

EMPLOYMENT AND SKILL DEVELOPMENT: EXISTENTIAL PRIORITIES

CHAPTER

12

India's labour market indicators have experienced substantial improvements in recent years driven by a robust post-pandemic recovery and increased formalisation. According to the Periodic Labour Force Survey, the unemployment rate has significantly declined over time, alongside positive trends in labour force participation and the worker population ratio. Factory employment data further reflects the manufacturing sector's resilience.

To fully capitalise on the demographic dividend, it is well-recognised that creating quality jobs that offer sustainable livelihoods is crucial. Further, by prioritising reskilling, upskilling, and new-skilling, the government is aiming to align the workforce with global demands, enhancing both domestic and international employability. Simplifying compliances, promoting labour flexibility, and strengthening workers' welfare are vital for driving sustainable job growth. Lowering the fixed costs of doing business through deregulation will create room for enterprises to hire more. To boost women's workforce participation, prioritising targeted skill development and providing entrepreneurial support is being pursued. Additionally, sectors like the digital economy and renewable energy offer vast potential for creating high-quality jobs, which is essential for achieving the Viksit Bharat's vision.

INTRODUCTION

12.1. As the crucial link between growth and prosperity, the quantity and quality of employment in an economy determines how economic growth sustainably percolates the masses. With around 26 per cent of the population in the age group 10-24 years, India stands at the cusp of a once-in-a-lifetime demographic opportunity.¹ As one of the youngest nations globally, India's economic success depends on integrating its growing workforce into productive and meaningful roles, ensuring inclusive and long-term growth.

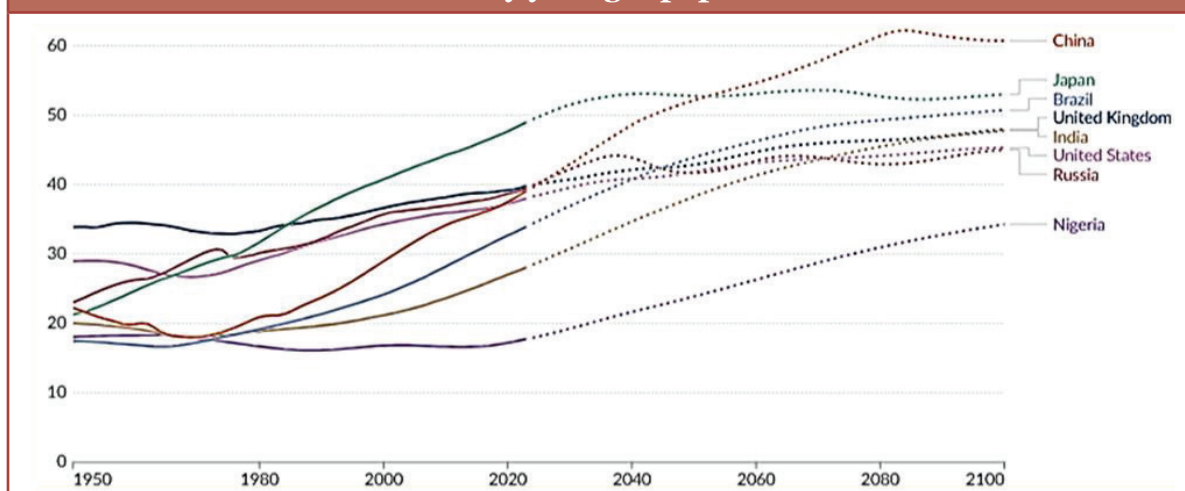
12.2. In 2014, India was ranked as the tenth-largest economy in the world. In under a decade, India surpassed the UK to reach the fourth position. She is poised to be the

¹ State of the World Population Report 2024, United Nations Population Fund (UNFPA) (<https://www.unfpa.org/swp2024>)

third largest economy by 2030, after the USA and China. By 2030, she will have a growing working-age population and healthy manufacturing sector. The country's demographic trend highlights the growing potential for a demographic dividend.² The currently young population, with a median age of around 28 years, compared to the ageing population of developed countries, is the key driver of the growth potential.³

12.3. The declining dependency ratio⁴, marked by the falling child dependency ratio following declining fertility rates, has contributed to this demographic advantage. This is further supported by a relatively gradual increase in the elderly dependency ratio due to increased life expectancy.⁵ The total dependency ratio has declined from 64.6 per cent in 2011 to 55.7 per cent in 2021 and is projected to fall further to 54.3 per cent by 2026.⁶ The expanding working-age population offers opportunities for economic growth, provided these individuals are employed in productive sectors.

Chart XII.1: Median Age across countries showing India's relatively younger population



Source: UN World Population Prospects, 2024

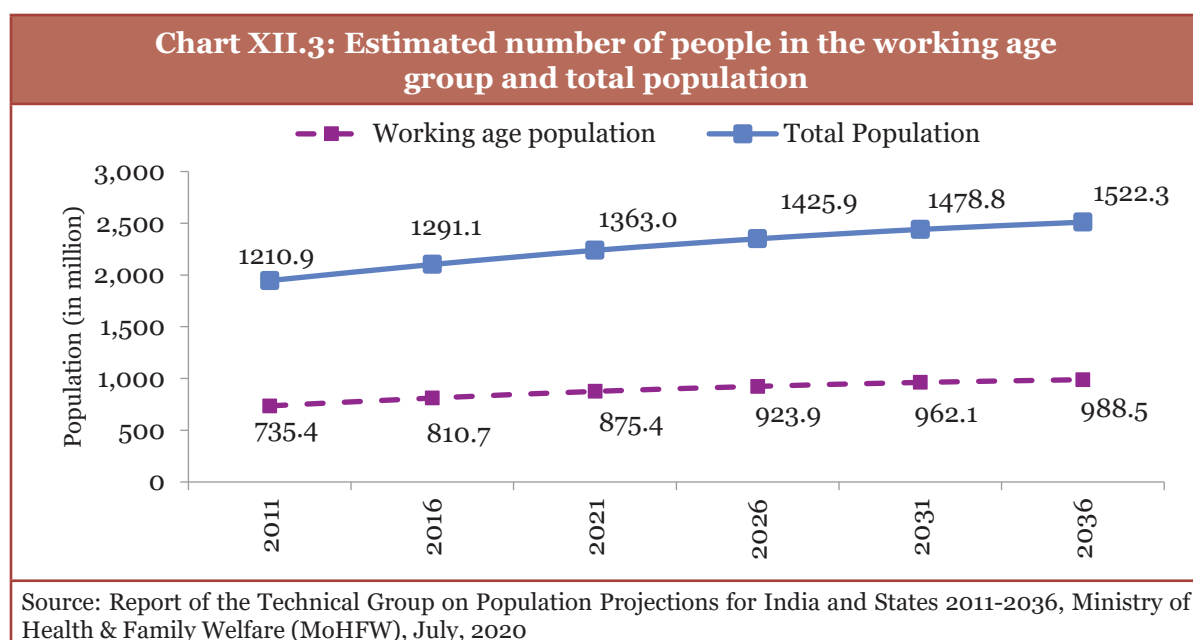
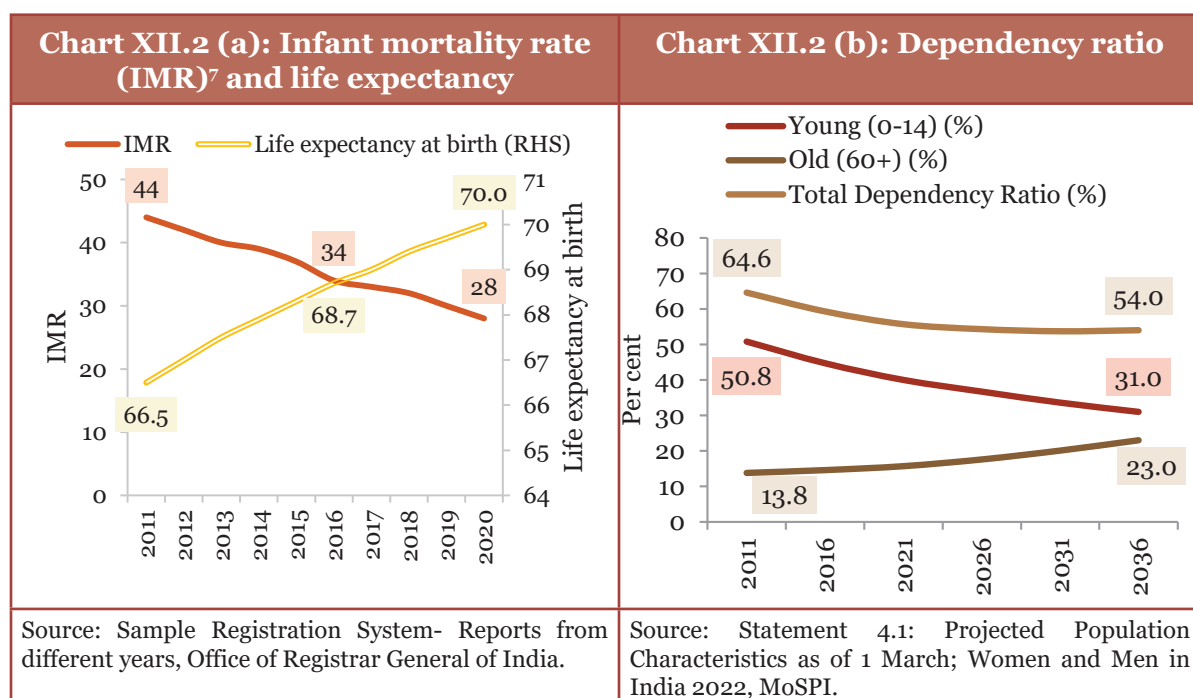
² The demographic dividend refers to the economic growth potential arising from a shift in a country's age structure, where the working-age population (15 to 59 years) outnumbers the non-working-age groups.

³ UN World Population Prospects, 2024. (<https://population.un.org/wpp/>)

⁴ The dependency ratio is the number of children (age 0-14 years) and older persons (age 60 years and above) per 100 working age population (15-59 years). The calculation of the ratio is given below: $\text{Dependency Ratio} = 100 \times \frac{\text{Population (0-14)} + \text{Population (60+)}}{\text{Population (15-59)}}$

⁵ Report of the Technical Group on Population Projections for India and States 2011-2036, Ministry of Health & Family Welfare, July, 2020 (<https://mohfw.gov.in/?q=documents/reports-archive>).

⁶ Ibid note 5 above



12.4. The Economic Survey 2023-24 highlighted that the Indian economy must generate, on average, 78.5 lakh non-farm jobs annually until 2030 to productively engage its growing working population. Creating quality jobs remains an ongoing endeavour and a well-recognised national priority, pivotal to ensuring inclusive and sustainable economic growth. Further, the ambitions and aspirations of the workforce align with the need to generate employment opportunities to leverage the country's demographic dividend and to accelerate the structural transformation from farm to non-farm jobs.

⁷ Infant mortality rate (or IMR) is the number of infant deaths per 1,000 live births during the year.

12.5. Against this backdrop, this chapter analyses the employment and skill development trends and challenges in the economy. The first section delves into the state of employment, focusing on the sectoral and gender distribution of the workforce and state-wise trends. The second section focuses on job creation and outlines the government's actions to enhance employment opportunities. It highlights initiatives such as labour law reforms, potential sectors for job creation, and the role of skill development. The challenge of re-strategising the skills development framework to prepare the youth for evolving industry requirements domestically and internationally is discussed in the third section.

STATE OF EMPLOYMENT

12.6. India has experienced good employment growth in recent years, following the nation's sustained economic momentum. The 2023-24 annual Periodic Labour Force Survey (PLFS) report by the National Statistical Organisation (NSO) highlights a significant post-pandemic recovery in employment trends across India.⁸ The all-India annual unemployment rate (UR) for individuals aged 15 years and above (usual status)⁹ has steadily declined from 6 per cent in 2017-18 to 3.2 per cent in 2023-24.¹⁰ This recovery has been accompanied by an increase in the labour force participation rate (LFPR) and the worker-to-population ratio (WPR).¹¹ Moreover, even under the stricter current weekly status (CWS) criteria, employment levels have rebounded strongly in both urban and rural areas, reflecting a broad-based recovery since the COVID-19 pandemic.¹²

12.7. In addition, the quarterly urban unemployment rate (UR) for people aged 15 years and above has shown improvement. The urban UR has dropped from 6.6 per cent in Q2 FY 24 to 6.4 per cent in Q2 FY 25. This positive shift aligns with a broader strengthening of workforce metrics in urban areas, as the LFPR increased from 49.3 per cent to 50.4 per cent, and the WPR rose from 46 per cent to 47.2 per cent during the same period (Q2 of FY24 to Q2 FY25).¹³

8 <https://tinyurl.com/yaykmtat> ; The period of the PLFS surveys is July-June. For example the survey period for 2023-24 is July 2023 to June 2024.

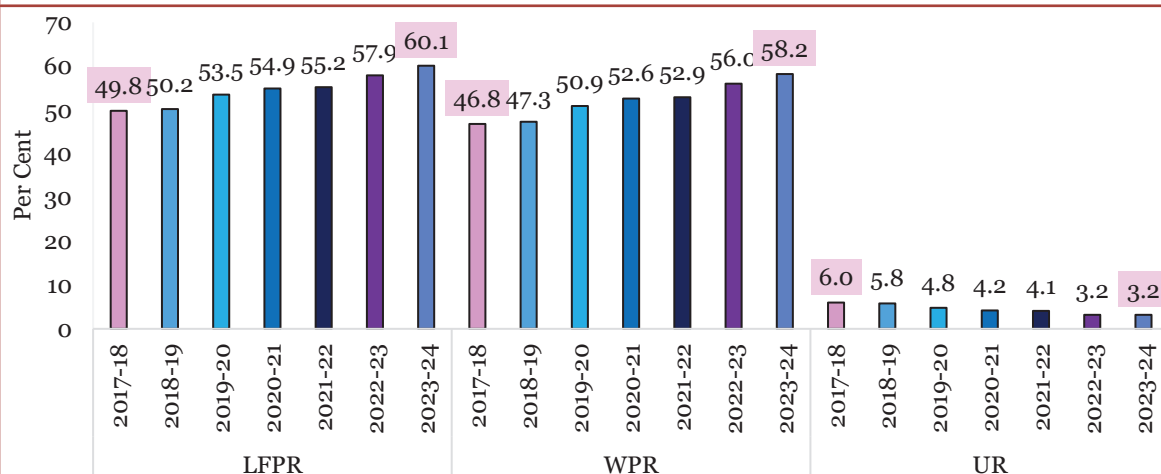
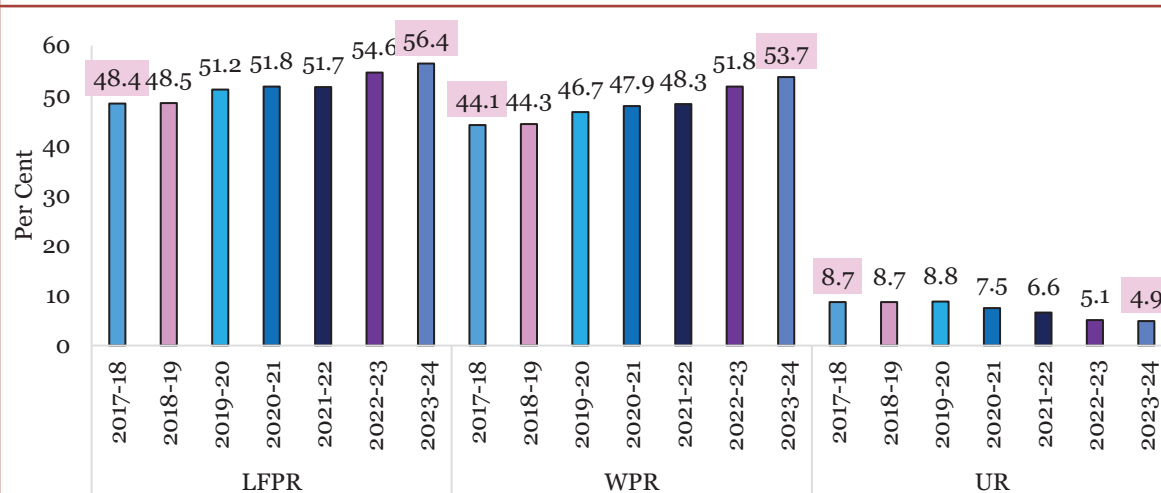
9 For a person to be categorised as employed as per usual status (ps+ss), he/she must have pursued an economic activity for at least 30 days during the 365 days preceding the date of the survey.

10 UR is defined as the percentage of unemployed persons in the labour force.

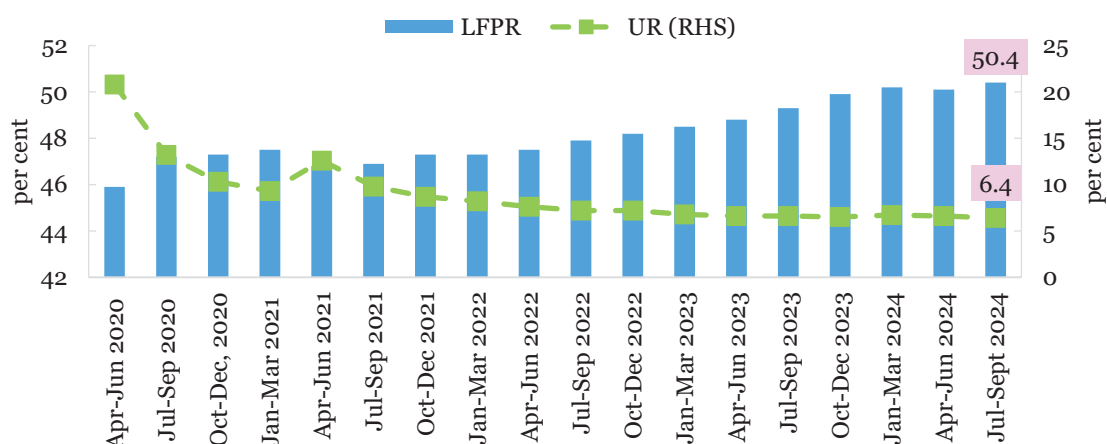
11 According to the PLFS, LFPR is the percentage of working-age population engaged in work or making tangible efforts to seek 'work' or being available for 'work' if it is available. 'Work' includes self-employment (subsistence agriculture and collection of firewood, poultry farming, etc., for self-consumption), regular wage/salaried employment, and casual labour. WPR is defined as the percentage of employed persons in the total population.

12 In the case of CWS, the activity status is determined on the basis of a reference period of the last 7 days preceding the date of the survey.

13 <https://tinyurl.com/2myhmmmed>, Quarterly PLFS, MoSPI

Chart XII. 4. Improvement in annual labour market indicators**(a) Usual status, aged 15 years and above (July – June Period)****(b) Current weekly status, aged 15 years and above (July – June Period)**

Source: Annual PLFS report 2023-24, Ministry of Statistics and Programme Implementation (MoSPI)

Chart XII.5. Declining quarterly urban unemployment

Source: Quarterly PLFS, MoSPI

Note: Figures for Current Weekly Status, 15 years and above

12.8. The 2023-24 annual PLFS report highlights encouraging trends in labour market conditions across India. Among the 36 states and union territories, only 12 have a WPR (for all ages) below the national average of 43.7 per cent, and 12 fall short of the national LFPR (for all ages) average of 45.1 per cent (refer to Chart XII.6). Further, 14 states have achieved over a 10-percentage point increase in WPR¹⁴, and 11 states have recorded a similar increase in LFPR compared to 2017-18.^{15,16}

Chart XII.6 (a) Worker population ratio across states for 2023-24 (for all ages)

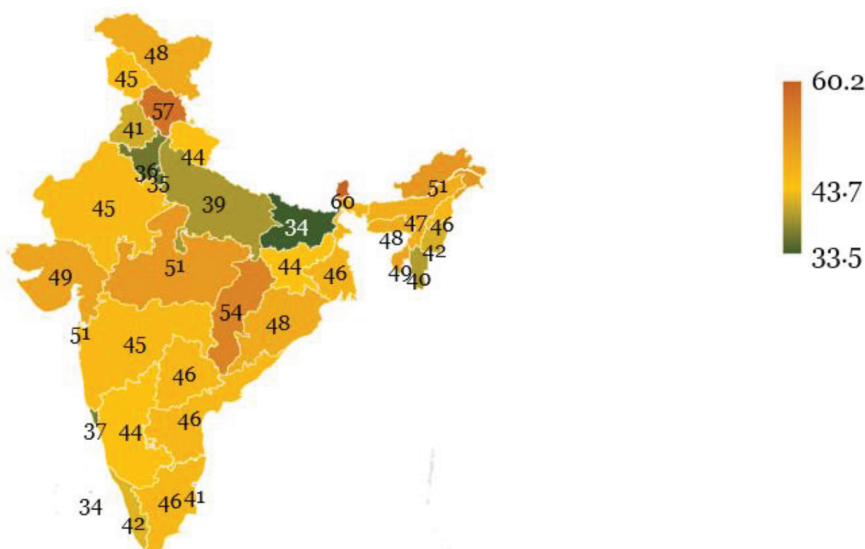
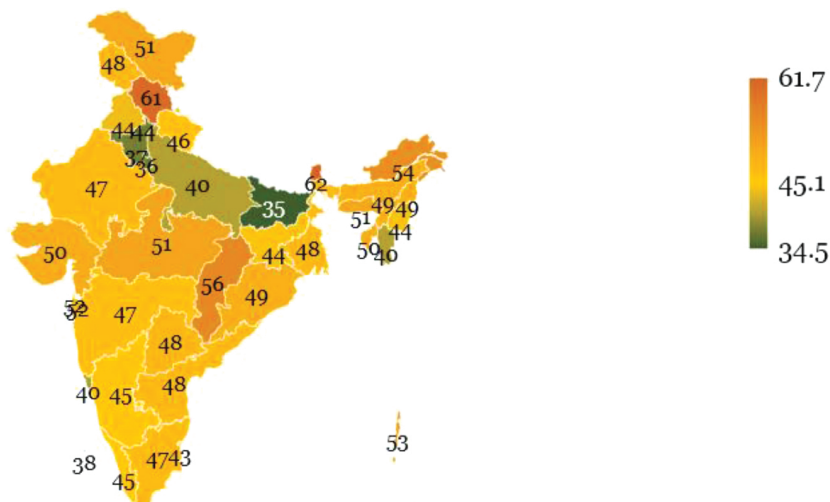


Chart XII.6 (b): Labour force participation rate across states for 2023-24 (for all ages)



Source: Annual PLFS report 2023-24, MoSPI

14 States/UTs with more than 10 percentage points increase in WPR: Arunachal Pradesh, Nagaland, Tripura, Jharkhand, Assam, Odisha, Uttarakhand, Sikkim, Gujarat, Rajasthan, Puducherry, Himachal Pradesh, Madhya Pradesh and Uttar Pradesh.

15 States/UTs with more than 10 percentage point increase in LFPR from 2017-18: Arunachal Pradesh, Nagaland, Tripura, Assam, Jharkhand, Odisha, Sikkim, Uttarakhand, Gujarat, Himachal Pradesh and Rajasthan

16 Figures for usual status for all ages. For a person to be categorised as employed as per usual status (ps+ss), he/she must have pursued an economic activity for at least 30 days during the 365 days preceding the date of the survey.

12.9. The proportion of self-employed workers in the workforce has risen from 52.2 per cent in 2017-18 to 58.4 per cent in 2023-24. This shift reflects growing entrepreneurial activity and a preference for flexible work arrangements. While the share of workers (male and female) in regular/salaried jobs decreased from 22.8 per cent to 21.7 per cent during the same period, the trend has stabilised since 2020-21, with employment levels either holding steady or showing gradual improvement. The decline in casual workers, from 24.9 per cent to 19.8 per cent, also indicates a shift toward more structured forms of self-employment. These changes suggest an evolving workforce that embraces flexibility and independence in response to industry transformations and individual preferences.

12.10. According to PLFS data, the shift in employment trends has been particularly impactful for women. While the proportion of women in regular wage/salaried employment decreased, more women engage in self-employment or contribute to household enterprises, especially in rural areas. For instance, in rural India, women's participation in regular wage jobs fell from 10.5 per cent in 2017-18 to 7.8 per cent in 2023-24, coinciding with an increase in women working as "own account workers/employers" or "helpers in household enterprises." In urban areas, salaried employment for women decreased from 52.1 per cent to 49.4 per cent. The bulk of the drop occurred in 2020-21, when it dropped to 50.1 per cent from 54.2 per cent the year before. This was accompanied by a rise in entrepreneurial ventures and flexible work roles.

12.11. Among rural women, the share of "own account workers/employers" surged from 19 per cent in 2017-18 to 31.2 per cent in 2023-24, highlighting a significant move toward independent work and entrepreneurship. Similarly, the share of "helpers in household enterprises", which represents unpaid family labour, grew from 38.7 per cent to 42.3 per cent, indicating a rise in family-oriented economic activities. The rise in casual wages could be one of the factors contributing to this increasing reliance on family labour within household enterprises. Urban areas also witnessed a positive shift, with "own account workers/employers" increasing from 23.7 per cent to 28.5 per cent and "helpers in household enterprises" from 11 per cent to 13.8 per cent over the same period.

12.12 PLFS covers the period from July to June; hence, the full force of the lockdowns in different states is felt in 2019-20. The impact of the pandemic felt in lost years of schooling, and the health of the elderly resulted in women leaving regular wage/salary work and taking up flexible work so that they could take care of children who stayed at home due to school closures and elders who needed extra care and attention. Subsequently, the enhanced flexibility that "own account work" allows and the expanded

opportunities it has brought for women have seen this category grow in the share of overall employment.

Chart XII. 7 (a) The trend in broad category-wise employment status

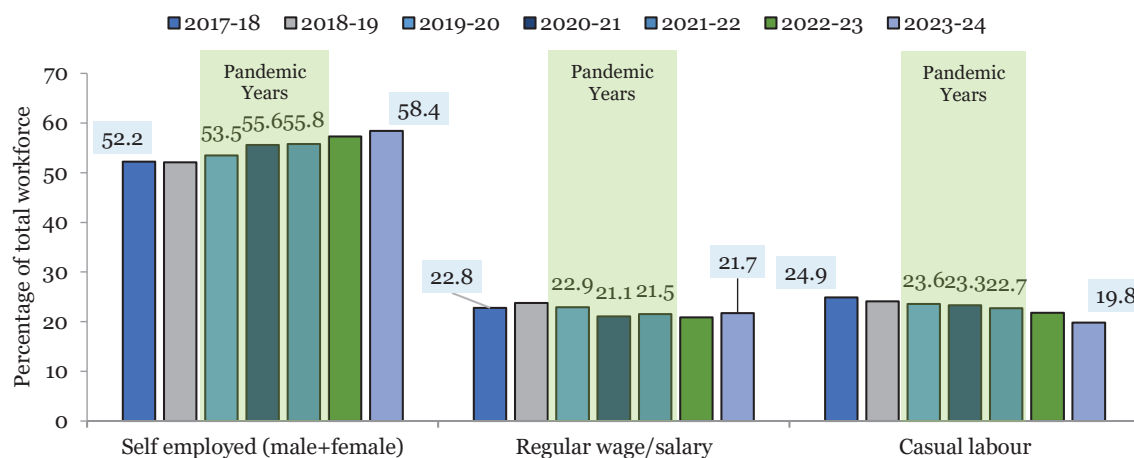
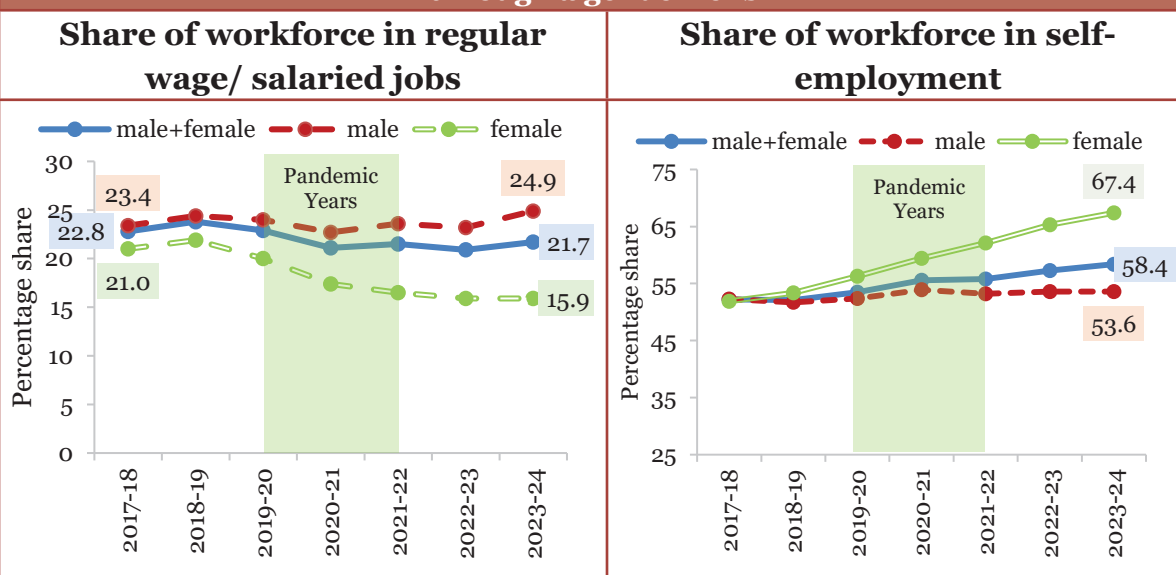


Chart XII. 7 (b) Trend in broad category-wise employment status: through a gender lens



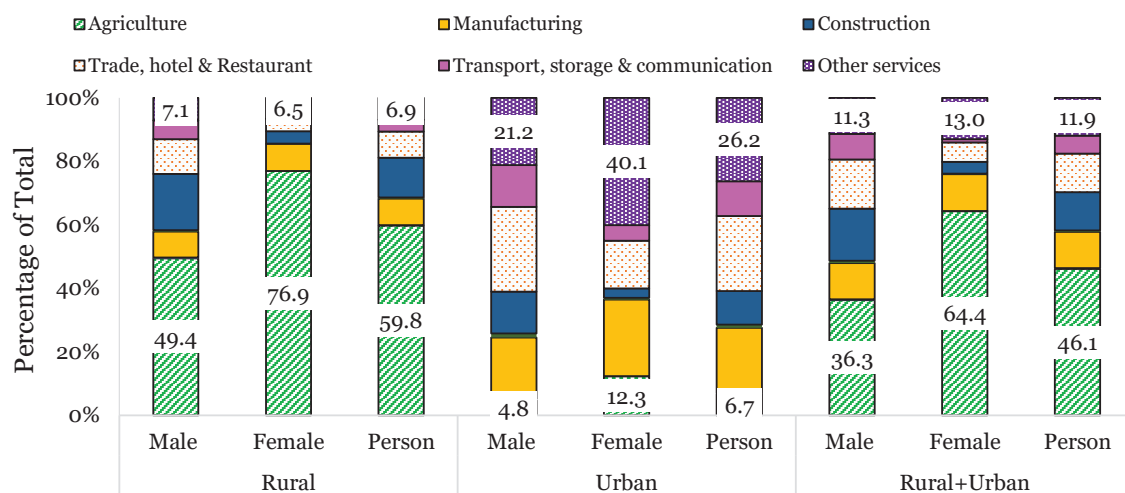
Source: Annual PLFS report 2023-24, MoSPI

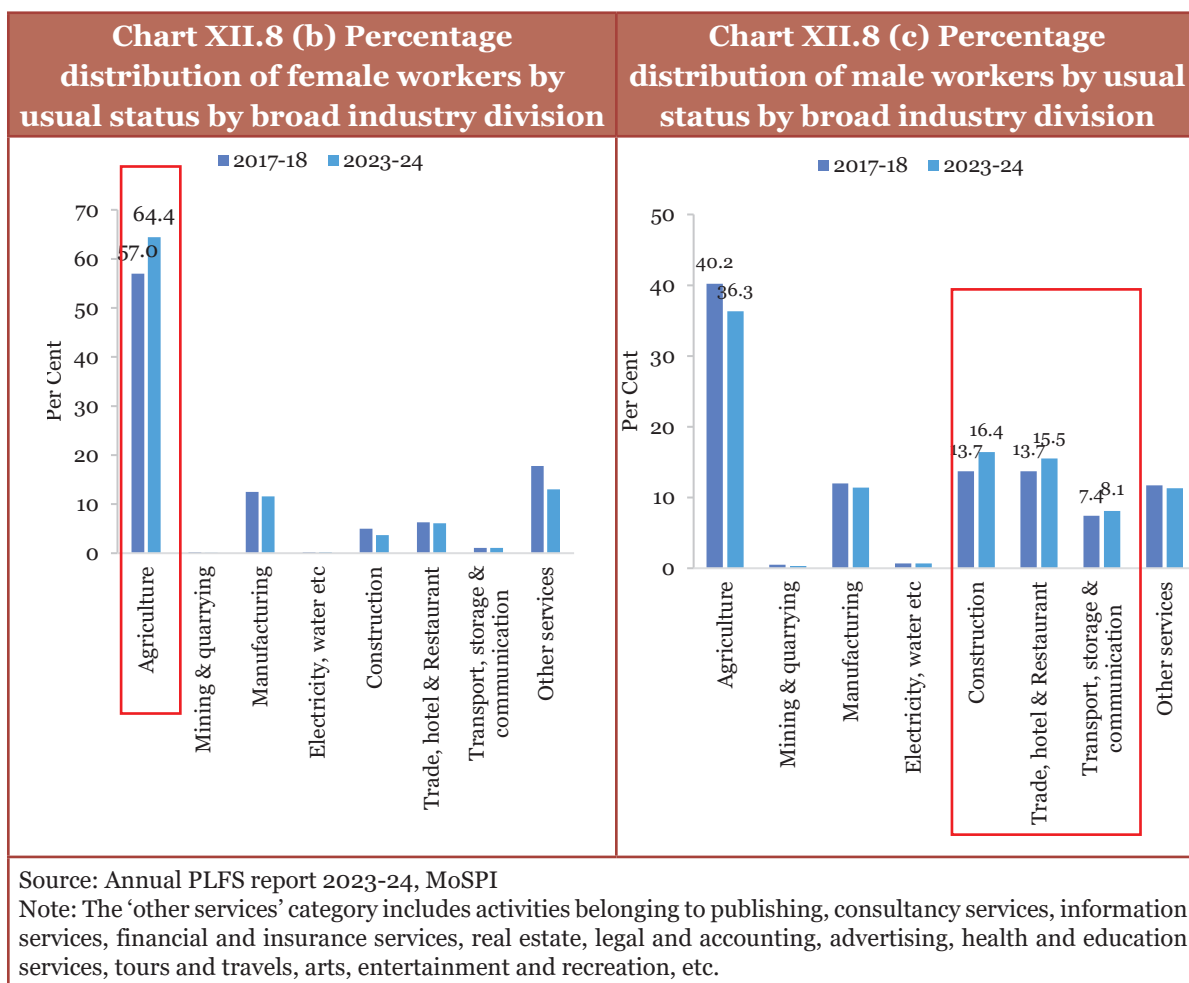
12.13. Initiatives such as Mudra Yojana, Skill India, Start-Up India, and Stand-Up India have played a pivotal role in fostering entrepreneurship, providing skill training, and supporting individuals in creating self-reliant and sustainable livelihoods. This ecosystem of support reflects the growing emphasis on empowering individuals to chart their own professional paths.

Sectoral distribution of the workforce

12.14. According to the PLFS 2023-24, the agriculture sector remains dominant in employment, with its share rising from 44.1 per cent in 2017-18 to 46.1 per cent in 2023-24. The share of industry and services sectors saw declines in employment share, with manufacturing falling from 12.1 per cent to 11.4 per cent, and services from 31.1 per cent to 29.7 per cent during the same period. The share of female workers in agriculture has increased significantly, from 57.0 per cent in 2017-18 to 64.4 per cent in 2023-24, whereas, male participation in agriculture decreased from 40.2 per cent to 36.3 per cent. Greater male involvement in sectors like construction, trade, hotel, restaurant, transport, storage and communication services is observed.

Chart XII.8 (a) Distribution of workers by broad industry division in 2023-24



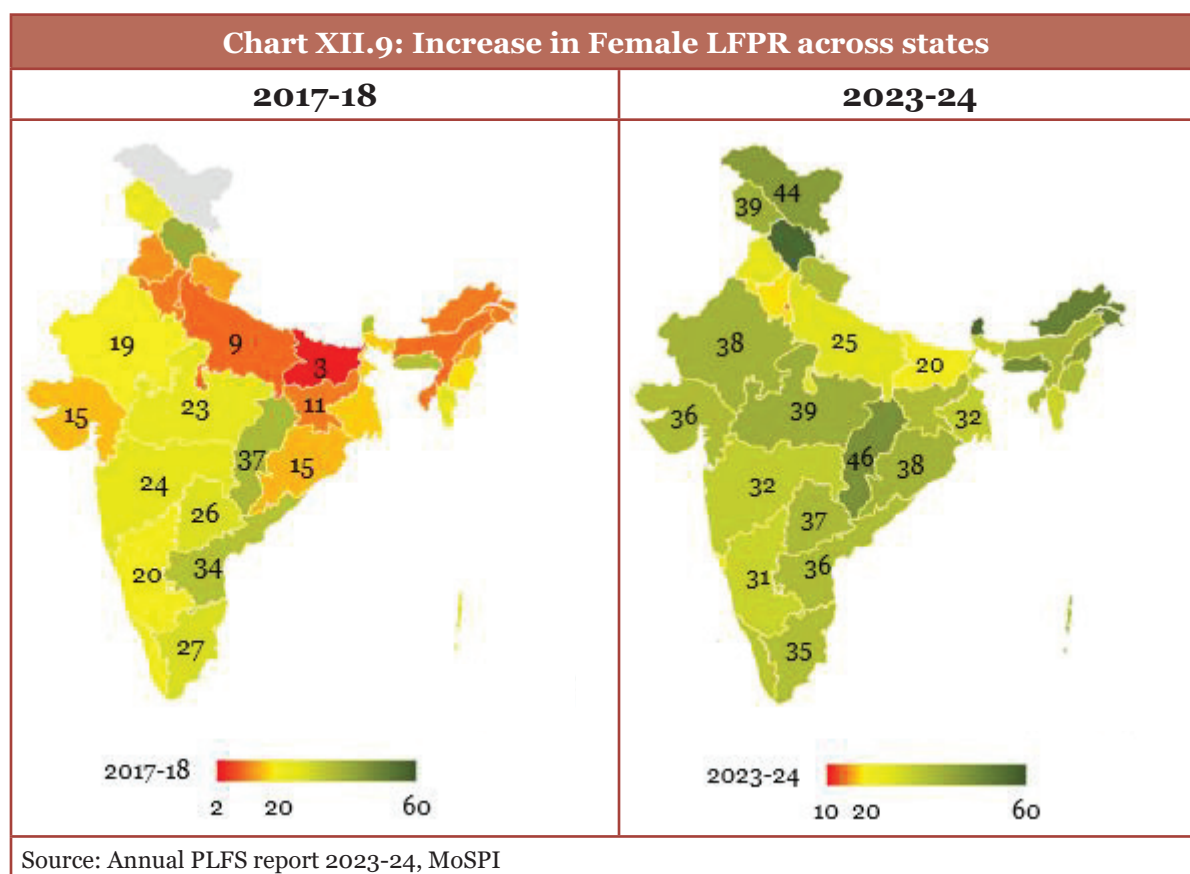


12.15. In rural areas, female agricultural employment rose from 73.2 per cent in 2017-18 to 76.9 in 2023-24 per cent, while male participation decreased from 55.0 per cent to 49.4 per cent, reflecting a shift towards non-agricultural sectors during the same period. In urban areas, women predominantly work in other services, though this share declined slightly from 44.4 per cent in 2017-18 to 40.1 per cent in 2023-24. Significant employment of females is also observed in manufacturing, trade, and agriculture. Male workers in urban areas are seen to be primarily employed in manufacturing, construction, and trade-related services.

Rise in Female LFPR: Tapping into female labour for economic growth

12.16. From the gender perspective, the female labour force participation rate (FLFPR) has been rising for seven years, i.e., from 23.3 per cent in 2017-18 to 41.7 per cent in 2023-24, driven mainly by the rising participation of rural women. The notable rise in the FLFPR is the primary driver of the overall improvement in the labour market indicators.

12.17. The FLFPR has improved across states. In 2017-18, 20 states/UTs had FLFPR of less than 20 per cent. This number has gone down to three in 2023-24. Currently, most states (21) have a FLFPR in the range of 30-40 per cent. Seven states/ UTs reported FLFPR greater than 40 per cent in 2023-24, with Sikkim reporting the maximum rate of 56.9 per cent.



12.18. The increase in the rural FLFPR largely drives the increase in FLFPR, which rose from 24.6 per cent in 2017-18 to 47.6 per cent in 2023-24. This rise could be attributed to women taking advantage of new opportunities brought about by the various government initiatives to promote female participation in the labour force. **Box XII.1** discusses the possible reasons for higher FLFPR in India. It also elaborates on findings from a primary survey conducted in selected districts of Bihar, Jharkhand, Madhya Pradesh, and Uttar Pradesh in November 2024 regarding the increase in FLFPR.

Box XII.1: Factors influencing the female labour force participation

PLFS 2023-24 shows enhanced participation of women in economic activities across various categories, including rural and urban. This increase in FLFPR can partly be attributed to better capturing female workers in unpaid work by the PLFS survey.¹⁷ Further, the increase

¹⁷ PIB release of Ministry of Labour & Employment dated 18 November 2024. (<https://tinyurl.com/3usymatj>).

in the rural FLFPR can be attributed to the skilling initiatives and improved access to credit for diversified livelihoods provided to women's collectives under the Deendayal Antyodaya Yojana - National Rural Livelihood Mission (DAY-NRLM). The increased push of government towards encouraging entrepreneurship is also likely a key contributor to the increased participation of women in the labour force. Some of these initiatives are discussed in Box XII.2.

To better understand the labour market choices of female workers, both paid and unpaid, a survey was conducted among married women aged 25 to 45 in rural areas who were relatively less financially privileged. The survey focused on those receiving loans from SHGs and represented a population poorer than the average Indian population.¹⁸ It was observed that 34 per cent of surveyed women were engaged in paid work, most pronounced among poorer households. In the households below average levels of wealth in the sample, 46 per cent of women are engaged in paid work, whereas less than 15 per cent of women are engaged in paid work if they come from the top 10 per cent of wealthiest households in the sample.

Among women not engaged in paid work, 58 per cent were engaged in unpaid work (helping the household in agricultural tasks). This suggests that more than 70 per cent of the married women were engaged in (paid or unpaid) labour, directly generating greater household income. Further, about 55 per cent of those currently out of the workforce cited household and childcare duties as barriers to entering the paid workforce.

According to some research, gender norms and the associated responsibilities/responsibilities of childcare and household responsibilities are prominent reasons for women not taking up paid work despite the desire to do so.¹⁹ This finding highlights the care sector's vast potential for increasing FLFPR, as noted in the Economic Survey 2023-24.

The Economic Survey 2023-24 (Box VIII.2) highlighted the systemic barriers that impede job opportunities for women. To sustain and enhance women's participation in the workforce, it is essential to remove restrictions on women working in certain occupations. This responsibility lies with state governments. As women cite childcare responsibilities as a consideration in deciding on employment, childcare facilities and crèches will go a long way in female participation in the labour force. Additionally, policies should prioritise targeted skill development and support for emerging sectors while encouraging transitioning from traditional to non-traditional roles. Aligning skill development programmes with industry needs and adopting a long-term strategy focused on women and girls will prepare them for evolving job opportunities and help India effectively leverage its demographic dividend. Reshaping the labour market with an emphasis on women-led development is crucial for achieving gender parity and fostering inclusive economic growth.

¹⁸ This was part of the same survey done by Artha Global's Centre for Rapid Insights (CRI) as reported in Box XI.2 in chapter 11. Artha Global's Centre for Rapid Insights (CRI) conducted a survey of approximately 2400 married women between the ages of 25 and 45 in rural areas, who were relatively less financially privileged, in selected districts of Bihar, Jharkhand, Madhya Pradesh, and Uttar Pradesh in November 2024. The sample population is poorer than the Indian population on average. This demographic group was chosen for study because an increased female labour force participation rate (FLFPR) has been observed among this group. Furthermore, as a popular target for DBTs and cash, as well as loans through SHGs from both the Centre and various state governments, a survey of this group, allows for an analysis of patterns of consumption due to cash transfers and loans.

¹⁹ Jayachandran, S. (2021). Social Norms as a Barrier to Women's Employment in Developing Countries. IMF Economic Review, 69, 576–595. <https://doi.org/10.1057/s41308-021-00140-w>

12.19. Women have been key beneficiaries of various initiatives designed to foster entrepreneurship. As of 31 October 2024, a total number of 73,151 startups with at least one woman director have been recognised under the Startup India Initiative. This represents nearly half of the 1,52,139 start-ups supported by the government. ₹3,107.11 crore has been invested in 149 women-led startups through Alternative Investment Funds (AIFs).²⁰ Since its inception in April 2021, the Start-up India Seed Fund Scheme (SISFS) has approved ₹227.12 crore in funding for 1,278 women-led startups.²¹ Credit Guarantee Scheme for Startups (CGSS)²² has guaranteed ₹24.6 crore in loans for women-led ventures.²³ These programmes offer women entrepreneurs financial support, training, and mentorship, empowering them to start and scale their businesses.

Harnessing the power of women entrepreneurs for India's economic future

12.20. A recent World Bank paper (Gupta et al., 2024) highlights that promoting women-owned, growth-oriented enterprises could significantly boost FLFPR and economic growth in rural India. The paper emphasises the importance of providing business development services to support and enhance women's entrepreneurial efforts.²⁴

12.21. Of the nearly 4.96 lakh people engaged in the khadi sector, over 80 per cent are women artisans.²⁵ It is estimated that more than 50 per cent of persons practising sericulture are women. Out of the total workforce engaged in the handicrafts sector, an estimated 56.1 per cent are women.²⁶ Certain crafts, like embroidery, mat weaving, etc., are practised predominantly by women. As per the Handloom Census 2019-20, handloom activity in India is also dominated by female workers (72 per cent).²⁷

12.22. However, the reins of ownership in entrepreneurship still remain dominantly male-held. Only 22 per cent of all micro, small and medium enterprises (MSME) are owned by women entrepreneurs. Diving further, as the size of the enterprise increases from micro to small and then to medium, women's share in ownership drops from 22 per cent to 12 per cent and further to 7 per cent, respectively.²⁸ However, this is not

20 PIB release of Ministry of Commerce & Industry dated 10 December 2024 (<https://tinyurl.com/yeyh54k2>).

21 <https://seedfund.startupindia.gov.in/>

22 PIB release of Ministry of Commerce & Industry dated 7 October 2022 (<https://tinyurl.com/df8jxwhb>)

23 Ibid note 20 above

24 Gupta, Arshia; Pinto, Alreena Renita; Madhavan Kutty, Balakrishnan. Fostering Female Growth Entrepreneurship in Rural India (English). Washington, D.C.: World Bank Group. (<https://tinyurl.com/3u4e4epp>)

25 Annual Report 2023-24, Ministry of MSME

26 Annual Report 2018-19, Ministry of Textiles

27 PIB release of Ministry of Textiles dated 16 March 2022 (<https://tinyurl.com/yku3tyvb>).








28 Data from Udyam Registration Portal, Ministry of MSME, Govt. of India not including Informal Micro-Enterprise registrations done through Udyam-Assist Platform

unique to India but is a ubiquitous trend. As per a report on gender diversity, women hold less than one-quarter of the world's board seats (23.3 per cent in 2023). Across India Inc., women only held 18.3 per cent of board seats in 2023.²⁹ **Box XII.2** discusses some of the initiatives taken by the government to promote female entrepreneurship.

Box XII.2: Government initiatives to boost female entrepreneurship

To give a fillip to women's entrepreneurship, various ministries/ departments of the government of India have launched several initiatives, some of which are presented below.

Ministry of Micro, Small and Medium Enterprises³⁰

 <p>Formalisation of Enterprises³¹</p> <p>63 per cent of the 2.41 crore enterprises formalised since January 2023 are women-owned.</p>	 <p>Marketing Support³²</p> <p>Women's trade fair participation is fully subsidised.</p>	 <p>PM Employment Guarantee Programme³³</p> <p>41 per cent of loans in FY24 were sanctioned to women, with higher subsidies (25–35 per cent) and lower contributions (5 per cent).</p>	 <p>Procurement</p> <p>3 per cent of procurement by CPSEs is reserved for women-owned enterprises.</p>
 <p>Skill Development</p> <p>Over 21,600 women trained in coir manufacturing in 5 years; free entrepreneurial training is offered.</p>	 <p>ZED Certification³⁴</p> <p>100 per cent subsidy on certification for women MSMEs.</p>	 <p>Access to Credit³⁵</p> <p>Women entrepreneurs receive 90 per cent guarantees (vs. 75 per cent for others) and reduced fees under the Credit Guarantee Scheme.</p> <p>Of 97.68 lakh guarantees approved, 22 per cent are for women.</p>	

Ministry of Skill Development and Entrepreneurship

29 Deloitte Global eighth edition of Women in the Boardroom: A Global Perspective, March 2024(<https://tinyurl.com/5y6u7nz4>)

30 Based on inputs from M/oMSME

31 <https://www.sidbi.in/udyam-assist-platform>

32 PIB release of M/oMSME dated 12 December 2024 (<https://tinyurl.com/436vvaad>).

33 <https://tinyurl.com/bdda6tdn>

34 <https://zed.msme.gov.in/>

35 <https://tinyurl.com/2t9w7phe>

**SANKALP³⁶**

32,262 women (67 per cent of beneficiaries) trained in entrepreneurship between 2021 to 2024.

Department for Promotion of Industry and Internal Trade**Start-up Support³⁷**

10 per cent of the Fund of Funds for Start-ups is reserved for women.

**Women Entrepreneurship Platform³⁸**

Launched in 2018 to aggregate and showcase policies, with NSA awards recognizing women-led start-ups.

Ministry of Food Processing Industries**PM Micro Food Processing Scheme³⁹**

SHG members receive ₹40,000 seed capital and 50 per cent branding/marketing grants.

Ministry of Tribal Affairs**Adivasi Mahila Sashaktikaran Yojana⁴⁰**

Loans up to ₹2 lakh at 4 per cent interest for ST women.

Ministry of Cooperation⁴¹**NCDC Support⁴²**

₹6,426 crore disbursed for women cooperatives; 25,385 registered cooperatives.

**Nandini Sahakar Scheme**

2 per cent interest subvention for innovative cooperative projects.

**Swayam Shakti Sahakar Yojna**

Working capital loan to support women SHGs.

³⁶ <https://sankalp.msde.gov.in/>

³⁷ <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1941361>

³⁸ <https://wep.gov.in/>

³⁹ Launched in 2020, provides credit-linked subsidies for individuals and groups of women entrepreneurs. <https://tinyurl.com/5d5axh3u>

⁴⁰ <https://tinyurl.com/5fmen9uy>

⁴¹ PIB release of Ministry of Cooperation dated 4 December 2024 (<https://tinyurl.com/3m34bndn>).

⁴² National Cooperative Development Corporation (NCDC)

Other flagship schemes: Besides these, certain flagship schemes of the government of India, such as Pradhan Mantri Mudra Yojana, DAY-NRLM etc., are also oriented towards promoting women-led enterprises. Other schemes and initiatives, such as Yashasvini mass awareness campaigns, are also available for women entrepreneurship development.

12.23. Building a strong ecosystem for women's entrepreneurship requires innovative solutions alongside government initiatives focusing on credit access, skill training, and formalisation. Rural women entrepreneurs face additional challenges, including limited business skills, market access, and technology gaps, compounded by a lack of mentorship and networking. Streamlining support through credit linkages, sensitising bankers, and efficient delivery mechanisms is essential. Cost-effective strategies, such as raising awareness, providing skill training, and improving access to government benefits, can empower women entrepreneurs. Institutions like the Global Alliance for Mass Entrepreneurship (GAME) address systemic barriers, supporting women-led MSMEs with access to markets, credit, and growth opportunities.⁴³

12.24. NRLM partnered with GAME to empower rural women entrepreneurs through the Women Entrepreneur Financial Empowerment Programme (WEFEP).⁴⁴ The programme improves credit access for rural women entrepreneurs by identifying and supporting aspiring individual rural women entrepreneurs through enterprise formalisation, business planning, and loan application processes. This is done with the support of NRLM's ground cadres like "Vitta Sakhis." *Vitta Sakhis* guide women on loan options and assist with bank visits, documentation, and business proposals, reducing bank linkage time. Under the initiative, 862 *Vitta Sakhis* were trained, outreach and assessment of 20190 women entrepreneurs were done, 10713 loan applications were submitted, 2400 loans were sanctioned, and banks disbursed ₹30 lakh in loans to rural women entrepreneurs.⁴⁵ Meanwhile, the "Growtherator" programme accelerates MSME growth, fostering profitability, job creation, and long-term success through mentorship and peer networks.⁴⁶

12.25. Systemic challenges such as skill gaps, compliance barriers, and limited mobility restrict women's access to digital platforms. GAME's Women Economic Empowerment (WEE) programme fosters gender-responsive policies to bridge this gap. It builds replicable models with private partners for rural e-commerce, social commerce, gig work, and job tech, enabling women entrepreneurs to participate actively in the platform

⁴³ <https://massentrepreneurship.org/about/>

⁴⁴ WEFEP was launched in 16 districts across Madhya Pradesh, Rajasthan, and Maharashtra.

⁴⁵ <https://tinyurl.com/597jepam>

⁴⁶ <https://massentrepreneurship.org/growtherator/>

economy. The programme aims to positively impact 2.5 lakh women across the digital platform economy by 2025.⁴⁷

12.26. WE Hub - The Women Entrepreneurs Hub is a good example from the state of Telangana of how the support of the government can help women's entrepreneurship flourish. It is India's first state-led incubator for women entrepreneurs.⁴⁸ WE Hub was started with the mission to ensure that all women entrepreneurs in the country have access to technical, financial, governmental, and policy support required to start up, scale up, sustain, and accelerate with global market access. It has raised ₹177 crore in funding. 6376 start-ups and SMEs have been incubated. It has engaged around 7828 entrepreneurs and has launched 87 start-up programmes, and 75 per cent of the start-ups survive beyond 2 years.⁴⁹

12.27. As women continue to overcome challenges and dismantle barriers, their progress drives empowerment, creates job opportunities and builds the foundation for more inclusive economic growth. The growing participation of women in entrepreneurship can propel the country towards higher levels of development by tapping into their latent potential to contribute to economic activities.

Trends in wages and earnings

12.28. The 2023-24 PLFS results provide earnings data segmented by status (regular/salaried, casual, and self-employed workers), gender and location (urban and rural). The average monthly earnings of workers vary across different segments. While the average monthly earnings for regular wage/salaried workers and self-employed workers grew at a CAGR of 5 per cent during the period 2018-19 to 2023-24, the daily wage of casual workers increased at a CAGR of 9 per cent during the same period. Earnings for self-employed workers showcased a dynamic trajectory, with a brief dip from 2017-18 to 2020-21, followed by a significant rebound post-pandemic. Nominal wages have shown good growth across all categories, outpacing growth in real wages.

⁴⁷ <https://tinyurl.com/mushjrd7>

⁴⁸ <https://invest.telangana.gov.in/we-hub/>

⁴⁹ Data as of 19 December 2024 (<https://wehub.telangana.gov.in/>)

Table XII.1: Average earnings segmented by employment status, gender and location (for 2023-24)

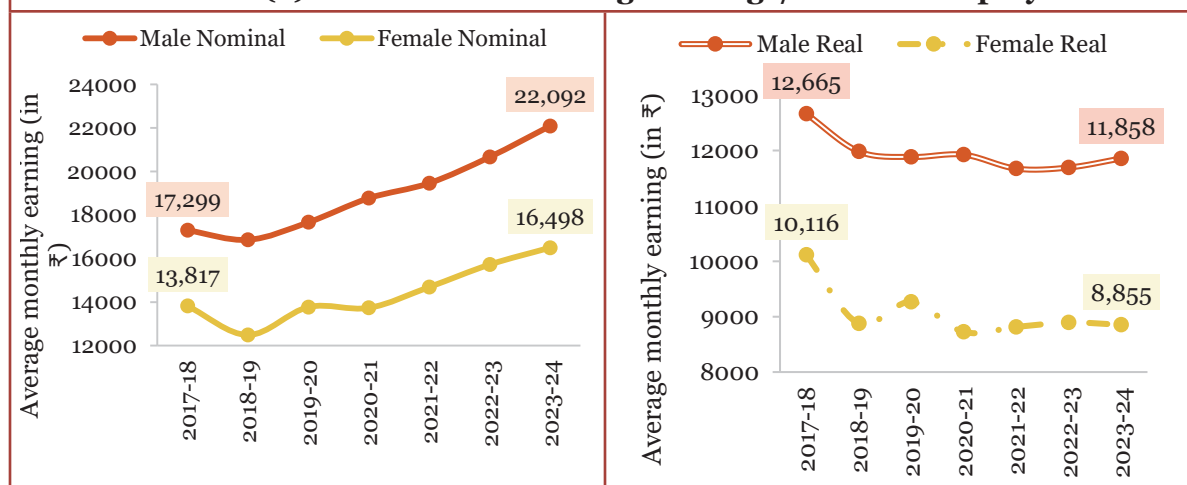
₹ Nominal Value	Rural			Urban			Total		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
Self-employed⁵⁰	13,907	4,907	11,422	22,930	8,489	20,055	16,007	5,497	13,279
Regular⁵¹	18,029	11,914	16,626	25,501	19,709	23,974	22,092	16,498	20,702
Casual⁵²	434	290	402	529	354	506	450	296	418

Note:1. For regular and self-employed workers, average monthly nominal earnings are reported.
2. For Casual workers, the average per-day earnings are reported.
Source: Annual PLFS 2023-24, MoSPI

Table XII.2: Trends in earnings

₹ Nominal Value	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Self-employed	10323	10454	10563	11678	13131	13279
Regular	15885	16728	17572	18391	19491	20702
Casual	277	291	318	374	403	418

Note:1. For regular and self-employed workers, average monthly nominal earnings are reported.
2. For Casual workers, the average per-day earnings are reported.
Source: Annual PLFS 2023-24, MoSPI

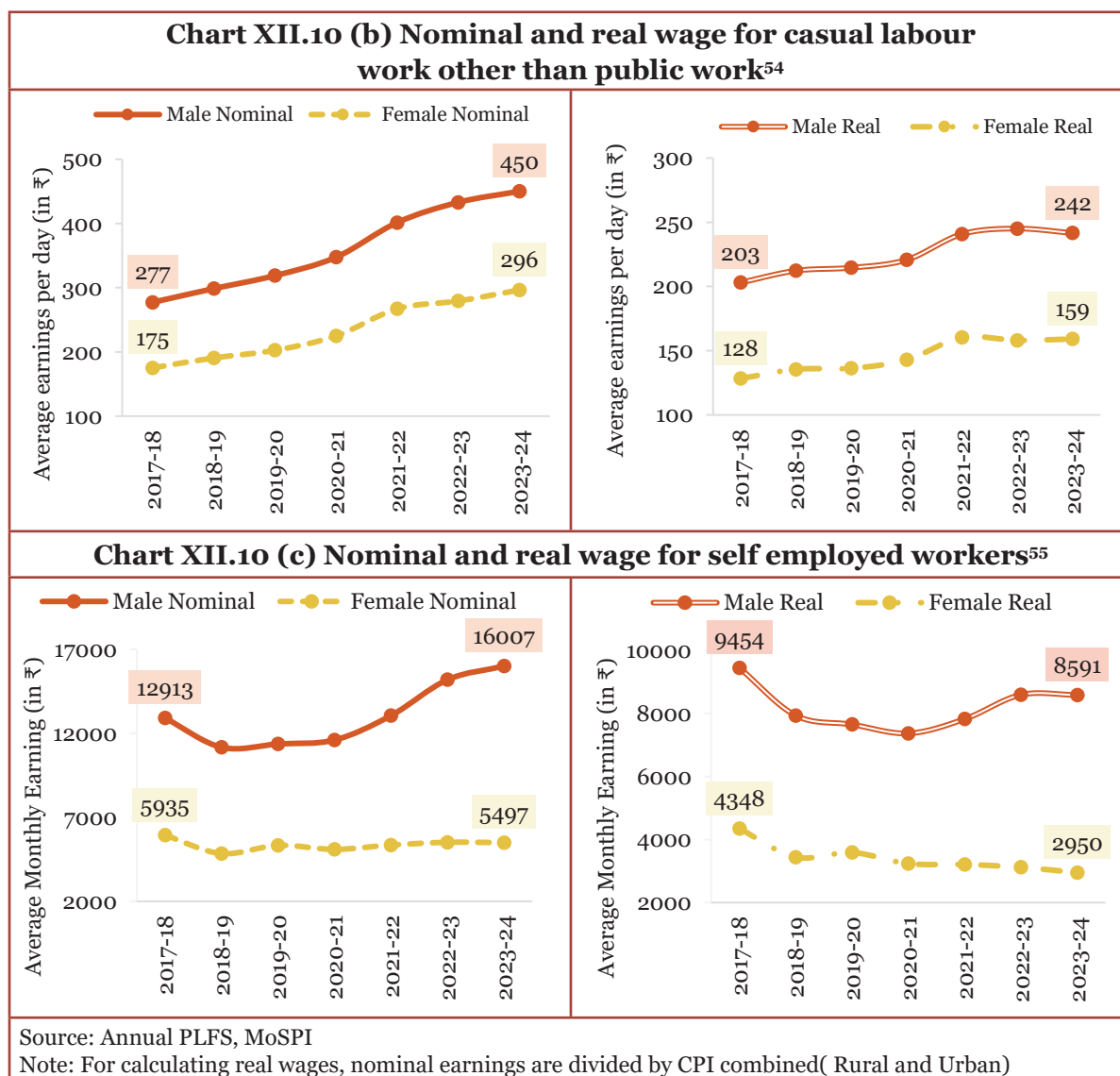
Chart XII.10 Male and female earnings**Chart XII.10 (a) Nominal and real regular wage/ salaried employment⁵³**

50 For self-employed persons in current weekly status, information on earnings during the last 30 days from the self-employment activity in which the person was working as per current weekly status was collected.

51 For regular wage/salaried employees in the current weekly status, information on earnings during the preceding calendar month from the regular wage/salaried work in which the person was employed in the current weekly status was collected.

52 For casual labour, information on earnings was collected for the casual labour work in which the person was engaged for each day of the reference week.

53 Average wage/salary earnings during the preceding calendar month from regular wage/salaried employment among the regular wage/salaried employees in CWS



Trends in rural wages

12.29. As per data of Labour Bureau⁵⁶, in FY25 (April- September 2024), rural wages rose at above-4 per cent every month, YoY. On average, the nominal wage rate in agriculture grew by 5.7 per cent for men and 7 per cent for women. In non-agricultural activities, nominal wage growth was slightly lower for men, at 5.5 per cent, but higher for women, at 7.9 per cent during the same period.

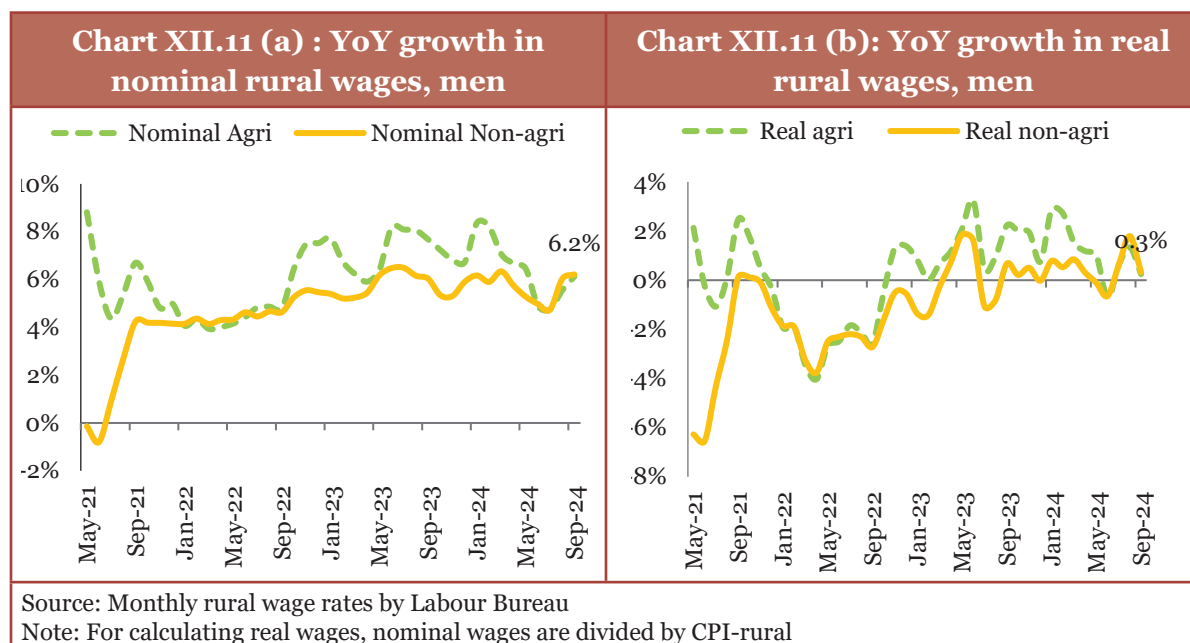
12.30. When adjusted for inflation, the real wage rate in agriculture demonstrated modest growth, increasing by 0.6 per cent for men and 1.8 per cent for women. In

⁵⁴ Average wage earnings per day from casual labour work other than public works in CWS

⁵⁵ Average gross earnings during last 30 days from self-employment among self-employed persons in CWS

⁵⁶ Monthly nominal rural wage data reported by Labour Bureau for agricultural and non-agricultural activities (<https://labourbureau.gov.in/rural-wages>).

non-agricultural activities, real wage growth was particularly noteworthy for women, reaching 2.6 per cent, compared to 0.4 per cent for men during the same period. These trends highlight a steady improvement in real wages for rural workers, with women experiencing a comparatively stronger increase.



Wages in unincorporated sector enterprises

12.31. As per the Annual Survey of Unincorporated Sector Enterprises (ASUSE) results for 2023-24⁵⁷, the average emolument per hired worker rose by 13 per cent in 2023-24 compared to 2022-23, with the average emolument per hired worker rising from ₹1,24,842 in 2022-23 to ₹1,41,071 in 2023-24, signalling improved wage levels⁵⁸. This growth, led by a 16.1 per cent increase in the manufacturing sector average emolument per hired worker, is strengthening the labour market, boosting productivity, and driving economic demand.

12.32. The ASUSE 2023-24 results highlight the notable labour market improvements of the non-agricultural unincorporated sectors, with hired workers increasing from 2.95 crore in 2022-23 to 3.15 crore in 2023-24, reflecting healthy employment growth.

⁵⁷ The period for the survey is October 2023 to September 2024.

⁵⁸ ASUSE conducted by NSSO, is a survey of unincorporated non-agricultural establishments belonging to three sectors viz., Manufacturing, Trade and Other Services. Ownership-wise, this Survey covers unincorporated non-agricultural establishments pertaining to proprietorship, partnership (excluding limited liability partnerships), self-help groups, cooperatives, societies/trusts etc (<https://tinyurl.com/b9k4apur>).

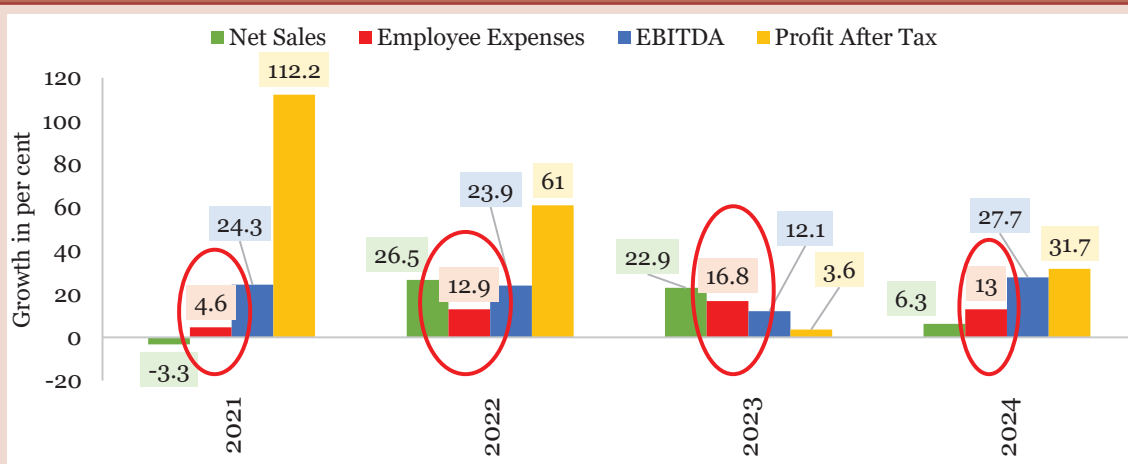
12.33. Beyond wage trends, examining corporate profits and wage share is crucial to understanding how income distribution between labour and capital influences productivity, competitiveness, and sustainable growth. The same has been discussed in **Box XII.3**.

Box XII.3: Corporate Profitability Hits 15-Year High even as wage growth moderates

Corporate profitability soared to a 15-year peak in FY24, fuelled by robust growth in financials, energy, and automobiles. Among Nifty 500 companies, the profit-to-GDP ratio surged from 2.1 per cent in FY03 to 4.8 per cent in FY24, the highest since FY08.⁵⁹ Large corporations, especially in non-financial sectors, significantly outperformed their smaller peers in profitability.

However, while profits surged, wages lagged. A striking disparity has emerged in corporate India: profits climbed 22.3 per cent in FY24, but employment grew by a mere 1.5 per cent.⁶⁰ State Bank of India (SBI) analysis reveals that 4,000 listed companies recorded a modest 6 per cent revenue growth. At the same time, employee expenses rose only 13 per cent -down from 17 per cent in FY23 - highlighting a sharp focus on cost-cutting over workforce expansion.⁶¹

Chart XII.12: Growth of key parameters of 4000 listed entities



Source: Cline; SBI Research; around 4000 listed entities

Despite Indian companies achieving a stable EBITDA margin of 22 per cent over the last four years, wage growth has moderated. This uneven growth trajectory raises critical concerns. Wage stagnation is pronounced, particularly at entry-level IT positions.

59 India Strategy.Nifty-50: 23,290. 10 June 2024. Motilal Oswal Financial Services (<https://tinyurl.com/9xxbkrkp>)

60 Ibid note 59 above

61 State Bank of India. (2024). Contours of inflation (<https://tinyurl.com/53a5scd5>)

While the labour share of GVA shows a slight uptick, the disproportionate rise in corporate profits—predominantly among large firms—raises concerns about income inequality. A higher profit share and stagnant wage growth risk slowing the economy by curbing demand. Sustained economic growth hinges on bolstering employment incomes, which directly fuel consumer spending, spurring investment in production capacity.

To secure long-term stability, a fair and reasonable distribution of income between capital and labour is imperative. It is essential for sustaining demand and supporting corporate revenue and profitability growth in the medium to long run.

Japan succeeded in industrialisation and in becoming a developed economy, despite its defeat in WW II through a social contract between the government, the businesses and workers, write Matthew C. Klein and Michael Pettis in “Trade Wars are Class Wars”:

“Japanese workers, consumers, and retirees all subsidised industrial development by overpaying for goods and services, by taking home a lower share of national output than their counterparts in the West, and by using a financial system designed to transfer purchasing power from households to businesses. Japanese companies returned the favour by upgrading the country’s manufacturing base, passing along productivity gains to workers, and refraining from excessive executive pay, while the government invested in top-tier infrastructure.”

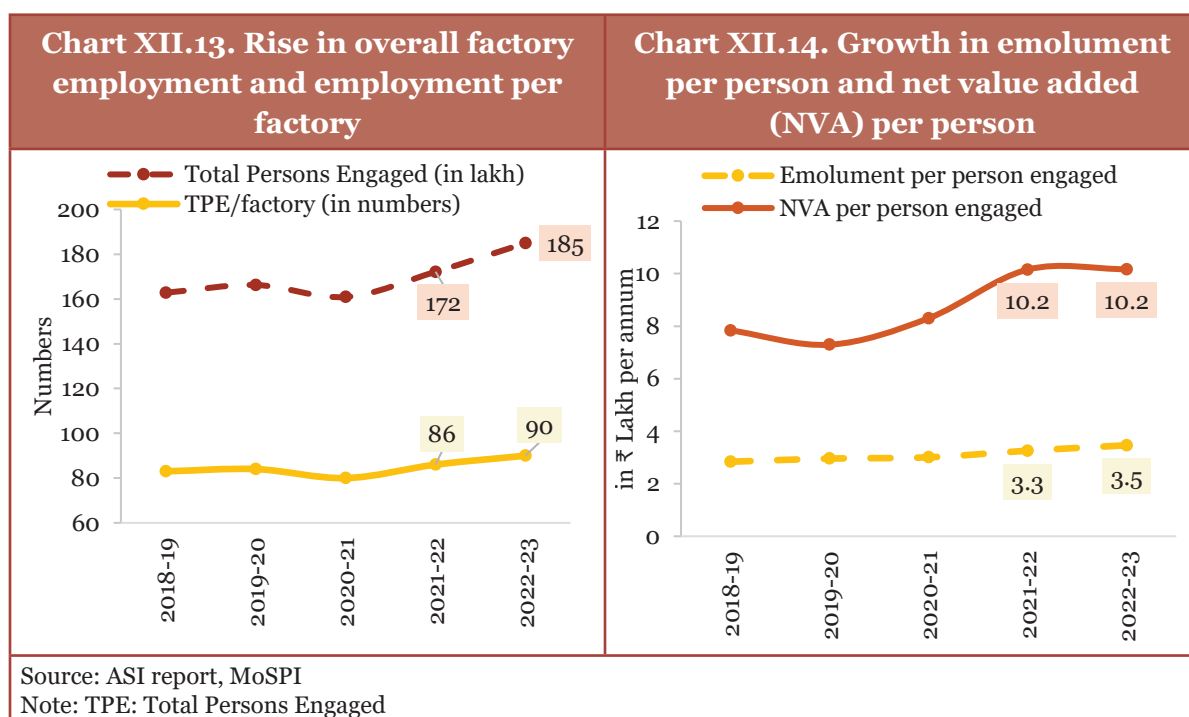
Employment in factories

12.34. The Annual Survey of Industries (ASI) results for the FY23⁶² highlight the manufacturing sector’s resilience, showing a more than 7 per cent increase in employment over the previous year.⁶³ This translates into an addition of over 22 lakh jobs in FY 23 over FY 19 (pre-pandemic level), underscoring the sector’s robust post-pandemic recovery.⁶⁴ During the pandemic in FY 21, the sector lost approximately 5 lakh jobs. The growth of the sector in FY 23 indicates a strong rebound of the sector as economic conditions improved.

⁶² Reference period of the survey is April 2022 to March 2023.

⁶³ The ASI, conducted by the MoSPI, covers the organised manufacturing sector. Its coverage extends to the entire Factory Sector comprising industrial units (called factories) registered under the Sections 2(m)(i) and 2(m)(ii) of the Factories Act, 1948, with ten or more workers with electricity or twenty or more workers without electricity. (https://www.mospi.gov.in/sites/default/files/asi_results/ASI_per_cent20Summary_per_cent20Results_per_cent202022-23.pdf)

⁶⁴ It may be noted that employment refers to total persons engaged (TPE), which includes the employees (which include workers and clerical/administrative staff) and all working proprietors and their family members who are actively engaged in the work of the factory even without any pay, and the unpaid members of the cooperative societies who worked in or for the factory in any direct and productive capacity.



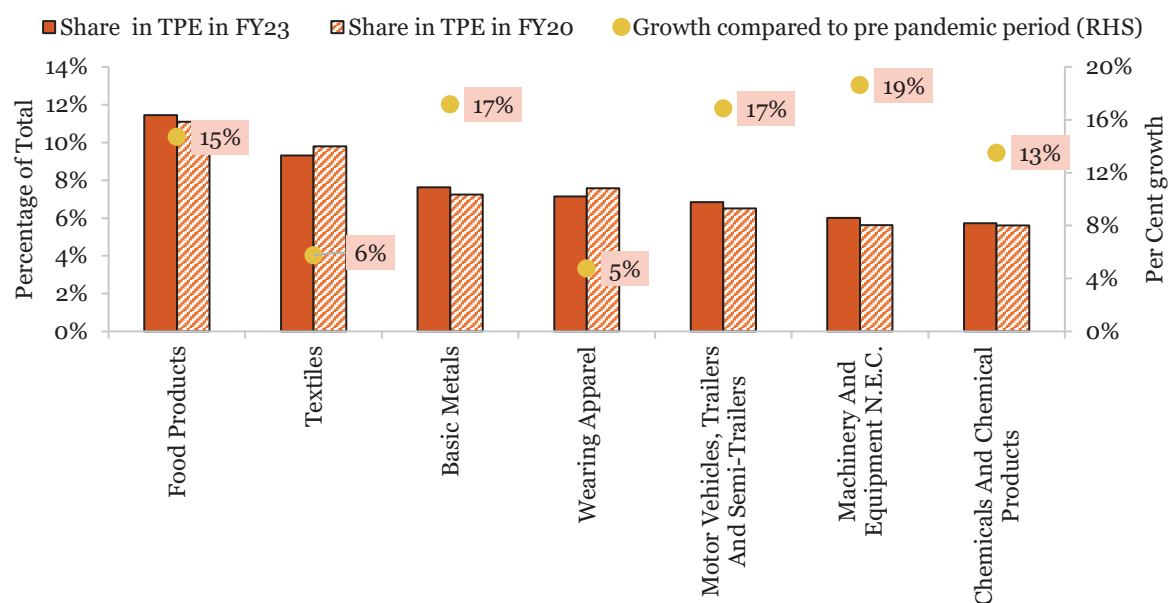
12.35. The results of ASI FY23 indicate a continued increase in the number of large factories i.e., those employing more than 100 workers. The number of such factories saw a robust growth of 7 per cent compared to FY22, while small factories (employing fewer than 100 workers) also experienced a steady increase of 2 per cent. Notably, large factories now account for around 22 per cent of all operational factories, reflecting their growing presence and contribution to the industrial landscape.

12.36. In terms of the share of employment, large factories continue to employ about 80 per cent of the total workers⁶⁵ and 78 per cent of the TPE⁶⁶ in the sector, whereas small factories, although larger in number, comprise a smaller share of employment in the sector.

12.37. Seven industry groups in the sector contribute to around 54 per cent of the total employment. These are food products, textiles, basic metals, wearing apparel, motor vehicles, trailers and semi-trailers, machinery and equipment N.E.C., and chemicals and chemical products. Other than these leading industries, industry groups representing computer, electronic and optical products and the manufacture of furniture have seen strong growth in employment compared to the pre-pandemic level with around 50 per cent growth in TPE. This indicates a positive shift towards electronics manufacturing in India.

⁶⁵ Workers are directly involved in the manufacturing process or in activities incidental to the manufacturing process, such as cleaning and repair. They can be employed directly or through an agency.

⁶⁶ Ibid note 64 above.

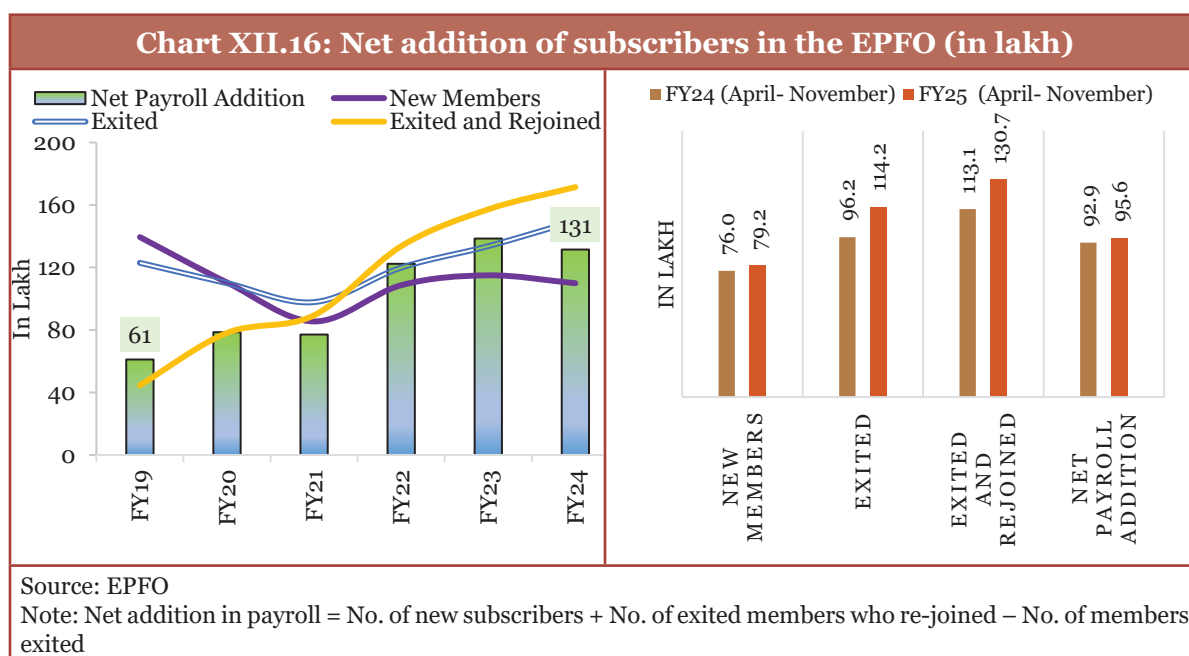
Chart XII.15. Industry groups registering high share in employment

Source: Annual Survey of Industries, MoSPI

Growing formal sector in India

12.38. Formalisation of the job market, as reflected in payroll data from the Employees' Provident Fund Organisation (EPFO), indicates that government initiatives are helping foster greater economic formalisation.⁶⁷ Net additions to EPFO subscriptions have more than doubled, rising from 61 lakh in FY19 to 131 lakh in FY24. During the first eight months of FY25 (April to November 2024), cumulative net additions reached 95.6 lakh, marking a 3 per cent YoY increase compared to the 92.9 lakh recorded during the same period in FY24. EPFO membership stands at 32.7 crore as of March 2024, compared to 29.9 crore as of March 2023.

⁶⁷ The EPFO data covers the low-paid workers in medium and large formal sector establishments. EPFO publishes subscription data every month, with a lag of two months.



12.39. In terms of industrial composition, expert services form the largest share of EPFO payroll addition (50 per cent in FY25, April-November), followed by trading-other industries (12 per cent) and trading-commercial establishments (7 per cent). Over the years, expert services have consistently led in formal job creation, as reflected in net payroll additions.

12.40. Across age groups, the age group of 18-25 years contributed to 47 per cent of the net payroll addition in April-November 2024. With nearly 61 per cent of net payroll addition coming from less than 29 years of age (in the same period), new jobs in the organised sector are mainly going to the youth.

12.41. The eShram portal⁶⁸, was launched by the Ministry of Labour and Employment (MoLE) on 26 August 2021 to recognise unorganised workers. The portal helps register and support unorganised workers by providing them with a Universal Account Number (UAN) and for the creation of a comprehensive National Database of Unorganised Workers (NDUW).⁶⁹ As of 31 December 2024, over 30.51 crore unorganised workers have already registered on the eShram portal.

12.42. Further, in keeping with the vision of developing eShram as a One-Stop-Solution for unorganised labour to have access to various social sector schemes, MoLE launched the eShram– “One-Stop-Solution” on 21 October 2024, which entails the integration of different social security/ welfare schemes on a single portal, i.e., eShram. This enables unorganised workers registered on eShram to access social security schemes and see benefits availed by them so far through eShram. So far, 12 schemes of different central

⁶⁸ <https://eshram.gov.in/>

⁶⁹ PIB release of Ministry of Labour and Employment dated 19 December 2024 (<https://tinyurl.com/3p2eab93>)

ministries/departments have already been integrated/ mapped with the eShram. These include Pradhan Mantri Surakhsha Bima Yojana, Pradhan Mantri Jeevan Jyoti Bima Yojana, Ayushman Bharat - Pradhan Mantri Jan Arogya Yojana, Prime Minister Street Vendors AatmaNirbhar Nidhi, PM Awas Yojana- Urban, PM Awas Yojana- Gramin, Mahatma Gandhi National Rural Employment Guarantee Scheme etc.

JOB CREATION: ACTION TOWARDS ENHANCED EMPLOYMENT OPPORTUNITIES

Security vs. Flexibility: The role of regulation in job creation

12.43. One key aspect of creating an enabling environment for businesses to grow is improving the ease of doing business and increasing flexibility in the labour market. In this regard, the government has worked to simplify labour laws. These reforms aim to foster job creation, enhance transparency, and improve accountability within the system. **Box XII.4** informs about the progress on this front.

Box XII.4: Labour laws strengthening workers' rights

The central government has formulated four Labour Codes, namely, the Code on Wages, 2019; the Code on Social Security, 2020; the Industrial Relations Code, 2020; and the Occupational Safety, Health, and Working Conditions Code, 2020 after simplifying, rationalising, and amalgamating the 29 existing central laws. The Code on Wages, 2019, was notified on 8 August 2019, and the remaining three Codes were notified on 29 September 2020.

The new Labour Codes constitute a significant step for workers' rights in India by strengthening the protection available to workers, including unorganised workers, regarding statutory minimum wage and its timely payment, social security, occupational safety, healthcare of workers, etc. The central government and 29 states/UTs have pre-published their draft rules under the four Labour Codes. Some of the remaining seven states/UTs have pre-published their draft rules for one or more Labour Codes.

Many states have already carried out various reforms in the spirit of the Labour Codes, such as:

- (a) Increasing the threshold of the number of workers from 100 to 300 for prior approval of appropriate government before retrenchment/ layoff/ closure of establishments in factory/plantation/ mining sector has been done by 14 states viz., Rajasthan, Andhra Pradesh, Arunachal Pradesh (AP), Assam, Bihar, Goa, Gujarat, Haryana, Jharkhand, Madhya Pradesh (MP), Uttar Pradesh (UP), Meghalaya, Punjab and Odisha under existing Industrial Disputes Act. Himachal Pradesh (HP) has increased it to 200.
- (b) Six states viz. Bihar, Haryana, Goa, Punjab, Odisha, and HP have notified Fixed Term Employment under the existing Industrial Employment (Standing Orders) Act, 1946.

- (c) 15 states/UTs viz. Maharashtra, Goa, Haryana, Odisha, J&K, HP, Punjab, UP, Uttarakhand, West Bengal, MP, Rajasthan, Karnataka, Andhra Pradesh, Assam have allowed women to work in night shifts subject to fulfilment of safety provisions.
- (d) 12 states/UTs viz. Gujarat, Maharashtra, Andhra Pradesh, UP, Odisha, Rajasthan, Haryana, Goa, MP, Uttarakhand, Bihar, and Punjab increased the threshold from 20 to 50 for applicability of the Contract Labour (Regulation & Abolition) Act, 1970. J&K and Ladakh increased the threshold from 20 to 40, and Himachal Pradesh increased the threshold to 30.
- (e) 14 states/UTs viz. Haryana, Gujarat, Punjab, Karnataka, Uttarakhand, Andhra Pradesh, J&K, Ladakh, Bihar, HP, Assam, Odisha, Manipur, and Jharkhand have increased the threshold for applicability of the Factories Act from 10 to 20(with power).
- (f) 16 states/UTs viz. Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Goa, Gujarat, Haryana, HP, Jharkhand, Karnataka, Maharashtra, MP, Meghalaya, Punjab, Rajasthan and UP have already increased the threshold for applicability of the Factories Act from 20 to 40(without power). This increase in the threshold is significant as it extends the protection of the Factories Act to a larger number of workers, thereby enhancing workplace safety and labour rights.
- (g) Seven states viz. Maharashtra, Haryana, HP, Odisha, Punjab, Karnataka and UP have increased the ceiling of overtime hours from 75 up to 144 hours in any quarter.

12.44. Labour regulations play a significant role in safeguarding worker rights and holding firms accountable for their working conditions. The regulatory framework not only shapes the business environment and the competitive dynamics of firms and factories but also ensures workers' well-being. Among these, Occupational Safety and Health (OSH) regulations stand out as foundational measures to ensure secure and dignified working conditions, providing a sense of security and confidence to the workforce.

12.45. Business experts, governments, economists, and management academics have repeatedly advocated for the role of working conditions, especially worker safety and well-being, in improving worker productivity. The role of OSH in enhancing worker productivity is discussed in **Box XII.5**.

Box XII.5: Occupational safety and health, labour productivity, and the role of Labour Laws.

OSH regulations⁷⁰ not only protect workers but also enhance efficiency and productivity. These regulations can be viewed as an investment in the long-term health of businesses and the economy. Literature and studies show that improving working conditions and implementing

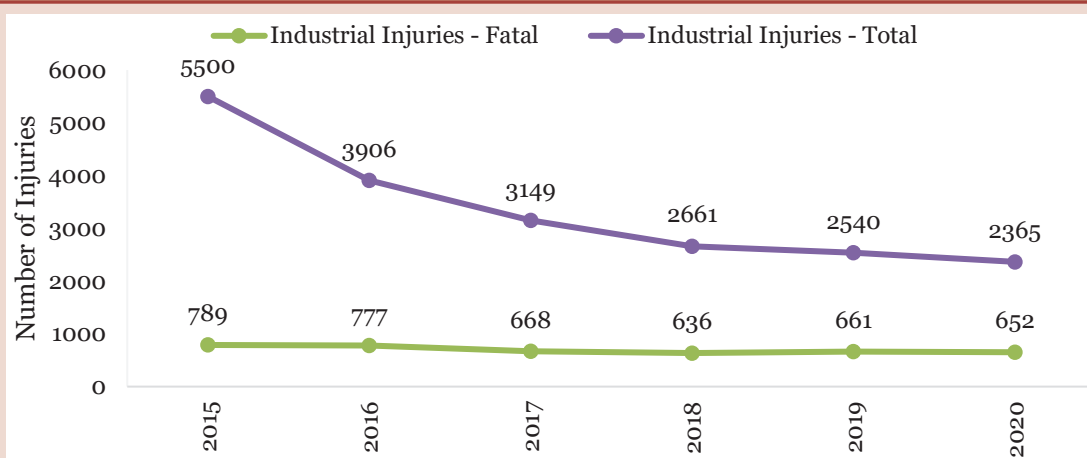
⁷⁰ The Occupational Safety, Health and Working Conditions Code, 2020 has been notified to consolidate and amend the laws regulating the occupational safety, health and working conditions of the persons employed in an establishment. <https://tinyurl.com/25j6hwx2>

OSH improve the GDP. The role of OSH in improving worker productivity is significant. This positive correlation underscores the importance of focusing on the effective implementation of OSH laws, as it directly contributes to increased productivity and economic growth.⁷¹

The labour laws for OSH have been in place since the Factories Act of 1948, and over time, new regulations have been brought in with the Employees' State Insurance Act of 1948 and the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act of 1996. The new Occupational Safety, Health, and Working Conditions (OSH&WC) Code, 2020 has introduced several worker-friendly provisions to enhance occupational safety, health, and labour productivity.⁷²

India's manufacturing (11.4 per cent of total workforce) and construction (12 per cent of total workforce) workforce are prone to workplace accidents. The Directorate General Factory Advice Service & Labour Institute (DGFASLI) monitors injuries in factories and major industries. Its data notes a decline in reported industrial injuries since 2015.⁷³ The number of injuries has reduced from 5500 in 2015 to 2365 in 2020.

Chart XII.17: Fall in the number of industrial injuries



Source: DGFASLI - Standard Reference Note - 2023

Challenges

While the National Guidelines for Responsible Business Conduct (NGRBC)⁷⁴ emphasise the role of businesses in ensuring OSH in supply chains, many leading corporations have yet to effectively implement these principles, as highlighted in Safe in India Foundations (SII's)⁷⁵

⁷¹ Ministry of Labour and Employment, National Policy on Safety, Health and Environment at Workplace (<https://tinyurl.com/yvmvn3u6>).

⁷² OSH&WC Code 2020 (<https://tinyurl.com/2d782hha>)

⁷³ Standard Reference Note - 2023

⁷⁴ Ministry of Corporate Affairs (<https://tinyurl.com/2ku384n5>)

⁷⁵ Safe in India Foundation (SII) is a civil society organisation that works to improve safety and social security for workers in India; <https://www.safeinindia.org/>. SII has been supporting ESIC, including during COVID-19, and is working with the Government of Haryana, MCA, M/o MSME, etc., in these areas; Report available at <https://tinyurl.com/24xt9cxd>.

SafetyNiti reports. The report highlights the prevalence of injuries due to inadequate safety sensors and audit and training lapses in the automobile sector, as an example.⁷⁶

This underscores the need for the industry to improve focus on prevention, training, and compliance through monitoring and audits. Enlightened self-interest and long-term thinking require employers to realise that a safe, secure, and satisfactory workplace is the key to long-term employee morale and productivity. Ethical conduct and fairness in business are the signs and bedrock of a mature and developed society. Treating workers humanely and, providing for their safety and looking after them when injured make as much business sense as it is the fair and ethical thing to do. Industry associations and collective bodies must champion this cause among their members. Addressing these challenges would be essential to fostering a robust and safe working environment across industries.

Way ahead

Technology-Driven Solutions: App-based worker reporting, can significantly enhance monitoring efforts. A good example is the Philippines' Online Labour Inspection System, which serves as a centralised digital platform for submitting safety records and accessing necessary templates.⁷⁷ The Employees' State Insurance Corporation (ESIC) data can help identify unsafe hotspots, enabling targeted actions. Additionally, incorporating a safety module in the ASI would improve the quality of safety data.

Utilising wearable technology in accident-prone areas, adopting the internet of things (IoT) for risk detection in MSMEs, and offering affordable virtual reality training modules can greatly enhance safety standards. Additionally, employing blockchain technology for tracking of claims will improve the transparency of ESIC claims and audits.

More substantial Incentives: Implementing tiered safety protocols for various industries and simplifying regulations for smaller businesses can encourage compliance. Incentives such as safety awards, tax breaks, and a machine safety subsidy programme can motivate industries to enhance their safety measures. An example of this is South Korea's Voluntary Safety Certification.⁷⁸ Furthermore, shared safety officers and subsidised training through public-private partnerships can further bolster industry support. For example, Thailand's Industrial Estate Authority provides shared safety services for industrial zones, including training, inspections, and safety audits.⁷⁹

By adopting these measures aligned with occupational safety, health, and well-being, India can drive its manufacturing goals sustainably, thereby improving worker dignity, increasing business profitability, and enhancing labour productivity.

⁷⁶ SafetyNiti 2024. Safe In India Foundation (<https://tinyurl.com/2zuwnhsz>)

⁷⁷ Department of Labor and Employment (Philippines) Online Systems: <https://tinyurl.com/nm7af385>

⁷⁸ ILO. (2019). Labour market governance and the future of work: Ensuring inclusive growth. International Labour Organization (p.39). (<https://tinyurl.com/ybrevcvk>)

⁷⁹ <https://www.ieat.go.th/en/roles-responsibilities>

12.46. India's labour regulations impose extensive compliance requirements on businesses (Rajagopalan & Shah, 2024).⁸⁰ For example, the Factories Act of 1948 mandates the placement of spittoons, specifies the materials for toilet paper, and dictates the design of washrooms. Similarly, other laws, like the Minimum Wages Act (1948) and the Maternity Benefit Act (1961), impose detailed specifications, through Rules, on register paper colours, font sizes on wage slips, and the distance between work areas and crèche facilities. Rather than focusing on essential safety and hygiene standards, these micromanaging regulations create unnecessary administrative burdens that hinder business growth. Implications of some of the laws on workers and firms are summarised in **Box XII.6**.

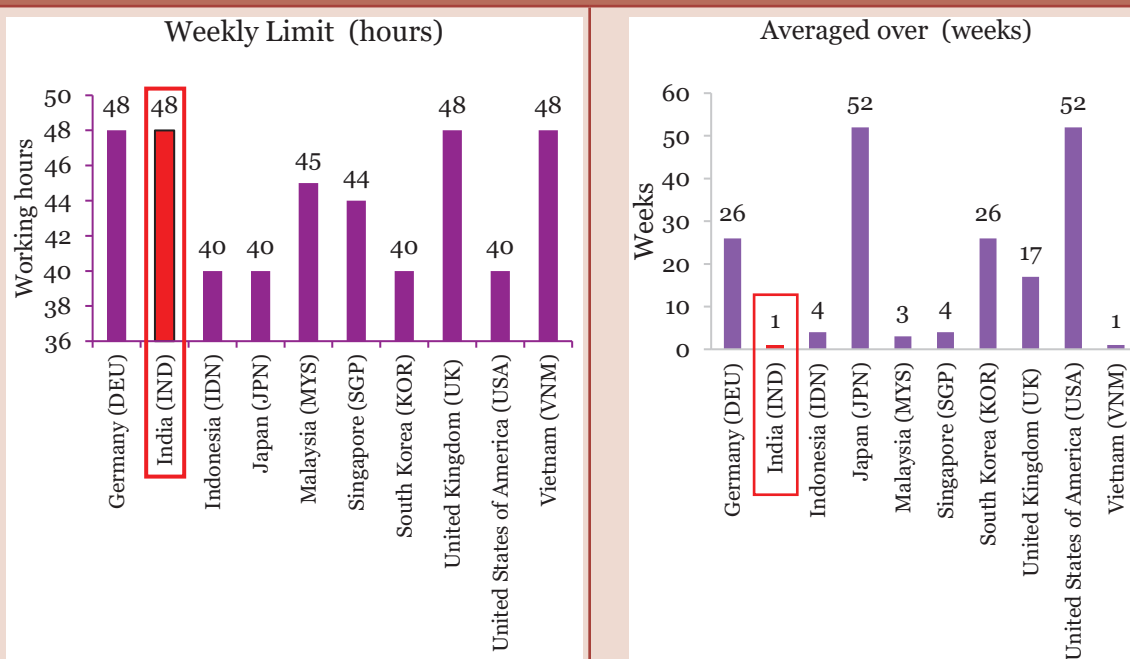
Box XII.6: Flexible labour regulations: Striking a balance for employment growth

Fostering an enabling environment that supports business growth is crucial for driving employment and economic development. However, there are instances where labour regulations designed to protect workers' rights perhaps inadvertently hinder the growth of firms, especially small and medium enterprises, by restricting their ability to expand operations when needed compared to global peers. In doing so, it dampens employment generation as well. Some such examples are presented here:

Inflexible working hours

Section 51 of the Factories Act (1948) states, '*No adult worker shall be required or allowed to work in a factory for more than forty-eight hours in any week.*' This clause limits the number of hours a worker can work in a day and a week. However, unlike India, certain countries allow these caps to be averaged over multiple days and weeks.

⁸⁰ Shruti Rajagopalan and Kadambari Shah. "Why Indian Firms Don't Scale: Labor Edition." Mercatus Policy Research, Mercatus Center at George Mason University, Arlington, VA, September 2024. (<https://tinyurl.com/37ep929p>).

Chart XII.18: Cap on average weekly working hours across some countries

Source: Country-specific laws and regulations⁸¹

India's working hour regulations prevent manufacturers from meeting demand surges and participating in global markets. Manufacturers stay competitive by minimising the time to bring a product to the market (Afonso et al., 2000; Vesey, 1991).⁸²

To reduce time-to-market, manufacturers must be capable of temporarily scaling up production. Labour laws in other countries allow manufacturers to average working hour limits across weeks and sometimes months. The International Labour Organisation (ILO) also recommends allowing manufacturers the freedom to average working hour limits across 3 weeks.⁸³ However, India's working hour limits may increase the cost, time, and risk of manufacturing.

Restrictions on overtime for factory workers

Section 65(3)(iv) of the Factories Act (1948) states, '*No worker shall be allowed to work overtime for more than seven consecutive days, and the total number of overtime hours in any quarter shall not exceed seventy-five.*' This law limits the number of overtime hours

81 Germany: Hours of Work Act, 1994, Section 3; India: Factories Act, 1948, Section 51; Indonesia: Manpower Act, 2003, Article 77; Japan: Labour Standards Act, 1947, Article 32; Malaysia: Employment Act, 1955, Section 60C; Singapore: Employment Act, 1968, Section 40; South Korea: Labour Standards Act, 1953(Act No. 8372), Section 50 and 51-2; United States of America: Fair Labour Standards Act, 1938, Section 207 (B); United Kingdom: The Working Time Regulations 1998, Section 4(1); Vietnam: The Viet Nam Labour Code, 2019, Article 105.

82 Vesey, J. T. (1991). The new competitors: They think in terms of 'speed-to-market'. *Academy of Management Perspectives*, 5(2), 23–33. <https://doi.org/10.5465/ame.1991.4274671>

83 ILO. 'Hours of Work (Industry) Convention, 1919', adopted in the 1st International Labour Conference session on 28 November, 1919.

workers can perform and the overtime wages they can earn. While states may set their own limits, these are generally lower than those established by other countries. The earning potential of workers across countries can be assessed based on the restrictions on overtime hours.⁸⁴

Table XII.3: Overtime work regulations across some countries

Country	Quarterly limits on overtime (hours)	Overtime wage rate (per cent of regular wage)	Overtime earnings per quarter (in ₹) ^{a b}
India (Union)	75	200	10,556
India (Best state: TG) ⁸⁵	156	200	21,957
South Korea (KOR) ⁸⁶	156	150	16,468
Vietnam (VNM) ⁸⁷	120 ^c	150	12,668
Indonesia (IDN) ⁸⁸	182	200 ^d	29,921
Singapore (SGP) ⁸⁹	216	150	22,802
Japan (JPN) ⁹⁰	240	125	21,113
Malaysia (MYS) ⁹¹	312	150	32,396
United Kingdom (UK) ⁹²	364 ^e	—	37,402 ^f
Germany (DEU) ⁹³	351 ^e	—	28,590 ^f
United States of America (USA) ⁹⁴	No Limit	150	44,882 ^g

Notes:

- a. Overtime earnings = hourly wage rate * overtime premium * number of overtime hours allowed.
 - i. Hourly wage rate = average daily wage rate (₹ 657.61) / 8 (the length of a day's shift in India)
 - ii. Overtime premium = mandated minimum premium under the country's laws.
 - iii. Average daily wage rate = Yearly wages paid per Indian manufacturing worker (as given in Annual Survey of Industries 2022-23)⁹⁵ / Maximum number of working days in a year = 2,05,175/312 = 657.61. This wage has been applied to all countries for the calculation.
 - iv. Number of working days in a year = Number of months * Number of working days in a month = 12 * 26 = 312).

84 Anand, B., Roy, S., Prisha, & Singh, A. (4 October 2023). #11: Lower the bar, increase the earnings. Prosperiti Insights (<https://tinyurl.com/5cw84bbu>).

85 India (TG): Factories (Telangana Amendment) Act, 2023, Section 3.

86 South Korea: Labour Standards Act, 1953 (Act No. 8372), Articles 53 and 56.

87 Viet Nam: The Viet Nam Labour Code, 2019, Articles 98 and 107.

88 Indonesia: Manpower Act, 2003, Article 77.

89 Singapore: Employment Act, 1968, Article 38

90 Japan: Labour Standards Act, 1947, Articles 36 and 37

91 Malaysia: Employment (Limitation of Overtime Work) Regulations, 1980, Clause 2

92 United Kingdom: The Working Time Regulations 1998, Sections 4, 10 and 12

93 Germany: Hours of Work Act, 1994, Sections 3, 4 and 5

94 United States of America: Fair Labour Standards Act, 1938, Section 207(A)

95 Government of India. (2022). Annual Survey of Industries, 2021-22. Ministry of Statistics and Programme Implementation(<https://tinyurl.com/mr2sf8pe>)

- b. The earnings data assumes that the worker can access the whole number of overtime hours allowed under the law. In practice, a higher overtime rate reduces the likelihood of workers accessing their desired number of overtime hours. Workers can earn more overtime income if higher limits are coupled with a lower overtime rate.
- c. Viet Nam's annual limit is lower than the sum of four quarterly limits. The quarterly limit is used here for calculation.
- d. This minimum overtime wage rate only applies from the second overtime hour of a workday. The first overtime hour in a workday may be compensated at 150 per cent or more of the regular wage.
- e. The law does not impose any specific limits on overtime. The overtime limit has been derived from other daily-hour restrictions and spread over.
- f. The law does not mandate a minimum overtime premium. To calculate overtime earnings, the ILO-recommended premium of 1.25 is used.
- g. The law does not impose any specific limits on overtime hours. The law does not set other limits from which overtime limits may be derived. Therefore, an overtime limit of 325 (the highest across countries) has been assumed.

Working hour restrictions are introduced to protect workers' health and prevent overwork. However, the various limits on working hours—per day, week, quarter, and year—often conflict, reducing workers' earning potential. For instance, Section 56 of the Factories Act limits a worker to a maximum of ten and a half hours at a factory daily, equating to approximately 63 hours in a six-day week. Of these, only 48 hours are considered regular (Section 51), three hours are considered rest intervals, and the remaining 12 hours count as overtime. Over a 13-week quarter, this would allow for 156 overtime hours; yet another provision (Section 65) caps overtime at only 75 hours per quarter. As a result, these laws inadvertently hinder workers' earning potential, ultimately affecting their financial well-being, as depicted in the table above. Notably, under the new Labour Laws, seven states viz. Maharashtra, Haryana, HP, Odisha, Punjab, Karnataka and UP have increased the ceiling of overtime hours from 75 up to 144 hours in any quarter.

In general, these compliance requirements are extensive and elaborate, demanding considerable management bandwidth, which is a scarce resource in small enterprises. However, the new Labour Laws represent a step in the right direction. With the introduction of flexible regulations and their effective implementation, these laws could lead to growth for firms, creating more employment opportunities. They also safeguard labour rights and allow workers to increase their earnings.

12.47. The Code on Social Security, 2020, is one of the four Labour Codes enacted by the Parliament. The Code provides for the framing of suitable social security measures for gig workers and platform workers on matters relating to life and disability cover, accident insurance, health and maternity benefits, old age protection, etc. The Code also provides for setting up a Social Security Fund to finance the welfare scheme.⁹⁶

12.48. To create a universal social security system for all Indians, especially the poor and the underprivileged, the government launched two social security schemes viz., the Pradhan Mantri Suraksha Bima Yojana (PMSBY) and the Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY) on a pan-India basis in May 2015. The Schemes are being

⁹⁶ Rajya Sabha Unstarred question no. 2795 To be answered on 19 December 2024(<https://tinyurl.com/34ez7598>).

offered by public sector insurers and other insurers who offer the product on similar terms, with necessary approvals and ties with banks and post offices. As of 27 November 2024, 47.76 crore and 21.75 crore persons have been enrolled cumulatively under PMSBY and PMJJBY, respectively. Further, 1,48,023 and 8,64,094 claims have been paid under PMSBY and PMJJBY, respectively.⁹⁷ Through the eShram portal, workers in the unorganised sector can easily access social security schemes and receive benefits.

Driving employment opportunities through the digital economy

12.49. OECD defines digital economy as “*alleconomic activity reliant on, or significantly enhanced by the use of digital inputs, including digital technologies, infrastructure, digital services, and data. It refers to all producers and consumers, including the government, utilising these digital inputs in economic activities*”.⁹⁸ According to the Ministry of Electronics and Information Technology (MeitY), India's digital economy is projected to surpass USD one trillion by 2025.⁹⁹

12.50. The digital economy has significantly broadened job opportunities, encompassing roles from delivery personnel, cab drivers, and beauty professionals to software engineers and data analysts. Hyperlocal service platforms have revolutionised the job landscape in the transportation, food delivery, and home services industries. These platforms have created flexible employment options by leveraging technology while transforming traditional service sectors into digitally driven ecosystems. According to NITI Aayog, the gig workforce is projected to reach 23.5 crore by 2029-30, comprising 6.7 per cent of the non-agricultural workforce and 4.1 per cent of total livelihoods, reshaping the labour market. India's gig economy is proliferating, fuelled by platformisation and remote work.¹⁰⁰

12.51. Digital technologies have a dual effect on employment. As Acemoglu and Restrepo (2019) note, automation replaces human labour through a displacement effect but also boosts demand for new roles through a reinstatement effect in both automated and complementary sectors.¹⁰¹ This technological reinstatement effect has the potential to drive labour demand and create numerous new job positions, positively impacting employment.

97 Department of Financial Services, Ministry of Finance.

98 OECD (2020), A G20 Roadmap toward a Common Framework for Measuring the Digital Economy. A report for the G20 Digital Economy Task Force (DETF) (<https://tinyurl.com/4txhh9z5>).

99 India's Trillion-Dollar Digital Opportunity, MeitY (<https://tinyurl.com/4thkuud>).

100 India's Booming Gig and Platform Economy. NITI Aayog, 2022 (<https://tinyurl.com/46u6bfxp>).

101 Acemoglu, Daron, and Pascual Restrepo. 2019. "Automation and New Tasks: How Technology Displaces and Reinstates Labor." *Journal of Economic Perspectives*, 33 (2): 3–30. DOI: 10.1257/jep.33.2.3 (<https://tinyurl.com/bdddfu8x>).

12.52. The digital economy offers a unique opportunity to bridge the gender gap and positively impact the gender structure of employment. Women often face distinct challenges in the labour market compared to men, including unequal access to education, limited job opportunities, cultural bias, mobility and time restrictions, and concerns about workplace safety. Such barriers frequently exclude women from participating in traditional labour markets, particularly in developing economies. The development of the digital economy can positively impact the gender structure of employment. The key benefit of the digital economy is that it allows and encourages remote working, where gender may not matter as much as in the physical economy. It opens opportunities for women in developing countries with increased financial independence and empowerment.¹⁰²

12.53. A study based on fintech data for 114 economies worldwide by Loko and Yang (2022) states that fintech adoption significantly improves female employment and reduces gender inequality.¹⁰³ Also, it mitigates the financial constraints of female-headed firms. Similar findings are reported by Sioson and Kim (2019), who note that fintech may play a role in bridging the gender gap in financial inclusion and promoting financial independence.¹⁰⁴ These findings highlight the role that fintech advancements and the digital economy play in creating an enabling environment for women, promoting economic participation and reducing systemic barriers to access to finance.

12.54. The digital economy holds immense potential to increase employment, but the extent of this impact varies across different industries. To ensure the long-term benefits of digitalisation on employment, it is crucial to have the right policies to address potential negative impacts on labour share due to automation and digital integration. The special essay on Artificial Intelligence (AI) (chapter 13) discusses the labour market implications of advances in the field of AI.

Building a green workforce: Job creation in the renewable energy sector

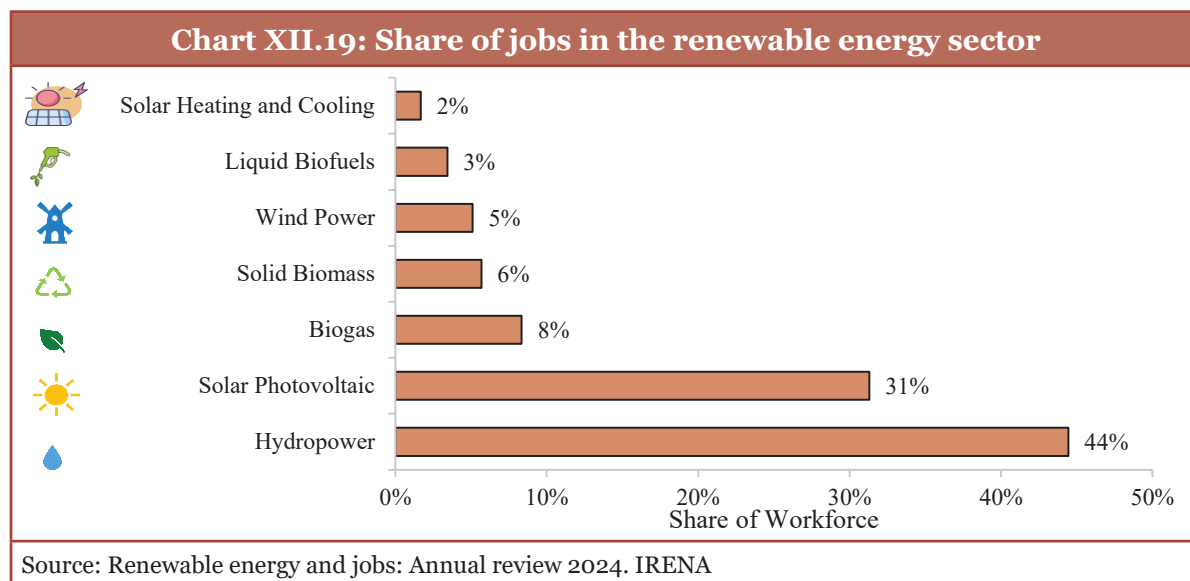
12.55. The Economic Survey 2023-24 discussed the impact of climate change and green transition on the job landscape. The efforts to mitigate the impact of climate change by adopting green technologies and transitioning to greener energy alternatives are expected to witness a strong job-creation effect.

¹⁰² World Bank Feature Story. Empowering Women through Jobs in the Digital Economy. October 20, 2015 (<https://tinyurl.com/krytxpsy>).

¹⁰³ Loko, Boileau and Yuanchen Yang (2022): "Fintech, Female Employment, and Gender Inequality, IMF Working Paper, African Department. Paper No WP/22/108, International Monetary Fund. (<https://tinyurl.com/yp92wd3c>).

¹⁰⁴ Sioson, Erica Paula and Chul Ju Kim (2019). Closing the Gender Gap in Financial Inclusion through Fintech," ADBI Institute Policy Brief, 2019-3, Asian Development Bank Institute. (<https://tinyurl.com/4u53w3rd>).

12.56. According to the 2024 Annual Review by the International Renewable Energy Agency (IRENA), the total number of jobs in the renewable energy sector in India reached an estimated 1.02 million in 2023.¹⁰⁵ Hydropower is the largest employer in India's renewable sector, providing approximately 453,000 jobs and accounting for 20 per cent of the global total, ranking second only to China.



12.57. In addition to creating livelihood opportunities, the renewable energy sector provides an opportunity for job creation for women, enhancing their participation in the labour market. The Solar Urja Lamps project in Dungarpur, Rajasthan, is a notable example of how the renewable sector provides a unique opportunity for women's empowerment. The project was initiated to provide an economical and sustainable solar lighting solution. Women's self-help group (SHG) members were trained and mentored to become solar entrepreneurs. The project resulted in the employment of 83 women, the establishment of five solar shops, and the assembly, sale, and maintenance of 40,000 solar lamps.¹⁰⁶ The tribal women engaged in the project could earn ₹ 5,000-6,000 per month.

12.58. Another example is the Global Energy Alliance for People and Planet (GEAPP) interventions. GEAPP India works closely with the DAY-NRLM to design and develop programmes to provide reliable clean energy access leading to improved livelihood for women enterprises. GEAPP India, in collaboration with the rural livelihood mission of UP, has rolled out a programme targeting solarising 50,000 women enterprises in 2025. The objective is to bring one lakh women enterprises under this programme by 2027 and five lakh by 2030.¹⁰⁷

¹⁰⁵ Renewable energy and jobs: Annual review 2024. IRENA. (<https://tinyurl.com/2w77au5s>).

¹⁰⁶ <https://tinyurl.com/5c8fu3b7>

¹⁰⁷ <https://tinyurl.com/2dw3zvrn>

12.59. Climate change and frequent disasters disproportionately impact women, especially those in rural and low-income households, threatening their livelihoods. As climate risks grow, there is an increasing thrust for SHGs to enable alternative livelihoods, creating opportunities for women in agriculture, home-based work, and MSMEs. Achieving this requires an ecosystem with access to tailored technologies, reliable energy, financial support, and business development services.

12.60. Technological, financial, and social challenges exist for women engaging in alternative livelihoods. Gender-biased tools, limited financing, and socio-cultural and geographic barriers constrain women's productivity and economic participation. Poorly designed, energy-inefficient tools force manual labour, while high costs and complex credit processes hinder technology adoption. Remote and hilly areas face additional challenges, including limited mobility, market access, and energy reliability.

12.61. Climate-smart solutions that use Decentralised Renewable Energy (DRE) (primarily solar energy) to power efficient appliances present a promising option to begin addressing these challenges in women-led livelihoods. There is substantial scope for these DRE-enabled livelihood solutions in agriculture, agro-processing, dairy, poultry, fisheries, textiles, crafts, and micro-enterprises.

12.62. The SELCO Foundation¹⁰⁸ demonstrates how DRE solutions can boost women's entrepreneurship and economic participation. It has empowered over 6,200 women in farming, food processing, textiles, and digital services across 24 states through energy-efficient technologies, affordable financing, training, market linkages, and climate-resilient infrastructure. Two such examples are discussed. Hundreds of women farmers in North Karnataka are advancing millet cultivation and local consumption through a solar-powered processing unit, boosting incomes and confidence for farmers, SHGs, and Farmer Producer Organisations (FPOs). Similarly, the *Boipariguda-Sabujima* FPO under Odisha's Millet Mission has adopted solar-powered processing, enhancing value capture, reducing costs, and fostering a productive, energy-reliable ecosystem.

12.63. The DRE solutions have the potential to improve well-being, cut energy costs, and strengthen local skills and financial inclusion while mitigating CO₂ emissions. With the right policies and strategies, the DRE solutions may be leveraged to address women entrepreneurs' challenges and support women-led livelihood.

SKILL DEVELOPMENT: UPSKILLING, RESKILLING AND NEW SKILLING FOR A CHANGING WORLD

12.64. India's skilling and employment ecosystem is an ever-evolving framework shaped

¹⁰⁸ <https://selcofoundation.org/>

by factors such as economic policies, technological advancements, globalisation, and the dynamic demands of the labour market. In the context of emerging global trends, including automation, generative AI, digitalisation, and climate change, aligning the nation's skill development initiatives with the anticipated transformations in the labour market is vital. The increasing pace of these disruptive changes necessitates the establishment of a resilient and responsive skilled ecosystem. It is imperative to assess how well-prepared India's youth are for emerging opportunities. **Box XII.7** discusses India's current skill landscape.

Box XII.7: India's evolving skill landscape¹⁰⁹

A detailed examination of the annual PLFS 2023-24 unit-level data has been conducted to understand India's skill and job landscape here. The PLFS data shows that 90.2 per cent of the workforce has equivalent to or less than a secondary level of education. This educational skill composition, as a result, leads to most of the workforce (88.2 per cent) being involved in low-competency occupations- elementary skilled and semi-skilled occupational skills.¹¹⁰

Chart XII.20: Educational level of workers

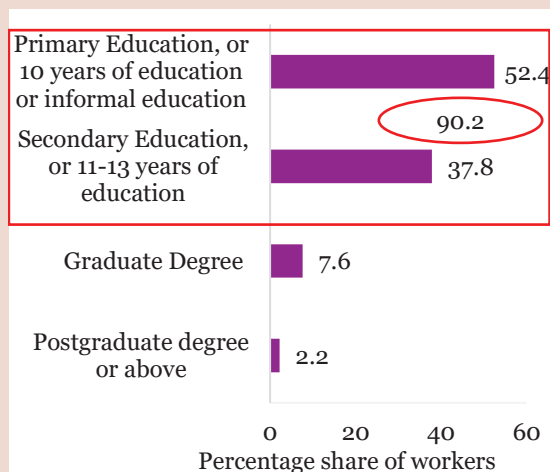
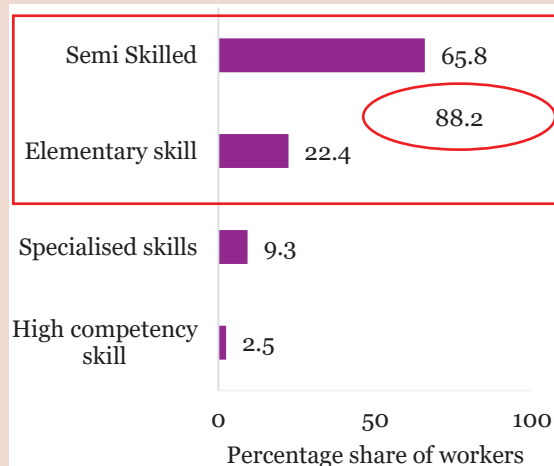


Chart XII.21: Occupational skill level of workers



Source: PLFS unit level data. MoSPI

¹⁰⁹ Based on inputs from Institute for Competitiveness.

¹¹⁰ Elementary occupations/ skills for occupations like hawkers, shoe shine, refuse workers, mining and construction labourers, agricultural, forestry and fishery labourers, etc.

Semi-skilled occupations include clerks, skilled agricultural and fisherman, plant and machine operators, assembly workers, craft and related trades workers, service workers, shop and market sales workers, etc.

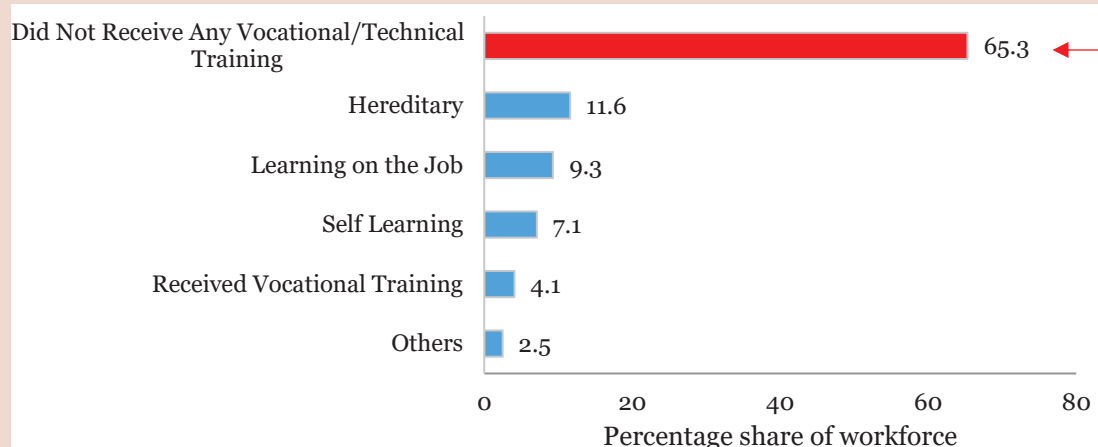
High competency occupations/skills include associate professionals like government regulatory associate professionals, sales and purchasing agents and brokers, medical and pharmaceutical technicians, veterinary technicians, traditional medicine associates, etc.

Specialised Skills for occupations like medical doctors, software, app developers and analysts, university and higher education teachers, legal professionals, administration professionals, authors, journalists and linguists, agriculture production managers, creative and performing artists, etc.

The composition of skills by education and occupations has major implications on the earnings of individuals and the economy. According to the PLFS data, there is a strong link between educational attainment, occupational roles, and income levels. While 4.2 per cent of the workforce, equipped with advanced education and specialised skills, earns between ₹4 lakh and ₹8 lakh annually, about 46 per cent earn less than ₹1 lakh, predominantly comprising low to semi-skilled workers like agricultural labourers, clerical staff, factory workers, and small-scale service providers. This highlights the urgent need for upskilling initiatives, considering the high concentration of India's workforce in lower-skilled roles.

Unlike general education, which tends to be broad and academic, Technical and Vocational Education and Training (TVET) in India offers specialised training to develop practical skills required by specific industries or job roles. The PLFS 2023-24 reports data on the workforce's vocational training status. Notably, 65.3 per cent of the workforce received no form of vocational training.

**Chart XII.22: Status of vocational training in India for 2023-24
(age group 15-59 years)**



Source: Annual PLFS report 2023-24. MoSPI

Challenges in the skill landscape

A key challenge in the skill landscape is the prevalence of low-skilled workers, which is attributable to the quality of educational outcomes across different levels of education. Low educational skills in the workforce make a mismatch between their academic qualifications and job market demands. This mismatch has resulted in over 53 per cent of graduates and 36 per cent of postgraduates being underemployed in roles below their educational qualifications.

Table XII.4: Matrix of mismatch between education skills and occupations

Occupational skill of workers	Education level/skills of workers			
	Primary Education, or 10 years of education or informal education	Secondary Education, or 11-13 years of education	Graduate Degree	Postgraduate degree or above
Elementary skill	32.13	19.25	3.22	0.96
Semi-skilled	66.3	72.18	50.3	28.12
High competency skill	0.29	2.79	8.25	7.67
Specialised skills	1.28	5.77	38.23	63.26

Note: The figures in the table represent the percentage of the workforce with a specific educational skill level and the corresponding occupational skill where they are employed. For instance, the figure in the first cell (32.13 per cent) indicates that 32.13 per cent of the workforce that has attained up to primary education (10 years of education, or informal education) are employed in elementary-skill jobs.

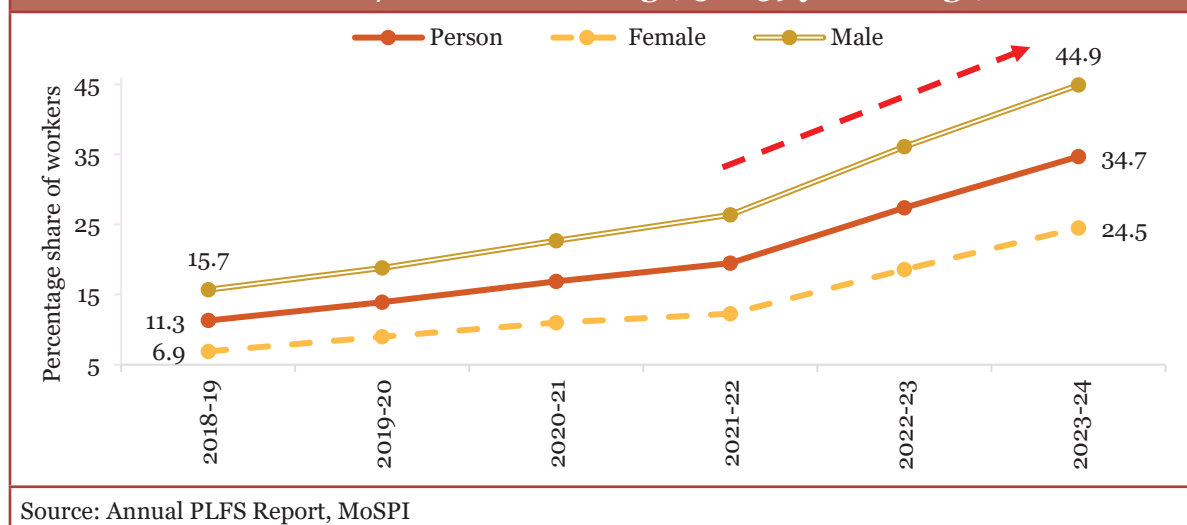
The main diagonal cells represent the skill match between educational and occupational skills (green cells). Cells above the main diagonal represent workers employed below their educational qualifications (in blue), while cells below the main diagonal indicate those in roles exceeding their educational qualifications (in orange).

Source: Institute for Competitiveness.

Skill mismatch can result from imperfect matching between employers and workers, primarily driven by labour market inefficiencies or an imbalance between aggregate supply and demand for specific skills. When the mismatch is due to the gap between the expected and actual skills of workers, it reflects a broader issue of misalignment between the demand for specific competencies and their availability in the labour force.


12.65. Over time, there is an improvement in the proportion of skilled people across all socio-economic classifications, including rural, urban and gender classification. According to the PLFS report 2023-24, 4.9 per cent of the youth in the age cohort of 15-29 years have received formal vocational/technical training, while another 21.2 per cent received training through informal sources. There is a significant improvement in the proportion of skilled people from 2018-19 to 2023-24 across all socio-economic classifications.

Chart XII.23: Increase in the share of workers receiving vocational/technical training (15 to 59 years of age)







12.66. This improvement in the skilling of the workforce results from the government's continuous efforts through its various initiatives. A summary of progress in this regard is summarised in **Table XII.5**.

Table XII.5: Advancing India's skill development initiatives

 <p><i>Re-skilling, Up-skilling and New-skilling of the workforce.</i></p>	<ul style="list-style-type: none"> • Over 1.24 crore persons enrolled for long-term training under the Craftsmen Training Scheme at Industrial Training Institutes (ITIs). • Over 1.57 crore persons have been trained, and over 1.21 crore have been certified under the Short-Term Training (STT), Special Projects (SP), and Recognition of Prior Learning (RPL) components of Pradhan Mantri Kaushal Vikas Yojna (PMKVY). • Over 27 lakh people have been trained, and over 26 lakh have been certified under Jan Sikshan Sansthan (JSS). • 11.79 lakh artisans have been imparted basic skill training in 3,145 Skill centers, spanning 559 districts under PM Vishwakarma. • National Council for Vocational Education and Training: 200+ new age and future skill courses approved. • 4.65 Lakh candidates enrolled in 100 New-age/futuristic job roles; 3.02 Lakh candidates have completed training, and around 98,000 are undergoing training under PMKVY.¹¹¹ • 29 new-age courses under CTS have been introduced in ITIs.
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¹¹¹ As of 31 October 2024.

 <p><i>Skilling Initiatives for Women Workers</i></p>	<ul style="list-style-type: none"> • The share of women among those trained under PMKVY has increased from 42.7 per cent in 2015-16 to 58.0 per cent 2024-25. • Under JSS, the special focus lies on the disadvantaged group, including women. Thus, women constitute about 82 per cent of the total beneficiaries in the JSS scheme. • In the long-term ecosystem, i.e., in ITIs and National Skill Training Institutes (NSTIs), women's participation has increased from 9.8 per cent in 2015-16 to 13.3 per cent in 2023-24. • Participation of women has increased from 7.7 per cent in 2016-17 to 22.8 per cent in 2024-25 (up to 31 October 2024) under the National Apprenticeship Promotion Scheme (NAPS).
 <p><i>Industry collaboration to meet the demands of the employer</i></p>	<ul style="list-style-type: none"> • The number of 'Establishments' registered on NAPS portal for taking up Apprentices has risen from 17,608 in 2016-17 to 2.38 lakh till 31 October 2024. • A total of 37.94 lakh apprentices have been engaged from 2016-17 to 2024-25 (up to 31 October 2024). • The New ITI Upgradation Scheme has been announced in the Union Budget 2024 to upgrade 1,000 ITIs in the hub and spoke arrangements in collaboration with the state governments and industry. <ul style="list-style-type: none"> ◦ 20 lakh youth will be skilled over a 5-year period in courses aligned to the human capital requirement of industries.
 <p><i>Credit Facilitation</i></p>	<p>The modified Credit Guarantee Fund Scheme for Skill Development (CGFSSD), or Model Skill Loan Scheme, was notified by the MSDE on 9 July 2024. Key changes include.</p> <ul style="list-style-type: none"> • The maximum loan limit was raised to ₹7.5 lakh (from ₹1.5 lakh). • Guarantee coverage now varies: 75 per cent for loans up to ₹4 lakh; 70 per cent for ₹4–7.5 lakh loans. • Eligible lenders expanded to include NBFCs, NBFC-MFIs, and Small Finance Banks. • Course coverage broadened to include non-NSQF-aligned courses via the Skill India Digital Hub (SIDH).
 <p><i>Entrepreneurship Training</i></p>	<ul style="list-style-type: none"> • 3,21,258 beneficiaries provided training from April 2018 to March 2024 by National Institute for Entrepreneurship and Small Business Development (NIESBUD). • Indian Institute of Entrepreneurship (IIE), Guwahati, provided training and handholding services to 1,43,470 beneficiaries from April 2018 to March 2024.

12.67. India has made progress in strengthening its skill infrastructure. The SIDH, a transformative digital portal, leverages the digital infrastructure to synergise and empower the skill ecosystem. The portal is a key step forward to democratise skill development with easy access to a diverse array of courses tailored to the demands of

the industry. The dual training system exposes trainees to an actual industry/workplace environment.

12.68. However, even with the government's continued efforts to evolve the skill landscape, technological advancements are rapidly changing the nature of work and presenting new challenges. Advanced technologies such as automation, AI, and digitalisation are reshaping industries and creating demand for new skill sets. This technological transformation underscores the need for a dynamic, forward-looking strategy that prepares the workforce for emerging opportunities.

12.69. A robust future roadmap must prioritise industry-academia partnerships, continuous skill development, and flexible learning models to create a globally competitive workforce. Several key areas require focused attention and strategic intervention to achieve this vision of a robust skilling ecosystem. The Ministry of Skill Development and Entrepreneurship (MSDE) has continuously brought initiatives to create a workforce matching the industry's demand (**Table XII.5**).

12.70. There is a need to focus on improving learning outcomes and employability. The improvement in learning outcomes that translate into employability may need to be made on two levels. The first is at the school level, for basic language, mathematics, and science proficiency. The focus on Foundational Literacy and Numeracy (FLN) under the National Education Policy (NEP) 2020 has already been discussed in the social chapter. Second at the higher education level, by incorporating skills that align with Industry 4.0 and new-age technologies like Generative AI and machine learning. Recognising this, the NEP 2020 aims to ensure that by 2025, at least 50 per cent of students in school and higher education gain exposure to skill education. Over the next decade, skill education will gradually become a part of all secondary schools.

12.71. A strategic plan for skills and education is essential to leverage the demographic dividend and achieve the Viksit Bharat 2047 goals. Targeted schemes that incentivise skilling and employment creation can help bridge the skill gap by providing practical experience and promoting job generation through the right incentives.

12.72. Early vocationalisation of education may be carried out to improve employability through vocational training. This will enable a smooth transition from learning to the job market. The existing ITIs provide formal vocational training. The relevance of the existing courses offered under the programme needs to be evaluated through a placement and demand analysis under which placement uptake studies should be conducted to identify underperforming and redundant courses. Such courses should be replaced by courses catering to up-and-coming sectors such as AI, sustainability, Big data analytics, etc.

12.73. The Union Budget 2024-25 introduced a package of five key schemes aimed at benefiting 4.1 crore youth over five years with a central outlay of ₹2 lakh crore to promote employment and skilling. These are discussed in Box XII.8.

Box XII.8: Package of schemes for employment and skilling

Government announced the Prime Minister's package of five schemes and initiatives for employment, skilling, and other opportunities for 4.1 crore youth over a 5-year period. These schemes are a stepping stone towards creating long-term quality jobs for Viksit Bharat.

Scheme A - for first-timers: This initiative provides a one-month salary of up to ₹15,000 in three instalments to first-time employees, as registered in the EPFO. With a salary cap of ₹1 lakh per month, this scheme aims to support 2.1 crore youth entering the workforce for the first time.

Scheme B - Job Creation in manufacturing: An incentive will be provided at a specified scale to the employee and the employer directly with respect to the EPFO contributions made in the first four years of employment. This scheme incentivises job creation in the manufacturing sector.

Scheme C - Support to employers: Under the scheme, the government would reimburse up to ₹3,000 per month for two years towards the EPFO contribution of employers for each additional employee. This is expected to benefit 30 lakh youth and additional employment across all sectors.

New centrally sponsored scheme for skilling: 20 lakh youth to be skilled over a five-year period and 1,000 ITIs to be upgraded in hub and spoke arrangements. This is expected to boost the formation of skilled human capital, aiding in the generation of quality employment.

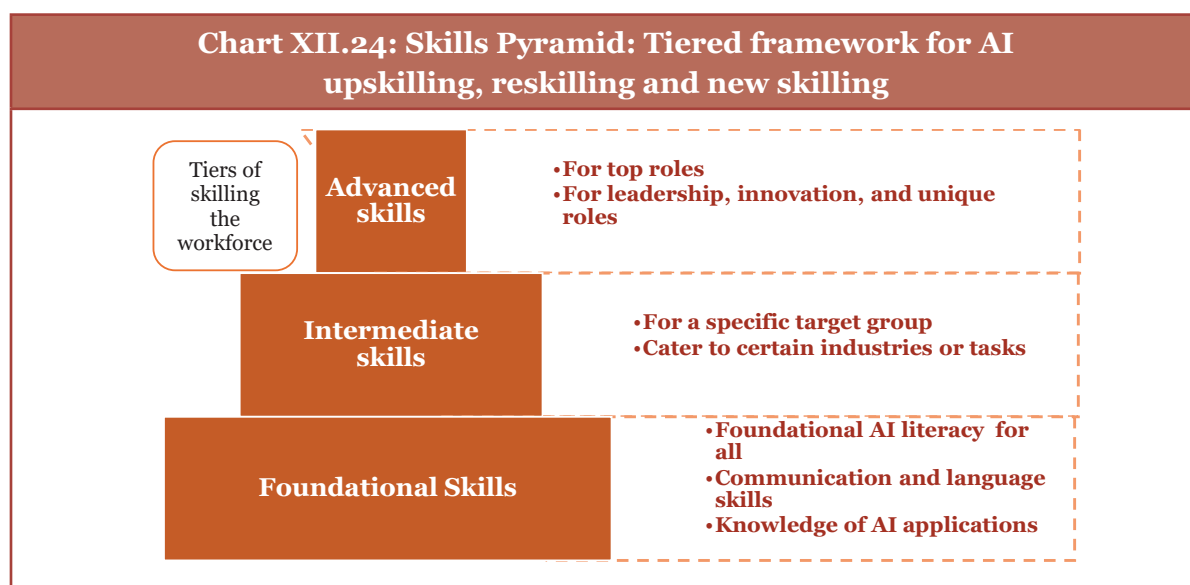
Prime Minister's Internship Scheme: Scheme for internship in 500 top companies to one crore youth in five years. This programme provides 12 months of real-life business exposure, with an internship allowance of ₹5,000 per month and one-time assistance of ₹6,000. This scheme aims to bridge the gap between academic knowledge and industry requirements and aligns with broader goals of improving employability and stimulating economic growth.

Tiered skill framework and the importance of internship programmes

12.74. The evolving transformations of the labour markets worldwide, and in India, revolve around the need for skilled workers, AI-ready workers, and workers who are ready even before they formally enter the job markets. The changing job market needs flexible skill strategies to keep up with fast-moving technologies like AI and large language models (LLMs). Policies should focus less on skilling for "AI jobs" and more on understanding how AI affects different tasks. In the future, most jobs will use AI, with some tasks fully automated and others made easier and more efficient. The impact of AI on employment has been discussed in detail in this survey in Chapter 13.

12.75. Most of the current skill policies are focused on re-skilling and up-skilling for AI jobs and roles or training on the use of AI. In order to re-skill and up-skill IT professionals to be adept with emerging technologies, the IT-ITeS Sector Skill Council, in partnership with MeitY, has launched the FutureSkills Prime platform, which aims at re-skilling/ up-skilling IT professionals in 10 new/emerging technologies including AI. The programme aims to up-skill/ re-skill 13.21 lakh beneficiaries up to March 2027, ensuring their continued relevance in a rapidly changing technological environment. Under the FutureSkills Prime programme, 119 courses specifically focused on the cutting-edge fields of AI. So far, 1.27 lakh individuals have been trained in various AI-related courses and provided training to 1,236 government officials and 292 trainers.¹¹²

12.76. In addition to such programmes and courses, the skilling strategy needs to adopt a layered approach to address diverse industry demands and workforce needs effectively. This new approach could include skills tailored for specific tasks or job roles, targeted at selected groups of workers, and foundational AI skills provided universally to everyone and across all sectors. By aligning these skill tiers with the aspirations and needs of workers, the strategy can better prepare the workforce for a dynamic job landscape with changing demands. The tiered approach allows for training cost-effectively. The basic three tiers of the skill strategy are elaborated in Chart XII.24.



¹¹² Rajya Sabha Unstarred Question No – 1084 Skill Development In Artificial Intelligence (AI) For Youth. Answered On – 31 July 2024. (<https://tinyurl.com/r3k4tuhb>)

12.77. Time is of the essence when picking up tasks in a workplace. In this context, education researchers and learning scientists have long recognised the importance of work-based learning or experiential learning. Scholars such as David Kolbs¹¹³, John Dewey¹¹⁴ Kurt Lewis and others have been pioneers of experiential learning approaches, which have been proven to be important instruments in workforce development in various studies worldwide.

12.78. Internships are one such type of work-based learning aiming to provide skills in a professional setting alongside gaining career and life experience. Internships are mutually beneficial arrangements between young aspirants and employers. Advocates of this approach present many positives of hands-on experiences towards jobs in the form of internships, such as providing real-world contexts. Internships hone communication, collaboration, creativity, and critical thinking. Recognising the importance of internships, the PM Internship scheme launched by the government is discussed in **Box XII.9**.

Box XII.9: PM Internship Scheme: Democratising the idea of learning by doing

The Union Budget of 2024-25 announced a new scheme for internship, named the PM Internship Scheme (PMIS), in 500 top companies to one crore youth over a period of five years. The key aspects of the Scheme are:

- The internship opportunities span 24 sectors, including oil, gas, energy, travel, hospitality, automotive, banking and financial services, etc.
- 12-month paid internship opportunities with top companies of India offered to those aged 21-24 years, from, and with educational qualifications ranging from matriculate to graduate (excluding IIT grads, CAs, etc.) are eligible to apply. The scheme is specifically for Indian nationals who are not employed full-time or engaged in full-time education.
- The scheme offers a monthly stipend of ₹5000, funded jointly by the government (₹4500) and the company (₹500), with an additional ₹6000 for incidentals.

The scheme's pilot phase, launched on 3 October 2024, aims to benefit 1.25 lakh youth in FY25, with a five-year target of facilitating internships for one crore youth. Companies can also use their corporate social responsibility (CSR) funds for expenditure under the scheme.

The scheme is being implemented through an online portal¹¹⁵ developed by the Ministry of Corporate Affairs. The portal is acting like a centralised platform for managing the entire internship lifecycle. The top companies for this pilot project have been identified voluntarily based on the average CSR expenditure of the last three years.

113 Kolb, A. Y., & Kolb, D. A. (2012). Experiential learning theory. In N. M. Seel (Ed.), *Encyclopedia of the sciences of learning*. Springer. https://doi.org/10.1007/978-1-4419-1428-6_227

114 Smith, M. K. (2001). John Dewey and experiential learning: Developing the theory of youth work. *The Encyclopedia of Informal Education*. <https://tinyurl.com/ynfm5zbnk>

115 Online portal of PM Internship scheme: www.pminternship.mca.gov.in

Industry partnership to tackle the skill-gap problem: This scheme will help bridge the gap between academic knowledge and industry requirements and align with broader goals of improving employability, stimulating economic growth, and promoting sustainable development. It offers a market-led and youth-driven solution to the issue of constrained higher education, employment and training options to citizens residing in tier 2 or 3 cities, in keeping with the government's commitment to youth empowerment.

While internships are a norm in India's premier institutions and professional courses, they remain unusual in state universities and less famous colleges attended by most youth due to a lack of career counselling and job-oriented networking.

The democratisation of learning by doing: Mass-level internships through PMIS aims to level the playing field for youth from non-metro cities and act as door opener for potential placements. At a personal level, the newfound financial freedom will help boost confidence and motivate young minds to do better and aim higher. For young women, financial freedom and a sense of self-worth can alter life decisions, such as the age of marriage and pre-nuptial terms.

With 65 per cent of India's population residing in rural areas, as highlighted by the Economic Survey 2023-24, many regions remain disconnected from corporate prospects. To address this disparity and ensure inclusivity, the scheme encourages companies to leverage their forward and backward linkages, vendor networks, and MSMEs, providing a more equitable distribution of opportunities nationwide. In its pilot phase, the scheme facilitated over 1.27 lakh internship opportunities through 280 companies across 36 states and union territories, covering more than 740 districts.

What sets this Scheme apart is its independence from existing skill development schemes, apprenticeships, and student training initiatives currently implemented across all states and union territories of India. By focusing solely on internships, the PIMS seeks to create a tailored experience that enhances employability and gives young people real-world exposure. Through this effort, the government aims to equip India's youth with the tools they need to thrive in the job market, fostering a skilled workforce ready to meet future challenges. Ultimately, this initiative reflects a commitment to nurturing talent and unlocking the potential of the next generation, contributing to the nation's overall growth and development.¹¹⁶

For young aspirants, internships under the PMIS are not only opportunities but also transformative experiences. They provide exposure to the real world of corporate work, which is quite dissimilar from the relatively more structured and stable world of academics as taught in most colleges across the country. Besides developing and identifying their optimal career path, aspirants can also get hands-on training in handling responsibility, problem-solving, decision-making, teamwork, and time management.

For the employer, internships are not just good low-cost experiments for testing a candidate's suitability for long-term employment but also a strategic tool for bridging the skills gap and

¹¹⁶ PIB release of Ministry of Corporate Affairs dated 12 October 2024. (<https://tinyurl.com/3267x2sp>)

meeting its CSR mandate. Over 12 months, the company can credibly observe an intern's IQ and EQ and confidently hire deserving candidates.

For the economy at large, PMIS is aligned with the NEP 2020 and is a more immediate measure for promoting youth employment and bringing equity in employment prospects for youth from underprivileged backgrounds. By acting as a finishing school for young pass-outs, internships help reduce the economy's deadweight loss of 'talent sans employability'. Such a segue from education to employment would be crucial in the coming age of AI, where job suitability would be determined by adaptability to change and life skills. In the long run, it could also influence the capital-to-labour ratio in the manufacturing sector.

With over three lakh candidate profiles created and 6.5 lakh applications submitted, the PMIS Scheme has emerged as a transformative catalyst for employment generation. To fully harness India's demographic dividend, the scheme requires widespread publicity and meticulous implementation, continuously aiming at a better fit with India's demographic dividend. The high interest shown by corporates since the launch of the scheme augurs well for the success of the scheme's goal of skilling Indian youth, boosting their employability and the ultimate aim of enhancing their livelihoods.

12.79. Along with internships, a public-private partnership for skill development and vocational training is another effective way of creating an industry-ready workforce. The Directorate General of Training, MSDE, has forged partnerships with industry leaders to enhance and upgrade training infrastructure. Notable collaborators include Dassault for aeronautical structure and equipment fitter, Pidilite and Jaguar for plumbing sector, Skoda for Automobile and HAL and Siemens for advanced CNC machinery training.¹¹⁷

12.80. Building a resilient skill ecosystem requires a collaborative effort from all stakeholders. To navigate the evolving job market, job seekers must focus on developing industry-specific skills. Employers should prioritise workforce planning, anticipate skill shortages, and understand the cost implications of adopting new technologies and regulatory standards. Trainers must design sector-specific programmes that address emerging industry needs and integrate governance, compliance, and innovation elements. A collaborative effort between job seekers, employers, and trainers will be crucial in navigating challenges and seizing opportunities in the future of work.

International mobility of skilled workers

12.81. India has a diaspora population of 32 million¹¹⁸, up from 18 million in 2020, making her one of the countries with the largest diaspora globally as of 2020.¹¹⁹ There is likely to be a demand for 97 million new jobs worldwide by 2025 in sectors such as healthcare, construction, IT, agriculture, and financial services, as estimated by the

¹¹⁷ Inputs from Ministry of Skill Development and Entrepreneurship

¹¹⁸ Population of Overseas Indians, MEA (<https://tinyurl.com/mvupc9n6>)

¹¹⁹ International Migration 2020 Highlights, United Nations (<https://tinyurl.com/y462r55p>)

World Economic Forum (WEF).¹²⁰ With 65 per cent of its population under 35 years and a median age of 28, India's demographic dividend makes it a global talent hub, provided it can cultivate a workforce with employable, industry-relevant skills.

12.82. By creating a skilling ecosystem with a high-quality, globally competitive workforce, India can enhance employability for youth in global job markets. This attracts international investments, stimulates growth, drives innovation, and strengthens India's global economic position. Skill development is key to 'Aatmanirbhar Bharat,' ensuring the workforce has the competencies to meet evolving industry demands and global standards. The government is taking several measures to facilitate skilled labour mobility internationally, as elaborated in **Box XII.10**.

Box XII.10: International cooperation in skill development

- **Bilateral partnerships** are key to facilitating skill-based pathways for the migration of India's workforce. The Indian Government, through the Ministry of External Affairs (MEA), with agreements like **Migration and Mobility Partnership Agreements (MMPA)**, **Labour Mobility Agreements (LMA)**, and **Labour Welfare Agreements** ensure skill alignment, worker rights, pre-departure support and forecast sector-specific demands fostering safe and sustainable international employment opportunities. MMPAs and LMAs with eight countries, including Australia, Israel, Denmark, Italy, Germany, the UK, Japan, and Austria, focus on vocational training and skill alignment.
- The MSDE has seven active **G2G Memorandums of Understanding (MoUs)** with Australia, Denmark, Germany, Japan, Qatar, Singapore, and the UAE. These MoUs focus on skill development, vocational training, capacity building, and international certification, enhancing the global mobility of skilled Indian workers and promoting the recognition of Indian qualifications abroad. By fostering technical collaboration, these partnerships align skilling outcomes with international standards, facilitate information exchange, and contribute to creating a globally benchmarked skills ecosystem.
- MSDE, via the National Skill Development Council (NSDC), conducts **skill gap assessments** in 16 countries, including the USA, Canada, and the UAE, and studies global practices through Sector Skill Councils (SSCs). India also emphasises training for international mobility, offering domain-specific, foreign language, and Recognition of Prior Learning programmes to address skill gaps in emerging fields like AI and robotics. PMKVY and Craftsmen Scheme include language training to improve worker integration abroad.
- Curriculum development under the **National Skills Qualification Framework (NSQF)** ensures alignment with international standards, enhancing employability and mutual recognition of qualifications.
- **Skill India International Centres**, designed as hubs for global job seekers, will reduce the time and cost of international mobility with the goal of establishing a 'Trusted

120 WEF, Future of Jobs, 2020 (<https://tinyurl.com/bdh5kmwp>)

Workforce Supply Chain'. Currently, two SIICs are operational in Varanasi and Bhubaneswar, with five more under renovation.

- **The Pre-Departure Orientation Training** programme, launched in 2018, provides free 8-hour training to migrant workers on destination countries' cultural, legal, and welfare aspects.
- The **MEA's e-Migrate platform** streamlines emigration by connecting stakeholders and offering services like online registration, PDOT, and grievance redressal. Currently, 2,171 recruiting agents and 284,345 employers are registered on the platform.

12.83. As the way forward to tap the global demand, there is need to periodically conduct regular detailed demand-supply analyses to map global skill gaps and align skilling programmes with international labour market needs.

CONCLUSION

12.84. In conclusion, India has seen good growth in employment in recent years, as highlighted by labour market indicators that show strong signs of post-pandemic recovery and increased formalisation of the economy. This growth can be attributed to notable achievements in entrepreneurship, formalisation, skill development, and the transformation of the regulatory framework.

12.85. Labour laws intended to protect the rights of women workers have, more often than not, discouraged hiring by creating systemic barriers to their entry into the workforce. India's new Labour Codes address this by enabling night shifts for women with safety measures, extending 26 weeks of maternity leave to gig and informal workers and mandating creche facilities in workplaces with 50 or more employees. The Codes ensure equal pay and prohibit gender discrimination in recruitment while allowing women to work in all sectors, including hazardous roles, with safeguards. These reforms will promote gender inclusivity, workplace safety, and social security for women.

12.86. By simplifying compliance, fostering labour flexibility, and promoting worker welfare, labour reforms have created an enabling environment that balances ease of doing business with the protection of worker rights. Together, these measures foster a 'virtuous cycle of job creation,' supporting sustainable employment growth and economic inclusivity. Chapter 5 of the survey 'Medium Term Outlook' discusses in detail the important role of deregulation in the economy. Deregulation, in general, whether or not related to labour, will boost employment because it helps lower the cost of doing business and allows for the resource to be used for expanding capacity through more labour and more and better equipment.
