



WOMEN AND WORK 2023 Looking Ahead Towards Women -Led Sustainable Development



A

Introduction

In 2023, India's economy experienced robust growth, becoming the fastest-growing major economy globally.¹ This remarkable achievement was fuelled by a combination of factors, emphasising the importance of linking employment generation, productivity, and sustained economic growth. **Additionally, the year witnessed many issues pertaining to women-led development and Nari Shakti being brought to the forefront, solidifying India's commitment to gender equality and sustainable development**. However, amidst this progress, the issue of female labour force participation remains critical. For years, India has grappled with lower female labour force participation of female labour. Nevertheless, recent trends indicate a positive shift in participation rates as more women get into family-owned or self-owned work including agricultural work.² According to the latest Periodic Labour Force Survey Report (2022-2023), female labour force participation over the age of 15 has increased from 36.6% to 41.5% in rural areas and from 23.8% to 25.4% in urban areas. Overall, the female labour force participation rate for ages 15 and above stands at 37%. Further the last year also saw a renewed impetus for women-led development, through women's representation in Parliament receiving a legislative push, and India's G-20 presidency setting a proactive policy agenda.

However it is widely accepted that gender equality is a distant dream. Across the world, women continue to be under-represented across a wide range of sectors especially within science and technological occupations, with workplaces mirroring unequal economic and social realities. Even as India's presidency concludes, the agenda of women-led development remains a pivotal topic in conversations spanning diverse areas such as education, employment, entrepreneurship, and various other domains. As various conversations under G-20 highlighted — in the face of complex challenges such as poverty, emerging technologies, evolving employment trends, climate change, food security and women in leadership — investing in the empowerment of all women and girls can have a multiplier effect on comprehensive social and economic development.

Throughout its tenure, India adopted an approach that incorporated gender perspectives into various discussions. The overarching objective was to shift the narrative around growth, challenging the conventional perception of women solely as beneficiaries of development initiatives. By concentrating on women-led development, India aimed to redirect attention from women as recipients of welfare efforts to women as economic agents driving development and growth. This perspective has also helped highlight the potential of Nari Shakti initiatives to spearhead transformative measures across economic sectors and establish an equitable and inclusive groundwork for key emerging sectors.

Against this backdrop, this report contextualises women's participation in diverse areas within the broader macro political and economic landscape and delineates specific challenges and opportunities that came up this year. Simultaneously, the report presents a forward-looking approach to chart out potential areas of growth in the upcoming year, embracing the spirit of Nari Shakti and recognizing women as the formidable force propelling progress and prosperity.

¹ UN DESA, World Economic Situation and Prospects 2024, Jan 2024

https://www.un.org/development/desa/dpad/wp-content/uploads/sites/45/WESP_2024_Web.pdf

² Gol. Ministry of Statistics and Programme Implementation. Annual Report Periodic Labour Force Participation Survey (PLFS) July 2022 - June 2023 https://www.mospi.gov.in/sites/default/files/publication_reports/AR_PLFS_2022_23N.pdf?download=1



Institute for What Works to Advance Gender Equality (IWWAGE) along with the Institute of Human Development organised a roundtable on "Women's Economic Empowerment: Integrating Care Work into India's G20 Priorities," at the 63rd Annual Conference of the Indian Society of Labour Economics. The insights that emerged from this event led to development of a policy brief titled "Emerging Priorities in the Care

Sector: Opportunities for India's G20 Presidency," which was later used to shape the background note for the session on care economy, part of the Ministerial Conference on Women Empowerment (G20 MCWE) Side Event held in August 2023 in Gandhinagar, Gujarat.

New Delhi Leaders' Declaration

At the 2023 G20 Leaders' Summit held in New Delhi on September 9th and 10th, The New Delhi Leaders' Declaration outlined a vision for G20 countries to deliberate on a roadmap aimed at advancing women-led development under the theme of Gender Equality and Empowering All Women and Girls. The outlined recommendations encompass:



Economic Participation: Ensuring women's full, equal, effective, and meaningful participation in the economy, aligning with the Brisbane Goal. This involves reaffirming commitments to quality and digital education, addressing gender pay gaps, investing in social protection, establishing accessible care infrastructure to rectify the uneven distribution of care work, and eliminating gender-based violence and stereotypes perpetuating inequalities.



Digital Inclusion: Aiming to reduce the digital gender gap by 50% by 2030 through genderresponsive regulatory policies, enhancing digital literacy and skills among women, promoting safety-focused design in digital tools and technologies, and creating an enabling and inclusive environment to support women's entrepreneurship and income security.



Climate Risk Mitigation: Prioritising gender equality in climate risk mitigation, particularly those disproportionately affecting women. This involves enhancing women's collaboration and leadership in these efforts and focusing on solutions related to water, sanitation, and hygiene.



Food Security and Nutrition: Ensuring food security and nutrition by promoting investments in agriculture, making accessible, affordable, safe, and nutritious food available in school meal programs, and encouraging innovative approaches for agricultural value chains.



Empowerment Working Group: Establishing a Working Group on the Empowerment of Women to support the G20 Women's Ministerial, with its inaugural meeting scheduled during the Brazilian G20 Presidency.

Enhancing Economic and Social Empowerment

An Overview of Women's Employment in India

Decoding employment data

Labour Force Participation Rate: The Labour Force Participation Rate (LFPR) is representative of active workforce in an economy, i.e., the proportion of the working age population that is economically active. The LFPR for persons aged 15 and above has slightly improved at an aggregate level for India from 55.2% in 2021-22 to 57.9% in 2022-23. LFPR among women has increased from 36.6% in 2021-22 to 41.5% in 2022-23 in rural India and from 23.8% in 2021-22 to 25.4% in 2022-23 in urban India. Among men, the LFPR for urban areas witnessed a slight dip, while it increased in rural areas in 2022-23 compared to the previous year's estimates.





Female Labour Force Participation Rate for different age groups, 2020-23, all India

3 Gol. Ministry of Statistics and Programme Implementation. Annual Report Periodic Labour Force Participation Survey (PLFS) July 2022 - June 2023 https://www.mospi.gov.in/sites/default/files/publication_reports/AR_PLFS_2022_23N.pdf?download=1

Where are women working? Analysing the numbers:

Between 2020-21 and 2022-23, the percentage of female workers in the self-employed category has steadily increased over the last 3 years, and most strongly in the rural area. This has come with a decline in the percentage of female workers categorising their work as casual labour, and a concomitant increase in the share of regular wage/salaried workers (not shown), and self-employed. When considered with the increase in female labour force participation over the last year, it can be seen that much of the increase has come through an increase in the self-employed category, and not through an increase in the share of salaried female workers. **The lack of significant growth in salaried female workers suggests limitations in formal employment opportunities. Such a trend could be signalling stagnant job quality and the lack of quality employment opportunities, especially for rural women.**



PERCENTAGE DISTRIBUTION OF FEMALE WORKERS BY BROAD STATUS IN EMPLOYMENT, ALL-INDIA, 2022-23 CASUAL LABOUR 18.8% WORKER, EMPLOYER 27.8% HELPER IN HOUSEHOLD ENTERPRISE 37.5%

Source: PLFS Annual Reports, various years





Source: PLFS Annual Report 2022-23

Source: PLFS Annual Report 2022-23

PERCENTAGE DISTRIBUTION OF RURAL FEMALE WORKERS BY BROAD STATUS IN EMPLOYMENT, 2022-23



Source: PLFS Annual Report 2022-23

Workforce Participation Rate:

The Workforce Participation Rate (WFPR) for India gives information about the employment situation in the country, and is calculated as the proportion (out of total population) of the number of employed persons. The WFPR for the working age population increased from 52.9% in 2021-22 to 56% in 2022-23 at an aggregate level. WFPR among women during the same period is reflective of the growth in female employment. WFPR among women increased from 35.8% in 2021-22 to 40.7% in 2022-23 in rural India and 21.9% in 2021-22 to 23.5% in 2022-23 in urban India. During the same period, among men, WFPR increased in urban areas from 70.4% to 71%, and from 75.3% to 78% in rural areas.



Workforce Participation Rate (15 years and above) (WFPR)

Impact of marriage and childbirth on women's participation in workforce:

The India Working Survey, 2023 (a collaborative project between Azim Premji University, Indian Institute of Management Bangalore, and the University of Western Australia and supported by IWWAGE) analysed the impact of methodological variations in survey design on employment estimates of men and women. It was found that while 70% of women report themselves as part of the labour force, only 64% were reported to be part of the labour force by their husbands. For men, about 38% report themselves as own-account workers in agriculture, whereas only 31% of wives report their husbands as so. The differences in reporting are most pronounced in wage work, specifically in casual employment. Such differences in self and proxy reported labour market outcomes suggest methodological limitations in estimation of workforce and labour force participation.

	Women			Men		
	Self	Proxy	Difference between self & proxy	Self	Proxy	Difference between self & proxy
Labour force participation rate	69.5	63.8	-5.7	79.7	81.5	1.8
Workforce participation rate	63.2	57.9	-5.4	76.9	78.7	1.8
Unemployment rate	9.0	6.0	-3.0	3.5	2.8	-0.7

Source: India Working Survey, 2023

Marriage and motherhood are almost universal and among the most critical events in a woman's life in developing countries.⁵ Even though the impact of childbirth and marriage on FLFPR is well-known, measuring impact of these two events are limited by a lack of longitudinal data, especially in a developing country context. The India Working Survey 2020 used the Life History Calendar approach and collected retrospective information on childbirth and marriage. The collected data, from rural Karnataka and Rajasthan presents a counter-intuitive picture of impact of major life events on women's participation in the workforce. The report finds that rural women experience a sharp increase in workforce participation from 26 percent in the year preceding marriage, to an average of 49 percent in the first 5 years of marriage. This employment was largely as contributing family workers or self-employment in agricultural work. Further, women also experienced a jump in workforce participation rate after first childbirth, from 45 percent 1 year before childbirth to an average of 51 percent in the first 5 years after childbirth.

Gol. Ministry of Statistics and Programme Implementation. Annual Report Periodic Labour Force Participation Survey (PLFS) July 2022 - June 2023 4 https://www.mospi.gov.in/sites/default/files/publication_reports/AR_PLFS_2022_23N.pdf?download=1

⁵ India Working Survey 2020, Centre for Sustainable Employment, Azim Premji University

Unemployment:

Unemployment rate in India decreased by 22% from 4.1% in 2021-22 to 3.2% in 2022-23. During the same period, unemployment among women decreased from 2.1% to 1.8% in rural areas and from 7.9% to 7.5% in urban areas. Among men, a similar decreasing unemployment trend has been observed in rural areas from 3.8% to 2.8%, and in urban areas from 5.8% to 4.7%. Despite the decreasing trend, unemployment among urban women at 7.5% remains relatively high.



Unemployment among youth in India, aged between 15-29 years, decreased from 12.4% in 2021-22 to 10% in 2022-23. During the same period, youth unemployment among women decreased in rural areas from 8.5% to 7.4% and minutely increased in urban areas from 21.6% to 21.7%. Among men, youth unemployment decreased from 11.4% to 8.3% in rural areas and from 15.8% to 13.8% in urban areas. Youth unemployment among urban women remains high without any yearly improvements.



⁶ Gol. Ministry of Statistics and Programme Implementation. Annual Report Periodic Labour Force Participation Survey (PLFS) July 2022 - June 2023 https://www.mospi.gov.in/sites/default/files/publication_reports/AR_PLFS_2022_23N.pdf?download=1ages

⁷ Gol. Ministry of Statistics and Programme Implementation. Annual Report Periodic Labour Force Participation Survey (PLFS) July 2022 - June 2023 https://www.mospi.gov.in/sites/default/files/publication_reports/AR_PLFS_2022_23N.pdf?download=1

Earnings among casual labour:

The data on per day wage earnings from 2023 PLFS annual report highlights the persisting disparities based on gender and region among casual labour. Urban areas compared to rural areas and males compared to females reported to have higher per day wages among casual labour. The data shows that wages among all segments across gender and regional differences have increased between 2022 and 2023 except 'amongst' rural men. Daily wages for rural men engaged in casual labour decreased from INR 437 in 2022 to INR 416 in 2023. In the region and gender based hierarchies of daily wages, as per the PLFS 2023 data, women are earning the least with only INR 259 in 2022 and INR 287 in 2023 compared to urban men with INR 488 and INR 515 as per day earnings in 2022 and 2023 years respectively.



Source: PLFS Annual Report 2022-23 (pg. 18)8

Earnings from self-employment:

Analysis of the 2023 PLFS report reveals significant gender disparities and regional trends in self-employment earnings. Across all regions, male self-employed individuals consistently out-earn their female counterparts. Moreover, while urban earnings have generally increased from 2022 to 2023, rural areas experienced a slight dip in earnings. For instance, in rural areas during July-Sept 2022, female self-employed individuals reported average gross earnings of INR 5,071.22, which decreased to INR 4,970.98 by Jan-Mar 2023. In contrast, their male counterparts earned substantially more, with average earnings of INR 14,376.44 in July-Sept 2022, declining to INR 13,412.02 by Jan-Mar 2023.



⁸ Gol. Ministry of Statistics and Programme Implementation. Annual Report Periodic Labour Force Participation Survey (PLFS) July 2022 - June 2023 https://www.mospi.gov.in/sites/default/files/publication_reports/AR_PLFS_2022_23N.pdf?download=1

Gol. Ministry of Statistics and Programme Implementation. Annual Report Periodic Labour Force Participation Survey (PLFS) July 2022 - June 2023 https://www.mospi.gov.in/sites/default/files/publication_reports/AR_PLFS_2022_23N.pdf?download=1

Sectoral insights: Scanning the landscape

Formal employment

Employees' Provident Fund (EPF) payroll data registrations in a year is representative of the new entrants into the formal labour market in India. In 2021-22, more than 1 crore people newly registered with the EPF. Of these, 25.4% are women and 74.5% are men. In 2022-23, a total of 1,14,98,453 people were newly registered. The EPF registration increased by 5.8% in 2022-23 compared to 2021-22. This data is reflective of the growing formal labour market in India and the share of women in it. However, the fact remains that only about a guarter of the new employee additions in the formal sector are women. When seen in conjunction with the increased female LFPR, it may be indicative of the steady pace of addition of women to the informal labour market which leads to more informal job opportunities and lower wage growth.

Moving beyond employment to leadership, Grant Thornton's yearly report from 2023 on women in business reported that the share of women in leadership roles has risen compared to previous years. It reported that women in senior management positions in mid-market business has increased to 36% in India and to 32% globally¹¹. This number was at 17% in India and 25% globally in 2017.¹² There has thus been a greater than 100% increase in the share of women in senior management positions over 6 years in India. Currently, India with 36% representation for women in leadership roles in business is doing relatively well compared to the global rate at 32% and BRICS at 34%.

Informal employment

Though the e-Shram portal does not capture the share of informal workers in its entirety, the registrations by informal workers keeps an account of their aggregate numbers in the country to some extent. As per the data available on the portal, 29,18,11,012 persons have registered as of 07 November 2023.



Source: Gol. Ministry of Labour and Employment. EPF Payroll Data.¹⁰



Source: Grant Thornton. Women in Business 2023: Pushing for Parity.¹³



Source: Gol. Ministry of Labour and Employment. e-Shram Dashboard.¹⁵

https://eshram.gov.in/dashboard

¹⁰ Gol. Ministry of Labour and Employment. Employees Provident Fund Organisation. 2023 October.

https://www.epfindia.gov.in/site_docs/exmpted_est/Payroll_Data_EPFO_Oct_2023.pdf

¹¹ Grant Thornton 2023. Women in Business: Pushing for Parity. https://www.grantthornton.global/en/insights/women-in-business-2023/the-push-forparity/

¹² Grant Thornton 2023. Women in Business. https://www.grantthornton.in/globalassets/1.-member-firms/india/assets/pdfs/women-in-businessembracing-leadership-oriented-roles.pdf

¹³ Grant Thornton 2023. Women in Business: Pushing for Parity. https://www.grantthornton.global/en/insights/women-in-business-2023/the-push-forparity/

^{14 &}lt;sup>'</sup>IWWAGE 2022. Women and Work: How India Fared in 2022. https://iwwage.org/wp-content/uploads/2023/02/IWWAGE_Trends_Report_2023.pdf 15 Gol. Ministry of Labour and Employment. e-Shram Dashboard. Accessed on 07 Nov 2023.

The sector-wise employment of women and men in the informal sector, as per the data available on e-Shram portal, shows that the yearly changes are minute across the industries. Women's participation slightly increased in the agriculture sector from 48.2% in 2022 to 48.4% in 2023. In the remaining four sectors, women's participation took a slight dip. With a 1.4% decrease, women's participation in the construction industry reported the highest drop.



Meanwhile, the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) provides employment to casual labourers in rural India having 'right to work.' Workers under this are employed as skilled and semi-skilled labourers. Among 90,98,741 MGNREGA's total workers, 46.1% are semi-skilled and 53.8% are skilled workers. Among semi-skilled workers, 38% are women and 62% are men. Among skilled workers, 13.1% are women and 86.8% are men. Women are highly underrepresented among skilled workers under MGNREGA.¹⁷

Person-days generated for women workers under MGNREGA scheme is an important indicator of the government's expenditure on women's informal rural livelihoods in India. According to the data available on MGNREGA's online dashboard, the share of person-days generated for women workers fluctuated between 53% to 54% between 2017-18 to 2021-22 financial years. It had increased to 57.5% in 2022-23 and 59.3% in 2023-24 (till 05 December 2023). Though these figures show that the women participation is over half the person-days generated, it needs to be highlighted that as per reports, women were paid below the MGNREGA's minimum wage standards until 2017 in 17 Indian states. More importantly, the national average of minimum wage provided to women is only 78% of the minimum wage paid to men under MGNREGA.¹⁹ Explaining this discrepancy, in terms of skilling, women's contribution to both "skilled" and semi-skilled work is significantly below male counterparts, which points to an area of further action for policymakers and implementers.



16 e-Shram Portal. Accessed on 16 November 2023.

https://eshram.gov.in/dashboard

18 Accessed on 05 December 2023. https://dashboard.rural.nic.in/dashboardnew/mgnrega.aspx

19 Nair, Shalini. "Why Minimum Wage Not in NREGA: 'Women Paid Less'." The Indian Express. September 11, 2017. https://indianexpress.com/article/ india/why-minimum-wage-not-in-nrega-women-paid-less-4837648/

¹⁷ MNREGA. Accessed on 07 November 2023. https://nreganarep.nic.in/netnrega/gender_sk_ssk.aspx?lflag=eng&fin_year=2022-2023&source=nation al&labels=labels&Digest=kODLAkQv8M9FT6WbXb7zhA

Further, analysing 10 states with the highest number of skilled and semi-skilled women workers under MGNREGA, it is found that only one, i.e., Tamil Nadu has a higher percentage of women (61.6%) compared to male workers. Apart from this, only Andhra Pradesh and Jharkhand come close to a gender-skill balance at ~40%.



PERCENTAGE OF WOMEN PERFORMING SKILLED AND SEMI-SKILLED WORK UNDER MGNREGA



Source: MGNREGA Dashboard.21

²⁰ MNREGA 07 November 2023. https://nreganarep.nic.in/netnrega/gender_sk_ssk.aspx?lflag=eng&fin_year=2022-2023&source=national&labels=lab els&Digest=kODLAkQv8M9FT6WbXb7zhA

²¹ MNREGA Dashboard. Accessed on 15 November 2023. https://nreganarep.nic.in/netnrega/gender_sk_ssk.aspx?lflag=eng&fin_year=2023-2024&so urce=national&labels=labels&Digest=MZ7EPgZ8ZwgnlaImm+t7hA



Azim Premji University's flagship report on employment in India 'State of Working India 2023' was published in September 2023, and this year's theme was 'Social Identities and Labour Market Outcomes'. The report uses official data sources as well as primary data from a study conducted by Azim Premji University in collaboration with IWWAGE and IIM Bangalore. This year's report also offers precise estimates of the impacts of structural changes on employment conditions and outcome gaps. It notes that while significant progress has been made on all fronts since the 1980s, there is a long road ahead.

With regard to women's participation in the workforce across the years in particular, the report highlights that the majority of women still remain outside the workforce due to supply and demand side challenges exacerbated by shocks like the pandemic. Certain crucial insights include:

Social Norms: The likelihood of women's participation in the workforce is impacted by issues such as husband's earnings, intergenerational effects of working mothers-in-law, and other social norms around decision-making. For example:

- a. As a husband's earnings rise, a wife's probability of being employed first falls and then rises: While a common gender norm is the "male breadwinner" norm, i.e. husbands are considered the primary earners with wives contributing to household income only if necessary. Women enter the labour market when household incomes are low, and exit when it meets a certain living standard.
- b. The penalty of childbirth is relatively lower in India than other developing countries. The report finds that the year of childbirth sees a five percentage point increase in work participation rates, and five years after childbirth, women's work participation increases by 30 percentage points from the year prior to marriage. This is because the presence of a large informal labour market lowers the entry and exit costs, especially in precarious low-paid work. Such work also gives women temporal and spatial flexibility that sustains them in the labour force even soon after childbirth.
- b. Women from SC, ST, and OBC castes have higher employment rates compared to Other caste

women. As of 2021-22, about 40% and 25% of ST and SC women, respectively, were in employment compared to only 21% of others. The report notes a similar parallel trend in the case of Hindus, Muslims and women from other religions. Muslim women (16.3) have lower WPR than Hindu (26.7) and Other religion communities (29.4).

- c. In rural areas, compared to households where there is no mother-in-law present, married women living with an unemployed mother-in-law are 20%
 - 30% less likely to be employed. However, if the mother-in-law was present and employed herself, the likelihood of women's participation in the workforce is 50% - 70% higher.
- d. A 10% increase in the district-level proportion of women who report the ability to make their own decisions on seeking healthcare or meeting relatives, or owning large assets is associated with a 4% increase in the probability of a woman in that district working.

Job creation: Labour demand is a critical area of investigation.

- Using Census 2011 data, the report finds that longer commutes and a lack of local work opportunities negatively affect female labour force participation. Similarly, combining Population Census data with Economic Census data, it reveals that women are more likely to work outside the home in those districts where the proportion of large firms (employing more than 10 workers) is higher.
- Additionally, the report highlights that the last few years saw the creation of more formal salaried jobs than earlier. But women were compelled to enter self-employment due to distress caused by the growth slowdown and the pandemic.

Innovations in measuring women's work: The India Working Survey shows that measurement of women's WPR is affected by how questions are asked and to whom they are asked. It also finds that asking women directly about their employment status increases female WPR by over 5 percentage points. Thus, while measurement problems cannot explain the falling trend of female WPR, they can provide part of the explanation of low levels.

Pay gap: On average women earn 76% of what men earn in salaried work, which drops to only 40% for the self-employed. At the intersection of caste and gender, more severe disparities arise. Women SC/ ST workers earn only 54% of what General caste women earn in salaried work.

²² Basole et al. State of Working India 2023: Social Identities and Labour Market Outcomes Azim Premji University, 2023, https://publications. azimpremjiuniversity.edu.in/5166/1/State_of_Working_India_2023_ebook_revised.pdf

Women's entrepreneurship: A key lever of women-led-development

Women's share of MSME ownership has not changed much over the past year, as noted in the UDYAM portal data. 20% of the MSMEs are owned by women, and till November 2023, nearly 25% of the employment created in the MSME sector has been for women workers. According to the Department for Promotion of Industry and Internal Trade (DPIIT), as on 31st December 2022, over 86,000 businesses have been recognised as start-ups, and about 46% of the recognised start-ups have at least one woman director.²³

Despite recognition that there is a huge role to be played by women entrepreneurs in raising the economic growth rate of India, women entrepreneurs face myriad problems in starting and expanding their businesses. There is thus a big role to be played by all stakeholders – policymakers, program leaders, educators, and researchers to dispel stereotypes about women's capabilities as business leaders and innovation skills. Proportion of women entrepreneurs aspiring to create 20+ jobs in the next 5 years





LEAD INSIGHT: BEYOND THE NUMBERS — DECODING THE GENDER GAP IN Financing smes in India

One of the key hurdles faced by MSMEs globally, particularly by women-led MSMEs, is access to capital for business. This hurdle constrains women over and above the

societal norms that relegate them to primarily focusing on families's well-being, and prevents them from pursuing career opportunities, either as a job-seeker or job-creator. A LEAD study²⁴ based on a primary survey of 856 entrepreneurs (383 women and 473 men), investigated the credit requirements of these businesses to analyze and identify the presence of a credit-gender gap and determine whether this gap can be attributed to explicit or implicit gender biases and discriminations.

The report focused on debt financing requirements of enterprises for more than INR 10 lakhs (INR 1 million). It found that:

- Approval of credit application by lenders was independent of the gender of the respondent.
- Among accepted applications, turnaround time is significantly longer for women-run enterprises as compared to men-run enterprises, pointing to longer scrutiny times of applications.
- Traditional gender roles may be biasing self-perceptions. Though the collateral requirements for both genders are similar, women may have selected themselves out from approaching formal credit institutions.
- Women run enterprises are younger than their male counterparts. This may be due to:
 - having a shorter time-span to operate businesses successfully, or
 - entrepreneurship being a relatively newer venture among women, or
 - younger women (between the ages of 30-50) prefer starting their own business because it allows them work hour flexibility.
- Membership in formal networks (such as business associations and incubators) may increase the probability of women entrepreneurs applying for credit through formal channels.
- Participation in networks (formal or informal) and applications for credit may be interdependent. Male-enterprises seeking credit relied more upon referrals than women-run enterprises.

²³ DPIIT, Annual Report 2022-23, https://dpiit.gov.in/sites/default/files/DPIIT_AnnualReportE_03March2023.pdf

²⁴ Gupta, A., John, A., Glan, C., Arunkumar, J.V., Tripathi, V., (2023). "Beyond the numbers – Decoding the Gender Gap in Financing SMEs in India". Villgro Innovations Foundation and LEAD at Krea University. https://ifmrlead.org/beyond-the-numbers-decoding-the-gender-gap-in-financing-smesin-india/

LEAD INSIGHT: WOMEN IN STARTUP ECOSYSTEM REPORT 2023

The India startup ecosystem's transformative potential has been well-recognised for > contributing to economic growth and employment creation. As a leading and high growth employer, it attracts some of the best talent in India, and carries implications beyond job-creation to potentiating gender equity in the private sector.

Key findings of the Women in India Startup Ecosystem Report (WISER) 2023²⁵ are as follows:

- 17% of startup unicorns are women-led, and 18% of cumulative startup funding is allocated to women-led startups.
- Startups can potentially create 2 million new jobs for women by 2030, with startups offering • better opportunities for younger women entering the workforce.
- The average age of startup employees is half their corporate equivalents, attracting upcoming talent to this sector and presenting lower barriers to women in occupying roles across all functions.
- Echoing findings of professor Claudia Goldin, while women and men may start their careers together, women have a higher tendency to drop out with increasing seniority – 10 years into service, 8 out of 10 men in startups occupy Director/VP positions, compared to about 5 out of 10 women (80% compared to 50%).
- Startups offer opportunities for faster career progression, ability to occupy roles of influence, and more autonomy and flexibility, creating conditions suitable for a more equitable environment for women. This can help accelerate the change towards greater diversity and inclusivity.
- Startups are preferable for women in the workforce as it allows them to meet their personal and professional aspirations at different stages of career development.
- Women at the helm of affairs also allow more equitable opportunities for growth startups that have at least one female co-founder have 2.5x more women in senior roles.
- Representation across other roles is also better in startups with women co-founders such • startups have 48% overall women representation, compared to 32% in startups where the founders have been men only.
- This also translates into greater sensitivity around issues uniquely affecting women, such as leaves and flexibility in working hours for care responsibilities, and maternity leave.

Government schemes to promote women owned enterprises

Women's economic participation in the economy has been receiving due attention from the Government of India, and the Ministry of Micro, Small, and Medium Enterprises (MSME) focuses on providing support to women entrepreneurs through various schemes. The Ministry implements the Prime Minister's Employment Generation Programme (PMEGP) through the Khadi and Village Industries Commission (KVIC). PMEGP provides assistance (in the form of subsidy) of a certain percentage of overall project cost for setting up business units in the manufacturing or service sector. As part of its focus on women entrepreneurs, an additional 10% assistance in the form of subsidy is provided to women entrepreneurs. According to the financial report for 2022-23,²⁶ 38.3% of the total projects were initiated and owned by women entrepreneurs, which was an increase over 37.9% in 2021-22.27

²⁵ Women in India's Startup Ecosystem Report (2023). ACT Grants, Udaiti Foundation, McKinsey and Company, LEAD at Krea University. https:// ifmrlead.org/women-in-indias-startup-ecosystem-report-wiser-2/

²⁶ Prime Minister's Employment Guarantee Programme Performance Report, 2022-23. Accessed at https://www.kviconline.gov.in/pmegpeportal/ dashboard/PerformanceRepo2223.jsp

²⁷ Prime Minister's Employment Guarantee Programme Performance Report, 2021-22. Accessed at https://www.kviconline.gov.in/pmegpeportal/ dashboard/PerformanceRepo2223.jsp

• Pradhan Mantri Mudra Yojana

The Pradhan Mantri MUDRA Yojana (PMMY) provides loans up to INR 10 lakhs (1 million) to the noncorporate, non-farm small micro enterprises and has been in operation since 2015. Since the aim of this scheme is to help people start their own business enterprise, it aims to explore and create synergies with other existing government schemes and bodies that also mean to provide skills and/or support such as National Skill Development Corporation, Make in India campaign, and the National Rural/Urban Livelihoods Mission. As per data provided in the performance reports, the loans to women under PMMY constitute nearly 48% of the total sanctioned value of loans in 2022-23, up from 41% in 2020-21.²⁸

Loan sanctioned under Mudra Yojana



Source: PMMY Performance Reports, various years

An analysis of the categories of PMMY reveals that in 2022-23, more than half of the sanctioned amount were provided under the Shishu category, i.e. loans upto INR 50,000, 42.8% were disbursed under the Kishore category (loans between INR 50,000 and 5,00,000), and 5.2% of the loans were under the Tarun category (INR 5,00,000 to 10,00,000).



Source: PMMY Performance Reports, 2022-23

Pradhan Mantri Mudra Yojana (PMMY) Performance				
	Yearly Progress in Numbers			
Category	2021-22	2022-23	2023-24	
Loans Sanctioned	5,37,95,526	6,23,10,598	3,24,97,712	
Amount Sanctioned (In Crores)	3,39,110.35	4,56,537.98	2,60,076.72	
Amount Disbursed (In Crores)	3,31,402.2	4,50,423.66	2,53,264.94	

Source: MUDRA Performance Reports.²⁹

²⁸ Pradhan Mantri Mudra Yojana Performance Reports, various years. Accessed at https://www.mudra.org.in/Home/ShowPDF

²⁹ Gol. Pradhan Mantri MUDRA Yojana (PMMY). Accessed on 20 November 2023. https://www.mudra.org.in/

Economic Empowerment of Women Entrepreneurs and Start-ups by Women (WEE)

Economic Empowerment of Women Entrepreneurs and Start-ups by Women (WEE) is a Technical Cooperation project under the Indo-German Bilateral Development Cooperation. It is a collaboration of MSDE with the German Federal Ministry for Economic Cooperation, supported by GIZ. The project aims to provide help to women micro-entrepreneurs to set up (incubation) or scale up their business (acceleration), and was implemented in 12 states across the country. Data shows that there was 24.6% expansion in the number of women entrepreneurs covered between 2021-22 and 2022-23, from 729³⁰ to 908³¹. The region-wise data is given below:



National Rural Livelihoods Mission (DAY-NRLM)

The government of India implemented Deendayal Antyodaya Yojana's (DAY) National Rural Livelihoods Mission (NRLM) in 7,113 sub-district level blocks and benefitted nearly a 100 million households mobilised into 90,00,000 SHGs.



³⁰ Ministry of Skill Development & Entrepreneurship - Annual Report 2021-22. Ministry of Skill Development and Entrepreneurship | Government Of India. Accessed May 22, 2024. https://www.msde.gov.in/sites/default/files/2022-06/Annual%20Report%202021-22%20Eng.pdf

Ministry of Skill Development and Entrepreneurship Annual Report 2022-23. Ministry of Skill Development and Entrepreneurship I Goverment Of India. Accessed May 22, 2024. https://www.msde.gov.in/sites/default/files/2023-09/Final%20Skill%20AR%20Eng.pdf

³² Gol. Ministry of Rural Development. DAY-NRLM Dashboard. 17 November 2023. https://nrlm.gov.in/dashboardForOuter. do?methodName=dashboard



The government of India conceptualised new schemes such as Agro Ecological Practice, Agri Nutri Garden and Farm Livelihood interventions, and supported pre-existing organisations like Farmer Producer Organisations (FPOs) under the DAY-NRLM. Over 3 million women farmers benefited from Agro Ecological Practice, over 2 million households of women farmers benefited from Agri Nutri Garden, over 1 lakh villages benefitted from Farm Livelihood interventions, and over half a million women farmers are organised into (FPOs).

Start-up Village Entrepreneurship Programme

The Start-up Village Entrepreneurship Programme (SVEP) was launched in 2016 under the DAY-NRLM to address issues of poverty by encouraging entrepreneurship activities among the rural youth. It does this by training a block-level community cadre in business management to rural poor to set-up their enterprises. Till January 8, 2024, INR 210.71 crore has been disbursed as loan to eligible entrepreneurs.34



SOCIAL CATEGORY WISE ENTREPRENEURS

33 Gol. Ministry of Rural Development. DAY-NRLM Dashboard. 17 November 2023. https://nrlm.gov.in/dashboardForOuter. do?methodName=dashboard

34 Enterprise Developement Institute of India, SVEP dashboard, 8 January 20204. https://www.ediindia.org/svep/

Metric	Progress until February 2023
SRLM Partner States	16
SVEP Blocks	82
Microenterprises supported	81,641
Microentrepreneurs trained	83,467

GENDER-SPLIT OF ENTREPRENEURS



OBC

47_0%

Bridging The Digital Gender Divide

Women in STEM

Broadly, STEM is an umbrella term used to group together the disciplines of Science, Technology, Engineering and Mathematics. As per estimates by the World Economic Forum, women's low participation in STEM is a global problem, with women constituting less than 30% of the world's STEM researchers.³⁵

Women and Girls in STEM Education:

Data pertaining to women's education in STEM in India is found in the latest available All India Survey on Higher Education's (AISHE) Report (2020-21) by The Department of Higher Education. The AISHE Report³⁶ suggests that overall enrollment of women in education has increased from 18.8 million from 2019-20 to 20.1 million in 2020-21. Overall trends in STEM specifically, including undergraduate, postgraduate, M.Phil and Ph.D. courses, indicate that women form about only 43.2% of the sample. At the undergraduate level, female representation is approximately about 50% in bachelors in arts and sciences. B.Tech programmes, however, have only 28.7% women. Similarly, Bachelor of Engineering (B.E.) has 13 lakh students enrolled, out of which, only 28.5% are female.

As per latest data, in engineering and technology, overall, within undergraduate, postgraduate, M.Phil, and Ph.D. education, the total enrollment is 39,20,213, with 71% males and 29.3% females. In sciences, which as per this report constitute 20 other sub-streams, a total of 55,48,809 students were enrolled at the undergraduate, postgraduate, M.Phil, and Ph.D. levels, with 53.1% females in the sample.

STEM enrollment in the last 5 years: ³⁷					
ENGINEERING AND TECHNOLOGY	MALE	FEMALE	SCIENCE	MALE	FEMALE
2016-17	71.1	28.9	2016-17	51.0	49.0
2017-18	71.1	29.0	2017-18	50.0	50.0
2018-19	70.7	29.3	2018-19	47.6	52.4
2019-20	70.5	29.5	2019-20	46.9	53.1
2020-21	71.0	29.0	2020-21	48.0	52.0

The table above indicates that over the last 5 years, while women's representation in other science fields, collectively, has increased, their proportion in engineering and technology has consistently remained low.

- 36 All India Survey on Higher Education (AISHE) 2020-21." Government of India, Ministry of Education. Accessed April 5, 2024. https://www.education. gov.in/sites/upload_files/mhrd/files/statistics-new/AISHE_Report_2020_21.pdf
- 37 ibid

^{35 3} things to know about women in STEM. WE Forum. Accessed February 11, 2020. https://www.weforum.org/agenda/2020/02/stem-genderinequality-researchers-bias/

Enrollment of men and women at higher levels of educational qualifications - By Different STEM Disciplines:

Disciplines.	MALE	FEMALE	ALLINDIA	
ENGINEERING AND TECHNOLOGY	26,17,155	10,69,136	36,86,291	
	6,32,069	8,94,178	15,26,247	
	5,33,445	3,44,492	8,77,937	
ENGINEERING AND TECHNOLOGY	11,8,012	59,267	1,77,279	
TECHNOLOGY ISOU	90,040	1,32,690	2,22,730	
	1,06,592	93,899	2,00,491	
ENGINEERING AND TECHNOLOGY	37,750	18,875	56,625	
	6,709	6,354	13,063	
IT & COMPUTER	1,872	2,158	4,030	

Women in STEM Employment:

The proportion of women faculty across 100 Indian universities highlighted that the overall base rate of women faculty in academia in India stands at 16.6% as of 2023.³⁸ The high attrition rate of women in science is attributed to a combination of inflexible workplace cultures and societal pressures.³⁹

In terms of employment, a report by UNESCO indicates that the presence of female principal investigators (PI) in R&D projects is very low. In the year 2000, 13% of the sample of PIs in R&D were women. In 2017, the number had only moved up to 24%.⁴⁰ The same report highlights that in 2020, at the Indian Academy of Sciences, there were about 8% female fellows. At the Indian National Science Academy, females consisted of 9.02% of fellows. At the National Academy of Sciences in 2016, there were 8.19% female fellows.

More recently, in 2023, AIMResearch (a market research firm) noted that in India, out of the 4.6 million employees in the tech industry in India, 1.3 million are women. This translates to women constituting 29% of the overall workforce in the technology sector. They hold only 8% of leadership roles, and earn 17% less than their male counterparts. Similarly, 35% of women perceive the hiring process within the tech industry to reflect biases, and 51% of surveyed women are aware about the current policies regarding pay parity within their respective organisations.⁴¹

³⁸ Muralidhar, Shruti, and Vaishnavi Ananthanarayanan. "Women's representation in Indian academia and conferences." 2023. doi:10.1101/2023.10.26.564078

Muralidhar, Shruti, and Vaishnavi Ananthanarayanan. "Women's representation in Indian academia and conferences." 2023. doi:10.1101/2023.10.26.564078

⁴⁰ Coley, Christopher, Abhijit Dhillon, Christie Gressel, and UNESCO Office New Delhi. A Braided River: The Universe of Indian Women in Science. Paris: UNESCO Publishing, 2022

⁴¹ Women In Tech 2023 (India). AIM Research. Last modified March 8, 2023. https://aimresearch.co/market-industry/aim-research-women-in-tech-2023-india

In the realm of Artificial Intelligence (AI) the World Economic Forum foresees that by 2025, AI will create 12 million more jobs than it displaces. As of August 2023, India possesses a talent pool of 4,16,000 AI professionals, while the existing demand stands at approximately 6,29,000. According to a report from the Wheebox National Employability Test (WNET), this demand is projected to increase to 1 million by the year 2026- thereby, making women's participation in STEM and allied fields pertinent.⁴²

Digital Gender Divide

The digital divide between men and women remains one of the key barriers that women face while accessing education and employment opportunities. This digital exclusion can be attributed to various factors, including barriers to access, issues of affordability, limited skills, and underlying socio-cultural norms. To move toward an equitable future, it is essential to prioritise improved, secure, and cost-effective access to digital tools.⁴³

The Global Digital Skills Index marked India to be one of the top countries for digital skills readiness among the countries surveyed - with a score of 63 out of 100 with an average score of 33. The country is ahead of the curve when it comes to digital readiness in emerging markets.^{44,45} However, the gender-digital divide could set this progress back.

The Mobile Gender Gap Report 2023 highlighted that in India, there was an 11% gap in mobile ownership and 40% gap in mobile internet usage between men and women aged 18 years and above.⁴⁶ The report went on to detail that while progress was noted between 2018 and 2020 where women's mobile phone and internet usage increased, the same progress stalled in 2021 where men's usage increased but women's utility remained unchanged. Similarly, even though women were reported to be using the internet, it was possible that they were using it on someone else's phone.⁴⁷



Women In Technical Education

Data for women's education comes from the All India Survey on Higher Education by the Ministry of Education. The latest report (2020-21), highlighted that despite the growth in women's enrollment across various fields in higher education during the academic year 2020-21, their participation in professional and technical courses remained limited. For instance, women's enrollment was below 30% in engineering and less than 40% in management courses. The report indicated a rise in enrollment for undergraduate management courses, increasing from 2,67,273 in 2019-20 to 2,98,594 in 2020-21. However, this figure remained considerably lower than the enrollment of male candidates in the discipline, which stood at 5,16,273. The pattern persisted in

⁴² Shivangini. "Al in India: Jobs Evolved, Not Erased - Opportunity and Reskilling Key. Mint. Last modified December 27, 2023. https://www.livemint. com/ai/artificial-intelligence/ai-in-india-jobs-evolved-not-erased-opportunity-and-reskilling-key-experts-claim-11703326684794.html

⁴³ Bridging The Digital Gender Divide Include, Upskill, Innovate." OECD. Last modified 2018. https://www.oecd.org/digital/bridging-the-digitalgender-divide.pdf

⁴⁴ How a \$12 phone could help close India's digital divide." WE Forum. Last modified August 11, 2023. https://www.weforum.org/agenda/2023/08/ mobile-phone-digital-divide-inclusion/

⁴⁵ Salesforce Newsroom. "Salesforce Launches Global Digital Skills Index: In-Depth Insights from 23,000 Workers." Salesforce. Last modified January 27, 2022. https://www.salesforce.com/uk/news/stories/salesforce-digital-skills-index-details-major-gaps-across-19-countries/

⁴⁶ Jeffrie, Nadia. "The Mobile Gender Gap Report 2023." GSMA | GSMA. Last modified May 2023. https://www.gsma.com/r/wp-content/ uploads/2023/07/The-Mobile-Gender-Gap-Report-2023.pdf?utm_source=website&utm_medium=download-button&utm_campaign=gender-gap-2023 47 Jeffrie, Nadia. "The Mobile Gender Gap Report 2023." GSMA | GSMA. Last modified May 2023. https://www.gsma.com/r/wp-content/

 $up loads/2023/07/The-Mobile-Gender-Gap-Report-2023.pdf?utm_source=website\&utm_medium=download-button\&utm_campaign=gender-gap-2023.pdf?utm_source=website\&utm_medium=download-button\&utm_campaign=gender-gap-2023.pdf?utm_source=website\&utm_medium=download-button\&utm_campaign=gender-gap-2023.pdf?utm_source=website\&utm_medium=download-button\&utm_campaign=gender-gap-2023.pdf?utm_source=website\&utm_medium=download-button\&utm_campaign=gender-gap-2023.pdf?utm_source=website\&utm_medium=download-button\&utm_campaign=gender-gap-2023.pdf?utm_source=website\&utm_medium=download-button\&utm_campaign=gender-gap-2023.pdf?utm_source=website\&utm_medium=download-button\&utm_campaign=gender-gap-2023.pdf?utm_source=website\&utm_medium=download-button\&utm_campaign=gender-gap-2023.pdf?utm_source=website\&utm_medium=download-button\&utm_campaign=gender-gap-2023.pdf?utm_source=website\&utm_medium=download-button\&utm_campaign=gender-gap-2023.pdf?utm_source=website\&utm_medium=download-button\&utm_campaign=gender-gap-2023.pdf?utm_source=website\&utm_medium=download-button\&utm_campaign=gender-gap-2023.pdf?utm_source=website\&utm_medium=download-button\&utm_campaign=gender-gap-2023.pdf?utm_source=website\&utm_medium=download-button\&utm_campaign=gender-gap-2023.pdf?utm_source=website\&utm_medium=download-button\&utm_campaign=gender-gap-2023.pdf?utm_source=website\&utm_medium=download-button\&utm_campaign=gender-gap-2023.pdf?utm_source=website\&utm_medium=download-button\&utm_campaign=gender-gap-2023.pdf?utm_source=website\&utm_campaign=gender-gap-2023.pdf?utm_source=website\&utm_campaign=gender-gap-2023.pdf?utm_campaign=gender-gap-2023.pdf?utm_campaign=gender-gap-2023.pdf?utm_campaign=gender-gap-2023.pdf?utm_campaign=gender-gap-2023.pdf?utm_campaign=gender-gap-2023.pdf?utm_campaign=gender-gap-2023.pdf?utm_campaign=gender-gap-2023.pdf?utm_campaign=gender-gap-2023.pdf?utm_campaign=gender-gap-2023.pdf?utm_campaign=gender-gap-2023.pdf?utm_campaign=gender-gap-2023.pdf?utm_campaign=gender-gap-2023.pdf?utm_campaign=gender-gap-2023.pdf?utm_campaign=gender-gap-2023.pdf?u$ 48 Same report page 26

these courses at the postgraduate level. Although the count of women students pursuing postgraduate management courses increased to 2,95,745 in 2020-21 from 2,78,050 in 2019-20, it remained below the enrollment of male students in the discipline, which amounted to 3,90,256.⁴⁹

Insights from PLFS

More specifically, the PLFS (2022-23) defined technical training and education as a form of education that imparts knowledge and skills relevant to the professional world. The primary goal of vocational/technical education and training is to equip individuals with the skills needed for a diverse array of occupations across various industries and economic sectors, enhancing their employability. The PLFS (2022-23) detailed the percentage of individuals in 15-29 years who received vocational/technical training from multiple sources. Administered to a part of the sample, the table highlights some of these proportions:⁵⁰

	Percentag	e distribution
Type of Training	Male	Female
Formal	4.6	4.2
Hereditary	6.4	3.7
Self learning	5	3.1
Learning on the job	9.3	2.2
Others	1.8	1.5

Insights from world economic forum's gender gap report (2023)

Similar figures to PLFS were reported by the World Economic Forum's Gender Gap Report, 2023. 27.5% of graduates in agriculture, forestry, fisheries and veterinary were female. Similarly, female graduates in manufacturing, engineering and construction comprised 30.83% of the sample and female graduates in natural sciences, mathematics and statistics were 51.37%. With reference to vocational training, women graduates comprised 1.51% of the sample as compared to 3.16% of men. These numbers can be compared to men's participation as follows:⁵¹



While men outnumber women in certain subject-areas, a press release from the Ministry of Skill Development and Entrepreneurship indicated that in 2022, women are actively engaging in vocational training, with over 14,000 Industrial Training Institutes (ITIs) nationwide contributing to this effort. It was noted that there had been a nearly 100% increase in women registrations at ITIs since 2014.⁵² At the same time, a 2023 report by Niti Aayog studying ITIs noted that in India, women-only ITIs constitute 16.83% of the total ITIs. However, the enrollment of female candidates in 2021 was only 6.6%. Additionally, only 15.83% of the total instructors were females, highlighting a concerning lack of gender diversity in ITIs. Furthermore, there is a noticeable staffing shortage in ITIs.⁵³

As India strives to become the skill capital of the world, fostering gender equality is crucial for enhancing economic productivity and improving development outcomes. Leveraging technology, creating funding opportunities, and implementing upskilling programs can encourage and facilitate greater participation of women in the ongoing transition.

⁴⁹ Iftikhar, Fareeha. "Enrolment Up but Women Representation Remains Low in Professional, Tech Courses." Hindustan Times. Last modified January 31, 2023. https://www.hindustantimes.com/india-news/enrolment-up-but-women-representation-remans-low-in-professional-tech-courses-101675134394777.html 50 April 2022-2023. Ministry of Statistics and Program Implementation I Government Of India. Accessed April 51 April 2022-2023.

 ⁵⁰ Annual Report- Periodic Labour Force Survey 2022-2023. Ministry of Statistics and Program Implementation I Government Of India. Accessed April 5, 2024. https://www.mospi.gov.in/sites/default/files/publication_reports/AR_PLFS_2022_23N.pdf?download=1
 51 International Women's Day 2022: MSDE salutes the grit of India's women, fulfilling their aspirations by breaking age-old stereotypes. Press Information

Bureau, Ministry of Skill Development and Entrepreneurship. Last modified March 8, 2022. https://pib.gov.in/PressReleasePage.aspx?PRID=1804089
 International Women's Day 2022: MSDE salutes the grit of India's women, fulfilling their aspirations by breaking age-old stereotypes. Press

Information Bureau, Ministry of Skill Development and Entrepreneurship. Last modified March 8, 2022. https://pib.gov.in/PressReleasePage. aspx?PRID=1804089

⁵³ Transforming Industrial Training Institutes." NITI Aayog. Last modified January 2023. https://www.niti.gov.in/sites/default/files/2023-02/ITI_ Report_02022023.pdf



LEAD AND IWWAGE'S WORK ON WOMEN'S DIGITAL EMPOWERMENT

The Centre of Excellence on Gender and Digital at IFMR is a cross-disciplinary platform dedicated to advancing meaningful digital connectivity among women and girls in India. The CoE will serve as a catalyst to accelerate knowledge sharing and co-creation

of gender-intentional digital innovations and strategies, by leveraging the collective thinking of the ecosystem — ranging from philanthropic organizations, policymakers and industry leaders, to researchers and community-based organizations.

Further, a new study by IWWAGE aims to study how smartphones impact women's work. The usage of smartphones can be crucial in bridging last-mile gaps in public service delivery and enhancing monitoring of scheme implementation through frontline workers. In India, various cadres of frontline workers (FLWs) delivering welfare services are women, and there is a growing expectation for FLWs to use smartphones to enable efficient monitoring and beneficiary tracking through various software apps. At present, there are limited studies that have focused on the impact of smartphone usage on service delivery, and there is a lack evidence on smartphones' impact on women's overall empowerment. The study will look at three main areas: how many women use smartphones, how phone use affects them differently because of their gender, and how well government programs train them to use these devices effectively.



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Driving Gender Inclusive Climate Action

Gender-based impact of climate crisis

An international team of climate scientists from six different research institutions developed a new hotspot map illustrating an index of climate risks among women engaged in agri-food systems in Africa and Asia⁵⁴. The index is based on recurring contemporary risks posed by climate change such as droughts, floods, and shortened crop-growing season. This index ranked India 12th globally.⁵⁵ It shows that women farmers in India are among the most vulnerable groups in the world susceptible to growing climate risks. This growing scientific evidence on gender-based inequalities in climate risks highlights the need to make our climate action gender-inclusive and more importantly women-centric.

Progress in providing sustainable essential needs

Adhering to its commitment at the 20th Conference of Parties (COP-20) in 2015, the Indian government initiated several policies aiming to empower women in its climate action. Two noteworthy programmes are Jal Jeevan Mission (JJM) and Pradhan Mantri Ujjwala Yojana (PMUY) which provide household water and clean fuel for cooking (Liquified Petroleum Gas (LPG) respectively. It is well established in intersectional climate research that women are disproportionately impacted due to climate risks. Clean accessible cooking fuel and water connection at the household level reduces the vulnerability among women in their everyday gendered household work.

Under the JJM, over 10 crore household potable water connections were provided by January 2024. Of these, over 2 crore households benefited in each financial year between 2022 and 2024. Through this initiative, the government of India provided resources to the state governments to achieve universal access to potable water at the household.

Yearly Progress of Jal Jeevan Mission			
Year	Household Connections Provided		
2022-2023	2,33,07,997		
2023-2024	2,39,92,300		
Until December 2023	10,79,57,689		

Source: Jal Jeevan Mission dashboard 56

PM Ujjwala Yojana			
Category	Connections Provided		
Total Connections Released	10,04,90,746		
PMUY 2.0 Total Connections	2,06,36,090		

Source: Pradhan Mantri Ujjwala Yojana dashboard 57

- 56 JJM Dashboard.https://ejalshakti.gov.in/jjmreport/JJMIndia.aspx 09 January 2024
- 57 PMUY Dashboard https://www.pmuy.gov.in/index.aspx 09 January 2024

⁵⁴ Where women in agri-food systems are at highest climate risk: a methodology for mapping climate–agriculture–gender inequality hotspots https:// www.frontiersin.org/articles/10.3389/fsufs.2023.1197809/full

⁵⁵ Climate crisis: Inequality hotspot study shows where women in agriculture are hit hardest https://www.downtoearth.org.in/news/agriculture/climatecrisis-inequality-hotspot-study-shows-where-women-in-agriculture-are-hit-hardest-92849

Under the PMUY programme, over 10 crore cooking gas connections were provided to households that previously lacked it. In its second iteration, over 2 crore households had benefited from the programme. Clean and safe cooking gas household connections protect women from burdens of gendered work such as collecting firewood from distant places during droughts and more importantly from indoor air pollution on a regular basis.

MGNREGA: An important tool for local climate action

MGNREGA as a social protection programme guaranteeing rural employment has been widely acknowledged for its national scale support for vulnerable rural communities. However, recent studies have shown that the works undertaken under MGNREGA are contributing to carbon sequestration. Activities such as plantation and soil quality improvement exercises proved to have captured 102 million tonnes of carbon dioxide in 2017-18.⁵⁸ Moreover, some of the required critical works at the community level in rural India to build climate resilience are also undertaken under MGNREGA's works. From a combination of 260 works permitted under MGNREGA, 181 are linked to natural resources management and 164 are linked to agriculture and allied activities.⁵⁹ The climate-proofing activities like water management, natural resource management, drought proofing, and building livelihood security are budgeted with 65% of the total funding received by the MGNREGA programme from the government of India.⁶⁰ Therefore, MGNREGA is proving to be a crucial governmental programme in ensuring community-based adaptation works to build climate resilience.



- 58 Moudgil, Manu. NREGA: A Pathway to Climate Resilience. India Development Review. Last modified June 22, 2022. https://idronline.org/article/ climate-emergency/nrega-a-pathway-to-climate-resilience/
- 59 Preethan, Parvathi, Shubham Gupta, and Nakul Sharma. Mainstreaming Climate Resilience: The MGNREGA Model.WRI INDIA. Accessed April 5, 2024. https://wri-india.org/blog/mainstreaming-climate-resilience-mgnrega-model
- 60 Budget 2023: Loosen Purse Strings for MGNREGA. It Aids in Climate Change Adaptation. Moneycontrol. Last modified January 30, 2023. https:// moneycontrol.com/news/opinion/budget-2023-loosen-purse-strings-for-mgnrega-it-aids-in-climate-change-adaptation-9963371.html

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Securing Women's Wellbeing

Physical safety

Ensuring physical safety is one of the most important indicators of women empowerment. In India, genderbased violence against women is a continuing social problem.

According to NCW data, 26,574 cases were filed in 2023 by 30 November in India – that is 79.5 cases per day.⁶¹ When the NCW's cases filed in 2023 are disaggregated as per the nature of crimes committed against women, at 30%, a major share of incidents is violating women's right to live with dignity. Other major crimes include domestic violence (21.8%), dowry harassment (16.4%), molestation (8.1%), and rape (5.2%).

A predominant share of cases of crimes against women filed with NCW in 2023 are in northern India. State-wise disaggregation of data shows that Uttar Pradesh (56%), Delhi (8.4%), Bihar (4.5%), Maharashtra (4.5%), Madhya Pradesh (4.1%), and Haryana (3.8%) reported the highest cases to NCW. With 14,930 cases out of the total cases, Uttar Pradesh alone reported over half of the total cases and nearly seven times higher than the state with the second highest share of cases – Delhi (2,234).

Annual reports from National Crime Records Bureau's (NCRB) also provide evidence on violence against women in India. The NCRB annual report on Crime in India for 2022 was released on 03 December 2023. It reported that the crimes against women increased from 428,278 in 2021 to 445,256 in 2022. This amounts to a 3.9% annual rise in crimes against women.

On an average, 1,219.8 crimes per day were committed against women in 2022. Even with a high frequency of crimes per day, the data captured is only the tip of the iceberg, given that only 6% of the crimes against women are reported globally.⁶²

Among the states and Union Territories (UTs) Delhi, Haryana, Telangana, Rajasthan, and Odisha reported the highest rate of crimes against women when adjusted to the number of crimes committed against per a lakh of women population.

Year-Wise Data on Crimes Against Women in India			
Year	No. of Crimes Against Women	Rate of Increase in Crimes Against Women	
2018	378,236	(+) 5.1%	
2019	405,326	(+) 7.1%	
2020	371,503	(-) 8.3%	
2021	428,278	(+) 15.2%	
2022	445,256	(+) 3.9%	

Source: NCRB Crime in India Report 2022

States and UTs with Highest Rate of Crimes Against Women			
Rate of Total Crime Against Women in 2022			
144.4			
118.7			
117			
115.1			
103.3			
65.4			

Source: NCRB Crime in India Report 2022

⁶¹ NCW C&I Cell Statistical Overview of Complaints." National Commission for Women. Accessed April 5, 2024. https://ncwapps.nic.in/frmComp_Stat_ Overview.aspx

⁶² Facts and Figures: Ending Violence Against Women.UN Women – Headquarters. Accessed April 5, 2024. https://www.unwomen.org/en/what-wedo/ending-violence-against-women/facts-and-figures

- Disaggregated data on crimes against women in India based on the nature of the crime shows that spousal violence accounts to nearly a third of total crimes against women.
- Other major crimes include kidnapping and abduction, assault on women with intent to outrage her modesty, rape, and dowry deaths.
- Nearly a third of kidnapping and abduction of women cases are reported to be to compel her for marriage.

Among the causes of violence against women, recent research studies on climate change reported that the perils of worsening environmental conditions have a direct impact on violence against women. The UN Special Rapporteur on violence against women and girls asserted that climate change is "the most consequential threat multiplier for women and girls, with far-reaching impacts on new and existing forms of gendered inequities."63 Evidence shows that climate risks will exacerbate all types of violence against women from physical to psychological to socioeconomic. For instance, a study published in JAMA Psychiatry journal reported that the climate crisis has a direct impact on domestic violence. The study highlighted that as the average annual temperature increased by 1° C due to climate change, incidents of intimate partner violence increased by 6.3% in India, Nepal, and Pakistan.⁶⁴ Moreover, the study also estimated that the continuing rising temperatures will result in a 23% rise in domestic violence in India by 2090. Another research paper published in Journal of the Association of Environmental and Resource Economists reported that there is a direct link between depleting groundwater resources and rise in sexual violence against women in India.65 The study, empirically, shows that depleting water resources forces women to travel longer distances to collect potable water and that this exposes the women to heightened risk of sexual violence.

The research-based evidence produced on several intersectional fronts ascertains that the violence against women may continue to rise in the coming years and there are factors like climate change which can have a multiplier effect on violence.

Nature-wise Incidences of IPC Crimes Against Women in 2022

Nature of Crime	Incidences
Murder with Rape/Gang Rape	248
Dowry Deaths	6,456
Abetment to Suicide of Women	4,963
Acid Attacks and Attempts	162
Cruelty by Husband and his Family	1,40,019
Kidnapping & Abduction of Women	85,310
Rape	31,516
Assault on Women with Intent to Outrage her Modesty	83,344
Total IPC Crimes Against Women	3,65,300

Source: NCRB Crime in India Report 2022

Care Support

As highlighted in a 2023 policy brief by IWWAGE, "care work – paid and unpaid – plays a significant role in the well-being and functioning of economies and societies. A large part of this work is primarily borne by women across the world; it is guided by existing social norms and is a continuing consequence of the gendered division of labour. It has often been considered one of the primary barriers to accessing labour markets by women globally".⁶⁶ Illustrating the inequitable distribution, a recent survey on unpaid care in the household in Kanpur, Uttar Pradesh, found the following gendered evidence:⁶⁷



⁶³ Climate Change Heightens Threats of Violence Against Women and Girls." UN News. Last modified October 5, 2022. https://news.un.org/en/ story/2022/10/112924

⁶⁴ Domestic Violence to Rise As Subcontinent Heats Up: Study." Down to Earth. Last modified June 29, 2023. https://www.downtoearth.org.in/news/ climate-change/domestic-violence-to-rise-as-subcontinent-heats-up-study-90313.

⁶⁵ Sekhri, Sheetal, and Md A. Hossain. "Water in Scarcity, Women in Peril." Journal of the Association of Environmental and Resource Economists 10, no. 6 (2023), 1475-1513. doi:10.1086/725247.

⁶⁶ Emerging Priorities In The Care Sector: Opportunities For India's G20 Presidency. IWWAGE-Institute for What Works to Advance Gender Equality – Home. Last modified June 2023. https://iwwage.org/wp-content/uploads/2023/06/care-brief.pdf.

⁶⁷ Sinha, Aashima, Ashish Kumar Sedai, Dil Bahadur Rahut, and Tetsushi Sonobe. "Well-being costs of unpaid care: Gendered evidence from a contextualized time-use survey in India." World Development 173 (2024), 106419. doi:10.1016/j.worlddev.2023.106419

Understanding the care sector itself requires a deep-dive into different aspects of care infrastructure as well as care work itself. Certain key numbers, findings, and initiatives from 2023 have been highlighted below:

1. Childcare

Anganwadi Centres (AWCs) are important institutional units for the welfare of the lactating mothers and the children that are spread across the country. Among other things, AWCs are entrusted with nutritional, immunisation, and pre-school education for the children. The Gol's Ministry for Women and Child Development (WCD) has revamped the older Rajiv Gandhi Creche Scheme and announced plans to integrate this with existing Anganwadi Centres in the country, building Anganwadi-cum-creches. The Ministry unveiled the **PALNA programme** to build child day-care centres (creches). Each PALNA centre employs a worker and a helper – both females.

- In December 2023, the WCD Minister announced that the government will build 17,000 Anganwadi cum creches across the country during the 15th Finance Commission Cycle (i.e., from 2021-22 to 2025-26) and increase the staff by hiring two additional workers per creche.^{68,69}
- Of the number envisioned, 5222 AWCCs have been approved as of December 2023, as per proposals received from various States/UTs.⁷⁰
- This is a sub-scheme under the heading of 'Samarthya' in Mission Shakti (clubbed with 5–6 other components). As per the Demand for Grants for the year 2023-24, INR 2581.96 crore has been allocated as the budget estimate (BE).⁷¹
- If materialised and optimally consumed, these targets will assist an estimated 3 to 4 lakh working mothers by substituting the required child care work and provide employment to nearly 70,000 women.⁷²
- From an inclusion perspective, in November 2023, the Union Minister of Women & Child Development also launched the 'Anganwadi Protocol for Divyang Children,' with the aim to guide district administrations in addressing the needs of children with disabilities. This includes providing Swavlamban Cards and tracking developmental milestones through the Poshan tracker. The data collected will support the convergence of efforts between relevant ministries, such as MoHFW, DoSEL, and DePwD. The Minister also underlined the need for improvement and upgradation of Anganwadi Centres to make them more inclusive and mentioned that INR 300 crore is being allocated for training, and capacity building of Anganwadi Workers.⁷³

2. Elderly care

The United Nations General Assembly has declared 2021–2030 the Decade of Healthy Ageing to bring together stakeholders for sustained collaboration, improve the lives of old people, address the gender power relations and norms that influence health and well-being for older women and older men. India Ageing Report 2023, a comprehensive review of the living conditions and welfare of older individuals in India, was released by UNFPA India and International Institute for Population Sciences (IIPS) in September 2023.⁷⁴

Insights from the Study⁷⁵

- **Global projection:** The number of older persons worldwide is expected to more than double by 2050, reaching over 1.5 billion.
- India's current status (July 1, 2022): 149 million individuals aged 60 and above, account for 10.5% of the population.

⁶⁸ Government Aims to Set Up 17,000 Creches Across the Country." The Hindu. Last modified December 22, 2023. https://www.thehindu.com/news/ national/government-aims-to-set-up-17000-creches-across-the-country/article67666125.ece

 ⁶⁹ Smriti Irani, Twitter. https://twitter.com/smritiirani/status/1737895345382916161
 70 Lok Sabha Question No. 2287 Rajiv Gandhi National Creche Scheme. Digital Sansad. Accessed April 5, 2024. https://sansad.in/getFile/ loksabhaquestions/annex/1714/AU2287.pdf?source=pqals

⁷¹ Notes on Demands for Grants, 2024-2025; Ministry of Women and Child Development." India Budget. Accessed May 22, 2024. https://www. indiabudget.gov.in/doc/eb/sbe101.pdf

⁷² Calculation based on the announcement: 17,000 x 25 (proposed no. of creches x average capacity per creche) = 4,25,000. But this needs to be adjusted to mothers with two children below 6 years. Hence, the range between 3 to 4 lakhs. 17,000x4 (proposed no. of creches x proposed no. of workers per creche) = 68,000

⁷³ Union WCD Minister Launches 'Anganwadi Protocol for Divyang Children' at National Outreach Program in New Delhi." Press Information Bureau. Ministry of Women and Child Development . Last modified November 29, 2023. https://pib.gov.in/PressReleasePage.aspx?PRID=1980609

⁷⁴ India Ageing Report 2023 Unveils Critical Insights into Elderly Care in India. Press Information Bureau. Last modified September 27, 2023. https://pib.gov.in/PressReleaselframePage.aspx?PRID=1961168

⁷⁵ International Institute for Population Sciences & United Nations Population Fund 2023. India Ageing Report 2023, Caring for Our Elders: Institutional Responses. United Nations Population Fund, New Delhi.f

- India's future projection (2036): The older population is expected to increase to 15% of the total population.
- India's projection for 2050: The share of older persons is expected to double to 20.8%, with an absolute number reaching 347 million.
- Old Age Dependency Ratio: There are 16 older persons per 100 working-age persons in India with significant regional variations
- **Awareness:** Many elderly individuals in India lack awareness of social security programs meant for them.
 - About 55% are aware of the old-age pension scheme (IGNOAPS)
 - Approximately 44% know about the widow pension scheme (IGNWPS)
 - Only 12% are aware of the Annapurna Scheme.
- Feminisation of Elderly: Incidence of widowhood and higher life expectancy among older women are key demographic features in India.

Number of Females per 1000 males of the general and elderly population in India from 1951 to 2031:

Year	General Population	Elderly Population
1951	946	964
1961	941	964
1971	930	965
1981	934	970
1991	929	977
2001	933	1,000
2011	943	1,033
2021	953	1,067
2031	963	1,102



IWWAGE- IAWS PANEL ON STRENGTHENING THE VOICES OF CARE Workers in India

UIIIIII On 7th September, 2023, Institute for What Works to Advance Gender Equality (IWWAGE) collaborated with the prestigious Indian Association for Women's Studies (IAWS) as a part of their 17th National Conference held in Thiruvananthapuram, Kerala (7th – 10th

September 2023). The crucial panel discussion was held on one of the emerging issues of women workers in the care sector. The panel aimed to discuss mechanisms to strengthen the voices of such workers and at contributing to policies for their welfare.

The panel emphasised:

- Efforts that must be made to recognize the home as a legitimate workplace, especially in contexts where care work is predominantly carried out.
- Current oversight in acknowledging domestic settings as official work environments and stressed that this recognition requires active engagement with pertinent stakeholders, especially labour ministry and departments, to highlight the significance of this matter.
- The importance of collaborating with statistical agencies to establish robust mechanisms for integrating care work into official labour statistics. This would involve creating specific categories or classifications customised to accurately depict the contributions of care workers.
- The need for a proactive approach in initiating productive dialogues with stakeholders, ultimately leading to the establishment of comprehensive guidelines and protocols for data collection and reporting specifically tailored to care work.

Women's nutritional security

Research has found clear links between adequate access to nutrition and improved academic performance and employment prospects for women.⁷⁶ According to the State of Food Security and Nutrition in the World (SOFI) 2023 report by the United Nations Food and Agriculture Organization (FAO), India is facing a concerning issue of growing disparity between the cost of a nutritious meal and the economic realities faced by a significant portion of the Indian population.⁷⁷ The report highlights that around 72% of individuals in South Asia, with 1.4 billion people, are unable to afford a healthy diet. As per the Global Hunger Index (GHI) 2023 report, India ranks 111th out of the 125 countries which is in the level of hunger that is serious.⁷⁸

Poshan 2.0, also known as Saksham Anganwadi, is a comprehensive nutrition support initiative in India designed to address malnutrition among children, adolescent girls, pregnant women, and lactating mothers.⁷⁹ As per the data available on the POSHAN tracker dashboard as of October 2023 ⁸⁰



76 Undernourished And Overlooked A Global Nutrition Crisis In Adolescent Girls And Women. UNICEF. Last modified March 2023. https://www.unicef. org/media/136876/file/Full%20report%20(English).pdf

77 Publication Preview Page | FAO | Food and Agriculture Organization of the United Nations. FAODocuments. Last modified 2023. https://www.fao. org/documents/card/en?details=cc3017en

- 78 Global Hunger Index Scores by 2023 GHI Rank. Global Hunger Index (GHI) Peer-reviewed Annual Publication Designed to Comprehensively Measure and Track Hunger at the Global, Regional, and Country Levels. Last modified October 12, 2023. https://www.globalhungerindex.org/ ranking.html
- 79 Saksham Anganwadi and Poshan 2.0. Ministry of Women & Child Development. Accessed April 5, 2024. https://wcd.nic.in/sites/default/files/ Final%20Saksham%20Guidelines%20with%20covering%20letter%20%281%29_0.pdf
- 80 Poshan Tracker https://www.poshantracker.in/statistics
- 81 Ration Card Dashboard https://nfsa.gov.in/public/nfsadashboard/PublicRCDashboard.aspx



Areas to keep an eye on in 2024

1.Care economy

According to the India Ageing Report by the United Nations Population Fund (UNFPA), India's elderly population is projected to double by 2050, with a growing sex ratio attributed to higher life expectancy among females. The demand for care from immediate family members is on the rise, particularly in the southern states, where the old-age dependency ratio surpasses the national average.⁸²



Unlocking opportunities by reducing and redistributing care work: Indian women allocate 19.5% of their day to unpaid domestic and care work, while employment-related activities constitute only 4.2% as per the National Time Use survey.⁸³ This could be addressed by leveraging existing government facilities, schemes, and laws to redistribute unpaid care work and improve women's access to maternity benefits. Additionally, to boost women's employment demand measures to prevent the reinforcement of gender stereotypes will be required with skill development and career progression strategies for care workers.

2. Renewable Energy/Green Jobs

Significant expansion in India's renewable energy capacity is anticipated this year due to the efforts underway to achieve 500 GW by 2030.⁸⁴ Companies across industries are expected to prioritise becoming ESG compliant and align with India's goal of achieving net-zero emissions by 2070.⁸⁵ Therefore, growing emphasis will be laid on acquiring talent with green skills related to the development, management, and implementation of green energy solutions.



Fostering inclusive green talent: At this stage, India has a unique opportunity to increase women's participation in the emerging green economy sectors. However, this will require the implementation of awareness programs, encouraging the enrollment of girls in STEM courses and other upskilling initiatives to cultivate an inclusive green workforce. Green skill development programs for women could facilitate their access to quality livelihood opportunities and build the capacity of communities against the adverse effects of climate change.

⁸² International Institute for Population Sciences & United Nations Population Fund 2023. India Ageing Report 2023, Caring for Our Elders: Institutional Responses. United Nations Population Fund, New Delhi.

⁸³ Report of The Time Use Survey. Ministry of Statistics and Program Implementation I Government Of India. Accessed April 5, 2024. https://www.mospi.gov.in/sites/default/files/publication_reports/Report%20of%20the%20Time%20Use%20Survey-Final.pdf

⁸⁴ India to Achieve 500 GW Renewables Target Before 2030 Deadline: RK Singh. The Economic Times. Last modified September 25, 2023. https://economictimes.indiatimes.com/industry/renewables/india-to-achieve-500-gw-renewables-target-before-2030-deadline-rk-singh/ articleshow/103936965.cms.

⁸⁵ India is committed to achieve the Net Zero emissions target by 2070 as announced by PM Modi, says Dr. Jitendra Singh. Press Information Bureau, Ministry of Science & Technology. Last modified September 28, 2023. https://pib.gov.in/PressReleaselframePage. aspx?PRID=1961797#:~:text=Union%20Minister%20of%20State%20(Independent,Prime%20Minister%20Shri%20Narendra%20Modi.

3. Gig economy

The gig economy is expected to surge this year with a growing demand for individuals with digital literacy, diverse skills and experience to opt for freelance or contract work. Notably, freelance gig opportunities have witnessed huge interest from women in 2023 as estimates suggest that the number of female professionals seeking freelance opportunities has grown by 158% and about 20% of women freelancers are in the technology sector.⁸⁶

Increase focus on women's wellbeing in the gig economy: Platform-based work, especially onsite work, requires safe working conditions and flexibility for care responsibilities of women gig workers. While skilling interventions, on one hand, will enhance women's access to platform-based work, legislative measures on social security and safety will play a significant role in sustaining their increased participation in the gig economy.

4. Microwork

The completion of small tasks that can be done online is a growing industry in India which offers employment opportunities for digitally enabled women without access to traditional jobs. It provides women with greater flexibility in terms of working hours and location, however, there are concerns about the impact of microwork on gender equality.

Encouraging impact sourcing for women's empowerment: Microwork is often associated with the informal sector and this raises concerns about the potential exploitation of women. Pay in this industry is directly tied to task complexity, highlighting the importance of training and skilling as essential components for empowering women in the sector. Incentives for gender balance in the workforce and vertical integration of recruitment services that focus on helping women join or reenter the labour force will also have a crucial role to play.

5. Automation & Artificial Intelligence (AI)

Rapid automation of the workspace and artificial intelligence (AI) technologies offer new job opportunities and avenues for economic advancement, but trends around the globe indicate a new set of challenges that women may face. Between 40 million and 160 million women globally may need to transition between occupations by 2030, often into higher-skilled roles.⁸⁷ A recent study by McKinsey Global Institute suggests

that women are 1.5 times more likely than men to require transitioning into new occupations due to Al automation.⁸⁸

Bridging the digital divide and enabling job transitions: Despite the slow pace of automation In India, the future of women at work is in transition due to the age of automation and AI technologies. As jobs are lost and gained, facilitating women to transition to sectors with higher potential will require improving their access to technology, digital literacy, internet knowledge and varied digital skill sets. Enhancing targeted interventions to address social norms and improve women's safety can serve as catalysts for encouraging girls to enrol in STEM-related courses and facilitate the reskilling of women to enable their transition from traditional sectors of work to the digital job market.







^{86 158%} Jump in Women Joining White-collar Gig. Here's Why. The Economic Times. Last modified October 26, 2023. https://economictimes. indiatimes.com/jobs/hr-policies-trends/158-jump-in-women-joining-white-collar-gig-heres-why/articleshow/104726555.cms?from=mdr.

⁸⁷ The future of women at work. McKinsey & Company. Accessed April 5, 2024. https://www.mckinsey.com/~/media/mckinsey/featured%20insights/ gender%20equality/the%20future%20of%20women%20at%20work%20transitions%20in%20the%20age%20of%20automation/mgi-the-future-ofwomen-at-work-full-report-june%202019.pdf.

⁸⁸ Generative AI and the Future of Work in America." McKinsey & Company. Last modified July 26, 2023. https://www.mckinsey.com/mgi/our-research/ generative-ai-and-the-future-of-work-in-america

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