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Adapting to Workforce Changes: Analyzing Employment Trends and Challenges in the Evolving Labour Market

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ABSTRACT: This study explores the dynamic shifts in workforce composition and employment trends in response to technological advancements, globalization, and demographic changes. The labor market has undergone significant transformations, leading to new challenges and opportunities for both employers and employees. Technological innovations, particularly automation and artificial intelligence, are redefining job roles and skill requirements, resulting in a growing demand for highly skilled workers while simultaneously displacing traditional, manual jobs. Globalization has further intensified competition, enabling companies to access a broader talent pool but also pressuring local labour markets. The research delves into the implications of these workforce changes, examining how they affect employment patterns, job security, and the future of work. Special attention is given to the rise of the gig economy, remote work, and flexible employment arrangements, which are increasingly becoming the norm in many industries. These trends are reshaping the traditional employer-employee relationship and raising questions about workers' rights, job satisfaction, and income stability. Demographic changes, such as an aging population and shifting workforce participation rates, are also considered, highlighting the need for policies that support lifelong learning and re-skilling to ensure workers remain competitive in the evolving job market. The study emphasizes the importance of proactive measures by governments, educational institutions, and businesses to address these challenges, including the development of adaptive labour policies, investment in education and training, and fostering a culture of innovation. By analyzing these workforce changes, this research aims to provide valuable insights into the future of employment, offering recommendations for navigating the complexities of the modern labour market and ensuring sustainable economic growth.

KEYWORDS: Workforce Transformation, Employment Trends, Gig Economy, Technological Disruption, Labor Market Adaptation

I. INTRODUCITON

Employment has long been one of the most difficult issues for Indian policymakers, and it has only grown more complex over time. One, there has been significant improvement in literacy, schooling, and acquisition of higher education, skills, and vocational education in the country. The educated and trained workforce seeks not only jobs, but also respectable ones with improved working conditions, regular employment, and better pay. However, job development for this type of work has not kept up with the growth in the number of job searchers. Two, the labour class's aspirations have grown in tandem with the country's general progress. Three, growth in the industries and services sectors has been relatively uneven between regions and states. This has resulted in a mismatch between employment opportunities and labour supply at the local level. Fourth, there is a significant difference between structural changes in the mix of output and employment. The industry and services sectors, which account for more than 80% of the country's gross value added, employ 54.4% of the workforce, while agriculture, which contributed for 18.29% of GVA in 2019-20, retains 45.6% of the workforce.

India has seen more or less continuous and gradual changes in the structure of its output, particularly following the economic reforms of 1990-91. The economy's growth rate, defined by gross value added at constant prices, increased from 4.27 percent twenty years prior to the economic reforms to 6.34 percent twenty years later. The growth rate in GVA accelerated further, reaching 6.58 percent between 2010-11 and 2019-20 at 2011-12 prices. This economic trajectory was accompanied by a gradual fall in the share of agriculture and an increase in the share of non-agricultural sectors in the overall economy. The shift in sectoral shares accelerated with time. However, the employment trend did not follow a constant and unambiguous pattern. This is due in part to demographic shifts and rising enrolment in



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postsecondary education. Many other factors, such as technical advancements, sectoral composition of production, the transfer of female labour from household to outside activities and vice versa, skill development, mechanisation, and labour laws and regulations, have all contributed to changes in the workforce and employment. These difficulties have resulted in a wide range of employment-related conclusions from experts and studies. The situation is exacerbated by a significant gap in statistics on numerous areas of employment.

Two important sources of data on the workforce and employment have been (i) the decennial population census and (ii) nationwide quinquennial surveys on employment and unemployment conducted by the former NSSO under the Ministry of Statistics and Programme Implementation (MoSPI), Government of India. The Census data is provided every 10 years, with the most recent data being from 2011. Similarly, quinquennium NSSO statistics on employment and unemployment are only available for 2011-12. The Periodic Labour Force Survey (PLFS), conducted by the National Statistical Office (NSO) of MoSPI, replaced the nationwide Employment and Unemployment (E&U) surveys beginning in 2017-18. Annually, PLFS data are available for both rural and urban areas, as well as the entire population. In contrast, only metropolitan families have access to quarterly statistics.

According to NSO, the PLFS statistics measure the dynamics of labour force participation, workers-to-population ratio, and employment status, as well as other relevant parameters for both rural and urban areas, in the typical and current weekly statuses (CWS) on an annual basis. Furthermore, PLFS highlights employment aspects for a three-month period in CWS's urban areas solely (MoSPI 2021). The PLFS surveys have a different sample framework and analytical approach than the NSSO employment surveys (Kannan and Khan 2022). As a result, the time series data on E&U accessible from NSSO surveys are incompatible with the PLFS data. Annual data sets from the PLFS are now available for three consecutive years: 2017-18, 2018-19, and 2019-20. The quarterly data is provided up to April-June 2021, although it only includes urban households. Although three years of data is insufficient to draw broad conclusions about an underlying trend, it is very rich and can be safely used to reveal the impact of various policies and developments implemented during the current regime at the Centre, as well as to understand and shape the country's employment situation. This study examines the country-level scenario of changes in employment and workforce using annual PLFS data from 2017-18, 2018-19, and 2019-20. Many studies and media pieces have voiced considerable concern about the country's deteriorating employment situation in recent years (Anand Thampi 2021; Mehrotra and Jajati 2021; Mehrotra and Tuhinsubhra Giri 2021). This article investigates the accuracy of allegations such as (i) a recent reduction in the worker-to-population ratio, (ii) an increase in unemployment, (iii) women's exit from the labour force, and (iv) a deterioration in the country's general employment situation, among others.

II. GROWTH RATE IN ECONOMIC ACTIVITIES DURING PLFS PERIOD

The progress and success of economic activity in numerous areas are important factors influencing the workforce and employment. As a result, it is important to consider the changes in employment across the three PLFS annual surveys in light of the economy's expansion. In doing so, the reference period for the economy's growth rate should match to the period of PLFS surveys, which is from July to June, rather than the Fiscal Year, which is from April to March. To bring the PLFS estimate and the economy's yearly growth rate to the same reference periods, the growth rates for Gross Value Added output were adjusted from July to June. The relevant growth rates are shown in Table 1.

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.



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The PLFS year 2019-20 includes the first quarter of FY 2020-21, from April to June 2020, when the country saw the first wave of the Covid-19 pandemic, causing significant interruption in economic activity. The non-agriculture sector's GVA fell by 26.45 percent in this quarter, resulting in a 22.37 percent contraction in the whole economy when compared to the same quarter last year. Despite Covid-19, agriculture GVA continued to expand since production and marketing operations were immune from pandemic-related limitations. This quarter also experienced a large-scale reverse movement of labour from its locations of work to native locales, as well as from urban to rural During the full PLFS year 2019-20, the GVA in the total economy fell by 2.85%, but the agriculture and allied sector grew at twice the rate seen in the preceding pre-Covid year. This had an impact on employment levels and worker distribution across agriculture and non-agriculture sectors, as well as rural and urban households.

III. LABOUR-FORCE-PARTICIPATION RATE

The labour force includes people who are either working (or employed) or looking for work (or jobless). Some people in the labour force refrain from working for a variety of reasons. Subtracting that number from the labour force yields the number of actual workers. These workers are further classified as self-employed, regular wage/salaried, and casual labourers. The discrepancy between the labour force and the workforce represents the number of unemployed people. Table 2 A&B shows how the labour force has changed in rural, urban, and all households from 2017-18. The country's labour force increased from 485.3 million in 2017-18 to 497.4 million in 2018-19. The next year, the labour force expanded by 8%, reaching 537.9 million. This increase was observed across both male and female populations, as well as rural and urban households. Urban areas have seen a significantly lesser increase than rural locations. At the aggregate level, the rural labour force accounted for 70.7% of the total labour force in 2019-20, the same as in 2017-18. In two years, the proportion of women in the work force climbed from 23.1% to 27.9%.

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

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 | 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 | |



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These changes in the labour market resulted in considerable increases in the labor-force participation rate (LFPR), which increased from 36.9 percent in 2017-18 to 40.1% in 2019-20. The labor-force participation rates in rural and urban areas are essentially identical. However, there is a significant disparity between males and females, which appears to be narrowing during the PLFS survey period. The most recent data shows that 56.8 percent. In India, 22.8 percent of men, 22.8 percent of women, and 40.1 percent of the total population work. The rise in the LFPR indicates the demographic dividend that India is experiencing.

IV. WORKER-TO-POPULATION RATIO

As previously said, some people who are willing to work may not find work or may not find work that suits them, leaving them unemployed and unable to contribute to the economy. Table 3 A&B shows changes in the country's workforce based on PLFS data. The number of workers increased by 12.3% in two years (2017-18 and 2019-20). The rise was 2.7% in 2018-19 and 9.4% in 2019-20. The expansion in workforce, like that in the labour force, was widespread. Of the overall increase of 56 million workers, approximately 72% found work in rural communities. In other words, only 28% of new jobs were created in metropolitan regions.

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

| Year | Status | Rural | | | | 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 | |

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 | |

Part B of Table 3 presents estimates of the worker-to-population ratio (WPR). This shows a significant increase in WPR. The WPR in rural regions climbed from 35.0 to 39.2 percent, while in urban areas it increased from 33.92 to 35.9 percent. Women in rural areas have experienced the greatest growth in WPR of any category. In 2017-18, 165 women out of a total of 1000 were employed. This ratio rose to 218 in 2018-19. Despite this growth, the country's worker-to-population ratio for women has remained less than half that of men. Some experts prefer to utilise workers' current weekly status as an indicator of employment. Table 3 shows workforce estimates (percentage and absolute number) based on CWS. This indicates that 8 million new jobs were created in 2018-19 and 31.3 million in 2019-20. The WPR based on CWS rose from 32.63 percent in 2017-18 to 34.91 percent in 2019-20. The direction and pattern of change in employment based on CWS data were similar to Usual status employment, however the former increased less than the



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latter. The PLFS figures plainly show that labour opportunities in the country increased significantly between 2017-18 and 2019-20. The growth is bigger among women and in rural regions.

V. UNEMPLOYMENT

Table 4 A&B shows the country's unemployment rates for 2017-18, 2018-19, and 2019-20, as well as the normal and current weekly status. During 2017-18, 29.1 million people in the country's labour force were unemployed for the majority of the year, depending on their normal status. Their number fell to 26.0 million in 2019-20, despite a massive surge of 52.6 million new recruits to the labour force. The number of unemployed people with normal status decreased from 18 million to 15 million in rural areas and from 11.1 million to 10.9 million in metropolitan areas. In normal times, the unemployment rate is far lower. The unemployment rate fell from 6.07 percent in 2017-18 to 5.84 percent in 2018-2019.

This was followed by a further fall to 4.84% in 2019-20. Rural areas had far lower unemployment rates than metropolitan areas. Similarly, rural females had a lower unemployment rate than rural males, but the reverse was true in urban areas. The extent and incidence of unemployment based on current weekly status of employment is more severe and shows an increase in the number of unemployed persons in two years by 3.4 million. The unemployment rate based on current weekly status is around 8.8 per cent, and does not show any change during the last three years. CWS unemployment was found to be much lower in rural areas than in urban areas. Also, it showed a decline in rural households and a rise in urban households.

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 | | |
|---------|--------|-------|--------|--------|------|--------|--------|---------------|--------|--------|
| | | 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 |

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 |

VI. SECTORAL DISTRIBUTION OF WORKERS

However, the total number of jobs produced in industry and services continued to rise, even in 2019-20, which included three months (a quarter) of Covid19-related economic activity. According to the PLFS forecasts, the industry created 4.8 million new employment in 2018-19 and 3.4 million in 2019-20. Similarly, the services industry created 10.1



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million new jobs in 2018-19 and 6 million in 2019-20. It is plausible to expect that job creation in 2019-20 could be significantly higher if the Covid19 effect on economic activity in the fourth quarter did not exist. Two reasons contributed to the reversal of the falling trend in agricultural workforce participation in 2019-20. One, the fiscal year 2019-20 includes the April to June quarter of 2020, which coincided with the end of the Covid-19 pandemic. The final quarter of PLFS 2019-20 (which is the first quarter of FY 2020-21) indicates a reasonable growth rate (3.45%) of the agriculture sector in contrast to the 26% fall in the production of the non-agriculture sector. Two, the agriculture sector grew substantially faster in labour-intensive horticulture and livestock subsectors.

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

| Year | Sex | Rural | | | Urban | l | | Rural | + Urban | |
|---------|--------|-------|----------|---------|-------|----------|---------|-------|----------|---------|
| | | 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 |

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

| Year | Sex | Rural | | | Urban | Urban | | | Rural + Urban | | |
|---------|--------|-------|----------|---------|-------|----------|---------|-------|---------------|---------|--|
| | | 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 | |

In terms of gender, 86.1 million women worked in agriculture, 33.7 million in services, and 23.9 million in industries like as construction. According to these figures, 60% of all female workers in the country worked in agriculture, 17% in industry, and 23% in the service sector in 2019-20. For male workers, 40% worked in agriculture, 27% in industry, and one-third in the service sector. It is interesting to note that 60% of employment in the industry sector and 43% in the service sector originated in rural areas. As previously stated, the agricultural and allied sectors' share of employment in the country increased in 2019-20. In the same year, the proportion of women in the workforce employed in agriculture grew, as did the proportion of women involved in agriculture among all women workers. The chart also reveals that 75.7% of all rural women workers were employed in the agriculture industry. During 2019-20, the agriculture and allied sectors employed 40% male workers, 60% female workers, and 45.6% of total workers. The industry sector



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employed 26% of male workers and 16.6% of female employees. The service industry employed 33.6% men and 23.5% women.

Table 6 shows the changes in employment in various activities classified by industry group. Between 2017-18 and 2019-20, 8.12 million extra jobs were produced in industry, with the construction sector accounting for 78%. The manufacturing sector's employment data shows a 1.78 million job increase throughout this time period. Furthermore, male employment in manufacturing is somewhat declining, while female employment has increased from 13.21 million to 15.62 million.

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

| Year | Sex | Mining and quarrying | Manufa -cturing | Electricity,gas, steam and air conditioning supply | Water supply; sewerage,waste mgt.and remediation | Construction | Total Industry |
|---------|--------|----------------------------|--------------------|---|---|--------------|-------------------|
| 2017 10 | 3.5.1 | 4.54 | 42.00 | 1.50 | activities | 45.06 | 0.4.40 |
| 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 |

VII. OCCUPATION STATUS

Workers are grouped into three occupational statuses: self-employed, casual labour, and regular wage/salary. Table 7 shows how the total number of workers is divided across these three categories. Agriculture has a substantially greater rate of self-employment than non-agricultural firms. Of the 274.1 million self-employed people in 2019-20, 74.25 percent worked in agriculture and 25.75 percent in non-agriculture. Between 2017-18 and 2019-20, the number of self-employed individuals increased significantly in both the agricultural and non-agricultural sectors.

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

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



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With the exception of a little fluctuation, the composition of workers across the three groups has remained rather consistent. In 2017-18, one-fourth of all workers were working as casual labourers, while 52.2% were self-employed. In 2019-20, the proportion of casual work fell to 23.6%, while the proportion of self-employed persons climbed to 53.50%. Approximately 23% of all workers were employed in regular wage or salary positions.

VIII. AGRICULTURE WORKFORCE: GENDER AND YOUTH

Some widespread perceptions about the agricultural workforce require empirical verification. It is frequently stated that agriculture employs more women than males, as the latter migrate away from rural areas in quest of better opportunities. Another common assumption is that young people are leaving agriculture, which can have a negative impact on agriculture productivity and bring uncertainty to the future of food production. It is also said that agriculture is undergoing de-peasantisation since small holdings do not generate enough money, leading many farmers to join the ranks of agricultural labourers.

Table 8A shows the actual status of the farm workforce by gender and age group, whereas Table 8B shows how they are distributed within these groups. The PLFS data demonstrate that women's participation in agriculture is increasing. Female workers accounted for 30% of the agricultural workforce in 2017-18 and 37% in 2019-20. Men continue to dominate agriculture, accounting for 63% of the labour.

IX. CONCLUSIONS

India has witnessed a significant mismatch between structural changes in output and employment, as the non-agriculture sector's growth rate has not resulted in corresponding employment. Furthermore, improvements in literacy, schooling, and attainment of higher education and skills, as well as vocational education, have resulted in a considerably faster increase in the number of people seeking decent jobs with improved work environments, consistent employment, and higher pay. Job creation for this type of employment has not kept up with the growing number of job searchers. Finally, because of employment stability, guaranteed compensation, and other pay and prestige benefits, the preference for government work has skyrocketed. The labour force in the country rose by 10.8 percent in the two years following 2017-18, raising the LFPR from 36.9 percent to 40.1 percent. Between 2017-18 and 2019-20, female labour increased significantly, increasing their share of the overall work force in the country from 23.1 to 27.9 percent. According to the most recent PLFS data, 56.8 percent of men, 22.8% of women, and 40.1% of all people in India are employed.

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