

Government Initiatives for Women's Digital Literacy in India: A Critical Review

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Digital literacy has become a necessary condition for educational participation, financial inclusion, access to welfare schemes, employment, entrepreneurship, and citizenship in contemporary India. For women, digital literacy is not merely a technical skill; it is linked with agency, mobility, access to information, safety, public participation, and economic empowerment. The Government of India has launched several initiatives under the broader Digital India framework to expand digital access and digital capability, including the National Digital Literacy Mission/Digital Saksharta Abhiyan, Pradhan Mantri Gramin Digital Saksharta Abhiyan, Common Service Centres, digital financial inclusion programmes, skill-development schemes, and women-oriented livelihood platforms. This paper critically reviews major government initiatives for women's digital literacy in India. It uses a documentary and analytical method based on official reports, government releases, policy documents, and scholarly literature. The paper argues that government initiatives have significantly expanded the scale of digital literacy training, especially through PMGDISHA, which trained 6.39 crore individuals against a target of 6 crore by 31 March 2024. However, women's digital literacy remains constrained by gendered access to devices, internet use, mobility, language, socio-cultural norms, safety concerns, and the gap between basic digital literacy and meaningful digital empowerment. The paper concludes that women's digital literacy policy must move beyond one-time training and certification toward sustained, locally supported, safety-conscious, livelihood-linked, and gender-transformative digital capability.

Keywords: Women, digital literacy, Digital India, PMGDISHA, digital divide, gender, India, e-governance, financial inclusion.

1. Introduction

Digital literacy has emerged as a central requirement for participation in education, governance, labour markets, banking, health services, entrepreneurship, and social communication. In India, where government services, welfare delivery, financial transactions, education, health consultations, and employment information are increasingly mediated through digital platforms, digital literacy has become a condition for social inclusion. For women, this question is especially important because digital exclusion often overlaps with gender inequality, poverty, rural location, caste, low schooling, unpaid care work, and restricted mobility.

The gender digital divide is visible in women's lower access to internet use. NFHS-5 was the first National Family Health Survey to include information on whether women and men had ever used the internet. The India report shows a significant gender gap, with

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women's internet use much lower than men's, indicating that digital access remains gendered even when mobile phones and digital services have expanded nationally. Government data and policy responses therefore need to be assessed not only in terms of number of beneficiaries trained but also in terms of whether women are able to use digital tools independently, safely, repeatedly, and productively.

The Digital India programme, launched in 2015, seeks to transform India into a digitally empowered society and knowledge economy through digital delivery of services, digital infrastructure, and digital empowerment. (Digital India, n.d.) Within this larger framework, women's digital literacy has been promoted through schemes such as the National Digital Literacy Mission, Digital Saksharta Abhiyan, Pradhan Mantri Gramin Digital Saksharta Abhiyan, Common Service Centres, digital financial inclusion programmes, and livelihood missions. However, the key question is whether these initiatives have reduced women's digital exclusion in a substantive way or whether they have mainly produced basic training and certification without deeper empowerment.

2. Objectives of the Study

The study has the following objectives:

1. To review major government initiatives promoting women's digital literacy in India.
2. To examine the achievements of schemes such as PMGDISHA, NDLM/DISHA, Digital India, CSCs, and related livelihood initiatives.
3. To analyze the gender-specific barriers that affect women's access to digital literacy.
4. To critically evaluate the gap between digital literacy training and actual digital empowerment.
5. To suggest policy measures for strengthening women's digital literacy in India.

3. Methodology

This paper adopts a *documentary and critical review method*. It is based on secondary sources, including Government of India press releases, official scheme documents, policy statements, parliamentary responses, government portals, and relevant academic literature on digital divide, gender, and ICT-based empowerment. The study is analytical rather than survey-based. It does not collect primary data from women beneficiaries; instead, it critically interprets available official data and scholarly literature to assess the scope, achievements, and limitations of government initiatives.

The review gives priority to verified sources such as Press Information Bureau releases, official Digital India and PMGDISHA information, National Family Health Survey data, Ministry portals, DAY-NULM documents, and government scheme reports. Scholarly sources are used to frame the theoretical understanding of digital literacy, gendered access, and empowerment.

4. Conceptualizing Women's Digital Literacy

Digital literacy refers to the ability to access, understand, evaluate, create, and use digital information through digital devices and online platforms. It includes basic operational skills such as using a smartphone, computer, internet browser, email, digital payment system, and government service portal. However, meaningful digital literacy goes beyond technical operation. It also includes information evaluation, cyber safety, privacy awareness, online communication, digital financial confidence, and the ability to use technology for education, livelihood, health, and citizenship.

For women, digital literacy has three interrelated dimensions. First, it is a *capability issue*, because women need the ability to use digital tools independently. Second, it is an *access issue*, because many women do not own devices or have reliable internet access.

Third, it is a *power issue*, because women's digital use may be controlled by family members, social norms, safety concerns, or fear of online harassment. Scholars have argued that the digital divide is not only about physical access to technology but also about skills, autonomy, language, confidence, and meaningful use (Warschauer, 2003; van Dijk, 2005; Selwyn, 2004).

Thus, women's digital literacy must be understood as a bridge between technological access and social empowerment. A woman who can use digital tools for banking, government services, health information, online learning, entrepreneurship, communication, and safety has greater agency than one who has only received basic one-time training.

5. Policy Background: Digital India and Gender Inclusion

The Digital India programme provides the broad policy foundation for digital literacy in India. The programme's official vision is to transform India into a digitally empowered society and knowledge economy. (Digital India, nd) This vision is important for women because digital empowerment is directly connected with access to welfare schemes, direct benefit transfer, online education, telemedicine, financial inclusion, and livelihood opportunities.

However, the Digital India framework is not automatically gender-transformative. A general digital programme may benefit women only if it consciously addresses gendered barriers such as restricted mobility, low device ownership, lower schooling, household control over phones, language barriers, online safety concerns, and unpaid domestic workload. Therefore, women's digital literacy must be examined through the question: does the policy merely create digital infrastructure, or does it create women's digital agency?

Government initiatives such as PMGDISHA specifically mention women and girls as important target groups. A 2022 PIB release stated that PMGDISHA aimed to bridge the digital divide, especially among rural populations, marginalized groups, women, and girls, by covering 6 crore rural households. It also reported that, as of 8 December 2022, women formed over 53% of total enrolled beneficiaries, over 54% of trained beneficiaries, and over 56% of certified beneficiaries under PMGDISHA. (Ministry of Electronics and Information Technology, 2024) This shows that women were not incidental beneficiaries but a significant part of the scheme's reach.

6. Major Government Initiatives for Women's Digital Literacy

6.1 National Digital Literacy Mission and Digital Saksharta Abhiyan

The National Digital Literacy Mission and Digital Saksharta Abhiyan represented early attempts to make non-IT-literate citizens digitally literate. The scheme was designed to impart IT training to 52.5 lakh persons, including Anganwadi workers, ASHA workers, and authorized ration dealers, so that non-IT-literate citizens could participate more effectively in democratic and developmental processes and improve their livelihood opportunities.

This initiative had indirect significance for women because Anganwadi and ASHA workers are mostly women and are located at the intersection of health, nutrition, education, and community development. Training such frontline women workers in digital skills has wider social importance because they often function as mediators between state schemes and local communities. However, the limitation of this phase was that the scale was smaller compared to PMGDISHA and the focus was more on basic IT training than on gender-specific empowerment.

6.2 Pradhan Mantri Gramin Digital Saksharta Abhiyan

PMGDISHA is the most important national-level scheme for rural digital literacy. It was launched to promote digital literacy in rural India by covering one person from each

eligible rural household, with a target of 6 crore rural households. The scheme aimed to make rural citizens capable of operating digital devices such as computers, tablets, and smartphones; using the internet; sending and receiving emails; accessing government services; searching for information; and undertaking digital payments.

The scale of PMGDISHA is substantial. A 2024 PIB release reported that around **7.35 crore candidates were enrolled, 6.39 crore were trained, and 4.78 crore were certified** under PMGDISHA. Another official release stated that the scheme ended after exceeding the target, with **6.39 crore individuals trained against the target of 6 crore as on 31 March 2024**.

From a gender perspective, PMGDISHA is important because women formed a large proportion of beneficiaries. In 2021, PIB reported that over **2.59 crore women beneficiaries were registered, forming 52% of cumulative registrations, and over 1.78 crore women beneficiaries were certified, forming 54% of total certified beneficiaries**. In 2022, women's share rose further, with women accounting for over **53% of enrolled, over 54% of trained, and over 56% of certified** beneficiaries.

This data shows that PMGDISHA has achieved numerical inclusion of women. Yet a critical review must ask whether certification translated into sustained use. Many women may complete training but still lack personal devices, independent internet access, digital confidence, or opportunities to apply their skills in education, banking, business, or governance. Hence, the scheme's success should be evaluated not only through enrolment, training, and certification numbers but also through post-training usage, income effects, confidence, autonomy, and safety.

6.3 Common Service Centres

Common Service Centres are important delivery points for digital services in rural and semi-urban India. PMGDISHA training was delivered through selected CSCs and training centres at the Gram Panchayat level. A 2022 official release noted that PMGDISHA training centres were required to have 3–5 computers or laptops with licensed software and at least one teaching faculty; over 4.13 lakh such centres had been approved under the scheme.

CSCs are important for women because they reduce the distance between rural communities and digital services. For women who cannot easily travel to towns or government offices, local digital access points may help in obtaining certificates, applying for schemes, accessing banking services, and using e-governance platforms. However, the gender impact of CSCs depends on location, safety, timing, presence of women operators, affordability, and local trust. If centres are male-dominated or socially inaccessible, women's actual use may remain limited.

6.4 Digital Financial Literacy and Women's Financial Inclusion

Digital literacy is closely connected with financial inclusion. Women's ability to use mobile banking, digital payments, Aadhaar-enabled services, UPI, direct benefit transfer information, and online banking can increase control over money and reduce dependence on intermediaries. However, digital financial literacy also requires protection from fraud, understanding of passwords and OTPs, awareness of cyber risks, and confidence in using financial apps.

Government initiatives such as Jan Dhan, Aadhaar, mobile connectivity, and digital payments have created a digital financial ecosystem. But women's digital financial inclusion requires more than account ownership. Women must be able to operate accounts, check balances, receive benefits, make payments, avoid fraud, and make decisions regarding savings and transfers. Without this, digital systems may reproduce dependence on male family members, banking correspondents, or local intermediaries.

6.5 DAY-NULM and Women's Livelihood Linkages

The Deendayal Antyodaya Yojana–National Urban Livelihoods Mission aims to reduce poverty and vulnerability among urban poor households by enabling access to self-employment and skilled wage employment opportunities. Its Employment through Skill Training and Placement component focuses on developing or upgrading skills of the urban poor according to market demand.

Although DAY-NULM is not exclusively a digital literacy scheme, it has relevance for women's digital empowerment because urban livelihoods increasingly require digital skills, financial literacy, online registration, digital payments, and platform-based work. A 2023 PIB release reported that DAY-NULM had mobilized more than **8.4 million urban poor women** and formed over **8,31,000 women's Self-Help Groups** across more than 4,000 towns. Such SHG-based platforms can become powerful channels for digital literacy if digital training is linked to livelihood, enterprise, banking, and market access.

7. Achievements of Government Initiatives

The first major achievement is **scale**. PMGDISHA exceeded its original training target, with 6.39 crore individuals trained by 31 March 2024. This scale is significant in a country where rural digital exclusion is historically deep.

The second achievement is **women's inclusion in beneficiary numbers**. Women formed more than half of enrolled, trained, and certified beneficiaries in the available PMGDISHA gender data. This suggests that the scheme did not bypass women; rather, women were one of its major beneficiary groups.

The third achievement is **rural outreach**. By using CSCs and Gram Panchayat-level training centres, PMGDISHA attempted to bring digital literacy closer to rural households. This is particularly important for women because distance, mobility restrictions, and safety concerns often limit their participation in training programmes.

The fourth achievement is **linkage with e-governance and digital payments**. PMGDISHA's training content included internet use, access to government services, information search, and digital payments. These skills are directly relevant to women's everyday needs, including welfare access, banking, education, health information, and communication.

The fifth achievement is **institutionalization of digital literacy as a public policy issue**. Digital literacy is no longer treated as a private skill acquired only by educated urban citizens. It has become part of state-led inclusion, rural development, and women's empowerment policy.

8. Critical Issues and Limitations

Despite these achievements, several limitations remain.

8.1 Certification does not guarantee empowerment

PMGDISHA data show impressive enrolment, training, and certification numbers. However, certification is only the first stage. A woman may be certified digitally literate but still lack a personal smartphone, data pack, family permission, confidence, or regular practice. Therefore, digital literacy must be evaluated through actual use, not only training completion.

8.2 Gendered access to devices

Women often use shared family phones rather than owning personal devices. Shared access reduces privacy, confidence, and continuity. If male family members control the phone, women may not be able to use digital services independently. This weakens the effect of digital literacy training.

8.3 Internet use remains unequal

NFHS-5 shows that internet use among women remains lower than among men, confirming that digital gender gaps persist despite the expansion of digital infrastructure and literacy initiatives. This gap indicates that policy must address social barriers, not only training supply.

8.4 Language and content barriers

Many women, especially in rural and low-literacy contexts, face difficulty using English-heavy interfaces, complex apps, and text-based instructions. Digital literacy programmes must use local languages, audio-visual content, voice-based interfaces, and practical demonstrations.

8.5 Digital safety and cyber vulnerability

Women's digital participation is affected by fear of online harassment, fraud, stalking, misuse of photographs, and privacy violations. If digital literacy training does not include cyber safety, privacy, password protection, financial fraud awareness, and reporting mechanisms, women may either avoid digital use or become vulnerable to harm.

8.6 Lack of livelihood integration

Basic digital literacy is valuable, but women gain more when digital skills are linked with livelihood. Training should help women access online markets, digital payments, SHG bookkeeping, telehealth, online education, job portals, government schemes, and entrepreneurship opportunities. Without livelihood linkage, digital literacy may remain symbolic.

8.7 One-time training model

Digital platforms change rapidly. A one-time training model may become outdated. Women need continuous handholding, refresher training, peer support groups, local mentors, and community-level digital helpdesks.

9. Discussion

Government initiatives have made an important contribution to women's digital literacy in India, especially by recognizing digital literacy as a public good. PMGDISHA's scale and women's participation are notable. The scheme's training target was not only met but exceeded, and women formed a majority of certified beneficiaries in available gender-disaggregated data. However, the critical question is whether women's digital literacy has moved from *access* to *agency*.

A gender-sensitive evaluation must distinguish between four stages: exposure, training, independent use, and empowerment. Many schemes are successful at the exposure and training stages. They bring women to training centres, teach basic digital operations, and issue certificates. But independent use requires ownership or regular access to devices, affordable internet, privacy, time, family support, local language content, and confidence. Empowerment requires that women use digital tools to improve their education, livelihood, health, safety, financial control, and civic participation.

Thus, the major policy gap lies between *digital literacy as skill acquisition* and *digital literacy as social transformation*. Current initiatives have addressed the first more effectively than the second. To become transformative, women's digital literacy must be integrated with education, livelihood, financial inclusion, cyber safety, local governance, health services, and entrepreneurship.

10. Suggestions

First, digital literacy programmes should include *post-training follow-up*. Beneficiaries should be contacted after three or six months to assess whether they are actually using digital services.

Second, the government should promote *women-friendly digital access spaces* through CSCs, Panchayat centres, schools, libraries, SHG offices, and community centres.

Third, digital literacy must include *cyber safety and privacy education*. Women should be trained in password safety, OTP fraud prevention, privacy settings, online harassment reporting, and safe digital payments.

Fourth, training should be *localized and multilingual*. Interfaces and learning modules should use regional languages, visual aids, voice-based tools, and examples from women's daily lives.

Fifth, digital literacy should be linked with *women's livelihoods*. SHGs, women entrepreneurs, artisans, domestic workers, farmers, vendors, and urban poor women should be trained in digital marketing, UPI payments, bookkeeping apps, online applications, and e-commerce access.

Sixth, schemes should move from household-level targets to *individual-level women's access*. "One person per household" may not ensure women's independent digital literacy if the selected person is male or if women cannot use the device later.

Seventh, stronger *gender-disaggregated monitoring* is needed. Data should report not only enrolment, training, and certification but also actual use, frequency of use, service access, income effects, device ownership, and confidence.

11. Conclusion

Government initiatives for women's digital literacy in India have produced important progress, particularly through Digital India, NDLM/DISHA, PMGDISHA, CSCs, digital financial inclusion, and livelihood missions. PMGDISHA stands out for its large scale, rural focus, and significant participation of women. Official data showing 6.39 crore trained individuals and women forming more than half of enrolled, trained, and certified beneficiaries demonstrates that government action has expanded women's access to digital literacy training.

However, a critical review shows that numerical achievement alone is not enough. Women's digital empowerment depends on independent access to devices, regular internet use, confidence, language accessibility, cyber safety, financial autonomy, and livelihood application. The continuing gender gap in internet use indicates that the problem is not merely technological but social, economic, and cultural. Therefore, future policy should move beyond basic certification toward sustained digital capability. Women's digital literacy should be treated as a foundation for education, livelihood, safety, financial inclusion, health access, and citizenship. Only then can digital literacy become a genuine instrument of gender equality in India.

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