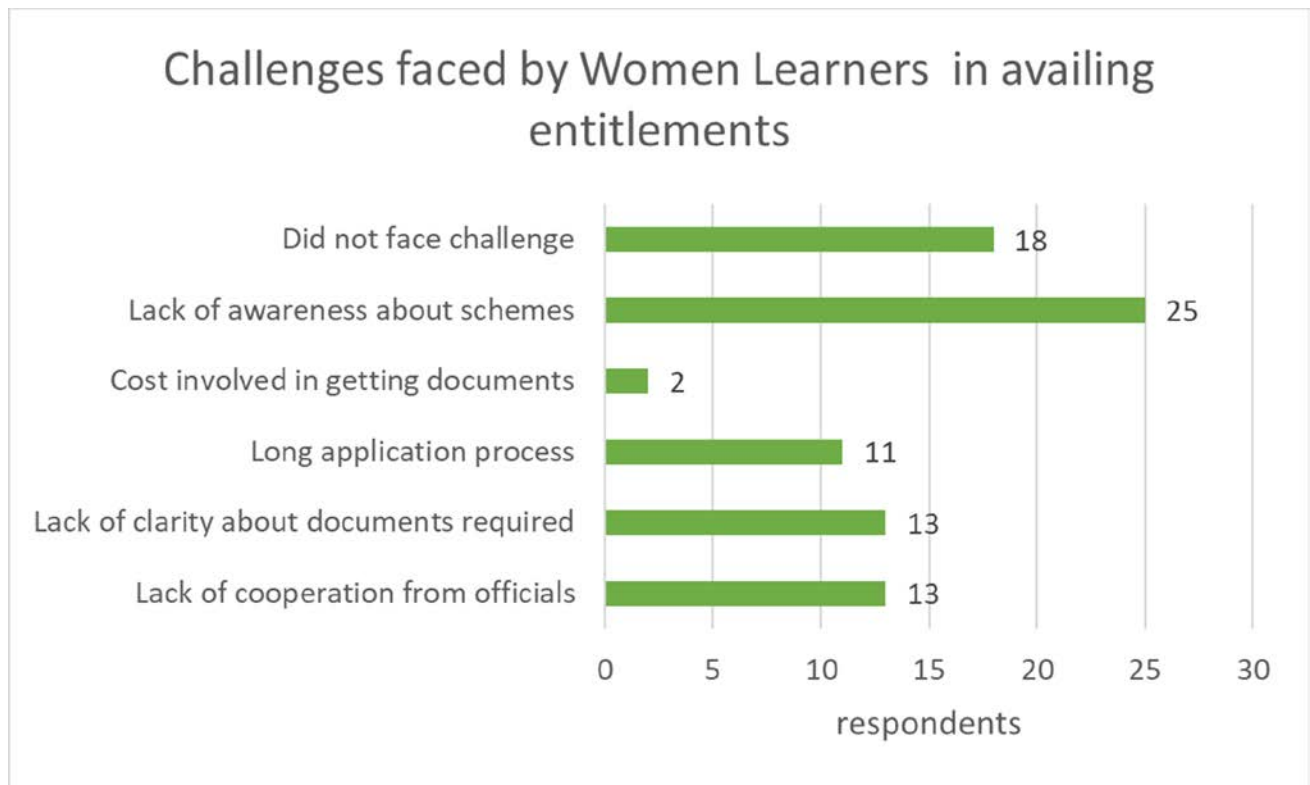
Source: Primary Data, DEF

¹ <https://csc.gov.in/>

The significant benefits availed by the learners were insurance-related (17), loan (13), ration benefits (12) and health benefits (7) during the endline survey. This is particularly positive, given that ration benefits were the most commonly accessed entitlement during the baseline survey,

with 50 respondents reporting this benefit. However, challenges persist among learners in accessing entitlements. Lack of awareness about the schemes has been a significant issue, with 28 learners reporting this problem in the baseline survey and 25 in the end-line survey (see Figure 14).

Figure 14: Challenges faced by Women Learners in availing entitlements



Source: Primary Data, DEF

5.6 Relation between Education, Age, Earning level and Digital literacy

In this section, an attempt has been made to understand whether a relationship exists between educational level, age, and earning level with digital literacy. This is done to counter the popular belief that higher educational qualifications and earnings positively impact digital literacy. Digital literacy is achieved through proper module training for different cohorts. The following

section shows the correlation and regression analysis to understand the relationships so that further programs and modules could be created for different cohorts.

pwcorr Edu_New earn_new, sig

	Edu_New	earn_new
Edu_New	1.0000	
earn_new	-0.0091	1.0000
		0.9321

Source: Primary Data, DEF

Correlation matrix between “Edu New” (education level) and “earn new” (earnings), along with their significance levels. The correlation coefficient between “Edu New” and itself is 1.0000, indicating a perfect correlation between “Edu New” and itself. The correlation coefficient between “earn new” and itself is also 1.0000, which is expected. The correlation coefficient between “Edu New” and “Earn new” is -0.0091. **This suggests a very weak negative correlation between education level and earnings. However, the correlation is not statistically significant, as indicated by the p-value of 0.9321. This means that there is no strong evidence to reject the null hypothesis that the correlation between “Edu New” and “earn new” is equal to zero.**

pworth Edu_New	DigiPay_new, sig
	Edu_New DigiPa~w
Edu_New	1.0000
DigiPay_new	0.0365 1.0000
	0.7326

Source: Primary Data, DEF

A correlation matrix between “Edu_New” (education level) and “DigiPay_new” (digital payment adoption), along with their significance levels. The correlation coefficient between “Edu_New” and itself is 1.0000, indicating a perfect correlation between “Edu_New” and itself. The correlation coefficient between “DigiPay_new” and itself is also 1.0000, as expected. The correlation coefficient between “Edu_New” and “DigiPay_new” is 0.0365. This suggests a very weak positive correlation between education level and digital payment adoption. However, the correlation is not statistically significant, as indicated by the p-value of 0.7326.

	Edu_New	intern~w
Edu_New	1.0000	
internetus~w	-0.0906	1.0000
	0.3958	

It is a correlation matrix with two variables: “Edu_New” (education level) and “internetus~w” (representing internet usage). The correlation coefficient between “Edu_New” and “internetus~w” is -0.0906. This suggests a weak negative correlation between education level and internet usage.

Edu_New	factch~w	
Edu_New	1.0000	
factcheck_~w	0.1428	1.0000
	0.2005	

The Pearson correlation coefficient between “Edu_New” (education level) and “factcheck_new” (fact checking) is as follows:

- The correlation coefficient between “Edu_New” and “factcheck_new” is 0.1428.
- The associated p-value for this correlation coefficient is 0.2005.

With a correlation coefficient of 0.1428 and a p-value of 0.2005, it indicates a weak positive linear relationship between “Edu_New” and “factcheck_new”, but this correlation is not statistically significant. **Therefore, based on these results, there does not appear to be a significant linear relationship between education level (“Edu_New”) and fact-checking behaviour (“factcheck_new”).**

This regression analysis examines the relationship between the variables “Age_New” (age) and “internetuse_new” (internet usage). Here are the key findings:

- The coefficient for “internetuse_new” is -0.1506. This indicates that for every one-unit increase in internet usage, the age decreases by approximately 0.1506 units, holding all other variables constant.
- The p-value associated with the coefficient for “internetuse_new” is 0.026, which is less than 0.05. This suggests that the coefficient is statistically significant at the 5% level, indicating that there is evidence to reject the null hypothesis that the coefficient is equal to zero.
- The R-squared value is 0.0554, indicating that approximately 5.54% of the variation in age can be explained by internet usage.
- The adjusted R-squared value is 0.0447, which adjusts for the number of predictors in the model.
- The intercept, represented by “_cons”, is 14.3457. This is the value of “Age_New” when “internetuse_new” is zero.
- The standard errors for the coefficients are also provided, which can be used to calculate confidence intervals.

Overall, this analysis suggests that there is a statistically significant negative relationship between age and internet usage, with increased internet usage associated with slightly lower age. However, the model’s explanatory power is relatively low, indicating that other factors not included in the model may also influence age.

Age_New	StopFa~w	
---------	----------	--

Age_New	1.0000	
StopFakeNews~w	-0.0387	1.0000
	0.7711	

Correlation matrix between “Age_New” (Age) and “StopFakeNews_New” (Steps to stop fake news), along with their significance levels. The correlation coefficient between “Age_New” and itself is 1.0000, as expected. The correlation coefficient between “StopFakeNews_New” and itself is also 1.0000, indicating a perfect correlation between “StopFakeNews_New” and itself. The correlation coefficient between “Age_New” and “StopFakeNews_New” is -0.0387. This suggests a very weak negative correlation between age and engagement with stopping fake news. However, the correlation is not statistically significant, as indicated by the p-value of 0.7711. This means that there is no strong evidence to reject the null hypothesis that the correlation between “Age_New” and “StopFakeNews_New” is equal to zero.

Age_New	Digise~w	
Age_New	1.0000	
Digiservice~w	-0.1605	1.0000
	0.1307	

Matrix of correlation between “Age_New” and “Digiservice_New”, along with their significance levels. The correlation coefficient between “Age_New” and itself is 1.0000, as expected. The correlation coefficient between “Digiservice_New” and itself is also 1.0000, indicating a perfect correlation between “Digiservice_New” and itself. The correlation coefficient between “Age_New” and “Digiservice_New” is -0.1605. This suggests a moderate negative correlation between age and engagement with digital services. However, the correlation is not statistically significant, as indicated by the p-value of 0.1307.

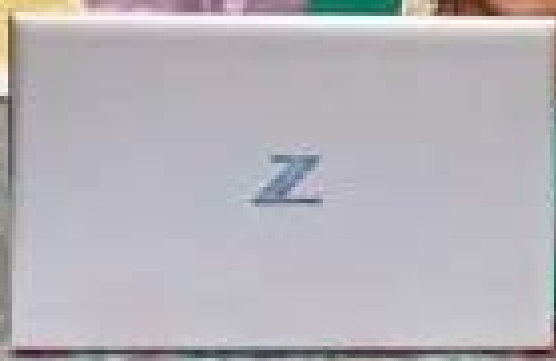


Skill Bot

COMMUNITY OF LEARNING

UPSKILLING AND ENTREPRENEURSHIP SUPPORT FOR
WOMEN WITH DISABILITIES AND WOMEN IN RIGID

- Small Digital Library
- Mobile Financial Literacy
- Mobile TV Digital Marketing
- Mobile Wi-Fi
- Mobile...
- Mobile...



सरकार
अफस
...
...
...



6. Project's Effectiveness

Here in this section, the effectiveness of the project is measured by drawing a comparison of the findings from Baseline study. The module-based training, yojna camps, and various capacity building initiatives have led to major shifts in how rural women interact with digital tools in the project implementation areas.

Table 16: Comparison of Baseline and Endline Study

Parameters	Endline Study
	Functional Digital Literacy
Access to Digital Device	Yes 92% No- 8%
Mode of access	Personal- 74.7% Family/shared- 7.23% Community- 18.07%
Services availed by respondents	Games/Social Media- 10.84% Financial and others- 73.49% Social Media Apps- 15.66%
Access to smartphone	97.59%
Ability to operate smartphone	Not well- 1.21% Moderately well- 15.66% Quite well- 83.13%
Purpose of internet usage	Social media and others- 79% Entertainment and others- 6% General information- 4% Online Shopping- 1%
Issues of using internet	No problem faced- 60% Safety concerns- 8.88% Difficult language- 7.77% Complex to navigate and others- 23.33%

Digital Financial Literacy	
Use of Digital payment services	Yes- 91.11% No- 8.89%
Digital Payment services	UPI and others- 64% Net banking- 3% Mobile wallets- 21% Debit card- 2%
Purpose of using payment services	Online shopping- 1.1% Transferring money and others- 82.2% Receiving payment- 1.1% Payment of mobile recharge/others- 5.55% Buying resources for business- 1.1%
Reasons for not using digital payment services	Difficulty to understand- 27% Lack of support for grievance- 2% No bank account-1.1% Don't need- 6.7% Lack of money in the account- 41% Distrust- 3% No device- 7%
Critical Digital Literacy	
Awareness about fact-checking	Yes- 91% No- 1.1% Not sure- 8%
Ways of fact-checking	Search on google- 8% Look for the source of post-1.1% Search on fact checking-6% Search on YouTube- 7% Ask to others what they think- 3% Look for discrepancies- 38% All the above- 40%
Ways of receiving news	Whatsapp/others- 76% Social Media- 13% YouTube- 1.1%

Access to citizen services on digital	
Soochnapreneur Centres near their home	Yes- 47% No-53%
Kinds of benefits availed	Health benefits-9% Loan related- 16% Insurance related- 21% Insurance related-21% Ration Benefits- 14%
Challenges in availing entitlements	Did not face challenge-20% Lack of awareness about schemes-28% Cost involved in getting documents-2% Long application process-12% Lack of clarity about documents required-14% Lack of cooperation from officials- 14%

Source: Primary Survey, DEF



7. Challenges

The study highlighted the challenges during towards ensuring digital literacy for rural women in India. They are as following:

- The educational qualifications of the women community members are lower than the men community members in the rural areas. This leads to women members having difficulties in accessing various resources. The rural women community members are willing and able to work towards digital empowerment of the community.
- In rural India and other parts of India, women's housework is invisibilised. Domestic work is not considered work, and women spend most of their days doing unpaid domestic work. This leads to financial dependence on the women's community. The lack of economic independence leads to poorer access to skill knowledge for digital skilling and other technological skills.
- In rural India, lack of public transportation leads to women members suffering a lot for training and other travel purposes. Though there is widespread use of online meeting platforms, there is also a need for robust physical infrastructure to build digital infrastructure.
- Another challenge in promoting digital literacy among rural women is the gender biases they encounter daily. These biases can hinder their ability to participate in training and educational activities.

समीक्षात्मक डिजिटल साक्षरता द्वारा ग्रामीण महिलाओं का सशक्तिकरण



8. Conclusion

Digital spaces, being part of broader societal structures, often reflect and perpetuate the existing inequalities and disparities in any society or nation. Consequently, marginalised groups, particularly women, frequently find themselves disadvantaged compared to men in accessing their rights and needs. While DEF's initiatives have substantially aided women in acquiring digital functional literacy, financial literacy, critical literacy, and access to citizen services through consistent training. However, despite these efforts, the overall situation remains challenging. This highlights the necessity for sustained engagement, particularly with rural women, to bridge the gender gap in digital access, usage, and impact.

In order to achieve an equitable digital landscape, it is imperative to engage in long-term projects exceeding one year and extend our reach to more unconnected or under-connected women. Long-term investments in digital education programs

can empower women and provide them with the tools for economic independence and social empowerment. Moreover, collaborations with local communities and organisations can also enhance the effectiveness of these initiatives and help ensure culturally relevant and impactful solutions. Additionally, government intervention is equally crucial in promoting gender equality at the socio-economic level to bring bigger and more sustainable changes within society's fabric. Their policies must support these efforts by ensuring access to affordable internet and digital devices, promoting digital literacy from a young age, and implementing measures to protect women from online harassment and exploitation. In summary, while progress has been made, there is still a considerable journey ahead to achieve digital equity. Continuous engagement, long-term projects, and proactive government intervention are essential to transform the digital landscape into inclusive and empowering for all women.



References

- Bala, S., & Singhal, P. (2018). Gender digital divide in India: A case of inter-regional analysis of Uttar Pradesh. *Journal of Information, Communication and Ethics in Society*, 16(2), 173-192.
- Chatterjee, A., & Chauradia, A. J. (2022). The impact of recruiting women entrepreneurs on reducing mission drift. *Centre for Development Policy and Practices*. <https://doi.org/10.5281/zenodo.7417876>
- Endow, T., & Dutta, S. (2022). Female workforce participation and vulnerability in employment: Evidence from rural Jharkhand. *The Indian Journal of Labour Economics*, 483-502.
- Gupta, T., Maiti, S., Y, M., & Jana, A. (2023). Gender-gap in internet literacy in India: A state-level analysis. <https://doi.org/10.21203/rs.3.rs-2846253/v1>
- Hufad, A., Purnomo, N. S., & Rahmat, A. (2019). Digital literacy of women as the cadres of community empowerment in rural areas. *International Journal of Innovation, Creativity and Change*, 9(7), 276-288.
- Kaur, H. (2023, July 25). Policy brief: Female literacy in the state of Bihar. *Centre for Development Policy and Practice*. Retrieved from <https://www.cdpp.co.in/articles/policy-brief-female-literacy-in-the-state-of-bihar#f5>
- Khan, A., Majeed, S., & Sayeed, R. (2020, June 13). Women education in India and economic development linkages: A conceptual study. *International Journal of Engineering and Management Research*, 10(3), 77-81. <https://doi.org/10.31033/ijemr.10.3.12>
- Laskar, M. H. (2023). Examining the emergence of digital society and the digital divide in India: A comparative evaluation between urban and rural areas. *Frontiers in Sociology*, 8, 1145221.
- Levi-Strauss, C. (1966). *The savage mind*. University of Chicago Press.
- Ministry of Statistics and Programme Implementation. (2023). *Annual report: Periodic Labour Force Survey (PLFS) 2022-23*. Retrieved from https://www.mospi.gov.in/sites/default/files/press_release/Press_note_AR_PLFS_2022_23.pdf
- Nikore, M. (2023). India's gendered digital divide. *Observer Research Foundation*. Retrieved from <https://www.orfonline.org/expert-speak/indias-gendered-digital-divide>
- Oxfam India. (2022). *Indian Inequality Report – 2022: Digital Divide*.
- Radiowala, A. A., & Molwane, M. S. (2021). A study on the challenges faced by rural women in accessing education. *Journal of Scientific Research*, 13-17.
- Rajam, V., Reddy, A. B., & Banerjee, S. (2021). Explaining caste-based digital divide in India. *Telematics and Informatics*, 65, 101719.
- Safeguarding-Rural-India-Through-Critical-Digital-Literacy_20-May-2024.pdf
- Sengupta, H., & Sharma, A. (2022, July 20). How digitisation is creating opportunities for Indian women. *World Economic Forum*. Retrieved from <https://www.weforum.org/agenda/2022/07/how-digitisation-is-creating-opportunities-for-indian-women/>
- Sharma, A., & Banerjee, A. (2022). Socio-economic determinants of digital divide in India. *Demography India*, 51(1), 78–92.
- Sharma, K. (2012). Changing profile of urban poverty: A case study of Jharkhand (India). *Transcience: A Journal of Global Studies*, 3(2), 37. Retrieved from http://www2.hu-berlin.de/transcience/Vol3_Issue2_2012_37_50.pdf

Sheokand, A., & Sulfath, J. (2024). I made pickle on my periods, and it didn't go stale. *Centre for Development Policy and Practice*. Retrieved from https://www.defindia.org/wp-content/uploads/2024/05/FGD-Safeguarding-Rural-India-Through-Critical-Digital-Literacy_20-May-2024.pdf

Singh, P., & Pattanaik, F. (2020). Unfolding unpaid domestic work in India: Women's constraints, choices, and career. *Palgrave Communications*, 6, 111. <https://doi.org/10.1057/s41599-020-0488-2>

Singh, R. (2016). Female literacy and economic development in India. *Rupkatha Journal on*

Interdisciplinary Studies in Humanities, 8(2), 64-70. <https://doi.org/10.21659/rupkatha.v8n2.07>

The Bridgespan Group. (2020). *Empowering rural women through digital literacy: Internet Sathi*. Mumbai: The Bridgespan Group.

Tewathia, N., Kamath, A., & Ilavarasan, P. V. (2020). Social inequalities, fundamental inequities, and recurring of the digital divide: Insights from India. *Technology in Society*, 61, 101251.

Tyres, A., Hight, C., Chamberlin, S., & Khanna, A. (2021). *Increasing women's digital literacy in India: What works*. New Delhi, India: BBC Media Action.

Digital Empowerment Foundation

✉ *info@defindia.org*