

Women in the Age of Artificial Intelligence: Gender Bias, Employment and Digital Rights in India

Nirupama Gehlot*

Assistant Professor, Kanoria School of Law for Women, Jaipur.

*Corresponding Author: nirupamagehlotng@gmail.com

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ABSTRACT

This paper examines the intersection of algorithmic bias, employment and digital rights as they play out in the Indian context. It argues, first, that AI-related job displacement in India is not gender-neutral: occupations dominated by women, particularly clerical, retail, data-entry and customer-facing roles, are disproportionately exposed to automation and generative AI¹. Second, it argues that the same digital exclusion that keeps women off the internet also keeps them out of the rooms where AI systems are designed, trained and deployed, producing a loop in which women are simultaneously under-represented as AI's builders and over-exposed as its subjects². Third, it maps how India's evolving digital-rights framework the Digital Personal Data Protection Act, 2023, the Bharatiya Nyaya Sanhita, 2023, and the IT Rules addresses, and fails to address, AI-enabled harms such as deepfakes, cyberstalking and non-consensual image manipulation that disproportionately target women³. Finally, it surveys India's emerging policy response, including the India AI Mission's gender provisions and the AI Governance Guidelines released in November 2025⁴, before setting out recommendations for a more gender-responsive AI ecosystem. The discussion draws on labour statistics, industry and multilateral reports, government documents and case law.

Keywords: Artificial Intelligence, Algorithmic Bias, Digital Rights, Job Displacement, Gender-Neutral.

Introduction

Artificial intelligence is being folded into hiring pipelines, credit scoring, welfare delivery, agricultural advisory services and everyday communication across India faster than most institutions can audit its effects. For a country that produces one of the highest shares of women STEM graduates in the world⁵ yet struggles to retain women in paid work, the arrival of AI is not a neutral event. It lands on top of three pre-existing and interlocking gaps: a labour-market gap in which women's workforce participation remains far below men's and heavily informal⁶; a digital-access gap in which India records one of the widest gender divides in mobile and internet use anywhere in Asia⁷; and a rights gap in which the legal architecture for privacy, data protection and online safety is still catching up with the pace of

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¹ "AI Bias May Worsen Gender Inequality in Jobs: ILO Report," Deccan Chronicle, 19 March 2026.

² "AI and Gender Equality," Drishti IAS, 13 February 2023 (citing World Economic Forum, Global Gender Gap Report 2022).

³ Government of India, Ministry of Information and Broadcasting, Lok Sabha Unstarred Question No. 2591, answered 11 December 2024.

⁴ "AI's Next Test Reaching India's Informal Women Worker," The Hindu, summarised in Superkalam Current Affairs, 28 July 2026.

⁵ World Economic Forum, Global Gender Gap Report 2022, cited in "Have More Women First to Have Multiplier Effect in AI Domain," India AI, Ministry of Electronics and Information Technology, Government of India, <https://indiaai.gov.in/article/have-more-women-first-to-have-multiplier-effect-in-ai-domain>.

⁶ "AI's Hidden Gender Fault Line: Why India's Boards Can't Afford to Look Away," BW Businessworld, 22 June 2026, <https://www.businessworld.in/article/ai-s-hidden-gender-fault-line-why-india-s-boards-can-t-afford-to-look-away-611322>.

⁷ "India's Gendered Digital Divide: How the Absence of Digital Access Is Leaving Women Behind," Observer Research Foundation, <https://www.orfonline.org/expert-speak/indias-gendered-digital-divide> (citing GSMA, Mobile Gender Gap Report 2021).

technological change¹. Artificial intelligence does not create these gaps; it is trained on them, and in absorbing patterns from historical data it risks freezing existing inequality into systems that operate at a scale and speed no individual biased decision-maker ever could².

Understanding Algorithmic Gender Bias: Origins and Mechanisms

Algorithmic bias is often described as a technical defect, but its roots are social. Machine-learning systems learn statistical patterns from historical data; when that data reflects decades of occupational segregation, wage discrimination or under-representation, the model reproduces those patterns as though they were neutral facts about the world³. Scholars examining AI from a developing-world, and specifically Indian, perspective note that algorithm developers frequently carry implicit biases into design choices without being aware of doing so, encoding stereotypes of women as docile, nurturing or in need of protection into systems ranging from virtual assistants to risk-assessment tools used in the justice system⁴.

Four mechanisms recur across this literature. First, training-data bias: datasets built from résumés, click histories or loan records generated within an already unequal labour market will, if used uncritically, teach a model that being male correlates with being a "safe" hire or a creditworthy borrower. Recruitment algorithms trained this way have been found to penalise résumés containing terms coded as feminine while rewarding "masculine-coded" language, systematically filtering out qualified women before a human recruiter ever reviews the file⁵. Second, design-team homogeneity: because women hold a small share of AI engineering and product-design roles, decisions about which use cases to prioritise and which edge cases to test are made largely without women present, so failure modes that disproportionately affect women are caught later, if at all⁶. Third, proxy discrimination: even where gender is explicitly excluded as an input variable, correlated proxies such as career gaps, part-time work history or neighbourhood can reproduce the same disparate outcome by another route. Fourth, interface-level stereotyping: the default feminisation of voice assistants such as Alexa and Siri, set against the near-universal masculinisation of security and enforcement robots, normalises a gendered division of labour between the caring, subordinate machine and the authoritative one⁷.

A widely discussed strand of this literature concerns generative AI and large language models specifically. A 2025 review in ScienceDirect found that chatbots, including ChatGPT, can perpetuate gender stereotypes through biased training corpora, algorithmic design choices and reinforcement from user-feedback loops, with effects surfacing in contexts as varied as career advice, healthcare triage and academic recommendation⁸. Because generative tools are now embedded in hiring platforms, résumé-screening software and customer-service systems, these biases translate directly into economic consequences rather than remaining abstract technical artefacts.

None of this, however, makes bias inevitable. Commentary on India's AI ecosystem has argued that gender-tagged public datasets, mandated algorithmic audits comparable to ESG-style compliance disclosure, and design-stage gender-impact assessments can meaningfully reduce the risk that AI systems entrench existing disparities provided such measures are built in from the outset rather than retrofitted after harm has occurred⁹.

AI and Women's Employment in India

• The Structural Starting Point

Any discussion of AI's employment effects in India must begin from an already unequal baseline. Close to four in five working Indian women are employed in the informal sector, without

¹ Vijay Pal Dalmia and Rajat Jain, "The Digital Personal Data Protection Act, 2023 (DPDP Act)," Vaish Associates Advocates, Mondaq, 20 October 2023.

² "Gender and Feminist Considerations in Artificial Intelligence from a Developing-World Perspective, with India as a Case Study," Humanities and Social Sciences Communications (Nature), 26 January 2022, <https://www.nature.com/articles/s41599-022-01043-5>.

³ "Gender and Feminist Considerations in Artificial Intelligence from a Developing-World Perspective, with India as a Case Study," Humanities and Social Sciences Communications (Nature), 26 January 2022.

⁴ Ibid.

⁵ "The AI Gender Equation Driving Inclusive Growth in India's AI Ecosystem," Udaiti Foundation, https://backend.udaiti.org/wp-content/uploads/2025/03/AI-Gender-Equation-Report_compressed.pdf.

⁶ "The Default Bias: Why Women's Underrepresentation in AI Is Turning the World Crooked," Sify, 24 February 2026.

⁷ "The AI Gender Equation Driving Inclusive Growth in India's AI Ecosystem," Udaiti Foundation.

⁸ "Gender Biases within Artificial Intelligence and ChatGPT: Evidence, Sources of Biases and Solutions," ScienceDirect, 24 March 2025.

⁹ "AI Bias May Worsen Gender Inequality in Jobs: ILO Report," Deccan Chronicle, 19 March 2026.

severance protection, structured re-skilling pathways, or a formal route back into paid work if displaced¹. Data drawn from the Periodic Labour Force Survey 2023-24 shows rural women constitute nearly 77 per cent of the agricultural workforce, much of it informal, seasonal and outside any social-security net². Against this backdrop, women's overall labour-force participation, though it has risen across recent survey rounds, remains structurally lower than men's and disproportionately concentrated in a narrow band of occupations: clerical support, data entry, telecalling, retail cashiering, garment manufacture and paid domestic or care work.

- **The AI-Exposure Paradox**

This occupational concentration turns out to be precisely where generative AI has its largest disruptive reach. An International Labour Organization analysis widely reported in the Indian press found that occupations dominated by women are nearly twice as likely to be exposed to generative AI as male-dominated occupations, with roughly 29 per cent of female-dominated roles at high exposure compared with about 16 per cent of male-dominated roles³. The same coverage noted that awareness of this risk remains nascent and fragmented among both Indian employers and policymakers, with few firms conducting a gender-disaggregated audit of which roles are actually being automated. Industry commentary echoes this concern, observing that AI is automating exactly the clerical, transactional and repetitive-task categories where Indian women are most concentrated, at a pace that corporate boards and human-resource functions have been slow to register, let alone plan for⁴.

This amounts to a double bind rather than a simple substitution story. Because so much of women's employment is informal, a role automated out of existence rarely generates a severance claim, an unemployment-benefit application, or even an official statistic; the worker simply disappears from the visible economy. Because retraining infrastructure employer-funded upskilling, returnship programmes, structured transitions into adjacent roles is unevenly available and rarely designed around women's constraints, including unpaid care responsibilities, mobility restrictions and safety concerns around late-shift retraining, displaced women are less able than displaced men to move laterally into AI-adjacent or AI-resilient work.

- **Women Inside the AI and Technology Workforce**

The picture is little better on the supply side of the AI economy. India produces a very high share of the world's women STEM graduates, estimated at around 43 to 44 per cent, a proportion that outpaces most advanced economies, yet only around 14 per cent of STEM jobs in India go to women, and India ranks poorly among comparable economies on translating female STEM graduates into female STEM employment⁵. Women's share of India's broader IT-BPM workforce stands at roughly 36 per cent, nearly five million professionals, but that share collapses further up the ladder: industry data cited from a NASSCOM report shows female representation falling from around 43 per cent at entry level to only 4-8 per cent in executive roles, well below a global average closer to 14 per cent⁶. A NASSCOM-Boston Consulting Group study went further, finding a 64 per cent gender gap in AI leadership roles specifically, even though the same study found that an overwhelming majority of women professionals 95 per cent of junior staff, 96 per cent of mid-management, and effectively all senior women surveyed say they are willing to invest time in building generative-AI skills; only about 35 per cent feel their employers have actually equipped them to do so⁷.

There are signs of momentum on the skills side even where the leadership pipeline lags. India is reported to lead the world in AI-skill penetration among women and in the share of women enrolling in generative-AI courses, which reached roughly a third of enrolments in 2025⁸. But as one commentary put it, what has not caught up is everything after the certificate: the hiring decisions, promotion cycles and

¹ "AI's Hidden Gender Fault Line: Why India's Boards Can't Afford To Look Away," BW Businessworld, 22 June 2026.

² "AI's Next Test Reaching India's Informal Women Worker," The Hindu, summarised in Superkalam Current Affairs, 28 July 2026 (citing Periodic Labour Force Survey 2023-24 and a 2018 ILO report).

³ "AI Bias May Worsen Gender Inequality in Jobs: ILO Report," Deccan Chronicle, 19 March 2026.

⁴ "AI's Hidden Gender Fault Line: Why India's Boards Can't Afford To Look Away," BW Businessworld, 22 June 2026.

⁵ "AI and Gender Equality," Drishti IAS, 13 February 2023 (citing World Economic Forum, Global Gender Gap Report 2022).

⁶ "9 out of 10 Women Agree Generative AI Is Crucial for Career Growth, Nasscom Report," Knowledge Hub, Clover Infotech, <https://www.cloverinfotech.com/?p=88172> (citing Nasscom and Boston Consulting Group).

⁷ "India Lags with 64% Gender Disparity in AI Adoption," GetCoAI (citing Nasscom and Boston Consulting Group, "GenAI: The Diversity Game Changer We Can't Ignore").

⁸ Smile Foundation India, blog post, <https://www.smilefoundationindia.org/blog/?p=17803>.

leadership appointments that determine whether skills convert into careers¹. The pipeline leak begins well before the workplace: girls trail boys by roughly nine percentage points in overall school enrolment, face a wider gap of about twenty percentage points in choosing science streams, and see their share fall further, to about 29 per cent, by the time an engineering degree is reached a narrowing that researchers link to family anxieties about safety, hostel distance and marriage timelines, and to the disproportionate load of unpaid domestic work placed on girls and young women even while studying².

Research organisations such as Nesta have found that fewer than 14 per cent of AI research publications globally are authored by women, and major technology employers report that only 10-15 per cent of their AI specialist roles are held by women a pattern that matters because the people who build, test and publish research about AI systems substantially determine which use cases, failure modes and fairness benchmarks receive attention³.

- **Where AI helps Rather than Hurts**

The employment story is not uniformly negative. Government and UN-linked casebooks document AI applications that have measurably improved outcomes for women workers: an agricultural advisory chatbot deployed across twelve Indian states was found, in a 2024 study, to have improved quality-of-life indicators for 61 per cent of women users within forty-five days of adoption, largely by giving women farmers direct access to agronomic advice that had previously been filtered through male intermediaries⁴. Such examples suggest that AI's employment effect on women is not fixed by the technology itself but by the design choices, distribution channels and digital-access conditions surrounding its deployment which is precisely why the digital divide discussed in the next section matters so much.

- **The Gendered Digital Divide as a Precondition of Bias**

Any AI system that reaches users through mobile phones or the internet inherits the access gap that precedes it, and in India that gap is unusually wide. GSMA's Mobile Gender Gap research has repeatedly identified India as having one of the widest gender-based online divides it tracks in the Asia-Pacific region: in 2021, only around 15 per cent of Indian women were using the internet against roughly 25 per cent of men, a proportional gap wider than that recorded in Pakistan and dramatically wider than in China or Indonesia⁵. More recent industry data cited by the Telecom Regulatory Authority of India at a 2025 Broadband India Forum event put mobile-phone ownership at roughly 85 per cent for men against 75 per cent for women, and internet adoption at 53 per cent for men against just 37 per cent for women a twelve-point gap in ownership and a thirty-point gap in actual internet use⁶.

This gap has a geography and a sociology, not merely a statistic. Analysts describe a triple disadvantage facing Indian women: a rural-urban infrastructure gap, since rural broadband penetration lags the national average; a gender gap layered on top of it that is narrowest in states such as Kerala, Goa and the North-eastern states and widest in states such as West Bengal, Gujarat, Maharashtra, Andhra Pradesh and Telangana; and a household-level access gap in which women are far more likely than men to rely on a borrowed handset shared with, or controlled by, a male family member⁷. Reporting on rural Rajasthan and Uttar Pradesh has documented village governing bodies and khap panchayats explicitly restricting unmarried women's use of mobile phones and social media, an extreme but telling illustration of how social norms, and not merely affordability, constrain women's digital access⁸.

Progress has been real but uneven. GSMA's tracking data shows South Asia recording the sharpest regional fall in its gender gap in mobile internet adoption in recent years, driven substantially by rising adoption among Indian women even as men's adoption stayed largely flat, while nationally the gap in basic mobile ownership has narrowed to single digits even as the gap in smartphone ownership the device actually needed to use most AI-enabled services remains stuck in the low double digits, with more

¹ Ibid.

² Ibid.

³ "AI and Gender Equality," Drishti IAS, 13 February 2023 (citing Nesta).

⁴ "AI's Next Test Reaching India's Informal Women Worker," The Hindu, summarised in Superkalam Current Affairs, 28 July 2026.

⁵ "India's Gendered Digital Divide: How the Absence of Digital Access Is Leaving Women Behind," Observer Research Foundation (citing GSMA, Mobile Gender Gap Report 2021).

⁶ Press Release, "BIF WTISD Celebrations and Responsible AI Innovation Paper Release," Broadband India Forum, 2025 (remarks of Atul Kumar Chaudhary, Secretary, Telecom Regulatory Authority of India).

⁷ "Internet: The Big Indian Gender Divide," The Tribune, <https://www.tribuneindia.com/news/archive/spectrum/internet-the-big-indian-gender-divide-737100> (citing GSMA data).

⁸ Ibid.

than 800 million women worldwide still entirely unconnected, over two-thirds of them in South Asia and Sub-Saharan Africa¹. Digital-skills and awareness gaps compound the access gap: surveys have found that even among women aware that mobile internet exists, low literacy, limited digital skills, and safety and harassment concerns remain the leading barriers to actually using it, meaning that closing the divide requires more than cheaper handsets or data plans².

This divide matters for AI specifically because most of India's flagship inclusion strategies the IndiaAI Mission's FutureSkills programme, the BHASHINI multilingual AI platform, digital financial services, agricultural chatbots assume a baseline of smartphone access and digital confidence that a large share of Indian women simply do not have. A woman who cannot independently access a smartphone cannot benefit from an AI-based government scheme, cannot generate the data that would make AI systems reflect her needs, and cannot participate in the skilling programmes meant to bring more women into the field. Digital exclusion and algorithmic bias are therefore mutually reinforcing: exclusion from access suppresses the volume and diversity of data generated by and about women, and data-poor or stereotype-laden representations of women in turn make AI systems less useful, or even actively unsafe, for the women who do gain access, further reducing their motivation to adopt these tools³.

Digital Rights, Legal Framework and Online Safety

• **The Legislative Architecture**

India's digital-rights framework has developed rapidly but unevenly relative to the pace of AI-enabled harm. The foundational privacy judgment came from the courts rather than Parliament: in Justice K.S. Puttaswamy v. Union of India (2017), the Supreme Court read a fundamental right to privacy into the Constitution, laying the constitutional basis for much of what has followed. On online speech specifically, the Supreme Court's 2015 decision in Shreya Singhal v. Union of India struck down Section 66A of the Information Technology Act, 2000, which had criminalised vaguely defined "offensive" online communication, on the ground that the provision was unconstitutionally broad and had a chilling effect on speech⁴. That judgment remains a reference point for balancing free expression against the regulation of online conduct, including conduct that disproportionately targets women.

The statutory landscape has since been substantially rebuilt. The Digital Personal Data Protection Act, 2023, notified in August 2023, is India's first comprehensive data-protection statute, establishing obligations on data fiduciaries to secure personal data, rules governing consent, and a Data Protection Board empowered to impose penalties for data breaches⁵. In parallel, India replaced the Indian Penal Code with the Bharatiya Nyaya Sanhita, 2023, which now governs offences such as online stalking and impersonation; the government confirmed in a December 2024 reply to the Lok Sabha that incidents of online abuse and stalking of women are prosecuted under Section 78 of the Bharatiya Nyaya Sanhita, while policing itself remains a state subject administered unevenly across states and union territories⁶. The Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021 additionally require platforms to be able to trace the first originator of certain categories of content, including sexually explicit material and content involving rape threats, when ordered to do so by a court or a competent authority⁷.

• **Where the Framework Meets AI-Enabled Harm**

These statutes were not drafted with generative AI specifically in mind, and legal scholarship examining them has been consistently critical of the resulting gaps. A 2025 study published in Vidhigya: The Journal of Legal Awareness concluded that the Bharatiya Nyaya Sanhita, the Information Technology Act and the Digital Personal Data Protection Act, taken together, remain inadequate to address AI-enabled crimes against women such as deepfake-based harassment, AI-generated

¹ "The Mobile Gender Gap Report 2026," GSMA, <https://www.gsma.com/gender-gap/>; "The Mobile Gender Gap Report 2024," GSMA Mobile for Development, 27 May 2026.

² "Tackling Social Norms to Reduce the Gender Digital Divide," GSMA Mobile for Development, 5 January 2023.

³ "India's Gendered Digital Divide: How the Absence of Digital Access Is Leaving Women Behind," Observer Research Foundation.

⁴ "Tackling Online Abuse," Drishti IAS.

⁵ Vijay Pal Dalmia and Rajat Jain, "The Digital Personal Data Protection Act, 2023 (DPDP Act)," Vaish Associates Advocates, Mondaq, 20 October 2023.

⁶ Government of India, Ministry of Information and Broadcasting, Lok Sabha Unstarred Question No. 2591, answered 11 December 2024.

⁷ "Tackling Online Abuse," Drishti IAS.

impersonation and algorithmically amplified stalking, and called for dedicated accountability mechanisms and improved platform governance rather than treating AI-enabled abuse as a simple extension of ordinary cyberstalking¹. A related study on cybercrime against women found that despite the Digital Personal Data Protection Act and mechanisms such as the National Cyber Crime Reporting Portal, underreporting remains widespread, driven by fear of social stigma, low awareness of legal remedies, and distrust that law enforcement will act while deepfake morphing and other AI tools are actively increasing women's vulnerability to reputational and image-based abuse². A separate analysis has similarly concluded that India's legal system remains under-prepared to handle the specific evidentiary and jurisdictional challenges that cyberstalking cases raise, and that many crimes go unreported precisely because victims are unaware which law applies to their situation³.

Emerging case law illustrates both the possibilities and the limits of the current framework. In *Shaviya Sharma v. Squint Neon & Ors.* (2024), the Delhi High Court ordered the removal of tweets that had exposed a woman's personal details, explicitly recognising the serious privacy and safety risks posed by doxxing even though Indian law does not yet contain a standalone statutory definition of the offence⁴. Scholarship on women's safety in digital space, published in a 2024 SAGE journal article, situates this litigation within a broader argument that India's Smart Cities and digital-governance programmes must build gendered safety and participatory-design principles into digital infrastructure from the outset, warning that without such intentional design, technological progress risks widening rather than narrowing existing gender disparities, even as government helplines and mobile-based reporting applications represent a genuine, if partial, institutional response⁵.

• **Privacy, Surveillance and the Double Edge of Protection**

The Digital Personal Data Protection Act itself embodies a tension relevant to women's digital rights: it was framed partly to balance individual privacy against the state's asserted national-security and surveillance interests, and scholars have cautioned that expansive government data-collection and monitoring powers, even when framed as protective, can themselves become tools that are misused, particularly where anonymity-enabled platforms make both harassment and its investigation difficult⁶. The practical result is a legal environment that offers Indian women more formal protection than existed a decade ago, but whose effectiveness depends heavily on state-level policing capacity, platform cooperation, and a victim's own willingness and ability to navigate an unfamiliar and fragmented reporting system.

Government and Institutional Responses

India's AI-governance apparatus has moved from broad ambition to more specific, gender-aware instruments over roughly the past eight years. NITI Aayog was tasked in 2018 with developing a national AI strategy, published as the *#AIforAll* discussion paper, followed by proposals for a National AI Stack and a National Mission on AI; commentators writing at the time already flagged the risk that a male-dominated development process would encode gender stereotypes into the resulting systems unless deliberately corrected⁷. That correction has been slow but is now visible in newer instruments.

The India AI Mission, run by the Ministry of Electronics and Information Technology, organises its work across pillars covering compute access, data quality, indigenous model development, talent, startup financing, and socially impactful and ethical AI⁸. Within this, the IndiaAI Future Skills programme is explicitly designed for population-scale skilling that includes women entrepreneurs alongside students and ITI trainees, and the Mission has established AI labs outside major metropolitan cities with the stated aim of geographic as well as gender inclusion⁹. In November 2025, the Ministry released India's AI

¹ "Cyberstalking of Women on Social Media: A Social-Legal Analysis in the Age of AI and New Digital Platforms," *Vidhigya: The Journal of Legal Awareness*, Vol. 20, Issue 1/2, 2025.

² Anubooks, "Social Issues: Trends and Analysis" (chapter on cybercrime against women), <https://anubooks.com/uploads/files/17627553291.pdf>.

³ Abha and Pallavi, "Cybercrime Against Women, Cyberstalking, Mass Surveillance, Right to Privacy, National Security, Digital Personal Data Protection Act 2023, Online Harassment, Revenge Pornography, Image-Based Sexual Abuse, Women's Digital Rights," Anubooks conference proceedings, pp. 205-216.

⁴ "Tackling Online Abuse," *Drishiti IAS*.

⁵ Aditi Narayani, "Women's Safety in Digital Space," *Indian Journal of Public Administration*, SAGE Publications, 1 September 2024, DOI: 10.1177/00195561241271513.

⁶ Abha and Pallavi, "Cybercrime Against Women, Cyberstalking, Mass Surveillance...", Anubooks conference proceedings.

⁷ "Make AI Evolution Inclusive in India," *The Pioneer*, 2021.

⁸ "Information: Safe & Trusted AI," *India.gov.in*, IndiaAI Mission overview.

⁹ *Drishiti IAS*, Mains Practice Question 9014, <https://www.drishitias.com/mains-practice-question/question-9014>.

Governance Guidelines, which for the first time embed fairness and equity as explicit design principles and call for gender-responsive outcomes and gender-impact assessments for AI systems that affect women's economic opportunities, access to welfare, or personal safety¹.

The most concrete recent output is the Casebook on AI and Gender Empowerment, developed under the IndiaAI Mission by the Ministry of Electronics and Information Technology in partnership with UN Women and the Ministry of Women and Child Development, and launched at the India AI Impact Summit in 2026. The casebook documents twenty-three AI-based interventions assessed by an independent panel drawn from the three partner bodies, selected for real-world deployment and measurable gender impact, and is intended as a practical reference for policymakers and innovators seeking to replicate successful gender-responsive AI design². One intervention documented under this umbrella, YASHODA AI, is a women-led digital-literacy programme that trains women, anganwadi workers and self-help-group members to recognise AI-enabled risks such as deepfakes and voice-cloning scams, and builds a peer-mentorship network of "AI Sakhi" volunteers who extend that awareness into their communities³. Industry bodies have echoed the same priorities from outside government: the Broadband India Forum's 2025 white paper on responsible AI innovation explicitly frames closing the gender gap in phone ownership and internet adoption as a precondition for any meaningful AI-driven inclusion strategy, rather than a side benefit of it⁴.

Taken together, these initiatives mark a genuine shift from treating gender as an afterthought to naming it as a design requirement. Their limitation is one of scale and enforceability: the AI Governance Guidelines are, at present, principles rather than binding regulation carrying penalties; the Casebook documents twenty-three interventions in a country with hundreds of millions of women workers; and programmes such as YASHODA AI or FutureSkills depend on reaching women who, as the digital-divide data above shows, frequently cannot access a smartphone independently in the first place. Policy ambition has outpaced both regulatory teeth and last-mile digital access.

Recommendations

Closing the gap between India's AI ambitions and its gender-equity commitments requires action at three levels.

At the level of data and design, gender-disaggregated data collection should be a default requirement, not an optional add-on, for any AI system used in hiring, credit, welfare eligibility or public-service delivery, paired with mandatory pre-deployment bias audits along the lines already proposed by industry and civil-society commentators, modelled on existing ESG-style compliance disclosure regimes⁵. Public digital infrastructure of the kind India has already built for payments and identity could similarly be used to build open, gender-balanced training datasets that reduce reliance on historically skewed commercial data.

At the level of employment, firms and regulators should treat AI-driven automation of women-dominated occupations as a labour-transition issue rather than a purely technological one: returnship and re-skilling programmes need to be funded and designed around the actual constraints displaced women face unpaid care work, safety in commuting to training, and limited digital access rather than assuming a level playing field with male workers⁶. Firms adopting generative-AI tools should track and publish gender-disaggregated data on who is actually being trained, promoted and retained in AI-adjacent roles, since current evidence shows the leadership pipeline leaking women even where entry-level and skilling numbers look healthy⁷.

At the level of rights and safety, Parliament and the Data Protection Board should move toward AI-specific amendments, or dedicated rules under the Digital Personal Data Protection Act, that name deepfake-based harassment, non-consensual synthetic imagery and AI-amplified stalking as distinct offences with clear reporting pathways, rather than leaving courts to extend general stalking and

¹ "AI's Next Test: Reaching India's Informal Women Worker," The Hindu, summarised in Superkalam Current Affairs, 28 July 2026.

² "Casebook on AI and Gender Empowerment, Features, Significance," Vajiram & Ravi, Current Affairs.

³ "YASHODA AI: Digital Rights on Paper, Barriers in Practice," AIKosh, IndiaAI, Government of India.

⁴ Press Release, "BIF WTISD Celebrations and Responsible AI Innovation Paper Release," Broadband India Forum, 2025.

⁵ "AI Bias May Worsen Gender Inequality in Jobs: ILO Report," Deccan Chronicle, 19 March 2026.

⁶ "AI's Hidden Gender Fault Line: Why India's Boards Can't Afford To Look Away," BW Businessworld, 22 June 2026.

⁷ "9 out of 10 Women Agree Generative AI Is Crucial for Career Growth, Nasscom Report," Knowledge Hub, Clover Infotech.

obscenity provisions case by case, as they have had to do in matters such as Shaviya Sharma¹. Reporting infrastructure such as the National Cyber Crime Reporting Portal needs parallel investment in state-level police training and multilingual, women-staffed support channels, since the evidence consistently shows underreporting is driven as much by distrust and unfamiliarity with the system as by any absence of a legal remedy on paper².

Finally, closing the access gap that underlies all of the above narrowing the gender gap in smartphone ownership and, especially, in confident, unsupervised internet use should be treated as core AI policy, not a separate connectivity initiative, since no gender-responsive AI system can reach the women it is designed for if they cannot independently get online³.

Conclusion

Artificial intelligence in India is arriving into a labour market where women's work is disproportionately informal and disproportionately exposed to automation, a digital ecosystem where women remain measurably harder to reach than men, and a legal system still building the vocabulary to name AI-specific harms. None of these conditions was created by AI, but each is amplified by it: automation exposure concentrates in the jobs women already hold precariously; algorithmic systems trained on unequal data reproduce that inequality at scale; and digital exclusion means the women most affected by AI-driven decisions are often the least able to see, contest, or benefit from them. At the same time, the past three years have shown that deliberate design choices gender-tagged datasets, agricultural chatbots that reach women farmers directly, literacy programmes that teach women to recognise deepfakes, governance guidelines that name gender-impact assessment as a requirement rather than an aspiration can bend AI's effects the other way. The evidence reviewed in this paper suggests that whether AI becomes a lever for narrowing India's gender gaps or a mechanism for hardening them will depend less on the technology itself than on whether data collection, employment policy, digital infrastructure and the law are made to work together, with women's participation built in from the point of design rather than added afterward as a correction.



¹ "Cyberstalking of Women on Social Media: A Social-Legal Analysis in the Age of AI and New Digital Platforms," Vidhigya: The Journal of Legal Awareness, Vol. 20, Issue 1/2, 2025.

² Anubooks, "Social Issues: Trends and Analysis" (chapter on cybercrime against women).

³ "The Mobile Gender Gap Report 2026," GSMA.