



GAN GLOBAL | Shaping Workforces
of the Future

HER PATH, HER POWER

Revolutionizing Women's Careers Through Apprenticeship

TABLE OF CONTENTS

Foreword	3
Executive Summary.....	5
1. Introduction	6
2. Current Trends: Women in the Workforce	8
Barriers Women Face in the Workforce.....	9
Talent Supply: A Growing Opportunity.....	10
3. Gender Inclusion for Future Ready Apprenticeships	12
Integration with National Policy and Higher Education.....	13
Growth of Apprenticeship in India.....	15
Emerging Industry and Participation Trends for Female Apprentices.....	17
4. The Business Case for Female Inclusion through Apprenticeships	23
Key Business Drivers for Hiring Women Apprentices.....	24
5. Empowering Journeys: Learning how Apprenticeships are Shaping Women's Careers	27
Case Study 1: Buhler India – Building Inclusive Talent Pipelines Through Tailored Apprenticeships.....	27
Case Study 2. Nestlé India's Swabhimaan Scholarship Scheme – Empowering Women in Manufacturing.....	29
From Learners to Leaders: The Impact of Apprenticeships on Women's Careers.....	31
Vijayalakshmi, the trailblazer at Buhler Group.....	31
Shivangi Dass's Journey at Nestlé India.....	32
6. Recommendations to Enhance Women's Participation in Apprenticeships	34
7. Conclusion	38
ABOUT TEAMLEASE DEGREE APPRENTICESHIP.....	39
ABOUT GAN GLOBAL.....	40
ABOUT INDIA EMPLOYER FORUM (IEF).....	41

FOREWORD

India finds itself at a pivotal juncture in its journey toward economic advancement. As one of the world's fastest-growing economies, the trajectory of its workforce will not only influence national prosperity but also resonate on a global scale. However, this journey remains incomplete without the full engagement of women, who constitute nearly half of the population yet contribute a mere 18% to the nation's GDP.

The magnitude of this missed opportunity is tremendous, spanning both economic dimensions and human potential. At TeamLease Degree Apprenticeship, the Global Apprenticeship Network and the India Employer Forum (IEF), we have observed firsthand how apprenticeships serve as a vital conduit for bridging skills gaps, establishing equitable pathways for employment, and fostering inclusive growth across diverse sectors.



Apprenticeships transcend traditional skilling models; they empower individuals, offering dignity, choice, and avenues for upward mobility—qualities that are especially crucial for women who must often juggle the dual demands of household responsibilities and career aspirations. Fortunately, encouraging signs are emerging: women's participation in the labor force has nearly doubled in recent years, and an increasing number of employers are beginning to recognize the potential of this demographic. Nevertheless, a concerning 38% of companies still lack women apprentices, underscoring the urgent need for intentional outreach, inclusive practices, and targeted support mechanisms.

This report lays out comprehensive recommendations aimed at government bodies, businesses, civil society organizations, and training providers to effectively address this gender disparity. By unlocking women's economic participation, India stands to increase its GDP by an astonishing 27%, thereby fortifying families, communities, and the nation as a whole.



We firmly believe that the vision of Viksit Bharat—and India that is developed and thriving—can only be realized in tandem with Naari Shakti, the collective strength of Indian women. It is essential for companies and institutions to align their ambitions with the aspirations of women by providing accessible and inclusive apprenticeship opportunities.

“
**TOGETHER, LET US STRIVE TO CREATE A
FUTURE WHERE EVERY WOMAN IS
EMPOWERED TO CONTRIBUTE, LEAD, AND
FLOURISH—ONE APPRENTICESHIP AT A TIME.**
”

Nipun Sharma, CEO
TeamLease Degree Apprenticeship

Kathryn Rowan, Executive Director
Global Apprenticeship Network
India Employer Forum



EXECUTIVE SUMMARY

This comprehensive report, crafted by TeamLease Degree Apprenticeship in collaboration with the Global Apprenticeship Network (GAN) and India Employer Forum (IEF), sheds light on the pivotal importance of skilling and apprenticeships in empowering women, narrowing employment disparities, and promoting inclusive economic growth.

By positioning skilling as a fundamental driver of economic empowerment, the report delves deep into how well-structured apprenticeship programs can dismantle long-standing barriers and create sustainable job opportunities for women across various sectors. As India approaches the centenary of independence, a unique opportunity arises to redefine the narrative surrounding women's roles—from perceiving them merely as beneficiaries of welfare to recognizing them as vital architects of national progress and development.

Key Insights:

- Current State:** Despite notable improvements in educational attainment, women continue to be significantly underrepresented in the workforce. This disparity is attributed to persistent socio-cultural barriers, existing skill gaps, and the absence of structured pathways that facilitate their entry and advancement in various industries.

- Business Case:** Employers who have integrated women into apprenticeship programs have reported significant benefits, including enhanced productivity, increased innovation, and more robust talent pipelines. These companies demonstrate a clear understanding of the value that diverse teams bring to the workplace.

- Case Studies:** The report highlights successful models implemented by industry leaders such as Bühler and Nestlé, showcasing how these initiatives have not only led to measurable improvements in business outcomes but have also profoundly impacted the careers and lives of women participants.

- Recommendations:** The report concludes with a series of actionable strategies aimed at policymakers, private sector leaders, and civil society. These strategies are designed to scale inclusive apprenticeship programs that will empower women and ultimately boost national economic growth.


By fostering collaboration among various stakeholders, India stands poised to revolutionize its apprenticeship ecosystem into a formidable instrument for women's empowerment, thereby contributing to the overall economic advancement of the nation.

1. Introduction

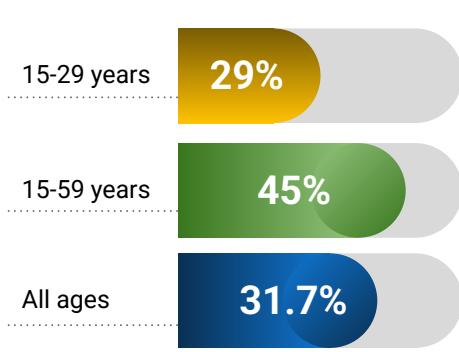


Diversity and inclusion are the twin engines of a thriving nation, and no country can truly progress without harnessing the full potential of its women. As India marches towards its centenary of independence in 2047, the vision of *Viksit Bharat*, a self-reliant, economically formidable, and globally influential nation, rests on the active participation of its entire population. Representing nearly half of the population, women are not just stakeholders in this journey but a central driving force to achieve India's economic aspirations.¹

From ancient scriptures that revered women as embodiments of knowledge, power, and prosperity to colonial policies that reshaped societal norms, the role of women in India has undergone a complex and paradoxical evolution. Today, women contribute a modest 18% to India's GDP, a figure that demonstrates both their critical role and the vast untapped potential that remains. As part of its 'Vision 2047' centennial roadmap, the Government of India aims to build a \$30 trillion economy, of which an impressive \$14 trillion is expected to come from the contributions of women.

This transformative goal highlights the indispensable role women must play in shaping India's future; however, realizing this vision requires addressing the glaring disparities that limit their economic engagement. The challenge is both vast and urgent as, despite progress in sectors like education and healthcare, India still struggles to integrate a huge portion of its female population into the formal economy. A staggering 60% of India's working-age women remain outside the labour force, depriving the nation of their invaluable contributions.²

The Female Labour Force Participation Rate (FLFPR)



The Female Labour Force Participation Rate (FLFPR) is 29% (15-29 years), 45% (15-59 years) and 31.7% (all ages), among the lowest globally (over 50%), reflecting deep-rooted socio-cultural barriers, economic disincentives, and structural inefficiencies. Projections indicate that India's female workforce may expand to 255 million by 2047, achieving an FLFPR of 45% at all ages. Nonetheless, this still falls significantly short of the 400 million needed to meet the nation's growth ambitions, leaving a deficit of 145 million 'missing women' who are excluded from the workforce.³

¹ <https://economictimes.indiatimes.com/news/economy/indicators/women-contribute-only-18-to-gdp-despite-48-share-in-population-study/articleshow/108147494.cms?from=mdr>

² Press Release by Ministry of Labour & Employment, Government of India, on PLFS Annual Report 2023-24 (<https://pib.gov.in/PressReleaselframePage.aspx?PRID=2074399#:~:text=Education%20as%20an%20important%20reason.to%20balance%20work%20and%20family>)

³ <https://www.bain.com/insights/from-aspiration-to-action-building-indias-400-million-women-workforce/#:~:text=This%20would%20increase%20the%20country's,missing%20women%22%20from%20the%20workforce>



Geographically, the gap is not evenly distributed, as 70% of rural women are expected to remain outside the labour force by 2047, owing to limited job opportunities, higher school dropout rates, and engagement in informal, low-paying jobs which continue to suppress participation. In contrast, 30% of urban and peri-urban women, though better educated, often face challenges like job-role mismatches, wage disparities, and the undervaluation of domestic work over market employment. The result is a complex, multi-layered challenge that requires nuanced, region-specific solutions.⁴ The economic stakes to bridge this gap are monumental. Research by the International Monetary Fund estimates that closing the gender gap in labour force participation could boost India's GDP by 27%. This would translate into higher household incomes, improved living standards, and enhanced national productivity.

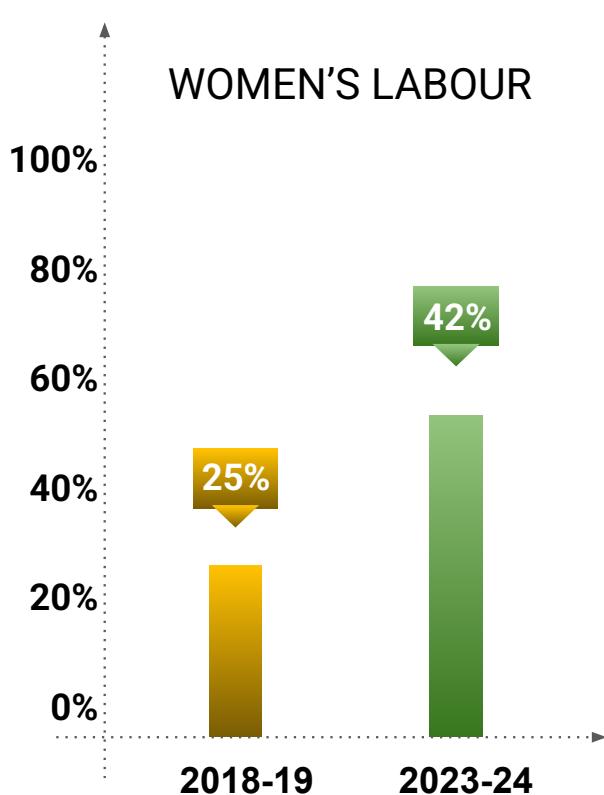
Beyond the economic boom, increased female participation would drive social equity, reduce poverty, and strengthen community resilience, creating a ripple effect of benefits that could extend far beyond individual households. However, this transformation hinges on upskilling and reskilling women to meet the demands of the evolving economy. In a world increasingly shaped by technology, innovation, and sustainability, equipping women with future-ready skills is not just an economic strategy but a national imperative.

⁴ Christine Lagarde, then Managing Director of the IMF, speaking at the launch of the W20 forum in Ankara in 2015

2. Current Trends: Women in the Workforce



Driven by rising enrolment in higher education, supportive policy reforms, and a gradual shift in societal norms, India is witnessing a steady rise in female economic participation. Between 2018 and 2022, female enrolment in higher education rose by 16%, with women now surpassing men in gross enrolment ratio.⁵ Flexible learning pathways, particularly related to distance education, have been essential in enabling access for women balancing domestic and economic responsibilities.⁶



Women's labour 25% in 2018-19 to 42% in 2023-24, while unemployment rates for women dropped from 5% to 3%.⁷ Though the agricultural sector still employs the majority of working women, participation is expanding across manufacturing, services, and emerging sectors like IT, logistics, and green jobs.⁸ In fact, women now represent 36% of the IT workforce and over 65% of healthcare and social service workers.⁹

The Union Budget 2025-26 underscores new opportunities in India's defense sector, the gig economy, and entrepreneurship, supported by digital platforms and targeted policy incentives—while also advancing women's workforce participation through record gender budget allocations of ₹4.49 lakh crore (8.8% of total budget) and incentivizing women entrepreneurs with term loans up to ₹2 crore.¹⁰ Female-led startups, particularly in health tech, ed-tech, and sustainability, are contributing to job creation and inclusive growth.¹¹

⁵ All India Survey on Higher Education (AISHE) 2021-2022, The Ministry of Education, Government of India

⁶ All India Survey on Higher Education (AISHE) 2021-2022, The Ministry of Education, Government of India

⁷ Press Release by Ministry of Labour & Employment, Government of India, on PLFS Annual Report 2023-24 (<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2057970>)

⁸ https://www.millenniumpost.in/k-reers/a-promising-ai-driven-future-for-women-601215#google_vianette

⁹ https://www.millenniumpost.in/k-reers/a-promising-ai-driven-future-for-women-601215#google_vianette

¹⁰ https://www.indiabudget.gov.in/doc/budget_speech.pdf

¹¹ <https://www.forbesindia.com/article/news/startups-have-potential-to-create-2-million-jobs-for-women-by-2030-report/89357/1>

Barriers Women Face in the Workforce

Despite progress in education, policy reforms, and gradual changes in cultural attitudes, significant structural and economic obstacles continue to impede women's full and equitable participation in India's workforce. Women still grapple with persistent wage disparities, limited representation in leadership roles, and are often funneled into lower-value, informal, or care economy sectors.

Notably, India's female FLFPR stands at approximately 31.7%, significantly lower than the global average of around 50%. In urban areas, this rate is even more concerning at about 22%, despite the rising educational achievements of women.

On average, women dedicate nearly five hours a day to unpaid domestic work, which is seven to eight times more than men. This invisible labor restricts their time, mobility, and opportunities to engage in full-time formal employment, reinforcing economic dependency and occupational segregation.

Alarmingly, about 51% of women cite safety concerns while commuting as a significant barrier to entering the workforce. As a result, many are pushed toward informal, home-based, or gig work, often lacking protections and avenues for career growth.

Women earn between 20-35% less than their male counterparts for similar jobs, with discrepancies reaching up to 28% in leadership positions, which hampers their financial independence and wealth accumulation over time.

Even with increasing qualifications, women remain concentrated in low-paying sectors. For example, although the number of female MBBS graduates is on the rise, women still make up only about 17% of allopathic doctors. In corporate India, women fill around 31% of entry-level positions, but their representation drops to approximately 17% at the executive level and 20% on boards, revealing a systemic exclusion from decision-making roles and economic power.

Only one in four companies offers formal childcare facilities, despite existing legal requirements. This structural shortfall leads to career breaks for around 43% of women in mid-career, effectively stalling the progression of future leaders.

Furthermore, women encounter hiring biases, especially in technical, manufacturing, and logistics industries. Even within organizations, women are promoted to managerial roles at about 85% the rate of men, resulting in a broken rung effect that hampers their advancement to leadership positions.



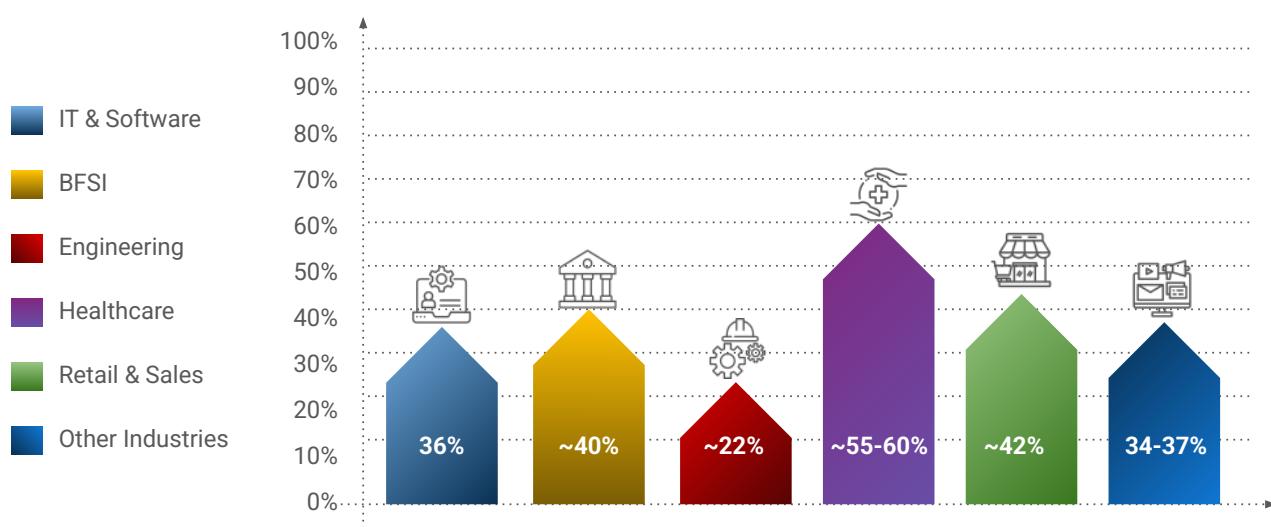
Talent Supply: A Growing Opportunity

India has approximately 364 million women in the working age group of 15-59 years (MoSPI, 2024). However, despite this large demographic, the FLFPR remains low at around 32% according to the PLFS 2023-24. The disparity is particularly stark in urban areas where FLFPR is just ~22%, compared to ~36% in rural areas. This indicates that a majority of Indian women of working age are either not engaged in paid employment or are excluded from formal labour force participation statistics.

When it comes to education, women's GER in higher education stands at approximately 28% (AISHE 2023).

This enrollment is skewed towards arts, science, and healthcare courses, while female representation in STEM and engineering streams continues to be significantly low. Annually, India produces ~12-15 million female graduates (including undergraduate and diploma holders). However, a key challenge lies in translating this academic achievement into employability, which is 48% in 2025 (a drop from 50.9% in 2024). This gender gap suggests that women—despite strong academic credentials—are falling behind in securing job-ready placements compared to male peers.

In IT & Software, approximately 36% of women graduates are considered employable, while in BFSI, this figure is marginally higher at ~40%. Employability in core engineering remains critically low at ~22%, reflecting systemic gaps in technical training, confidence building, and industry exposure. In contrast, healthcare demonstrates relatively higher female employability at ~55-60%, attributed to the structured and regulated nature of allied health training pathways. The retail and sales sector shows female employability at ~42%. On average, however, only about 34-37% of all graduating women are deemed employable by industry standards, meaning that roughly one-third of female graduates are job-ready with adequate technical, digital, communication, and workplace skills.



The strategic implication is clear: education alone does not equal employability. India's challenge is not just to educate women but to ensure that their skills are aligned with market demands through targeted, work-integrated learning programs and inclusive apprenticeship models. Approximately one-third of India's educated women are employable by industry standards, reflecting the high untapped economic potential.

India's talent ecosystem is evolving towards greater inclusivity, with projections indicating a substantial increase in employable female talent—expected to rise by approximately 46% from 2021, reaching an estimated 2.01 million by 2027, up from 1.38 million. Despite this promising growth, the increase remains inadequate when measured against the total talent requirements across various sectors. The persistent gap in skilled labor consistently hovers between 1.5 to 2 million annually, revealing a significant underrepresentation of women, particularly in engineering and technical roles.

While the year 2022 saw a slight narrowing of this gap, mainly attributed to a temporary decrease in overall demand, the situation reversed from 2023 onwards, with the shortfall widening once again. This trend underscores a critical concern: without the implementation of targeted skilling initiatives and apprenticeship programs designed specifically to integrate women into high-demand industries, India faces the dual challenge of ongoing workforce shortages and the failure to capitalize on the vast potential of its female talent pool.

Employable Female Talent in Direct Engineering Specific Roles, Indirect Roles, and Direct Engineering Supporting Roles			
Year	Employable Female Talent (All numbers in Millions)	Total Talent Required (All numbers in Millions)	Gap (Total – Female Talent)
2021	1.38	3.35	1.97
2022	1.76	3.31	1.55
2023	1.81	3.43	1.62
2024	1.83	3.58	1.75
2027	2.01	3.82	1.81
Note	Leading industries with the highest female participation - IT/BPM (Information Technology & Business Process Management), Retail, Manufacturing, and Banking, Financial Services, and Insurance (BFSI) - were considered while estimating talent supply.		



3. Gender Inclusion for Future Ready Apprenticeships

Despite a 32% increase in female enrollment in higher education between 2014-15 and 2021-22, this progress has not translated into workforce participation.¹² In 2024-25, women's participation in STEM education and careers in India remains limited despite gradual improvements in enrolment trends.

According to the AISHE 2022, women constitute around 42-43% of total STEM enrolments at the undergraduate level, with relatively better representation in life sciences and basic sciences, but significantly lower enrolment in engineering, technology, and physical sciences courses. In engineering and technology specifically, female enrolment stands at approximately 28-30%, with concentration in computer science, IT, and electronics streams, while participation in mechanical, civil, and core engineering disciplines remains under 15-20%. When it comes to the workforce, women's representation in STEM occupations is even lower, estimated at ~14-16% of India's STEM workforce, reflecting barriers such as workplace bias, lack of mentorship, and cultural expectations that limit entry and retention. While India has one of the highest absolute numbers of women STEM graduates globally due to its large population base, translating this academic participation into equitable employment and leadership opportunities remains a persistent challenge requiring focused interventions in career guidance, work-based learning, and organisational inclusion practices.

Expanding apprenticeships, particularly for future-ready industries, requires targeted policies to support female participation in skilling programs. These policies require continual efforts, including leadership accountability and collective commitments, to foster inclusion at all levels of education and in the workplace. Public-private partnerships can play a pivotal role in bridging the gap between education and employment by aligning curriculum with labour market needs and enabling safe, accessible pathways for women into high-growth sectors. The National Apprenticeship Promotion Scheme (NAPS), National Apprenticeship Training Scheme (NATS), and degree-level apprenticeships, amongst others, show how government policy can be leveraged to attract employers and learners across a wide variety of sectors.

¹² All India Survey on Higher Education (AISHE) 2021-2022, The Ministry of Education, Government of India

Integration with National Policy and Higher Education

India has made strides in embedding WBL into its national systems with its framework on foundation building upon the Apprentices Act (1961), which provides a structured mechanism for skills development and workforce enhancement. Section 3A mandates reserved training places for SC/ST/OBC apprentices, while Sections 13 and 14 ensure minimum stipend levels and health/safety protections. At the same time, Section 8 (plus amendments) imposes scalable thresholds—compelling larger establishments (40+ employees) to engage apprentices at 2.5%–15% (or up to 25% in states like Maharashtra) of total workforce. This framework ensures the creation of structured learning opportunities while promoting fairness, inclusivity, and scalability in workforce development. Regulatory oversight via contract registration and recorded obligations further ensures structured, inclusive, and scalable apprenticeship execution.

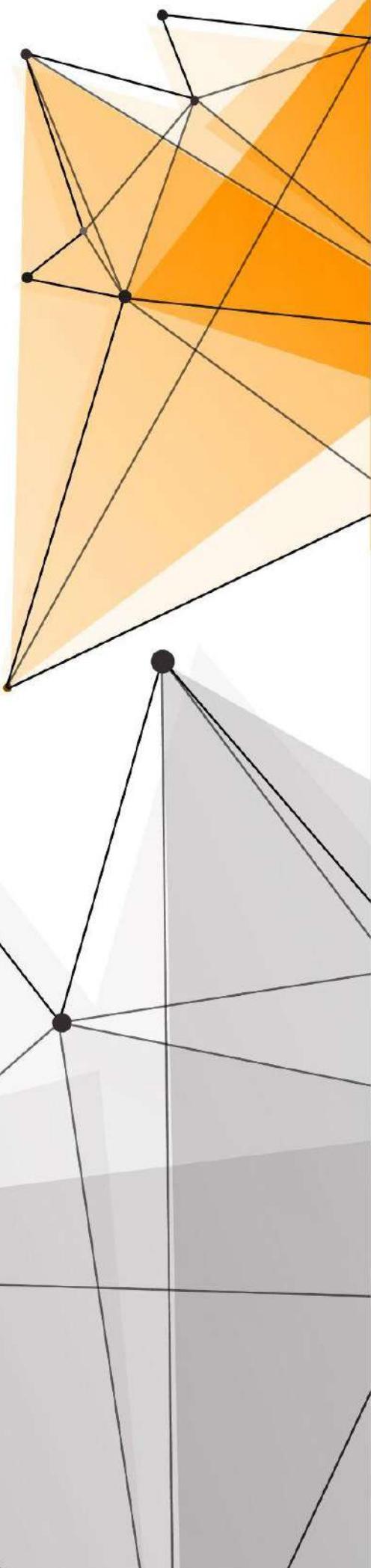
Flagship schemes such as the NAPS and NATS support apprenticeship policies by providing stipends to learners and structured incentives for employers: under NAPS, employers are reimbursed up to 25 % of the stipend (capped at ₹1,500/month), while NATS facilitates structured, industry-oriented on-the-job training, with provisions for partial reimbursement of stipends.¹³

Integrating national policies with higher education to advance skill development for Indian women requires leveraging frameworks like the National Education Policy (NEP) 2020, which mandates the embedding of vocational education and skill training within mainstream curricula, thus enabling women to gain employable skills alongside academic degrees. The National Credit Framework (NCrF) complements this by recognising credits earned across formal education, skilling, and work-based learning, allowing women to accumulate, transfer, and utilise learning outcomes flexibly, which is crucial given their higher likelihood of career breaks and re-entry needs. The National Skills Qualification Framework (NSQF) ensures that such skill training is standardised, competency-based, and aligned with industry requirements, enhancing the credibility and portability of women's qualifications across sectors. Further, work-based learning (WBL) models and apprenticeships, as promoted under NEP, NAPS, and Degree Apprenticeship guidelines, offer structured on-the-job learning with academic integration, bridging employability gaps for women who often lack workplace exposure due to socio-cultural barriers. By aligning higher education curricula with NSQF standards, embedding WBL opportunities, and operationalising NCrF for lifelong learning, India can create gender-inclusive skilling pathways that empower women to enter, remain, and advance in the workforce, thus realising both economic and social development goals.

¹³ <https://nsdcindia.org/sites/all/themes/ibees/pdf/apprenticeship-faqs.pdf>



A paradigm shift towards skill-centric education and training is particularly crucial for India's women, who represent an untapped economic force within the country's rapidly evolving job market. As India pursues its vision of Aatmanirbhar Bharat and self-reliance, equipping women with both academic credentials and hands-on, industry-relevant expertise can unlock productivity gains and drive inclusive growth. Currently, only 34-37% of graduating women are considered employable by industry standards, reflecting persistent gaps in workplace readiness, technical skills, and exposure. Moreover, sectors such as STEM, core manufacturing, and high-value services continue to see female workforce representation below 20%, underscoring the urgent need for integrated work-based learning, apprenticeships, and skilling programs tailored to women's unique socio-economic contexts. With over 550 million individuals comprising India's workforce and the economy growing at a robust pace, fostering inclusive, skill-centric education and employment pathways for women is essential to build a resilient and self-reliant India while ensuring equitable and sustainable development.





Growth of Apprenticeship in India

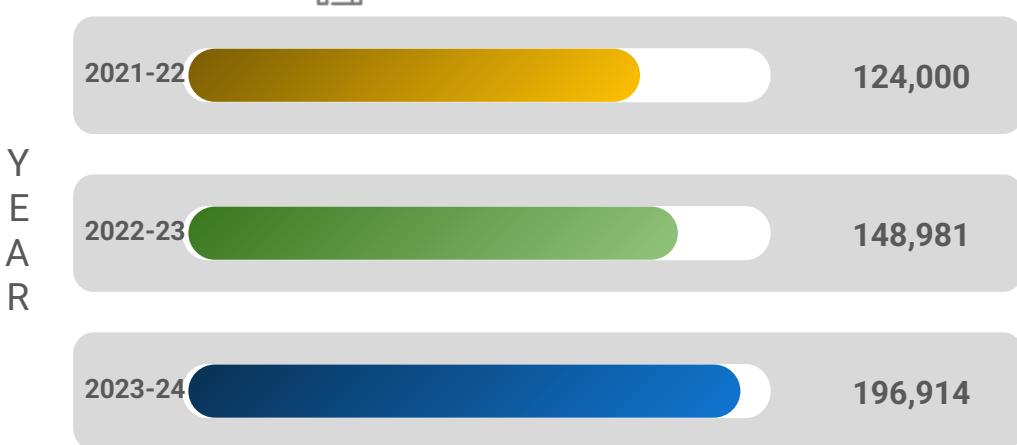
Over the past few years, there has been a notable rise in the enrolment of women apprentices in India, driven by government initiatives such as the NAPS and growing industry awareness about gender diversity in the workforce. According to the Ministry of Skill Development and Entrepreneurship (MSDE), the proportion of female apprentices under NAPS has increased from ~7-8% in 2018-19 to approximately 18-20% by 2023-24.

This growth is attributed to targeted efforts to expand apprenticeship opportunities in sectors where women are traditionally present, such as healthcare, retail, hospitality, BFSI, and administrative roles, as well as the introduction of Degree Apprenticeship models integrating academic learning with workplace training, which appeal to women seeking structured career pathways. However, despite this upward trend, women still constitute less than one-fifth of the total apprentices in India, highlighting significant scope for expansion.

India's apprenticeship landscape has undergone significant expansion in recent years. As of mid-2025, India's apprenticeship ecosystem shows strong expansion: under NAPS, over 4.3 million apprentices have been engaged, and under NATS, over 850,000 benefited in 2023-24—marking a significant scale-up across both schemes.¹⁴ Upward trends demonstrate how apprenticeship programs are becoming a meaningful pathway for women to enter and advance in the workforce. Female participation has risen markedly - an increase of approximately 25,000 apprentices (+20%) in 2021-22 to 2022-23 and 48,000 apprentices (+32%) in 2022-23 to 2023-24. This trend indicates a positive momentum in female apprenticeship enrollment. It reflects the successful outreach and implementation of inclusive skilling programs. If this trend continues, the number of female apprentices could surpass 250,000 within the next two years, further narrowing the gender gap in entry-level skilled employment.



FEMALE APPRENTICES



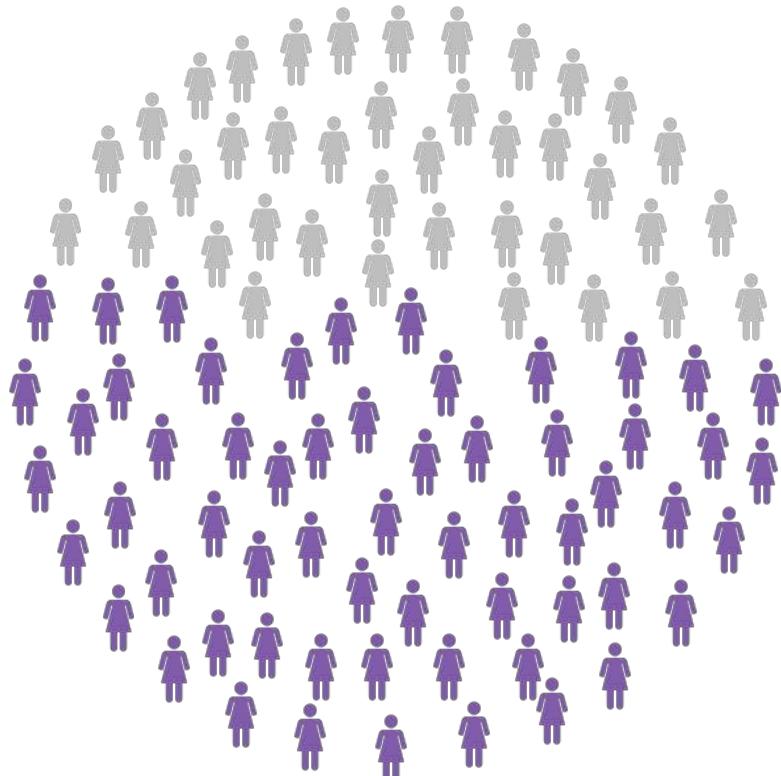
¹⁴ [MSDE: Status of Apprenticeship Scheme](#)

Participation is also growing across key sectors:

Sector	2021-2022	2022-2023	2023-2024
IT & BPM	27,464	38,304	39,697
Retail	13,472	16,551	21,205
Automotive and Automobile	8,675	14,872	31,495
Electronics	8,563	9,597	17,357
BFSI	7,412	5,682	8,485
Tourism and Hospitality	2,406	3,738	6,586
Food Processing	2,749	3,132	8,055
Life Sciences	1,987	3,163	4,821
Logistics	2,198	2,315	3,735
Healthcare	814	1,642	3,797

Female apprenticeship participation is growing rapidly, with enrolment increasing by ~58% over three years, driven by sectors such as IT, retail, and automotive. However, sectors like BFSI, healthcare, and logistics remain underutilised, indicating opportunities for targeted policy support and employer initiatives to diversify women's workforce integration.

**FEMALE
APPRENTICESHIP
PARTICIPATION WITH
ENROLMENT**
~58%



Emerging Industry and Participation Trends for Female Apprentices

A growing number of industries are actively seeking to increase the participation of women. Sectors such as solar energy, semiconductors, textiles, and IT/BPM are leading the way in hiring women apprentices, with others like retail, healthcare, telecommunications, and electric mobility following suit.¹⁵ These emerging sectors not only require new technical and digital skills but also offer entry points for women into formal and quality employment. Under NAPS employers receive financial incentives covering 25% of stipend (up to ₹1,500 per apprentice per month) and basic training costs, making it economically viable to hire women apprentices, especially in entry-level roles requiring structured skilling pathways. Industries such as solar energy and electric mobility utilise NAPS to train women in assembly, maintenance, and installation-related roles, while IT/BPM and telecommunications sectors use NATS for graduate apprenticeships to build digital and technical talent pipelines from universities.

Further, policy provisions under NAPS prioritise women by allowing relaxation in eligibility conditions and promoting partnerships with training providers focused on women's skilling. Additionally, several state governments offer top-up subsidies or transport and hostel support for women apprentices to address mobility and safety barriers. The introduction of Degree Apprenticeship guidelines under NEP 2020 also enables women to simultaneously pursue academic qualifications while gaining workplace experience, enhancing employability outcomes. Industries strategically combine NAPS for trade apprentices, NATS for graduate apprentices, and Degree Apprenticeships for integrated learning pathways, aligning incentives with their diversity goals. These measures are instrumental in expanding women's participation in apprenticeships, ensuring inclusion in sectors that demand new-age technical and digital skills essential for India's future workforce.

Notably, these opportunities are expanding beyond urban centers. While metropolitan cities like Hyderabad, Mumbai, and Bengaluru are at the forefront, with Hyderabad reporting 42% women apprentices in 2024, cities such as Kolkata and Chennai are showing steady annual gains.¹⁶ This suggests increasing geographic diversification of apprenticeship opportunities, which may help mitigate the limitations women face in transitioning from informal to formal employment, especially in less populated or traditionally underserved areas.

Despite promising changes, female participation in apprenticeship programs remains uneven. According to the TeamLease Degree Apprenticeship Report.¹⁷

- 38% of organizations report having no female apprentices, indicating significant untapped potential.
- 26% state that women make up just 1-10% of their apprentice pool.
- Only 2% of companies report achieving over 50% female representation in their programs.

¹⁵ NAPs data

¹⁶ Apprenticeship Outlook Report Jan'25-Mar'25, TeamLease Degree Apprenticeship(<https://degreeapprenticeship.teamlease.com/report/apprenticeship-outlook-report-jan25-mar25>)

¹⁷ Apprenticeship Outlook Report Jan'25-Mar'25, TeamLease Degree Apprenticeship(<https://degreeapprenticeship.teamlease.com/report/apprenticeship-outlook-report-jan25-mar25>)



Annual participation trends also reveal volatility. While female apprenticeship share rebounded to 26% in 2024, it had dropped to 13% in 2023 after reaching 24% in 2022.¹⁸ This fluctuation coincided with a spike in “no preference” hiring policies, which rose from 32% in 2022 to 43.7% in 2023, before falling to 16% in 2024.¹⁹ The data suggests that without targeted inclusion strategies, progress towards women’s advancement is stalled.

Year	Female Apprenticeship Share (%)	No Targeted Inclusion Policy (%)
2022	24	32
2023	13.3	43.7
2024	26.1	16

City-level analysis reflects the same trend of progress with disparities.²⁰ Hyderabad continues to lead supported by strong IT ecosystems and corporate diversity mandates. Other cities, like Pune and Delhi, are improving yet still lagging. These variations point to a need for localized strategies and policy support to level the playing field.

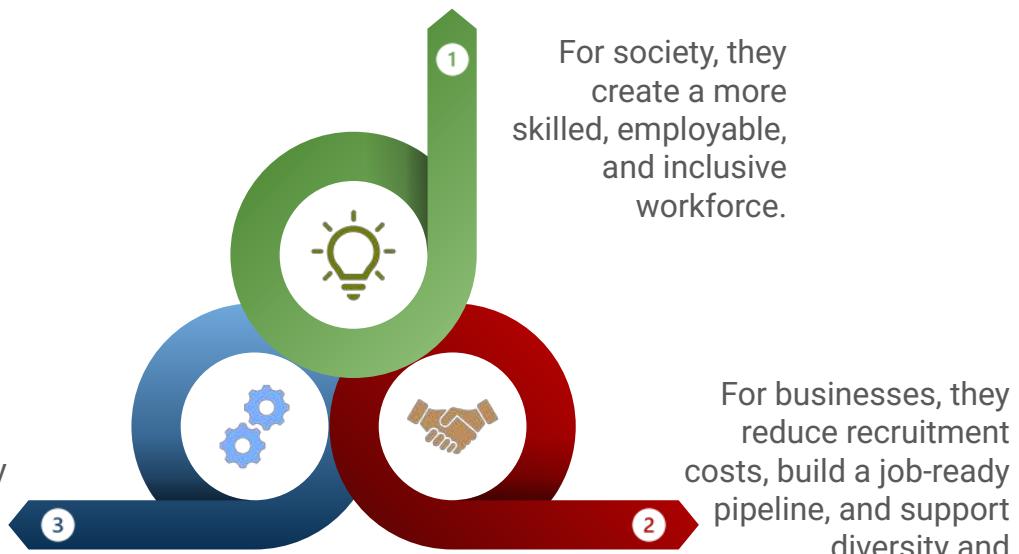
Comprehensive analysis of women workforce: Demand and skill gaps across key Indian industries



IT & BPM (Information Technology & Business Process Management)

The Triple Win: Society, Business, and Women Apprenticeships generate shared value across the economy:

For women, they open pathways to financial independence, career advancement, and entry into high-growth and male-dominated sectors.



¹⁸ Apprenticeship Outlook Report Jan'25-Mar'25, TeamLease Degree Apprenticeship (<https://degreeapprenticeship.teamlease.com/report/apprenticeship-outlook-report-jan25-mar25>)

¹⁹ Apprenticeship Outlook Report Jan'25-Mar'25, TeamLease Degree Apprenticeship (<https://degreeapprenticeship.teamlease.com/report/apprenticeship-outlook-report-jan25-mar25>)

²⁰ Apprenticeship Outlook Report Jan'25-Mar'25, TeamLease Degree Apprenticeship (<https://degreeapprenticeship.teamlease.com/report/apprenticeship-outlook-report-jan25-mar25>)

- Demand: High demand for women in coding, data analytics, AI/ML, testing, and IT support roles, driven by diversity mandates in major firms (TCS, Infosys, Wipro targeting ~35-40% female representation).
- Current women workforce share: ~35-38%.
- Skill gap:
 - Lack of advanced programming skills (Java, Python, cloud).
 - Limited exposure to cybersecurity and AI/ML projects.
 - Communication and client-facing skills deficits among Tier 2-3 graduates.
- Gap implication: ~20-25% shortfall in job-ready women candidates in niche tech skills.



2 Healthcare and Social Services

- Demand: Growing rapidly due to expansion of private hospitals, diagnostics, telemedicine, and allied healthcare services.
- Current women workforce share: ~40-55% (higher in nursing, paramedical, and allied health; low in specialist doctor roles).
- Skill gap:
 - Limited specialist and technical skill pathways (e.g. lab technicians, radiology).
 - Soft skills gaps for patient care and digital health services.
- Gap implication: ~15-20% shortage of employable female allied health professionals to meet expanding urban and rural healthcare needs.



3 BFSI (Banking, Financial Services, Insurance)

- Demand: Increasing for sales, credit analysts, insurance advisors, relationship managers, and fintech operations.
- Current women workforce share: ~22-25% in banking; ~15-18% in insurance sales roles.
- Skill gap:
 - Digital banking and fintech literacy.
 - Sales confidence and field mobility limitations.
- Gap implication: ~30-35% shortfall in women for aggressive rural and fintech expansion targets.



4 Manufacturing & Core Engineering

- Demand: Growing in EV manufacturing, electronics assembly, precision engineering, and robotics/automation.
- Current women workforce share:
 - Overall manufacturing: ~12-15%
 - Electronics assembly: up to ~35% in south Indian clusters
 - Heavy engineering & core trades: 10%.
- Skill gap:
 - Technical skill certifications (welding, CNC, robotics maintenance).
 - Socio-cultural barriers to night shifts and plant deployment.
 - Gap implication: ~40-50% gap in job-ready women for skilled technician roles.



5 Retail & Ecommerce

- Demand: High demand for customer sales associates, inventory management, digital marketing, and logistics coordination roles.
- Current women workforce share: ~30-35% overall; lower in warehousing/logistics (~15%).
- Skill gap:
 - Customer handling and digital sales operations.
 - English communication for premium retail segments.
- Gap implication: ~20% shortage in employable women talent for rapid omni-channel retail growth.



6 Telecommunications

- Demand: Rising for sales, tower operations, fibre installation, and network maintenance with 5G rollout.
- Current women workforce share: ~10-15%, concentrated in customer support and back-office roles.
- Skill gap:
 - Field technical skills (fibre splicing, tower maintenance).
 - Safety and mobility constraints for on-site deployments.
- Gap implication: ~30-40% shortfall of women in technical field roles.



7 Electric Mobility and Renewables

- Demand: Rapidly increasing for battery assembly, EV maintenance, charging infrastructure management, and solar installation.
- Current women workforce share: ~10% in EV sector; ~15-20% in solar assembly and testing.
- Skill gap:
 - Mechatronics and EV battery maintenance skills.
 - Safety certifications for electrical work.
- Gap implication: ~40-50% skill gap in female workforce readiness for green economy

Industry	Demand Trend	Current Women Workforce (%)	Skill Gap Estimate (%)
IT & BPM	High	~35-38%	~20-25%
Healthcare	High	~40-55%	~15-20%
BFSI	Medium-High	~22-25%	~30-35%
Manufacturing & Core Engg	High	~12-15% overall	~40-50%
Retail & E-commerce	High	~30-35%	~20%
Telecom	Medium	~10-15%	~30-40%
Electric Mobility & Renewables	High	<10-15%	~40-50%

Industry	Current Women Workforce Share (%)	Estimated Demand Growth (2024-25)	Employability (Job Readiness) (%)	Skill Gap (%)	Key Skill Gaps & Barriers
IT & BPM	~35-38%	High	~36%	~20-25%	Advanced coding (Java, Python, cloud), AI/ML exposure, client communication, leadership pipeline gaps.
Healthcare & Social Services	~40-55%	High	~55-60%	~15-20%	Specialist skills (lab tech, radiology), digital health familiarity, managerial roles underrepresentation.
BFSI	~22-25%	Medium-High	~40%	~30-35%	Digital banking/fintech literacy, field sales confidence, mobility restrictions.
Manufacturing & Core Engineering	~12-15% overall	High	~22%	~40-50%	Technical certifications (robotics, CNC, welding), gender norms in plant deployment, night shift constraints.
Retail & E-commerce	~30-35%	High	~42%	~20%	Customer service digitalisation, English communication, leadership and store management skills.
Telecommunications	~10-15%	Medium	~28-30%	~30-40%	Field technical skills (fibre splicing, tower ops), safety and mobility challenges.
Electric Mobility & Renewables	<10-15%	High	~25-30%	~40-50%	EV battery assembly/maintenance, electrical safety certifications, green tech digital skills.

Highest Skill Gaps:



Manufacturing, Electric Mobility, Telecom – **gaps exceeding 40-50%** due to technical certification shortages and socio-cultural constraints.

Moderate Gaps but High Demand:



IT, BFSI, Retail – employability **gaps of 20-35%**, largely driven by digital and communication skill deficiencies.

Lowest Gaps (Yet Underrepresented in Leadership):

- Healthcare – higher employability but limited specialist and leadership roles for women.

The skill demand-supply gaps highlighted in the dashboard can be strategically addressed through Work-Based Learning (WBL) integration and Degree Apprenticeship models. For instance, in industries like manufacturing, electric mobility, and telecom, where skill gaps exceed 40-50%, embedding degree apprenticeships that combine academic learning with structured, on-the-job training can equip women with essential technical certifications in robotics, CNC operations EV



battery maintenance, and fibre splicing, making them immediately employable. In sectors such as IT, BFSI, and retail, which exhibit moderate skill gaps (~20-35%) driven by digital, technical, and communication deficiencies, WBL programs aligned with the National Skills Qualification Framework (NSQF) levels can integrate coding, fintech, and customer service modules directly into work environments, enhancing job readiness. For healthcare, although employability is relatively high (~55-60%), degree apprenticeships can be leveraged to upskill women into specialist and managerial roles, strengthening the leadership pipeline. Overall, embedding WBL and Degree Apprenticeships across sectors transforms learning into an employment outcome, bridging theoretical knowledge with industry-relevant expertise, addressing gendered occupational segregation, and creating an inclusive, skilled female workforce aligned with India's economic growth needs.

4. The Business Case for Female Inclusion through Apprenticeships

As India accelerates efforts to build a future-ready workforce, employers are increasingly recognizing the strategic value of gender diversity. What was once viewed through a corporate social responsibility lens is now understood as a lever for business growth, innovation, and long-term competitiveness. Apprenticeships not only create direct employment opportunities but also act as catalysts for upskilling and professional advancement, rendering them a strategic tool for sustainable workforce development.

Apprenticeships can lead to strong employment outcomes in a variety of growing sectors, with some targeting female participation:

1

Strong Employment Outcomes

98% of apprentices transition into formal jobs, with 40% remaining within the same organization.²¹



2

Sectoral Leadership

Solar (64%), semiconductors (61%), IT (57%), healthcare (49%), and retail (46%) are actively integrating women through apprenticeships, recognizing the value of diverse talent pools.²²



3

Growing Female Participation

Increased from 18% in 2020-21 to 22% in 2024-25, indicating the success of targeted skilling initiatives.²³



²¹ People Supply Chain Innovation with ROI Report, TeamLease Degree Apprenticeship (<https://degreeapprenticeship.teamlease.com/report/people-supply-chain-innovation-with-roi>)

²² Apprenticeship Outlook Report Jan'25-Mar'25, TeamLease Degree Apprenticeship (<https://degreeapprenticeship.teamlease.com/report/apprenticeship-outlook-report-jan25-mar25>)

²³ <https://www.apprenticeshipindia.gov.in/>



Key Business Drivers for Hiring Women Apprentices

Employers cite multiple strategic motivations for increasing the participation of women in their apprenticeship programs:²⁴

Workforce Development and Skills Gaps

As India transitions towards Industry 4.0, employers face acute skill shortages in areas such as automation, AI, advanced manufacturing, and digital services. Women apprentices are seen as an untapped talent pool to bridge these gaps efficiently. Tata Electronics recruits women apprentices for precision assembly and quality inspection roles in their Tamil Nadu facility to meet semiconductor manufacturing skill demands. Their partnership with ITIs and polytechnics under NAPS focuses on training women in cleanroom operations, thereby expanding their skilled workforce rapidly.



Diversity and Inclusion Goals

Companies integrate apprenticeship hiring with their diversity KPIs to ensure long-term gender-balanced workforce pipelines. Infosys and Accenture prioritise hiring women apprentices in digital roles under their inclusivity initiatives. They partner with NSDC training providers to design pre-apprenticeship bridge programs for women, aiming to build future tech leadership that is gender-diverse.



Workplace Culture and Productivity

Increasing women's participation fosters collaborative environments, improves team performance, and enhances problem-solving capabilities due to diverse perspectives. Maruti Suzuki observed improvements in assembly line efficiency and quality after introducing all-women apprentice batches in their welding, paint, and assembly divisions under NAPS. They also noted reduced absenteeism and enhanced discipline in work processes.



Corporate Social Responsibility (CSR)

Many companies align apprenticeship initiatives with CSR to empower local communities and strengthen women's economic participation, particularly in operational geographies. Schneider Electric India Foundation implements apprenticeship-linked skill programs for rural and urban women electricians under their CSR, aiming to increase female representation in energy sector jobs while improving community livelihoods.

²⁴ Apprenticeship Outlook Report Jan'25-Mar'25, TeamLease Degree Apprenticeship (<https://degreeapprenticeship.teamlease.com/report/apprenticeship-outlook-report-jan25-mar25>)

Business Benefits

Apprenticeships reduce recruitment and training costs compared to lateral hiring and enhance retention due to structured skill pathways and company loyalty. Mahindra & Mahindra uses NAPS to hire women apprentices for assembly, logistics, and mechatronics roles in EV manufacturing. This pipeline reduces dependency on expensive contract labour while improving retention, as trained apprentices are often absorbed as full-time associates.



Community Investments and Brand Equity

Investing in women's apprenticeships strengthens employer brand equity, demonstrating commitment to inclusive growth, which attracts quality talent and consumer goodwill. Godrej Consumer Products integrates women apprenticeship programs in their manufacturing and supply chain units, publicly communicating this under their "**Good & Green**" CSR strategy, enhancing both talent attraction and brand trust.

Sectoral Participation

Traditionally male-dominated sectors are witnessing increasing women participation through apprenticeships, diversifying talent pools and driving innovation. Hero MotoCorp employs women apprentices in EV assembly and robotics maintenance to expand their talent pipeline for future-ready plants, while Samsung India trains women under NATS as graduate apprentices in electronics manufacturing and repair operations.



Advanced Skill Sets

Employers recognise that Degree Apprenticeships generate graduates with industry-relevant expertise, higher productivity, and stronger retention compared to regular graduate hiring. Capgemini India is piloting degree apprenticeship models with universities to build advanced IT, cybersecurity, and data analytics pipelines. This ensures entry-level hires are job-ready with minimal additional training investments, aligning with their strategic talent supply chain planning.

Employers view women apprenticeships as strategic levers not just for diversity compliance but for building resilient, future-ready, and inclusive talent pipelines that drive productivity, innovation, and brand equity. The alignment of NAPS/NATS financial incentives, CSR goals, and degree-integrated models makes this approach both impactful and cost-effective.



By integrating more women into apprenticeship programs, companies can:

Build resilient talent pipelines that reflect the demographic and skill trends of the future.



Improve brand equity and community reputation, particularly in socially conscious consumer and investor markets.

Achieve cost-effective workforce development, reducing recruitment and onboarding costs.

To unlock these benefits, businesses must go beyond intent and embed measurable accountability into their diversity strategies. Despite women comprising ~48% of India's population and ~43% of higher education enrolment, their labour force participation remains low at ~31.7% overall with female employability rates lagging at ~34-37% compared to ~48-52% for men. Addressing this gap requires leadership-driven investments in targeted skilling, inclusive apprenticeships, and robust industry-academia partnerships that equip women with market-relevant technical and digital skills. Sectors such as IT, healthcare, EV manufacturing, and semiconductors increasingly hire women apprentices under schemes like NAPS and NATS, yet participation remains under 20% of total apprentices (MSDE, 2024) due to barriers such as informality of work, limited mobility, and restrictive cultural norms. Implementing structured recruitment and professional development programs, particularly in male-dominated fields, will integrate this rising talent pool effectively. By fostering workplace cultures that value diversity and inclusivity, businesses can not only enhance productivity and innovation but also drive broader economic and social progress, crucial for realising India's vision of a \$30 trillion economy and inclusive Aatmanirbhar Bharat.





5. Empowering Journeys: Learning how Apprenticeships are Shaping Women's Careers

Apprenticeships have the power to transform lives, offering women practical skills, industry exposure, and pathways to meaningful careers. This chapter highlights how companies have tailored apprenticeship programs to benefit their businesses while positively impacting the lives of young women. Real-life stories of women who have broken barriers, challenged stereotypes, and built successful careers through apprenticeship programs are shared in the following two examples that demonstrate the profound impact of hands-on learning in driving empowerment and economic inclusion.

Case Study 1: Buhler India – Building Inclusive Talent Pipelines Through Tailored Apprenticeships

Buhler India Private Limited, incorporated in 1992, is a subsidiary of Buhler AG, Switzerland. With a state-of-the-art manufacturing facility in Attibele, Bengaluru, and regional offices across India, Buhler India specializes in manufacturing food and grain processing machines, serving clients like Nestle, ITC, and KRBL, along with numerous rice and grain mills. The company employs around 1500 individuals, with 850+ on payroll and the rest are partner employees and apprentices.

Buhler Academy: Shaping the Workforce of Tomorrow

Launched in 2009 in Bengaluru, the Buhler Academy focuses on training young individuals from rural and economically disadvantaged backgrounds, aiming to equip them with industry-relevant skills. Starting with just four trainees, the academy has now trained over 700 apprentices, offering them hands-on experience, attractive stipends, and placement opportunities along with formal education. Unwavering commitment from the management is the key to the success of the apprenticeship program in Buhler India.



Key Initiatives:



Customized Learning Approaches: Recognizing industry-specific needs, Buhler India has tailored its programs to align with core manufacturing roles such as Fitters, Welders, Electricians / Mechatronics, and Machinists.



Gender Diversity Efforts: The academy actively encourages female participation, though challenges remain in attracting and retaining women due to relocation challenges and skill gaps and non-availability of women apprentices for their field of job roles.



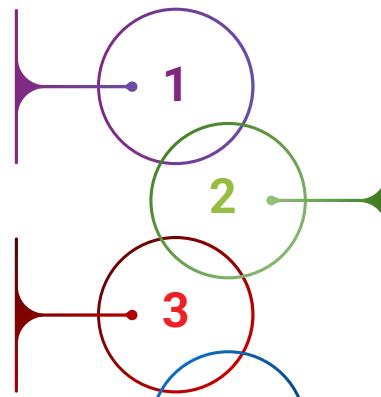
Swiss Vocational Education & Training (VET): Buhler adapted the Swiss VET system, initially focused on mechanical skills. Later modified to include Mechatronics, enhancing its appeal to women. This specialization covers electrical and automation subjects, providing women apprentices with roles in control panel wiring, sorter machine assembly, and PLC programming.



Bachelor of Vocation in Post Harvest Technology (B Voc – PHT): In collaboration with Ramaiah University, the B Voc program integrates academic learning with on-the-job training under a 70:20:10 model—70% experiential learning, 20% workshop training, and 10% formal education. Buhler covers 70% of the tuition fees, making it accessible for economically weaker students.

Impact:

Over 700 apprentices have graduated since inception.



Increased female participation through specialized Mechatronics programs.

Enhanced employability of apprentices through real-time projects and university collaborations.

Assistance in stay and accommodation at Bangalore.

Dedicated women trainer and welfare officer – Mentorship, career guidance and placement assistance.

Improved flexibility in learning and practice and connection with families

Exposure to real time scenarios through site visits and industry visits.

Exchange programs within Buhler group.

Case Study 2. Nestlé India's Swabhimaan Scholarship Scheme – Empowering Women in Manufacturing

Nestlé India, in collaboration with **HIM Gaurav ITI**, Santokhgarh, Himachal Pradesh, has taken a significant step toward fostering gender inclusivity in manufacturing through its flagship initiative: the **Swabhimaan Scholarship Scheme**. Designed to bridge the gender gap in technical education and empower women in local communities, this program fully sponsors the education of female students from the vicinity of Nestlé's **Tahliwal Factory**, enabling them to pursue a **two-year ITI program** and build sustainable careers in manufacturing.

The Swabhimaan Scholarship Scheme integrates academic learning with real-world industry exposure, ensuring that students gain both technical knowledge and practical skills. This **blended learning model** creates a seamless transition from education to employment.

Key Components of the Program:



Blended Learning Approach: Students receive hands-on **On-the-Job Training (OJT)** at Nestlé's Tahliwal Factory while continuing their academic studies.



Regular Industry Engagement: Monthly knowledge-sharing sessions conducted by Nestlé professionals to enhance industry readiness and build domain expertise.



Performance Monitoring & Career Progression: To ensure the holistic development of students, the program emphasizes continuous performance evaluation and career support on a regular basis.



Mentorship & Career Guidance: Students receive mentorship from industry experts, gaining real-world exposure and strategic insights for future career growth.



Pathway to Employment: Upon successful completion of the program, students are offered apprenticeships at Nestlé India, creating a direct employment pathway and long-term career opportunities.

Driving Inclusivity & Workforce Development

The Swabhimaan Scholarship Scheme is a cornerstone of Nestlé India's commitment to fostering **diversity, equity, and inclusion** in its workforce. By investing in the education and skill development of women, the program addresses key challenges in gender disparity within manufacturing and builds a sustainable talent pipeline.



Recognizing the success of the Swabhimaan initiative, Nestlé India is now **expanding the program across all its factories**, further strengthening its commitment to **gender diversity, skill development, and inclusive growth**. This horizontal deployment ensures that more women across India can access technical education, hands-on training, and sustainable employment opportunities.

Nestlé India's Swabhimaan Scholarship Scheme stands as a model for **industry-academia collaboration** aimed at empowering women and fostering inclusive growth. By integrating education with practical training and creating direct employment pathways, the program not only transforms individual lives but also strengthens India's manufacturing sector. Swabhimaan is more than a scholarship; it is a transformative journey that equips women with the skills, confidence, and opportunities needed to thrive in the workforce—reinforcing Nestlé's vision of a more inclusive and equitable future.



From Learners to Leaders: The Impact of Apprenticeships on Women's Careers

Vijayalakshmi, the trailblazer at Buhler Group

Vijayalakshmi, a young woman from a rural village in Karnataka, faced significant barriers in accessing higher education and stable employment due to financial constraints and societal norms. Growing up in a farming family, her opportunities were limited, but her determination to secure a better future led her to explore non-traditional career paths.

Journey Through Apprenticeship:

01

Choosing Buhler Academy: After completing her ITI certification in Electrical Engineering, Vijayalakshmi learned about Buhler Academy's Electrician apprenticeship program. Drawn by its practical learning approach and placement opportunities, she enrolled in the program.



02

Overcoming Barriers: Relocating to Bengaluru was a significant challenge, but Buhler's support systems, including accommodation facilities and mentorship programs, helped her adapt. As one of the few women in her cohort, she navigated societal expectations and gained confidence through continuous learning and hands-on experience.



03

Professional Growth: During her apprenticeship, Vijayalakshmi specialized in control panel wiring and automation systems, excelling in both practical and theoretical modules. Her dedication earned her a full-time position at Buhler India upon graduation.



04

Work life balance: She is managing personal as well as professional life with support from family and company.



Impact:

Vijayalakshmi now mentors new female apprentices, advocating for greater inclusivity in technical roles.

Her success story has inspired other young women from her village to pursue similar opportunities, gradually shifting community perceptions.

She continues to upskill through advanced certification programs, aiming for leadership roles in the future.

Shivangi Dass's Journey at Nestlé India

For many young professionals, entering the manufacturing industry can be an overwhelming experience, especially for women in what has traditionally been a male-dominated field. However, structured apprenticeships can serve as a powerful tool in bridging the gap between education and employment, providing women with the skills, experience, and confidence needed to succeed. Shivangi Dass's journey with Nestlé India showcases how such opportunities can lead to significant career advancements and empower women to break barriers in manufacturing leadership.

Shivangi's Journey: From Apprentice to Leader

In 2018, Shivangi Dass embarked on her professional journey with Nestlé India as an apprentice at the company's Pantnagar Factory after completing her degree from Sam Higginbottom University of Agriculture. Fuelled by a passion for manufacturing, Shivangi embraced the fast-paced challenges of the production floor, working directly with shop floor operators in noodle manufacturing. This hands-on experience gave her a deep technical knowledge of production processes and laid the foundation for her career in the manufacturing sector. Upon completing her apprenticeship, Shivangi was offered a position as a Production Officer at the Nestlé Pantnagar Factory, one of the largest noodle manufacturing sites in Uttarakhand. Her apprenticeship had equipped her with the technical skills required to navigate the complexities of large-scale food manufacturing, allowing her to quickly adapt to her new role. By learning from seasoned operators and engaging with every aspect of production, Shivangi was well on her way to leadership.

Climbing the Ladder: Recognition and Growth

In early 2025, Shivangi was transferred to Nestlé's Sanand Factory in Gujarat, the largest noodle manufacturing site within the company. Known for its 50% gender diversity and inclusive workforce, including people with disabilities, the Sanand factory is a testament to Nestlé's commitment to fostering an inclusive environment. Here, Shivangi is set to lead her own team, a significant career milestone she has achieved in just four years since starting as an apprentice.



Impact of Apprenticeships on Women's Workforce Participation

Bridging the Skill Gap: Through her apprenticeship, Shivangi gained hands-on experience that complemented her academic background, providing her with the technical expertise required to excel in manufacturing. 1

Accelerated Growth: From apprentice to leadership track in just four years, Shivangi's rapid career progression demonstrates how apprenticeships can fast-track women's growth in the manufacturing industry. 2

Breaking Barriers: By challenging traditional gender norms, Shivangi has become an inspiration for other women looking to build careers in manufacturing, proving that gender does not define leadership potential. 3

Mentoring Future Talent: Shivangi is dedicated to developing the next generation of talent at Nestlé, actively mentoring young women, and encouraging them to explore manufacturing as a viable career option. 4

A Story of Determination and Success

Shivangi Dass's journey is a powerful testament to the transformative impact of apprenticeships on women's careers. Her story highlights how structured apprenticeship programs can provide women with the right tools to succeed, advance, and lead in industries like manufacturing. Thanks to Nestlé India's commitment to diversity and inclusion, Shivangi has not only succeeded but also paved the way for more young women to follow her.

With the right opportunities, support, and determination, women can overcome traditional barriers and thrive in any industry.



6. Recommendations to Enhance Women's Participation in Apprenticeships

Women's participation in India's workforce remains below global benchmarks, limited by socio-economic barriers, family responsibilities, mobility challenges, and lack of access to industry-relevant skills. Yet, structured skilling pathways, particularly apprenticeships and WBL programs, offer significant potential to bridge this gap.

Employers are increasingly seeking women apprentices, with demand rising five-fold in recent years. Industry leaders note that women bring qualities such as discipline, consistency, and attention to detail, making them especially valued in sectors like manufacturing, where their representation is projected to touch 40% by year-end.²⁵ Apprenticeships under NAPS surged twenty-fold in five years, rising from about 35,500 in 2018-19 to nearly 7.4 lakh in 2022-23, while women's participation grew seven-fold—from roughly 22,400 to 1.5 lakh over the same period.²⁶

To further advance diversity and inclusion, the government should prioritize expanding apprenticeships that enable women to upskill, reskill, and gain hands-on work experience, particularly through financial incentives, policy support, and inclusive infrastructure such as childcare, safe transport, and housing for migrant apprentices. A whole-of-society approach is needed, with the following recommendations proposed for the private sector and other stakeholders to scale programs, strengthen partnerships, and increase awareness to enhance women's participation in India's skilling ecosystem.

A. For Government and Policy Makers

1. Expand and Incentivize Apprenticeship Opportunities

- i. *Scale apprenticeship programs in high-growth sectors (e.g., IT, healthcare, BFSI, logistics, green energy) aligned with the National Skills Qualification Framework (NSQF).*
- ii. *Strengthen schemes like NAPS and NATS through higher stipends and employer incentives specifically for hiring women apprentices.*
- iii. *Implement Recognition of Prior Learning (RPL) frameworks to formally recognize informal work experience and transition women into apprenticeships.*
- iv. *Introduce one-time mobilization allowances to support candidates from rural and underserved areas.*
- v. *Offer policy-driven incentives for companies that create inclusive work environments.*

²⁵ <https://hr.economictimes.indiatimes.com/news/workplace-4-0/diversity-and-inclusion/representation-of-women-apprentices-in-mfg-sector-to-touch-40-pc-by-year-end-teamlease/109515963?>

²⁶ <https://economictimes.indiatimes.com/jobs/fresher/apprenticeship-training-sees-twenty-fold-jump-in-five-years/articleshow/105529574.cms?>



2. Create Enabling Infrastructure and State-Level Support

- i. Create legislation that requires employers to provide childcare support via on-site crèche facilities in training centers and workplaces.
- ii. Develop safe transport and accommodation solutions for migrant and rural women (e.g., Gujarat's free transport service, Tamil Nadu's working women hostel model).
- iii. Promote state-driven policy frameworks that prioritize women's participation, particularly in low-engagement regions.

3. Foster Public-Private Partnerships

- i. Collaborate with industry to set up women-centric skilling hubs in Tier II and Tier III cities.
- ii. Support the development of sector-specific Centres of Excellence to provide training in digital skills, financial literacy, and technical trades.
- iii. Expand state-specific financial support models to incentivize businesses training women (e.g., Gujarat's subsidies for companies hiring women apprentices).

4. Raise Awareness and Challenge Social Norms

- i. Launch national apprenticeship awareness drives in schools, colleges, ITIs, and rural communities.
- ii. Partner with local NGOs, Self Help Groups (SHGs), and community leaders to educate families on the importance of skilling women.
- iii. Provide scholarships, travel stipends, and technology access to support women's enrollment in hybrid training models.

B. For the Private Sector and Employers

1. Integrate Women into Core Apprenticeship Strategies

- i. Create and expand work-integrated degree apprenticeship models that combine academic learning with on-the-job experience.
- ii. Design flexible, hybrid, and part-time apprenticeship models to support women balancing work and family responsibilities.
- iii. Ensure mentorship and personal development initiatives to keep women engaged from apprenticeship to management and leadership roles.

2. Offer Incentives and Inclusive Work Environments

- i. Establish onsite crèche and family support programs to accommodate apprentices with children. This includes gender neutral parental policies.
- ii. Provide mentorship, scholarships, and career counselling for women entering non-traditional trades like STEM, construction, and aviation.
- iii. Encourage MSMEs and startups to hire women apprentices through customized modules, wage support, and direct subsidies.

3. Establish Anti-Discrimination Policies

- i. *Implementing D, E, and I policies, particularly for recruitment and hiring, can help curb unconscious bias and gender stereotypes.*
- ii. *Offer regular training and workshops on unconscious bias. This can create awareness about gender stereotypes and influence decision-making at all levels of the organisation. Include women in key decisions and discussions.*
- iii. *Provide transparent procedures for reporting misconduct and lodging discrimination and harassment complaints.*

4. Lead Women-Centric Programs

- i. *Leverage CSR funding to skill women in underrepresented sectors.*
- ii. *Develop company-specific training pipelines that prioritize diversity and inclusion in the workforce.*

5. Evaluate and Adapt Programs

- i. *Regularly assess gender inclusive policies, gathering data and feedback.*
- ii. *Adapt, refine and improve strategies.*

6. Showcase Success and Drive Engagement

- i. *Share real-life stories of women apprentices through digital platforms and industry events.*
- ii. *Organize industry-led apprenticeship fairs and connect women to employers and mentors.*

C. For Training Providers and Education Institutions

1. Deliver Industry-Relevant and Inclusive Training

- i. *Establish women-led training centers that prioritize both soft and technical skill development.*
- ii. *Update curricula to include digital skills, financial literacy, and career readiness modules tailored for women.*

2. Expand Hybrid and Flexible Learning Models

- i. *Use digital platforms and blended learning to reach women with mobility or caregiving constraints.*
- ii. *Ensure rural and low-income women have access to devices and internet connectivity.*

3. Connect Training to Career Outcomes

- i. *Partner with employers to co-design work-based learning pathways with clear progression routes.*
- ii. *Set up placement cells or career facilitation services focused on helping women transition from training into employment.*

D. For Civil Society and NGOs

1. Raise Awareness and Shift Mindsets

- i. Engage with families, SHGs, and community leaders to challenge gendered perceptions of work and training.*
- ii. Run localized campaigns promoting women's access to apprenticeships and work-based learning programs.*

2. Support Women from Underserved Backgrounds

- i. Help identify and mobilize women from rural, tribal, and economically marginalized areas.*
- ii. Provide social support services (e.g., counselling, childcare coordination, transportation facilitation) that reduce dropout rates.*

3. Advocate for Policy and Program Inclusion

- i. Act as a liaison between communities and policy makers to ensure women's voices are represented.*
- ii. Support monitoring and evaluation efforts to measure inclusion outcomes in skilling programs.*

Empowering women through apprenticeships and structured WBL is both a matter of equity and economic necessity. By aligning efforts across government, private sector, civil society, training providers, and communities, India can significantly advance gender inclusion in the workforce. Through targeted interventions, supportive infrastructure, and widespread awareness, the country can unlock the full potential of its female talent pool.





7. Conclusion

Empowering women through apprenticeships transcends the boundaries of mere employment, it is a transformative tool for economic growth, social equity, and national progress. As India charts its course towards a \$30 trillion economy by 2047, the full participation of its women is not just a social imperative but an economic necessity. Apprenticeships stand at the heart of this transformation, bridging the gap between education and employment by equipping women with industry-relevant skills, real-world experience, and the confidence to lead in both traditional and emerging sectors.

From manufacturing floors to tech hubs, and from green energy to digital entrepreneurship, structured skilling programs are opening doors, enabling women to step into roles that shape the future. Yet, the road ahead demands more than isolated efforts, it calls for a collective commitment from businesses, policymakers, educators, and society at large to dismantle structural barriers, foster inclusive ecosystems, and create sustainable pathways for women to thrive. The stories of women who have risen from the margins to leadership through apprenticeships are a testament to what is possible when potential meets opportunity.

Skilling is not just a tool for employability, it is the cornerstone of empowerment, the catalyst for innovation, and the key to unlocking India's true economic potential. If India is to realize its vision of *Viksit Bharat*, it must recognize that when you skill a woman, you do not just empower an individual, you ignite a force capable of transforming families, communities, and entire economies.



ABOUT TEAMLEASE DEGREE APPRENTICESHIP

TeamLease Degree Apprenticeship is India's largest provider of solutions for creating a skilled entry-level workforce, with a strong focus on productivity enhancement, talent engagement, and bridging the employability gap. As India's leading skilling partner, our innovative work-based learning models such as Degree Apprenticeships, Diploma Learning Programs, Work-Integrated Learning Programs (WILP), Managed Training Services (MTS), and Hire-Train-Deploy (HTD) solution help bridge the employability gap.



Recognized as a leading Third-Party Aggregator (TPA) by the Ministry of Skill Development and Entrepreneurship (MSDE), we have mobilized over one million youth and partnered with more than 1,000 employers across diverse sectors over the past decade to create impactful job roles. Over 98% of the youth trained through our programs have transitioned into formal employment, with 40% being absorbed by the same organizations.

Since our inception in 2014, we have revolutionized work-based learning by seamlessly integrating earning and learning through innovative models such as Degree Apprenticeships and Work-Integrated Learning Programs (WILPs). These programs emphasize real-world skills and job readiness, ensuring our youth are equipped to thrive in today's competitive workforce. Over the past decade, we have empowered a significant proportion of women, helping them build sustainable careers and gain financial independence.

We cater to over 24 industries across the 28 states of India to create impactful job roles, addressing the skill deficit and enhancing the employability quotient of the youth. Our administration of the National Apprenticeship Promotion Scheme (NAPS) and National Apprenticeship Training Scheme (NATS) underscores our commitment to fostering work-based skilling and learning programs tailored to meet industry needs.

At TeamLease Degree Apprenticeship, we believe in aligning talent with employer requirements. To achieve this, we leverage an extensive network of partnerships with leading universities and colleges, 150+ field recruiters, and collaborations with 30+ Sector Skill Councils, four Regional Boards of Apprenticeship Training, and over 1,000 skilling centres and partners across 50 industries. Our advanced technology platforms, including an in-house Applicant Tracking System (ATS) and mobile applications, provide real-time tracking and information for both employers and apprentices, ensuring seamlessness throughout the apprenticeship lifecycle.

Our approach extends beyond workforce development to empowering women through skill-building and career opportunities, addressing gender disparities in the labour market. By fostering inclusive growth, we are transforming education and employment for students, industries, startups, and MSMEs.

As pioneers in advocating for youth employability, we work closely with the Ministry of Skill Development and Entrepreneurship (MSDE), the Ministry of Education (MoE), and other key stakeholders to build a robust ecosystem. Our initiatives focus on enhancing economic productivity while enabling meaningful livelihood opportunities for India's youth, driving the nation's progress toward a skilled and sustainable future.



ABOUT GAN GLOBAL

The Global Apprenticeship Network (GAN) is a business-driven, multi-sector alliance that promotes work-based learning (WBL) and apprenticeship. Our vision is a future in which all individuals and businesses have the skills and competencies they need to thrive and contribute to society. Our mission is to drive action to achieve an inclusive and skilled workforce. We do this by advocating for WBL, focusing on apprenticeships, and sharing industry best practices from our member companies. We implement projects on a global and local level through a multi-stakeholder approach involving both the private sector and policymakers.

Our Board Members include CEOs and executive leaders from some of the world's leading companies and policymakers from prominent international organizations. Together, we commit to ensuring that apprenticeship and WBL empower people and businesses to meet the rapidly evolving demands of today's labour market.

At the heart of our efforts is the promotion of quality apprenticeships aligned with the International Labour Organization's (ILO) [Recommendation on Quality Apprenticeships \(R208\)](#).²⁷ This guiding framework reinforces the importance of social dialogue, inclusivity, and sustainable business practices, all of which are essential to building resilient economies and societies. To increase private sector commitment on ILO R208, we officially launched the Corporate Champions for Apprenticeships (CCA) initiative at the World Economic Forum in Davos in January 2024.²⁸

GAN's unique approach combines global advocacy with local action. Through our GAN country networks, spanning regions from the Americas to Oceania and Europe, we implement targeted initiatives, foster peer-to-peer learning, and drive private sector engagement. Our networks convene with governments, employers, companies, training providers, and civil society to scale effective apprenticeship models and tailor solutions to national and regional needs.

As we mark over a decade of impact, GAN remains committed to shaping the future of work by championing quality apprenticeships, fostering sustainable employment, and supporting continuous skilling, reskilling, and upskilling worldwide.

Visit gan-global.org for more information.

²⁷ https://normlex.ilo.org/dyn/nrmlx_en/f?p=NORMLEXPUB:12100:0::NO::P12100_INSTRUMENT_ID:4347381

²⁸ https://www.gan-global.org/wp-content/uploads/2024/03/GAN_CorporateChampions_Flyer_A5.pdf



ABOUT INDIA EMPLOYER FORUM (IEF)

India Employer Forum (IEF) is a non-profit, independent platform committed to shaping the future of work in India. As the country advances toward India@100, IEF brings together voices from industry, policy, and academia to understand and respond to the sweeping changes driven by formalization, skilling, financialization, and technological disruption. With a focus on the three pillars—Employment, Employability, and Ease of Doing Business—IEF promotes dialogue, research, and knowledge-sharing to support progressive workplace practices. Its flagship initiatives include Samvaad, a series of in-depth interviews with business leaders; Manthan, a webinar platform for live discussions; and Nibandh, a collection of authored articles offering fresh perspectives on workforce challenges. Through comprehensive reports, expert journals, and a growing network of contributors, IEF serves as a trusted knowledge partner—helping employers, policymakers, and professionals navigate change and build a more resilient, inclusive, and future-ready workforce.

Visit <https://indiaemployerforum.org/> for more information.



[CONTACT US]



TeamLease Services Limited

315 Work Avenue Campus, Ascent Building,
#77, Koramangala Industrial Layout
Jyothi Nivas College Road, Koramangala,
Bangalore, Karnataka - 560 095



080-6824 3000



group.teamlease.com

