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Workforce Evolution and Employment Dynamics: Adapting to the Future of Work

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ABSTRACT: The modern workforce is undergoing significant transformations driven by rapid technological advancements, globalization, demographic shifts, and evolving societal norms. This study, titled "Workforce Evolution and Employment Dynamics: Adapting to the Future of Work," explores the multifaceted changes reshaping employment landscapes and the implications for workers, employers, and policymakers. The research examines how automation, artificial intelligence, and digital platforms are redefining job roles, skill requirements, and organizational structures. Additionally, it considers the rise of the gig economy, remote work, and flexible employment arrangements as critical components of this evolution. The study also addresses the challenges and opportunities presented by these changes, including the need for reskilling and upskilling to meet new demands, the potential for increased job polarization, and the growing importance of social safety nets and inclusive policies to ensure a just transition for all workers. By analyzing these factors, the research aims to provide a comprehensive understanding of the current and future trends in workforce dynamics. Furthermore, the study offers strategic recommendations for businesses to foster adaptability and resilience in their workforce, emphasizing the importance of continuous learning, innovation, and collaboration. Policymakers are also urged to consider proactive measures that support workforce development and address the social and economic impacts of these changes. Ultimately, this research seeks to contribute to a more informed dialogue on how societies can navigate the complexities of workforce evolution and employment dynamics in the 21st century, ensuring that the future of work is equitable and sustainable for all.

KEYWORDS: Workforce Evolution, Employment Dynamics, Future of Work, Skill Development, Gig Economy

I. INTRODUCTION

Employment has consistently been a significant challenge for Indian policymakers, becoming increasingly complex over time. Despite improvements in literacy, education, and vocational training, job creation has not matched the growing demand for quality employment. The educated workforce now seeks not just jobs, but decent employment with better working conditions, regularity, and remuneration. However, the growth in job opportunities has lagged behind the increase in job seekers. Additionally, the rising aspirations of the labor force and uneven industrial and service sector growth across regions have created a mismatch between job opportunities and local labor supply. The divergence between the structural changes in output and employment, with the industry and services sectors providing employment to a smaller proportion of the workforce compared to their contribution to gross value added, further exacerbates the issue.

II. LITERATURE SURVEY

The economic reforms of 1990–91 led to a steady increase in the growth rate of the economy, with the gross value added growing from 4.27 percent before the reforms to 6.58 percent between 2010–11 and 2019–20. This period saw a consistent decline in the share of agriculture in the economy and a rise in the non-agriculture sectors. Despite these changes, employment trends have remained inconsistent, influenced by factors such as demographic shifts, increased post-matric education, technological advancements, and labor laws. The complexity of these factors has led to varied conclusions in expert analyses, compounded by gaps in data. Data on employment and workforce has traditionally come from decennial censuses and quinquennial surveys by the NSSO, with the latest data available only up to 2011. The transition to the Periodic Labour Force Survey (PLFS) in 2017–18, conducted by the National Statistical Office, has provided more recent data, though it is not directly comparable to previous datasets due to different sampling frameworks and analytical methods. The PLFS data, covering annual figures from 2017–18 to 2019–20 and quarterly data for urban areas, is crucial for analyzing recent employment trends. This paper utilizes PLFS data to evaluate concerns about declining worker-to-population ratios, rising unemployment, and changes in female workforce participation, aiming to shed light on the current employment scenario in India.



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Many studies and media articles have expressed serious concern about the deterioration in the employment scene in the country in recent years (Anand Thampi 2021; Mehrotra and Jajati 2021, Mehrotra and Tuhinsubhra Giri 2021). This paper examines the veracity of assertions such as

- a. decline in worker-to-population ratio in recent years,
- b. increase in unemployment,
- c. withdrawal of women from workforce
- d. deterioration in the overall employment scenario in the country, among others

III. GROWTH RATE IN ECONOMIC ACTIVITIES DURING PLFS PERIOD

The performance of various economic sectors significantly influences workforce and employment trends. To assess employment changes using the PLFS data, it's important to align the economic growth reference period with the PLFS surveys, which run from July to June, differing from the Financial Year (April to March). Therefore, growth rates for Gross Value Added were recalculated to match the July-June period for consistency with the PLFS estimates.

Table 1: Annual rate of change in gross value added in agriculture and non-agriculture sectors, and the total economy during PLFS years 2017–18 to 2019–20 at 2011–12 prices

| PLFS Year | Agriculture | Non-agriculture | Total economy |
|------------|-------------|-----------------|---------------|
| 2017-18 | 6.39 | 6.85 | 6.78 |
| 2018-19 | 2.16 | 5.92 | 5.35 |
| 2019-20 | 4.35 | -4.10 | -2.85 |
| Q1 2019-20 | 3.54 | -26.45 | -22.37 |

Source: Press Releases of MOSPI, and National Accounts Statistics.

The PLFS year 2019–20 encompasses the first quarter of FY 2020–21, which was significantly impacted by the first wave of the Covid-19 pandemic. During this period, from April to June 2020, economic activities were severely disrupted, causing the Gross Value Added (GVA) of the non-agriculture sector to contract by 26.45 percent and the total economy to shrink by 22.37 percent compared to the same quarter the previous year. In contrast, agriculture GVA grew normally since agricultural activities were exempt from pandemic-related restrictions. This period also saw a large-scale movement of labor from urban areas to rural regions and their native places. For the entire PLFS year 2019–20, the total economy's GVA decreased by 2.85 percent, while the agriculture sector experienced a growth rate twice that of the pre-Covid year, affecting employment levels and the distribution of workers between agriculture and non-agriculture sectors, as well as between rural and urban areas.

IV. LABOUR-FORCE-PARTICIPATION RATE

The labour force comprises individuals who are either employed or available for work, with some abstaining for various reasons. Subtracting those who are not working from the labour force gives the number of actual workers, categorized into self-employed, regular wage/salaried, and casual labour. The difference between the labour force and the workforce indicates the number of unemployed persons.

From 2017–18 to 2018–19, the labour force in India grew from 485.3 million to 497.4 million. In the following year, it rose by 8 percent to 537.9 million, with increases observed across both genders and in both rural and urban areas. However, the growth in urban areas was smaller compared to rural areas. In 2019–20, the rural labour force made up 70.7 percent of the total, consistent with the share in 2017–18. Additionally, the share of female labour in the total labour force increased from 23.1 percent to 27.9 percent over two years.



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Table 2A: Labour force in India by gender, and rural and urban categories based on usual status and current weekly status (in million): 2017–18 to 2019–20.

| Year | Employment | | Rural | | | Urban | | Rural + Urban | | |
|---------|------------|-------|--------|--------|-------|--------|--------|---------------|--------|--------|
| | status | Male | Female | Person | Male | Female | Person | Male | Female | Person |
| 2017-18 | US | 261.3 | 82.4 | 343.6 | 111.7 | 30.0 | 141.7 | 373.0 | 112.4 | 485.3 |
| 2018-19 | US | 259.4 | 89.1 | 348.4 | 117.3 | 31.6 | 148.9 | 376.7 | 120.7 | 497.4 |
| 2019-20 | US | 267.5 | 113.1 | 380.6 | 120.5 | 36.9 | 157.3 | 388.0 | 150.0 | 537.9 |
| 2017-18 | CWS | 258.2 | 72.7 | 330.8 | 111.0 | 28.9 | 139.8 | 369.1 | 101.5 | 470.5 |
| 2018-19 | CWS | 255.7 | 75.7 | 331.4 | 117.1 | 30.5 | 147.6 | 372.8 | 106.2 | 479.0 |
| 2019-20 | CWS | 262.8 | 96.6 | 359.4 | 119.0 | 34.9 | 153.9 | 381.8 | 131.6 | 513.3 |

Source: Authors estimates based on NSO-PLFS data and population data Note: US (Usual status) include principal and subsidiary status and CWS refers to Current Weekly Status

Table 2B: Labour force participation rate (%) in rural and urban households by gender and work status, 2017–18 to 2019–20.

| Year | Employment | | Rural | | | Urban | | Rural + Urban | | |
|---------|------------|-------|--------|--------|-------|--------|--------|---------------|--------|--------|
| | status | Male | Female | Person | Male | Female | Person | Male | Female | Person |
| 2017-18 | US | 54.90 | 18.18 | 36.99 | 56.98 | 15.87 | 36.79 | 55.51 | 17.50 | 36.93 |
| 2018-19 | US | 55.14 | 19.65 | 37.71 | 56.72 | 16.10 | 36.94 | 55.62 | 18.58 | 37.48 |
| 2019-20 | US | 56.33 | 24.68 | 40.78 | 57.84 | 18.49 | 38.59 | 56.79 | 22.80 | 40.11 |
| 2017-18 | CWS | 54.25 | 16.04 | 35.61 | 56.60 | 15.28 | 36.31 | 54.93 | 15.81 | 35.81 |
| 2018-19 | CWS | 54.36 | 16.70 | 35.86 | 56.63 | 15.54 | 36.62 | 55.05 | 16.35 | 36.10 |
| 2019-20 | CWS | 55.35 | 21.08 | 38.51 | 57.13 | 17.51 | 37.75 | 55.89 | 20.00 | 38.28 |

Source: Same as in Table 2A. Note: same as in Table 2A.

The changes in the labour force led to a notable increase in the labour-force-participation rate (LFPR), rising from 36.9 percent in 2017–18 to 40.1 percent in 2019–20. LFPR is nearly the same in rural and urban areas, but there is a significant gender gap, although this gap has been narrowing over the PLFS survey period. As of the latest data, 56.8 percent of men, 22.8 percent of women, and 40.1 percent of all individuals in India are part of the labour force. This increase in LFPR highlights the ongoing demographic dividend India is experiencing.

V. WORKER-TO-POPULATION RATIO

As already mentioned, some persons willing to undertake work either may not be getting any work or getting the work of their choice and are thus unemployed and not making contribution to the economy. The changes in the workforce of the country derived from the 5 PLFS data are presented in Table 3 A&B. The number of workers increased by 12.3 per cent in two years (2017–18 and 2019–20). The increase was 2.7 per cent during 2018–19 and 9.4 per cent in 2019–20. Just like the labour force, the increase in workforce was witnessed across the board. Of the total increase of 56 million workers, about 72% got work in rural areas. In other words, only 28% of new jobs were generated in urban areas. Another important change noticed from the PLFS data is that the increase in female workers was two times the increase in number of male workers. Between 2017–18 and 2019–20, 37.7 million women joined the workforce as against 18.3 million men.

The estimates of the worker-to-population ratio (WPR) reveal a substantial increase, with rural areas seeing a rise from 35.0 percent to 39.2 percent, and urban areas from 33.92 percent to 35.9 percent. The most notable increase in WPR is among women in rural areas, where the ratio of women in the workforce rose from 165 per 1,000 females in 2017–18 to 218 per 1,000 in 2018–19. Despite this improvement, the WPR for women remains less than half that of men. Current weekly status (CWS) is another key indicator of employment, showing the addition of 8 million new jobs in 2018–19 and 31.3 million in 2019–20. The WPR based on CWS increased from 32.63 percent in 2017–18 to 34.91 percent in 2019–20. Although the trend in CWS data mirrors that of Usual status employment, the increase is smaller in comparison. Overall, PLFS data from 2017–18 to 2019–20 indicate a significant rise in work opportunities, with more notable increases for women and in rural areas.



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Table 3A: Number of male and female workers in rural and urban India (in million): 2017–18 to 2019–20.

| Year | Status | | Rural | | 0. | Urban | | Rural + Urban | | | |
|---------|--------|-------|--------|--------|-------|--------|--------|---------------|--------|--------|--|
| | | Male | Female | Person | Male | Female | Person | Male | Female | Person | |
| 2017-18 | US | 246.0 | 79.2 | 325.3 | 103.8 | 26.8 | 130.6 | 349.9 | 106.0 | 455.8 | |
| 2018-19 | US | 244.9 | 86.0 | 330.8 | 109.0 | 28.5 | 137.5 | 353.9 | 114.4 | 468.3 | |
| 2019-20 | US | 255.4 | 110.2 | 365.5 | 112.8 | 33.6 | 146.4 | 368.2 | 143.7 | 511.9 | |
| 2017-18 | CWS | 235.4 | 67.1 | 302.4 | 101.2 | 25.2 | 126.3 | 336.6 | 92.3 | 428.8 | |
| 2018-19 | CWS | 233.2 | 70.2 | 303.4 | 106.8 | 26.8 | 133.5 | 340.0 | 94.3 | 436.8 | |
| 2019-20 | CWS | 239.8 | 91.3 | 331.1 | 106.4 | 30.6 | 137.0 | 346.3 | 121.9 | 468.1 | |

Source: Same as in Table 2A. Note: same as in Table 2A.

Table 3B: Workers to population ratio (%), according to gender and rural-urban categories, 2017-18 to 2019-20.

| Year | Status | | Rural | | | Urban | | Rural + Urban | | |
|---------|--------|-------|--------|--------|-------|--------|--------|---------------|--------|--------|
| | | Male | Female | Person | Male | Female | Person | Male | Female | Person |
| 2017-18 | US | 51.70 | 17.49 | 35.02 | 52.96 | 14.16 | 33.91 | 52.07 | 16.51 | 34.69 |
| 2018-19 | US | 52.06 | 18.96 | 35.80 | 52.70 | 14.51 | 34.11 | 52.25 | 17.61 | 35.29 |
| 2019-20 | US | 53.78 | 24.03 | 39.16 | 54.15 | 16.85 | 35.91 | 53.89 | 21.85 | 38.17 |
| 2017-18 | CWS | 49.47 | 14.81 | 32.56 | 51.60 | 13.32 | 32.80 | 50.09 | 14.37 | 32.63 |
| 2018-19 | CWS | 49.58 | 15.47 | 32.83 | 51.61 | 13.65 | 33.12 | 50.20 | 14.52 | 32.92 |
| 2019-20 | CWS | 50.50 | 19.92 | 35.48 | 51.08 | 15.34 | 33.60 | 50.68 | 18.53 | 34.91 |

Source: Same as in Table 2A. Note: same as in Table 2A.

VI. UNEMPLOYMENT

The unemployment results for 2017–18, 2018–19, and 2019–20, based on both usual status and current weekly status (CWS), reveal several key trends. In 2017–18, 29.1 million people were unemployed for most of the year under the usual status measure. This number decreased to 26.0 million by 2019–20, despite a substantial increase of 52.6 million new entrants into the labour force. Specifically, the number of unemployed persons declined from 18 million to 15 million in rural areas and from 11.1 million to 10.9 million in urban areas. The unemployment rate based on usual status also showed a significant decline, dropping from 6.07 percent in 2017–18 to 5.84 percent in 2018–19, and further to 4.84 percent in 2019–20. Unemployment rates in rural areas were consistently lower than in urban areas. Among rural areas, unemployment rates for females were lower than for males, whereas the opposite was true in urban areas. In contrast, unemployment based on current weekly status presented a more severe picture, with an increase of 3.4 million unemployed persons over two years. The CWS unemployment rate remained around 8.8 percent, showing no change over the three years. CWS unemployment was notably lower in rural areas compared to urban areas, with a decline in rural households and an increase in urban households.



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Table 4A: Number of unemployed persons by gender and rural urban categories based on Usual status and CWS (in Million): 2017–18 to 2018–19.

| Year | Status | | Rural | | | Urban | | Rural + Urban | | |
|---------|--------|------|--------|--------|------|--------|--------|---------------|--------|--------|
| | 10 | Male | Female | Person | Male | Female | Person | Male | Female | Person |
| 2017-18 | US | 15.2 | 3.1 | 18.3 | 7.9 | 3.2 | 11.1 | 23.1 | 6.4 | 29.4 |
| 2018-19 | US | 14.5 | 3.1 | 17.6 | 8.3 | 3.1 | 11.4 | 22.8 | 6.3 | 29.1 |
| 2019-20 | US | 12.1 | 3.0 | 15.1 | 7.7 | 3.3 | 10.9 | 19.8 | 6.2 | 26.0 |
| 2017-18 | CWS | 22.7 | 5.6 | 28.3 | 9.8 | 3.7 | 13.5 | 32.5 | 9.2 | 41.8 |
| 2018-19 | CWS | 22.5 | 5.6 | 28.0 | 10.4 | 3.7 | 14.1 | 32.8 | 11.9 | 42.2 |
| 2019-20 | CWS | 23.0 | 5.3 | 28.3 | 12.6 | 4.3 | 16.9 | 35.6 | 9.7 | 45.2 |

Source: Same as in Table 2A. Note: same as in Table 2A.

Table 4B: Unemployment rate (%) by gender and rural urban categories based on Usual status and CWS: 2017–18 to 2018–19.

| Year | Status Rural | | | | Urban | | Rural + Urban | | | |
|---------|--------------|------|--------|--------|-------|--------|---------------|------|--------|--------|
| | | Male | Female | Person | Male | Female | Person | Male | Female | Person |
| 2017-18 | US | 5.83 | 3.80 | 5.33 | 7.06 | 10.78 | 7.83 | 6.20 | 5.66 | 6.07 |
| 2018-19 | US | 5.59 | 3.51 | 5.06 | 7.09 | 9.88 | 7.66 | 6.06 | 5.22 | 5.84 |
| 2019-20 | US | 4.53 | 2.63 | 3.97 | 6.38 | 8.87 | 6.94 | 5.11 | 4.17 | 4.84 |
| 2017-18 | CWS | 8.81 | 7.67 | 8.57 | 8.83 | 12.83 | 9.67 | 8.81 | 9.11 | 8.88 |
| 2018-19 | CWS | 8.79 | 7.37 | 8.45 | 8.86 | 12.16 | 9.56 | 8.81 | 11.19 | 8.81 |
| 2019-20 | CWS | 8.76 | 5.50 | 7.87 | 10.59 | 12.39 | 10.99 | 9.32 | 7.35 | 8.80 |

Source: Same as in Table 2A. Note: same as in Table 2A.

VII. SECTOR DISTRIBUTION OF WORKERS

The distribution of the workforce among agriculture, industry, and services sectors, based on usual status, is detailed in Table 5 A&B. Historically, workforce distribution has shifted from agriculture to industry and services due to higher labor productivity in the latter sectors, as seen in previous Census and NSSO data. Consistent with this trend, the PLFS data showed a decrease in the share and number of workers in agriculture from 2017–18 to 2018–19. However, this trend reversed in 2019–20, with a significant increase in agricultural employment and its share of the total workforce, resulting in a decline in the shares of industry and services sectors. Despite this shift, job creation in industry and services continued to rise even during 2019–20, a year affected by Covid-19. The PLFS data indicate that the industry sector added 4.8 million jobs in 2018–19 and 3.4 million in 2019–20, while the services sector provided 10.1 million new jobs in 2018–19 and 6 million in 2019–20. Job creation might have been higher without the pandemic's impact in the last quarter of 2019–20.

The reversal in the declining trend of agricultural workforce share during 2019–20 can be attributed to two factors: the inclusion of the April to June 2020 quarter, which saw a growth of 3.45% in agriculture amidst a 26% decline in non-agriculture output due to Covid-19, and significant growth in labor-intensive subsectors like horticulture and livestock.



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Table 5A: Number of workers employed in agriculture, industry and services during PLFS years,

| Year | Sex | | Rural | | | Urban | | 1 | Rural + Url | oan |
|---------|--------|-------|----------|---------|-------|----------|---------|-------|-------------|---------|
| | | Agri. | Industry | Service | Agri. | Industry | Service | Agri. | Industry | Service |
| 2017-18 | Male | 135.2 | 56.8 | 54.0 | 5.6 | 37.4 | 60.9 | 140.8 | 94.2 | 114.9 |
| 2018-19 | Male | 130.3 | 57.8 | 56.9 | 5.4 | 38.5 | 65.2 | 135.6 | 96.3 | 121.9 |
| 2019-20 | Male | 141.5 | 58.7 | 55.2 | 5.6 | 38.6 | 68.6 | 147.1 | 97.2 | 123.7 |
| 2017-18 | Female | 58.0 | 10.8 | 10.4 | 2.4 | 8.1 | 16.3 | 60.4 | 18.9 | 26.7 |
| 2018-19 | Female | 61.1 | 13.2 | 11.7 | 2.2 | 8.3 | 17.9 | 63.3 | 21.4 | 29.6 |
| 2019-20 | Female | 83.4 | 14.4 | 12.3 | 2.8 | 9.4 | 21.4 | 86.1 | 23.9 | 33.7 |
| 2017-18 | Person | 193.2 | 67.7 | 64.4 | 8.0 | 45.4 | 77.2 | 201.2 | 113.0 | 141.5 |
| 2018-19 | Person | 191.3 | 70.9 | 68.5 | 7.6 | 46.8 | 83.1 | 199.0 | 117.8 | 151.6 |
| 2019-20 | Person | 224.8 | 73.1 | 67.5 | 8.4 | 48.0 | 90.0 | 233.2 | 121.2 | 157.5 |

Source: Same as in Table 2A. Note: same as in Table 2A.

Table 5B: Per cent distribution of workers over sectors and gender and industry type, 2017–18 to 2019–20.

| Year | Sex | | Rural | | | Urban | | 1 | Rural + Url | ban |
|---------|--------|-------|----------|---------|-------|----------|---------|-------|-------------|---------|
| | | Agri. | Industry | Service | Agri. | Industry | Service | Agri. | Industry | Service |
| 2017-18 | Male | 55.0 | 23.1 | 22.0 | 5.4 | 36.0 | 58.6 | 40.2 | 26.9 | 32.8 |
| 2018-19 | Male | 53.2 | 23.6 | 23.2 | 4.9 | 35.3 | 59.8 | 38.3 | 27.2 | 34.5 |
| 2019-20 | Male | 55.4 | 23.0 | 21.6 | 5.0 | 34.2 | 60.8 | 40.0 | 26.4 | 33.6 |
| 2017-18 | Female | 73.2 | 13.7 | 13.1 | 9.1 | 30.1 | 60.8 | 57.0 | 17.8 | 25.2 |
| 2018-19 | Female | 71.1 | 15.3 | 13.6 | 7.8 | 29.2 | 63.0 | 55.3 | 18.7 | 25.9 |
| 2019-20 | Female | 75.7 | 13.1 | 11.2 | 8.2 | 28.0 | 63.8 | 59.9 | 16.6 | 23.5 |
| 2017-18 | Person | 59.4 | 20.8 | 19.8 | 6.1 | 34.8 | 59.1 | 44.1 | 24.8 | 31.0 |
| 2018-19 | Person | 57.8 | 21.4 | 20.7 | 5.5 | 34.1 | 60.4 | 42.5 | 25.2 | 32.4 |
| 2019-20 | Person | 61.5 | 20.0 | 18.5 | 5.7 | 32.8 | 61.5 | 45.6 | 23.7 | 30.8 |

Source: Same as in Table 2A. Note: same as in Table 2A.

In 2019–20, 86.1 million women worked in agriculture, 33.7 million in services, and 23.9 million in industry, including construction. This distribution shows that 60 percent of all women workers were employed in agriculture, 17 percent in industry, and 23 percent in the service sector. For men, 40 percent were in agriculture, 27 percent in industry, and one-third in services. Notably, 60 percent of industry employment and 43 percent of service sector jobs originated in rural areas. Overall, 71 percent of the workforce was from rural households, with 29 percent from urban areas.

The year 2019–20 saw an increase in the share of agricultural employment, including a rise in the proportion of women working in agriculture. It was observed that 75.7 percent of rural women workers were employed in agriculture. During this year, agriculture and allied sectors employed 40 percent of male workers, 60 percent of female workers, and 45.6 percent of all workers. The industry sector absorbed 26 percent of male workers and 16.6 percent of female workers, while the service sector provided employment to 33.6 percent of males and 23.5 percent of females. Between 2017–18 and 2019–20, the industry sector created 8.12 million additional jobs, with 78 percent in construction. The manufacturing sector added 1.78 million jobs, showing a slight decline in male employment but an increase for women, rising from 13.21 million to 15.62 million.



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Table 6: Estimates of workforce in different categories of Industry, Million

| Year | Sex | Mining and quarrying | Manuf- acturing | Electricity, gas, steam and air conditioning supply | Water supply; sewerage, waste mgt. and remediation activities | Constru- ction | Total Industry |
|---------|--------|----------------------------|--------------------|---|---|-------------------|-------------------|
| 2017-18 | Male | 1.71 | 42.09 | 1.50 | 1.01 | 47.86 | 94.19 |
| 2018-19 | Male | 1.73 | 41.83 | 1.31 | 1.03 | 50.36 | 96.26 |
| 2019-20 | Male | 1.33 | 41.42 | 1.58 | 1.18 | 51.73 | 97.24 |
| 2017-18 | Female | 0.18 | 13.21 | 0.06 | 0.13 | 5.33 | 18.91 |
| 2018-19 | Female | 0.23 | 14.66 | 0.09 | 0.17 | 6.29 | 21.44 |
| 2019-20 | Female | 0.07 | 15.62 | 0.07 | 0.29 | 7.82 | 23.87 |
| 2017-18 | Person | 1.87 | 55.29 | 1.55 | 1.14 | 53.19 | 113.04 |
| 2018-19 | Person | 1.97 | 56.52 | 1.40 | 1.22 | 56.66 | 117.78 |
| 2019-20 | Person | 1.43 | 57.07 | 1.64 | 1.48 | 59.53 | 121.16 |

Source: Same as in Table 2A. Note: same as in Table 2A.

VIII. OCCUPATION STATUS

Workers are categorized into self-employed, casual labor, and regular wage/salary workers. In 2019–20, out of 274.1 million self-employed individuals, 74.25 percent worked in agriculture and 25.75 percent in non-agricultural sectors. There was a significant increase in the number of self-employed persons in both agriculture and non-agriculture sectors between 2017–18 and 2019–20.

Table 7: Distribution of workers among various occupation types, in million

| Year | Sector | Self employed | Regular wage/salary | Casual labour |
|---------|-----------------|---------------|---------------------|---------------|
| 2017-18 | Non-Agriculture | 90.7 | 101.7 | 62.3 |
| | Agriculture | 147.4 | 2.5 | 51.4 |
| | Total | 238.1 | 104.1 | 113.8 |
| 2018-19 | Non-Agriculture | 96.4 | 108.9 | 64.1 |
| | Agriculture | 147.6 | 2.4 | 49.1 |
| | Total | 243.9 | 111.4 | 113.2 |
| 2019-20 | Non-Agriculture | 100.8 | 113.3 | 64.9 |
| | Agriculture | 173.3 | 4.1 | 56.0 |
| | Total | 274.1 | 117.3 | 120.9 |

Source: Same as in Table 2A. Note: same as in Table 2A.

The composition of workers across the three occupational categories has remained relatively stable, with minor changes. In 2017–18, 52.2 percent of workers were self-employed, and 25 percent were employed as casual labor. By 2019–20, the proportion of casual labor decreased to 23.6 percent, while self-employment increased to 53.5 percent. Approximately 23 percent of workers were in regular wage or salaried positions during the same period.

IX. AGRICULTURE WORKFORCE: GENDER AND YOUTH

Popular perceptions about the agriculture workforce include the belief that women now make up a larger portion of the sector due to men migrating for better opportunities, that youth are leaving agriculture which could impact food production, and that de-peasantisation is occurring as small farms struggle to provide adequate income, pushing many farmers into agricultural labor. The PLFS data, presented in Tables 8A and 8B, provides insights into these perceptions.



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It shows that while the participation of women in agriculture has increased—from 30 percent in 2017–18 to 37 percent in 2019–20—men still dominate the sector, holding a 63 percent share of the agriculture workforce.

The agriculture workforce is increasingly shaped by the participation of women and youth, both of whom play crucial roles in sustaining agricultural productivity. Women contribute significantly to farming activities, yet they often face challenges such as limited access to resources, land, and decision-making power. Youth involvement in agriculture is essential for the sector's future, but it is often hindered by limited opportunities, lack of training, and the allure of urban employment. Addressing these challenges through targeted policies and programs can empower women and youth, ensuring a more inclusive and resilient agricultural workforce.

Table 8A: Number of agriculture workers by gender and age group, million

| Sex | Year | 8 | All age gr | roups | 50. | You | th (15-29 | year ag | e) |
|--------|-------------|------------|------------|-------|--------|------------|-----------|---------|--------|
| | *********** | Agricul | tural wor | ker | All | Agricul | tural wor | ker | All |
| | | Cultivator | Labour | Total | Worker | Cultivator | Labour | Total | Worker |
| Male | 2017-18 | 108.4 | 30.7 | 140.8 | 349.9 | 21.7 | 7.4 | 29.4 | 89.84 |
| | 2018-19 | 104.6 | 29.3 | 135.5 | 353.9 | 20.4 | 7.1 | 27.9 | 90.16 |
| | 2019-20 | 112.6 | 31.8 | 147.1 | 368.2 | 23.0 | 7.3 | 31.1 | 94.50 |
| Female | 2017-18 | 39.0 | 20.7 | 60.4 | 106.0 | 7.6 | 3.8 | 11.5 | 23.51 |
| | 2018-19 | 42.8 | 19.7 | 63.3 | 114.4 | 7.4 | 3.4 | 11.0 | 23.42 |
| | 2019-20 | 60.6 | 24.1 | 86.2 | 143.7 | 11.6 | 4.0 | 15.9 | 30.72 |
| Person | 2017-18 | 147.3 | 51.4 | 201.2 | 455.8 | 29.2 | 11.1 | 40.9 | 113.39 |
| | 2018-19 | 147.5 | 49.1 | 199.0 | 468.3 | 27.8 | 10.5 | 38.8 | 113.61 |
| | 2019-20 | 173.2 | 56.0 | 233.3 | 511.9 | 34.6 | 11.3 | 47.0 | 125.24 |

Source: Same as in Table 2A. Note: same as in Table 2A.

Table 8B: Per cent distribution of agricultural worker among cultivators and labour categories by gender and age group (youth) 2017–18 to 2019–20.

| Sex | Year | India All age group | | | | Youth (15-29 year age) | | | |
|--------|---------|---------------------|--------|--|-------|------------------------|--------|--|-------|
| | | Agricultural worker | | | WPR | Agricultural worker | | | WPR |
| | | Cultivator | Labour | Agri. Worker % to Total worker | | Cultivator | Labour | Agri. Worker % to Total worker | |
| Male | 2017-18 | 76.96 | 21.83 | 40.24 | 52.07 | 73.63 | 25.01 | 32.73 | 48.32 |
| | 2018-19 | 77.18 | 21.60 | 38.28 | 52.25 | 73.17 | 25.47 | 30.89 | 48.59 |
| | 2019-20 | 76.55 | 21.63 | 39.95 | 53.89 | 73.97 | 23.33 | 32.9 | 50.94 |
| Female | 2017-18 | 64.52 | 34.21 | 56.99 | 16.51 | 65.75 | 33.00 | 48.87 | 13.46 |
| | 2018-19 | 67.66 | 31.20 | 55.29 | 17.61 | 67.3 | 30.99 | 46.82 | 13.32 |
| | 2019-20 | 70.34 | 28.00 | 59.95 | 21.85 | 72.63 | 25.31 | 51.86 | 17.55 |
| Person | 2017-18 | 73.23 | 25.55 | 44.13 | 34.69 | 71.42 | 27.24 | 36.08 | 31.44 |
| | 2018-19 | 74.15 | 24.66 | 42.49 | 35.29 | 71.52 | 27.03 | 34.17 | 31.43 |
| | 2019-20 | 74.25 | 23.99 | 45.57 | 38.17 | 73.51 | 24.00 | 37.55 | 34.73 |

Source: Same as in Table 2A. Note: same as in Table 2A.

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X. CONCLUSIONS

India has faced significant challenges in aligning structural changes in output with employment growth. While the non-agriculture sector has experienced substantial output growth, this has not translated into proportional employment growth. Additionally, improvements in literacy, education, and skills have increased the demand for better job opportunities, but job creation has not kept pace with this demand. Moreover, the rising preference for government jobs due to job security and benefits has further impacted the labor market. The Periodic Labour Force Survey (PLFS), which began in 2017–18, has been instrumental in filling the data gap on employment, providing insights for evidence-based policymaking. This analysis uses PLFS data from 2017–18, 2018–19, and 2019–20 to examine employment trends and assess common assertions about the labor market.

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