



Research Paper

Gender and Growth: Analyzing the Economic Impact of Women's Participation in India's Workforce

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An integral feature of India's social and economic development is the involvement of women in the workforce. By examining data from the National Statistics Office's (NSO) Periodic Labour Force Survey (PLFS) and other pertinent sources, this study explores a number of facets of women's engagement in the workforce. The study looks at how many women work in the primary, secondary, and tertiary sectors, how much they contribute to the GDP, socioeconomic factors that influence participation, why women don't work as much in skilled and well-paying jobs, and policies that increase women's economic contribution and increase their access to profitable employment opportunities.

The study starts out by emphasizing the inherent connection between female empowerment and employment. In India, female empowerment and employment continue to be major concerns despite tremendous advancements over the years. Indian women's life have changed significantly as a result of the country's increased economic prosperity, which has affected the employment trends of women. However, for a number of years, India's female labor force participation rate (FLFPR) has lagged behind the 47 percent global average. Nevertheless, there has been a noticeable improvement; according to the most recent PLFS statistics for 2021–2022, the FLFPR for the prime working-age group (15 years and above) increased significantly in recent years, reaching 32.8%. Structural advancements in women's lives, such as falling childbearing rates and more access to education, are responsible for this rising trajectory.

Data analysis shows that women's employment decisions are significantly influenced by socioeconomic circumstances. With trends indicating a rise in female enrollment at all educational levels, access to education emerges as a critical driver. Female enrollment in both the school and higher education sectors has significantly increased, according to data from the All India Survey on Higher Education (AISHE) and the Unified District Information System for Education (UDISE). Girls' Gross Enrollment Ratio (GER) has been increasing, and since 2017–18, it has surpassed that of boys. Nevertheless, social standards and a lack of high-quality job possibilities still affect women's work options despite educational achievements, especially for those with secondary and tertiary degrees.

The study emphasizes how important it is economically to encourage women to enter the workforce. According to studies, if women attain the same level of workforce participation as males, India's GDP may rise by 27%, or US\$770 billion. To address these issues, immediate action is required, including enhancing working conditions, promoting social and legal reforms, developing skills, granting loans to women-led enterprises, and creating capacity.

Supporting women's employment and empowerment requires policy changes and measures. In order to guarantee equal pay, uphold anti-harassment regulations, and safeguard women's rights in the workplace, the Indian government has taken a number of actions. Stakeholders, including the commercial sector, philanthropies, and civil society groups, must, nevertheless, coordinate their efforts and promote long-term fixes. To remove obstacles to women's involvement in the labor, infrastructure upgrades are crucial, including access to high-quality childcare services and sanitary infrastructure.

Furthermore, the private sector may support and sustain women's employment through gender-affirming policies like paid maternity leave and flexible work schedules. Enhancing women's economic empowerment and employment prospects requires investments in education. Higher income levels and more job opportunities can be attained through education. Women are more likely to join the workforce and earn greater salaries as their educational attainment rises.

The study concludes by highlighting the significance of encouraging women's employment in India through extensive legislative initiatives, infrastructure upgrades, and educational expenditures. In addition to

being morally required, achieving gender equality in the workforce is a major factor in India's social and economic advancement.

I. LITERATURE REVIEW

The body of research on Indian women's employment involvement offers important insights into the complex opportunities and problems in this field. Numerous elements impacting female employment trends, the influence of socioeconomic dynamics, and the efficacy of governmental measures aimed at fostering gender equality in the workforce are addressed by research articles, journals, and reports.

The significance of female workforce participation for economic growth and development has been emphasized in numerous studies. The World Bank report highlights the economic necessity of reducing gender disparities in the workforce, projecting that if female employment participation equals that of men, India's GDP could rise by 27%. This research emphasizes how urgent it is to remove obstacles to women's empowerment and employment.

Women's employment chances are significantly shaped by their level of education. Workforce engagement and female education levels are positively correlated, according to studies by Klasen and Pieters (2015) and Deshpande (2011). Women who have access to high-quality education are not only better prepared for the workforce, but they are also more empowered to question the way that society views them. Women's employment chances are significantly shaped by their level of education.

Research by Duflo (2012) and Chakravorty and Mani (2016) highlights the necessity of all-encompassing approaches that tackle social norms and cultural perspectives on gender roles in addition to economic obstacles. Governmental organizations, civil society groups,

and the commercial sector must work together to achieve long-term solutions that support women's economic empowerment.

The literature on Indian women's employment patterns emphasizes the intricate interactions between socioeconomic variables, cultural norms, and legislative initiatives. The full potential of women in the Indian workforce requires more comprehensive measures that address supply-side and demand-side obstacles, even if progress has been made in raising female education levels and labor force participation rates. Persistent gender gaps still exist.

II. RESEARCH METHODOLOGY AND DATA COLLECTION

This study uses a mixed-methods approach to examine women's engagement in various sectors in India, as well as their economic contributions. Quantitative study uses data from the National Statistics Office's Periodic Labour Force Survey (PLFS) to look at trends and patterns in female workforce participation, sectoral distribution, and GDP contribution. The PLFS data is analyzed using statistical approaches such as descriptive and inferential statistics.

Quantitative analysis uses statistical approaches to investigate trends, patterns, and correlations in data. Descriptive statistics, such as percentages, means, and standard deviations, are used to characterize key characteristics relating to female labor participation, sectoral distribution, and GDP contribution. Inferential statistics, such as regression analysis and correlation tests, are used to investigate relationships between socioeconomic characteristics and women's employment results.

Qualitative study expands on quantitative findings by investigating socio-cultural, institutional, and policy factors influencing women's workforce involvement. Qualitative data is gathered through a literature study, document analysis, and qualitative interviews or focus group talks with key stakeholders. Literature reviews and document analysis shed light on existing research, policy frameworks, and implementation issues. Qualitative interviews capture the different viewpoints and experiences of women workers and key players, allowing for a more nuanced understanding of employment dynamics.

Secondary data retrieval is used for quantitative analysis and literature reviews, whilst qualitative interviews and document analysis give primary qualitative data. Overall, the mixed-methods approach enables a thorough investigation of women's engagement in the Indian labour force, combining quantitative trends with qualitative insights for a more holistic knowledge of the subject.

III. DISCUSSION

Women's engagement in the Indian workforce is crucial for economic development and gender equality. This research project investigates several aspects of female workforce participation in India, with an emphasis on the primary, secondary, and tertiary sectors, their contribution to GDP, socioeconomic factors impacting participation, and barriers to attaining skilled and well-paid positions. It also looks at ways to increase women's contributions to the economy and their participation in profitable jobs.

On the basis of age, women can be divided into 3 main groups :

0-15 Years : According to estimates from the Population Division of the United Nations Department of Economic and Social Affairs, girls between the ages of 0 and 15 make up around 47.7% of the overall Indian population.

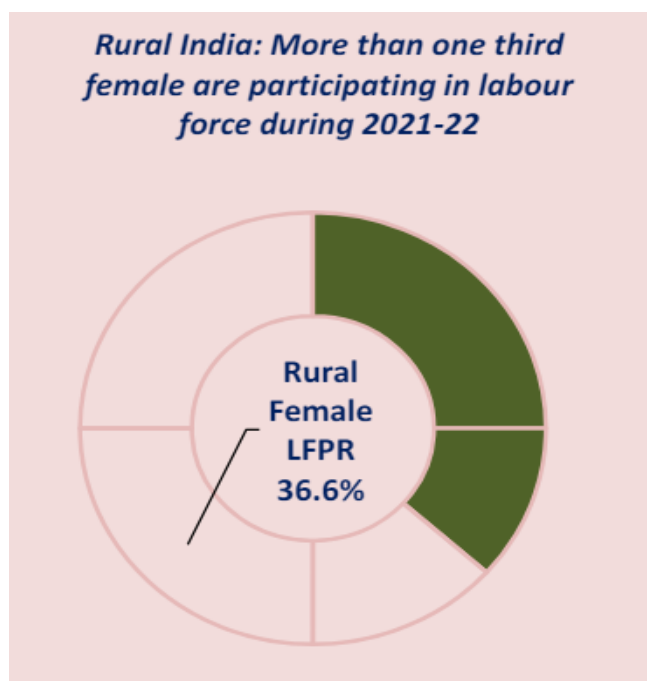
15-60 Years : According to the National Statistics Office's Periodic Labour Force Survey (PLFS), roughly 32.8% of women aged 15-60 years are employed. This represents the percentage of women actively participating in the workforce in this age group.

Above 60 years : Although statistics on the proportion of women over 60 may differ, according to the 2011 census, 8.9% of India's overall population was 60 years of age or older. However, more research or access to more recent demographic surveys might be necessary to obtain precise figures on the proportion of women in this age range.

DEMOGRAPHIC DIVIDEND : Based on the most recent data available, women make up roughly 48.4% of India's overall population. According to this demographic makeup, women make up a sizable portion of the population, which may help to generate the demographic dividend.

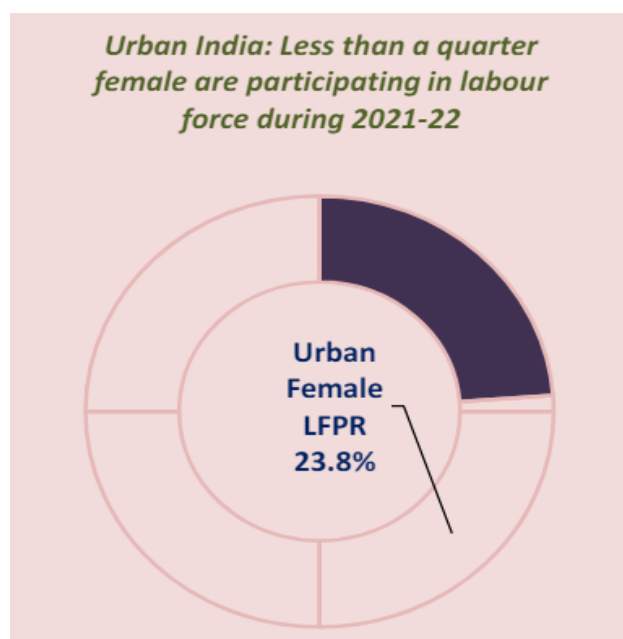
By analyzing the developments in the female population, especially in the working-age group (15–64 years), and its possible effects on economic development, the idea of India's "women's demographic dividend" may be comprehended. In India, women have historically had a lower labor force participation rate (LFPR) than men. According to the most recent PLFS report, women of working age (15 and over) made up about 32.8% of the labor force in 2021–2022, up 9.5% points from just 23.3% in 2017–2018.

In rural areas, about 36.6% of women aged 15 and older are employed, compared to 78.2% of men. In rural areas, the female LFPR climbed by 12.0% points from 24.6% in 2017–18 to 36.6% in 2021–2022. The accompanying diagram looks like this:



Source: Annual PLFS Report, MoSPI

However, compared to rural areas, female participation was far lower in urban areas. The female LFPR in urban areas increased by only 3.4% points from 20.4% in 2017–18 to 23.8% in 2021–2022. According to the following diagram, 23.8% of women in urban areas who are 15 years of age or older are employed, compared to 74.7% of men.



Source: Annual PLFS Report, MoSPI

The Table 1 below shows the LFPR in usual status for persons of age 15 years & above (in %) segregated by gender and geographical location (rural and urban) -

Table 1: LFPR in usual status (ps+ss) for persons of age 15 years & above (in %)									
Years	Rural			Urban			Rural+Urban		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
2017-18	76.4	24.6	50.7	74.5	20.4	47.6	75.8	23.3	49.8
2021-22	78.2	36.6	57.5	74.7	23.8	49.7	77.2	32.8	55.2
Change in 2021-22 over 2017-18 (% points)	1.8	12.0	6.8	0.2	3.4	2.1	1.4	9.5	5.4

Source: Annual PLFS Report, MoSPI

SECTORAL COMPOSITION OF WORKFORCE

About 55% of India's female workforce works in the primary sector, as per statistics from the Periodic Labour Force Survey (PLFS) for 2021–2022. Crop cultivation, animal husbandry, and related agricultural activities employ a sizable percentage of the overall number of women employed in the agricultural sector.

Approximately 20% of women work in the secondary sector, which includes manufacturing and industry. This sector includes a number of sectors, including construction, vehicles, pharmaceuticals, textiles, and clothing.

About 25% of women work in the tertiary sector, which includes industries like retail, hospitality, healthcare, education, finance, and information technology. Women are increasingly occupying management and professional positions in the tertiary sector, notably in industries like banking, information technology, and healthcare administration.

As per PLFS 2021-22, 6.8% of total females of age 15 years & above in India were casual labour. Looking at rural and urban sector, it is observed that more rural females were working as casual labour than the urban females. 8.7% of total rural females were casual labour as compared to 2.3% of total urban females. This is shown in the table below:

Table 2: Distribution of rural and urban female casual labour by sector

Sectors	Rural Females (in %)	Urban Females (in %)	Total Females (in %)
Agriculture sector	6.4	0.7	4.7
Secondary sector	1.1	1	1.1
Services sector	0.1	0.3	0.2
Worked in public works other than MGNREGA	1.1	0.2	0.9
Total Female casual labour	8.7	2.3	6.8

Source: PLFS, MoSPI

The percentage distribution of regular wages /Salaried employees in rural and urban areas by sectors is given below:

Table 3: Distribution of rural and urban female regular wage/salaried employees by sectors

Sectors	Rural Females (in %)	Urban Females (in %)	Total Females (in %)
Agriculture sector	0.2	0	0.1
Secondary sector	0.4	1.6	0.7
Services sector	2.3	9.4	4.4
Total Regular wage/Salaried Females	2.9	11.0	5.3

Source: PLFS, MoSPI

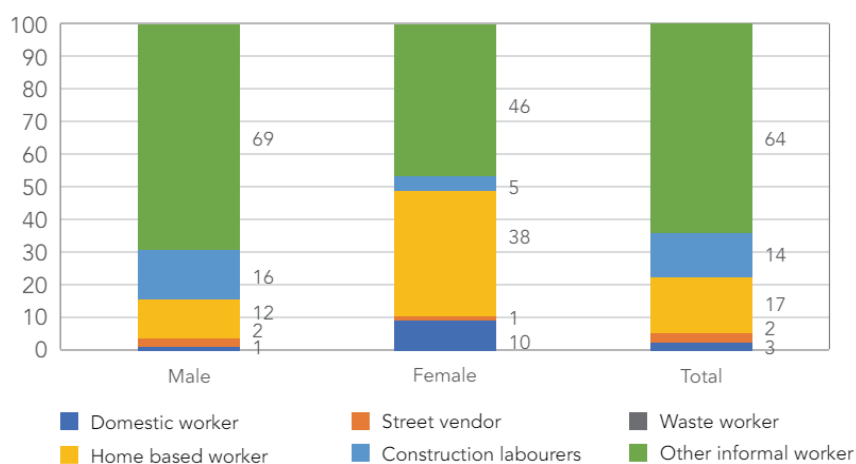
Compared to urban women, more rural women were found to be self-employed. The table below shows that 24.2% of all rural women worked for themselves, compared to 8.6% of all urban women.

Table 4: Distribution of rural and urban self-employed females by sectors

Sectors	Rural Females (in %)	Urban Females (in %)	Total Females (in %)
Agriculture sector	20.6	1.7	15.1
<i>Own account worker/Employer</i>	<i>6.4</i>	<i>0.8</i>	<i>4.7</i>
<i>Helper</i>	<i>14.2</i>	<i>0.8</i>	<i>10.3</i>
Secondary sector	2.3	3.5	2.6
Services sector	1.4	3.4	2.0
Total Self-employed Females	24.2	8.6	19.7

Source: PLFS, MoSPI

In India, although there are fewer people working in informal jobs overall, a somewhat higher percentage of women than men do so. Due to the global increase in informal work, the degree of informality varies inversely with socioeconomic development and educational attainment, according to the International Labour Organization (ILO) (2018). An illustration of India's informal workers by gender for 2017–18 can be found below.



Source: Computed from the Periodic Labour force Survey (2017-18) unit-level data

Note: Usual Status of employment is considered.

WAGES WISE COMPOSITION OF WORKFORCE

The wages of the various categories of workforce of rural and urban areas employed in different sectors of the economy can be illustrated with the help of following table :

sector of work(industry division)	during July 2011-June 2012											
	Not literate		Literate & upto Middle		Secondary & higher secondary		Diploma/ certificate		Graduate and above		All	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
RURAL												
Agriculture (01-03)	88.2	128.52	107.48	143.14	351.02	274.51	-	670.43	242.76	466.72	101.24	168.83
Mining& quarrying (05-09)	483.5	535.36	433.29	475.5	95.15	657.87	175	1514.2	120.47	984.17	286.17	648.63
Manufacturing1 (10-18)	94.52	141.06	118.23	149.38	125.99	210.23	194.07	225.51	262.2	329.9	121.36	182.64
Manufacturing2 (19-33)	86.65	170.33	114.41	200.57	145.91	225.14	394.07	407.6	162.24	543.97	131.33	265.65
Electricity, gas and water (35-39)	336.72	246.78	87.83	350.28	551.43	543.74	355.29	461.99	483.79	649.65	248.06	462.71
Construction (41-43)	153.32	243.55	176.56	224.74	280.1	295.29	980.62	476.36	82.8	524.82	322.43	279.15
Trade (45,46,47,55,56)	55.15	128.2	90.25	150.04	115.13	183.02	180.03	279.58	341.02	270.56	140.27	175.15
Transport& storage etc. (49-53)	282.2	197.3	264.62	196.97	312.87	271.61	0	448.07	161.11	415.48	295.87	235.55
Services (58-96)	83.54	219.55	98.46	266.8	192.23	439.94	428.94	557.17	388.28	577.9	248.67	471.51
Private hhs. with emp. Persons (97)	57.55	146.14	88.34	241.13	39.59	119.68	-	107.14	-	100.52	64.79	169.32
others (99)	-	-	-	195.52	-	-	-	-	-	-	-	195.52
All	89.31	174.37	104.27	202.48	179.98	319.46	428.66	450.31	377.85	550.23	201.56	322.28
URBAN												
Agriculture (01-03)	107.18	156.64	132.22	156.37	161.33	352.92	-	605.33	497.45	962.87	160.35	438.14
Mining& quarrying (05-09)	534.52	630.78	258.71	557.53	301.49	601.9	-	1193	472.26	1457.71	467.78	946.25
Manufacturing1 (10-18)	126.77	182.15	125.84	196.78	151.81	268.41	236.36	329.55	299.08	507.48	149.03	258.9
Manufacturing2 (19-33)	113.65	182.18	115.05	242.22	182.41	335.39	254.23	502.04	652.62	934.95	276.09	451.64
Electricity, gas and water (35-39)	177.78	291.34	374.26	280.78	400.64	570.85	427.52	704.1	1014.6	1029.54	531.96	524.55
Construction (41-43)	106.96	238.07	311.26	268.39	806.92	269.8	280.26	545.59	543.4	748.11	270.29	403.3
Trade (45,46,47,55,56)	147.93	158.65	158.83	175.36	203.65	229.87	582.89	389.2	335.66	514.51	231.33	254.59
Transport& storage etc. (49-53)	123.61	216.71	306.39	269.69	389.76	415.1	1133.29	614.07	690.68	902.45	455.01	443.76
Services (58-96)	145.69	256.9	151.1	304.57	381.33	443.81	401.46	543.41	623.82	809.79	480.74	631.96
Private hhs. with emp. Persons (97)	93.65	153.69	102.73	229.05	159.86	209.39	50	175.7	101.22	199.35	102.93	211.82
others (99)	-	-	-	-	-	-	-	-	600	-	600	-
All	123.43	207.65	132.81	237.24	306.96	358.51	391.43	524.33	609.69	805.52	366.15	469.87

Source: NSSO 68th Round Report No.554

IV. CONCLUSION

Women's involvement in various Indian economic sectors and their contributions to economic growth and development have been thoroughly examined by the research project. Several important conclusions have been drawn from an examination of a number of topics, including the proportion of women in various industries, their GDP contribution, socioeconomic factors influencing participation, the causes of low participation in skilled jobs, and strategies to increase participation and contribution.

First of all, the study emphasized how prevalent women are in the primary sector, especially in agriculture, where they make up a sizable portion of the labor force. This emphasizes how important women are to maintaining food security and agricultural livelihoods in India. To increase productivity and income levels, it also highlights the necessity of expanding women farmers' access to resources, technology, and market opportunities.

Second, the study demonstrated the difficulties women encounter in obtaining well-paying, competent positions in the secondary and tertiary sectors. Even with improvements in education and training, women still face obstacles like unequal pay, biased hiring practices, and a lack of representation in positions of leadership. In order to overcome these obstacles, legislators, businesses, and civil society organizations must work together to

improve gender equality, encourage career advancement and vocational training, and establish inclusive workplaces.

The study also highlighted the socioeconomic elements—such as cultural norms, access to healthcare and education, and domestic duties—that affect women's employment. These elements interact to influence women's decisions and career prospects, underscoring the necessity of comprehensive strategies that tackle gender inequality on several levels. Putting money into social safety programs, healthcare, and education can help women become more economically independent and increase their ability to contribute to the workforce.

Additionally, the study emphasized the possible financial advantages of expanding women's employment in India. Closing the gender gap in labor force participation might greatly increase India's GDP, promoting overall economic growth and reducing poverty, according to studies. This emphasizes how crucial laws and initiatives are to supporting women's employment, entrepreneurship, and leadership in all fields.

In conclusion, a multifaceted strategy that tackles systemic obstacles, advances gender equality, and creates an atmosphere that supports women's empowerment is needed to realize the full potential of India's female workforce. This means making investments in education and skill-building, offering services and policies that assist them, and working to dismantle discriminatory customs and behaviors. For women to succeed in the workforce, inclusive and equal opportunities must be created via cooperation between the public and commercial sectors, civic society, and other stakeholders.

India can boost its economic growth, enhance social results, and create a more successful and inclusive society for all by utilizing the skills and contributions of women. To guarantee that no one is left behind on the path to a more just and sustainable future, gender equality and women's empowerment must be given top priority as we proceed and become the cornerstones of India's development plan.

To sum up, our study project is a clear call to action, imploring players from all sectors to accept the necessity of women's empowerment and gender equality as crucial preconditions for sustainable development. India can unleash a tidal surge of human capital, ingenuity, and resilience that drives the country towards a better, more affluent future for everybody by investing in women's potential, tearing down structural barriers, and promoting inclusive growth models. As we set out on this revolutionary path, let us keep in mind that empowering women is not just a moral requirement but also a strategic necessity for creating a society that is more resilient, egalitarian, and just for future generations.

V. SUGGESTIONS, RECOMMENDATIONS AND LIMITATIONS

It is imperative that women's working circumstances be improved by boosting their involvement in high-paying, skilled jobs, since this will not only contribute to their economic development but also lessen their reliance on agriculture for employment. As a result, the issue of concealed unemployment will be reduced. In this regard, a number of actions should be taken. Some of them are :

- Programs for skill development, such as technology-enabled learning platforms, entrepreneurship development, and vocational training, will be implemented with women's needs in mind. giving priority to funding for girls' education from elementary school through university, guaranteeing that girls in both urban and rural communities have equal access to high-quality education.
- Implement and uphold gender-responsive policies in the fields of social welfare, education, and employment that provide equal compensation for equal labor, maternity and paternity leave, and safeguards against harassment and discrimination at work.
- In order to accommodate and enforce gender-responsive policies in the employment, education, and social welfare sectors—which guarantee equal pay for equal work, maternity and paternity leave provisions, and protection against workplace discrimination and harassment—flexible working arrangements, such as telecommuting, part-time work options, and job-sharing arrangements, should be introduced.
- Offer mentorship programs, training, and business development assistance to give female entrepreneurs the tools and resources they need to launch and expand profitable companies.
- Involve the media, civil society organizations, and communities in advocacy campaigns to dispel gender stereotypes, advance women's rights, and increase understanding of the significance of gender equality for economic growth.

The crunch of time and resource constraints gave rise to this project. We set out on our adventure with the knowledge that there would be many problems along the way, not the least of which were the availability and dependability of secondary data sources. But despite these setbacks, we persisted because we were determined to get past every obstacle in our quest for knowledge and advancement.

Due to a limited timescale, this research's scope and analytical capabilities were limited. To complete this project, we overcome these obstacles.

WAY FORWARD

With the greatest working-age population in the world, predicted to reach over 70% by 2030, we can no longer tolerate low female workforce participation as a nation looking to capitalize on its demographic dividend. India has the potential to be the largest contributor to world growth. According to a recent estimate, the country has to increase its GDP by 8% over the next five years, and in order to do so, women must make up more than half of the new workforce that will be formed by 2030.

The importance of these efforts in furthering gender equality is highlighted by India's dedication to the Sustainable Development Goals of the UN. Nonetheless, the discrepancy noted in the 2023 Global Gender Gap Report by the World Economic Forum indicates that more work is required. It is essential to take coordinated action to increase women's employment. This entails putting in place laws that support gender diversity, offering equitable chances for education and skill improvement, and cultivating an inclusive work environment. Furthermore, it is critical to address the sociocultural norms and biases that impede women's economic empowerment. India may work to reduce the gender gap and promote a more equitable society through persistent lobbying and cooperation between the public and commercial sectors. Initiatives for skill development and capacity building are crucial for giving women the skills and knowledge they need to succeed in a variety of economic sectors. Since credit promotes entrepreneurship and financial independence, it is essential for women-led enterprises. To draw and keep female talent, it is critical to improve working circumstances, including maternity leave policies, flexible scheduling, and secure workplaces.

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