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KARNATAKA
JOBS REPORT 2022-23

A QUESS-FICCI Joint Report

Authored by:
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Senior Research Analyst
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PREFACE

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The Sustainable Development Goal lay out the need for 'Decent Work and Economic Growth". The state of Karnataka recognizes that formalization of labour force would help reduce poverty, improve living standards, raise productivity, and strengthen social cohesion. Karnataka Economic Survey 2021-22 has highlighted the need for regular publication on creation of formal jobs based on EPFO, NPS, ESIC and e-Shram data. With the data support from Directorate of Economics and Statistics of Planning Department, expert agency, Quess Corp-Bengaluru has prepared the first ever Jobs Report 2022-23.

This report is a preliminary step towards building data-driven policies, programs, and strategies to achieve progress towards formalization of labour market. I am happy to note that the state of Karnataka has about 24.7% of its workforce employed in the formal sector, which is significantly higher than the national average of 20%. The state now needs to accelerate its pace of formal job creation with timely and efficient interventions. This would require periodical data collection and analysis, continuous progress monitoring and timely actions towards adjustments of policies and strategies, at various levels.

I am confident that Directorate of Economics and Statistics in collaboration with expert/s will take this forward through publication of quarterly report, as it provides insights for planning and budgeting for Welfare Schemes.

Shalini

(Dr. Shalini Rajneesh)

PREFACE

It is well-established that job-led growth is one of the most sustainable models of economic development and growth. To achieve this, increasing the pace of formal job creation is critical.

I am happy to note that the findings of this report indicate that Karnataka is a leader in formal job creation in India. The report highlights that the state accounts for nearly 11 percent of net new job additions in India. The proportion of the state's population engaged in the formal sector is also higher than the national average. This creates promising possibilities for the state's industry and trade prospects.

Thus, as we move further towards a knowledge-based economy, the state is well-positioned to leverage its large base of skilled workforce to attract firms to set up their operations within Karnataka. Furthermore, the increased demand for skilled workforce from the large number of MSME's in the state coupled with the demand from the ever-booming IT and tech-driven sectors is a key factor for the state to take concerted efforts towards improving skilling. Undertaking skilling efforts at graduation level with constructive partnership with Industry, Government, and Academia can fast-track the progress of formal job creation. This is required at both the state and district levels.

As this report reveals, Karnataka has already made steady progress in transforming its informal economy into formal and I take this opportunity to congratulate the state on its achievements.

I thank Quess Corp for developing this report and the Department of Planning, Program Monitoring and Statistics, Government of Karnataka, for all their support and guidance. We hope the findings and recommendations serve as useful policy guides to planners, policy makers, academicians, and researchers.

K Ullas Kamath,
Chairman,
FICCI Karnataka State Council

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SUMMARY

Karnataka is one of the fastest-growing and largest state economies, with a per capita GSDP of INR 3.05 lakh in fiscal 21-22. The state's economic growth is reflected in high job creation. Karnataka's net formal employment generation from September 2017 to November 2022 was 67.94 lakh, according to an analysis of the Employees Provident Fund Organisation (EPFO) and Employees State Insurance Corporation (ESIC) monthly data. Even though Karnataka holds just 4.75% of India's total population, the state accounts for a much higher percentage of net formal jobs added in the last five years, as reflected in EPFO payroll and the ESIC member database, the second highest after Maharashtra.

According to the Karnataka Economic Survey 2021-22 the state's estimated population of 6.66 crore in 2022, of which, around 45% of them, or 2.99 crore, are estimated to be part of the workforce. Like the rest of India, the majority of workers remain in the informal job sector, particularly in the agriculture and rural sectors. They lack access to social security benefits such as the employee provident fund, medical insurance, gratuity, and maternity leave, making them extremely vulnerable to market uncertainties. This report analyses the formal workforce data for Karnataka and India based on EPFO and ESIC monthly/annual reports and takes into account the number of state and central government employees who are part of the formal workforce. It makes a comprehensive analysis of job scenarios in India based on age, sector, gender and states using the EPFO, ESIC, National Pension System, and e-Shram data.

The analysis finds that, of an estimated 2.99 crore people in the workforce in Karnataka, 24.74% are employed in the formal sector. This is 4.74 percentage points higher than the national average of 20%. Since 46.6% of Karnataka's total workforce is engaged in the agriculture sector as per the Periodic Labour Force Survey (PLFS) report, which is informal by nature, we can conclude that the remaining 1.59 crore people (53.4%) are working in the non-agriculture sector. Within the non-agriculture sector, 46.54% of workers are employed in the formal sector, which is 9% higher than India's formal sector employment in the non-agriculture sector.

An analysis of the EPFO payroll data for the last five years given below shows Karnataka has added 49.94 lakh formal jobs since September 2017, with the state accounting for 10.49% of the total net new job additions as per the EPFO's old methodology database. The state's contribution to the national EPFO additions was the highest in 2021-22 at

12.2%, compared to the previous four years. It implies that the state is making steady progress in formal job creation. Overall, Karnataka is the national leader in net EPFO job additions, second only to Maharashtra.

Table: Net new subscribers on EPFO in India and Karnataka (in lakhs). India's methodology was updated to correctly count exited and rejoined subscribers, while state analysis methodology has not been updated.

Year	India (new methodology)	India (old methodology)	Karnataka (old methodology)	% of KA to India
2017-18 (from September	73.8	15.5	1.48	9.5%
2018-19	112.5	61.1	6.2	10.1%
2019-20	94.7	78.5	8.1	10.3%
2020-21	94.5	77.0	7.5	9.7%
2021-22	138.2	122.3	15.0	12.2%
2022 (April – Nov)	112.1	105.4	11.6	11%

Additionally, the ESIC data shows Karnataka has added 24 lakh formal jobs between September 2017 and March 2021, which is next to Maharashtra and Tamil Nadu. Assuming that a quarter of these jobs overlap with EPFO, we can deduce that the state has added a total of 67.94 lakh jobs in the formal sector (49.94 lakh EPFO and 18 lakh ESIC), excluding the government jobs. So by combining EPFO and ESIC data, we can say that Karnataka has been creating on average 13.58 lakh formal jobs every year since September 2017. Since 49.58% of the net EPFO and ESIC subscriptions added in India in the last five years are in the age group of 18-25, we have applied the same logic to Karnataka and estimate that 33.63 lakh out of 67.94 lakh net formal jobs added in Karnataka in the last five years are in the 18-25 age bracket and are possibly first time job seekers.

Karnataka's unemployment rate, at 2.7% as per the latest PLFS report, is much lower than India's figure of 4.2%.

Although Karnataka is a prominent formal job-generating state, there is a need to accelerate formal job creation as well as to formalise the existing informal job sector. Bringing unorganised sector employees to the formal sector by removing regulatory barriers and through skilling programmes will have positive economic and social implications.

The report offers comprehensive recommendations to the Karnataka government regarding formalising jobs. In a nutshell, they are:

- Carry out district-wise data analysis of formal job creation.
- Introduce a scheme to pay employers' contributions to social security benefits for the first couple of years.
- Identify 10 poor and backward districts and introduce an incentive programme for formal job creation.

JOB SCENARIO IN KARNATAKA AND INDIA

Karnataka has set a goal to become a 1 trillion-dollar GDP economy by 2032, aligning with India's aim to achieve 10 trillion-dollar GDP over the next decade, implying that state hopes to contribute 10% of the national GDP by 2032.

Karnataka is the second-most prominent formal job-generating state for young people after Maharashtra. The state's sizeable revenue comes from the services sector, primarily information technology (IT) and start-ups (services sector contributed 66.1% to GSVA in 2021-22), followed by the industry (19.8%) and agriculture sectors (14.1%). It is the second-highest Goods and Services Tax (GST)-collecting state after Maharashtra. Karnataka's GST collection in 2021–22 was Rs 42,761 crore. The state surpassed Gujarat by collecting Rs 59,035 crore in GST in the first six months of financial year 2022-23. The state's monthly GST collection crossed Rs 10,000 crore in a row in the last three months. On the employment generation front, Karnataka Employment Policy 2022–25 aims to create 7.5 lakh jobs in the next three years, mainly in the textile and garment sector. Meanwhile, the Karnataka Digital Economy Mission (KDEM) is expected to create 10 lakh jobs by 2025, largely in the IT sector.

As per Census 2011, 2.78 crore out of 6.11 crore people (45.49%) in Karnataka were engaged in work activities. The Census 2001 report showed 2.35 crore out of 5.29 crore people (44.42%) were employed or in the working category. There was a 1.07% increase in the number of people engaged in work activities between 2001 and 2011. With an estimated population of 6.66 crore as per the Karnataka Economic Survey 2021–22, around 2.99 crore people (around 45%) may be employed or working in the state.

However, the number of people in the age group of 22–60 who are eligible to work could be a lot higher than the actual number of people working or employed. Below is the analysis.

Karnataka's population vs working population

Of Karnataka's 6.66 crore population, the number of infants and children below the age of six is estimated at 63 lakh. This is considering that, on average, 10.55 lakh babies are born in the state every year, as per the data from the Civil Registration System. The Department of School Education data shows approximately 1.2 crore children go to school (including higher secondary students) in Karnataka. The number of college-

going students, most of whom are yet to join the workforce, is 21.82 lakh, according to the Department of Higher Education's (AISHE) report 2020-21. Apart from this, Karnataka has 76.58 lakh people above the age of 60, as per the Karnataka: A $1 Trillion GDP Vision (2022) report. Therefore, cumulatively, 2.82 crore people (42.34%) out of Karnataka's total population of 6.66 crore substantially remain out of the workforce because of their age and occupation. It implies that the remaining 57.55% (3.84 crore) of Karnataka's total population is eligible to participate in the workforce.

That said, the Periodic Labour Force Survey annual report of 2020-21 and extrapolation of the Census data of 2001 and 2011 place Karnataka's worker population ratio (WPR) at 43.5% and 46.5%, respectively, with an average WPR of 45% (2.99 crore). Approximately a 12.5% gap exists between the actual population eligible to work (57.50%) and those who are in the workforce (45%). I.e., around 85 lakh people who could be potentially employed remain out of the workforce. A large proportion of women in the age group of 22–60 who are not in the workforce either out of choice or otherwise due to marriage, child-bearing, elderly care and other family obligations. The unemployment rate (UR) in Karnataka is 2.7% as against the national UR of 4.2%, according to the PLFS report. Unemployment among women is slightly higher at 2.8% compared to men (2.7%). UR in urban areas is higher at 3.8% compared to rural areas (2.2%).

India's population vs working population

As far as India is concerned, the country's population as of the 2001 Census was 102 crore, with a working population ratio of 39.11% (39.89 crore). In 2011, the population was 121 crore, with 39.78% of them (48.13 crore) employed or in the working category. 2011 reported a slight increase of 0.67% in the working population ratio compared to 2001. By applying the same logic to 2022, out of India's estimated population of 141 crore, around 40.45% (57 crore) of them may be employed or working.

But then, as is the case with Karnataka, the number of people in the age group of 22–60 who are eligible to work but have remained out of the workforce is on the higher side. Below is the analysis to explain this gap.

With an average 2.32 crore infants born in the country every year as per the Civil Registration System data, the total number of children below the age of six who are yet to join the formal education is estimated to be around 13.96 crore. According to the Department of School Education database, the total number of school-going children is 26.52 crore. Add to this the number of students who have enrolled and are pursuing higher education, which is 4.14 crore, according to AISHE report. India has an elderly population (over 60 years) of 14.24 crore, which is 10.1% of the population. The above-mentioned categories account for 41.74% (58.86 crore) of India's total population. Essentially, it means the remaining 58.26% of the population (82.14 crore) is eligible to join the workforce. But the actual workforce seems to be different.

According to the PLFS annual report 2020–21, India's worker population ratio stands at 39.8%, whereas an extrapolation of the Census data of 2001 and 2011 puts India's worker population ratio at 40.45%. An average WPR of PLFS and the Census data would be 40.12%. It implies that of the 58.26% of India's total

population who are eligible to join the workforce, only 40.12% are working. Therefore, there exists a gap of 18.14%, which is essentially the population that remains out of workforce although it has the potential to work. Again, a large proportion of this population is made up of women who remain out of the workforce for reasons such as childbearing and family responsibilities.

India's unemployment rate, as per the PLFS 2020-21 annual report, is 4.2%, with a UR of 4.5% among men compared to 3.5% among women. The unemployment rate in urban areas is higher at 6.7% compared to 3.3% in rural India.

Formal jobs estimation for India

Informal jobs dominate the Indian labour market. PLFS's annual report 2020-21 shows 46.5% of India's working population is in the agriculture sector (cultivators and agriculture labourers), the largest of the informal sectors. Of the remaining working population, 75.3% are engaged in non-agriculture informal sectors. Therefore, cumulatively, around 86.5% of India's working population is engaged in the informal sector, while around 13.5% of them (7.69 crore out of 57 crore) are estimated to be employed in the formal sector with social security benefits, as per the PLFS report.

However, an analysis of the administrative data sets primarily used to gauge formal job creation and job formalisation in India and an estimation of the government employees show the percentage of formal jobs in India could be higher than what is projected in the PLFS report. The datasets used to determine the formal job sector in India are the monthly and annual payroll reports of the Employee Provident Fund Organisation (including the private trust-run provident funds) and the Employees State Insurance Corporation (ESIC). An increase in net EPFO enrolment and new ESIC subscribers indicates a surge in job creation as well as the formalisation of the existing workforce. Since the EFPO data does not include provident funds that government employees contribute to, an estimation was made to calculate the number of government employees in the formal workforce based on the publicly available statistics.

As per the data available in the EPFO dashboard, 6.83 crore members have contributed monthly to the EPFO as of January 2023, i.e., the number of people on payroll and in the formal sector. The contributing establishments is 7.38 lakh. Separately, the number of ESIC members who paid contribution as of November 2022, is 2.77 crore. Assuming that a quarter of ESIC subscribers are also enrolled in the EPFO (to avoid possible overlap), we can deduce that around 2.07 crore are unique number of subscribers registered with the ESIC. This makes a total of 8.9 crore contributing to EPFO/ESI. The numbers best may differ on a month-to-month basis.

The last category of the formal workforce is the government employees, including those working in the central, state governments, or on contract with them, and parastatals who are funded by the budget.

Official data on the total number of government employees both States and Central is not readily available (though the data must be made public). We have estimated the government employees to be 2.5 crore on the basis of various data sources. The finance ministry's pay and allowance annual report (2019-20) puts the total number of central government civilian employees at 31.33 lakh. Additionally, a

report on defence manpower, estimates the number of defence personnel at 14.38 lakh, as of 2019. This puts the total number of central government employees at around 46 lakh. The number may have increased since 2019 as the government has been filling up vacancies. We have arrived at 2 crore figure of state government employees based on estimations. For instance, India has 61.24 lakh teaching and non-teaching staff in the state-run and the government aided elementary, secondary, and higher secondary schools, based on data sourced from the Department of School Education and Literacy's Unified District Information System for Education. Accurate data on the number of teaching and non-teaching staff in government colleges and universities is not readily available. However, on the conservative side, the estimated numbers could be 10.3 lakh (21.4% of all colleges are government-run 13.6% are aided colleges) out of the total 29.45 lakh teaching and non-teaching staff in private, aided, and government colleges in India, as per AISHE report 2020-21. This puts the total number of government teachers and non teaching staff at 71.54 lakh.

Besides, Indian states have a huge police force that reports to state governments. According to the Bureau of Police Research and Development, the number of police personnel in India was 20.91 lakh as of 2020. Apart from education and home, states have massive manpower in several other departments, including revenue, health, public works, transportation, power etc. While Karnataka and Kerala have 5.3 lakh and 5.1 lakh state government employees, respectively, an enormous state like Uttar Pradesh has 16 lakh government employees. Presuming an average of 7.1 lakh government employees per state, including parastatals and those on contract that would put the total number of state government employees (28 states) at approximately 2 crore. Apart from direct employment, governments also deploy huge number of contract employees who are eligible for social security benefits and fall within the ambit of formal employment.

Going by this calculation, India has an estimated 11.4 crore people on payroll, working in the formal sector. It includes 6.83 crore EPFO subscribers, 2.07 crore unique ESIC subscribers, and 2.5 crore government employees, parastatals and on contract. As discussed earlier in the report, if India has a working population of 57 crore, it can be deduced that 20% of them are part of the formal workforce. As mentioned previously, of the total 57 crore workforce, 46.5% of them are informal workers in the agriculture sector. Therefore, of the remaining 30.49 crore (53.5%) people in the non-agriculture sector, 37.38% of them (11.4 crore) are employed in the formal sector.

Formal jobs estimation for Karnataka

As for Karnataka, the net EPFO registration as of November 2022 was 49.94 lakh, while 24 lakh employees had enrolled in the ESIC as of March 2021. We apply the same logic of assuming a quarter of the ESIC subscribers have enrolled with the EPFO to avoid any overlap. I.e., around 18 lakh unique employees have registered with ESIC (subscribers may have increased since March 2021). We are also adding another 6 lakh state government employees including parastatals and contract workers employees to the "formal employees" category. That is, cumulatively, the number of formal employees on payroll in Karnataka is around 74 lakh, which is 24.74% of the working population of 2.99 crore (by taking an average WPR of 45%). The percentage of the working population in Karnataka engaged in

formal sector jobs, at 24.74%, is 4.74% higher than the national average of 20%. Considering that 46.6% of Karnataka's total workforce is engaged in agriculture sector, we can say that the remaining 1.59 crore (53.4%) are working in the non-agriculture sector. Of this, 46.54% workers are employed in the formal sector, which is 9% higher than India's formal sector employment in the non-agriculture sector.

A brief analysis of EPFO and ESIC database

As the country moves towards enhanced formalisation of jobs, it is important for India to develop a comprehensive dataset to analyse and understand the formalisation of jobs that is taking place. Since some data exists to calculate this, the lack of a comprehensive identifier for formalisation is gaping. Depending on thin private sector surveys or the much-delayed PLFS will not help much.

EPFO is one of the major metrics that can be used to understand the formal job trends in India. An analysis of the EPFO data from September 2017 to November 2022 shows that 6.25 crore net new subscribers have joined the EPFO subscription base during this period. "Net new subscribers" is the sum of newly joined subscribers, the number of subscribers who exited, and also those who rejoined. Of the 6.25 crore net new subscribers, 6.09 crore are new subscribers, indicating that they have joined the formal workforce for the first time. The number of net new subscribers who joined the EPFO this fiscal year, i.e., March 2022–November 2022, is 1.12 crore, of which the number of new subscribers is 81.24 lakh.

Out of the 6.25 crore new EPFO subscribers between September 2017 and November 2022, 3.21 crore (51.3%) are in the age group of 18–25 years, which reflects the fact that first-time job seekers have joined the formal and organised sectors in large numbers. Similarly, 3.65 crore (47.7%) out of 7.64 crore new ESIC subscribers who paid contributions between September 2017 and November 2022 are in the age range of 18–25. Assuming that a quarter of the ESIC subscribers are also enrolled in the EPFO, we can say that 2.73 crore unique subscribers in the age group of 18–25 joined the ESIC exclusively in the last five years and paid contribution. Altogether, we can deduce that approximately 5.94 crore people (49.58%) joined the EFPO and ESIC since 2017 are first-time job seekers in the age group of 18-25.

A comparison of India's EPFO data and the state-wise split that is given in the old methodology reveals that five states—Maharashtra, Karnataka, Tamil Nadu, Gujarat, and Haryana—that are industrialised and have embraced the service sector account for 60.54% of the net new EPFO additions in the last five years. I.e., these five states have added 2.78 crore net members of the total 4.60 crore members as per the old methodology. The EPFO updated its methodology of counting new members at a national level and publishes both sets. But states data is published in the old methodology only.

Further analysis of the EPFO (September 2017 - November 2022) and ESIC (until March 2021) data shows that Karnataka has approximately 67.94 lakh net EPFO and ESIC subscribers and stands next to Maharashtra (1.26 crore) and on par with Tamil Nadu (67.98 lakh) in creating or formalising jobs. We have arrived at these figures by adding the number of net EPFO subscribers and 75% of the ESIC subscribers, taking into account the possible overlap between ESIC and EPFO members.

An analysis of EPFO data shows Karnataka has added on average 8.32 lakh job every year and a total of 49.94 lakh in the last five years. The state accounts for 10.49% of the net EPFO new jobs added in the last five years.

Age-wise EPFO and ESIC enrolment data for Karnataka is not available. However, considering that 49.5% of all EPFO and ESIC enrolments in India are in the age range of 18–25, we can apply the same logic to Karnataka. Therefore, we can infer that 33.65 lakh out of 67.94 lakh net EPFO and ESIC subscribers who joined the formal job sector in Karnataka in the last five years belong to the 18–25 age group and perhaps are first-time job seekers. Approximately 3.7–4 lakh students graduate from colleges in Karnataka every year, most of whom likely join the workforce.

Unorganised sector jobs

As far as the informal job sector is concerned, informal jobs include those held by farmers, agricultural labourers, owners of small enterprises, domestic workers, street vendors, construction workers, and the self-employed who have not hired any workers and lack social security and workplace benefits. Around 28.55 crore workers in the informal and unorganised sectors have registered with the Ministry of Labour and Employment's e-Shram portal, a national data base of unorganised sector workers including migrant workers and gig and platform workers, which was launched in August 2022. Of this, around 73.81 lakh workers are from Karnataka. However, the number of unorganised workers registered on the e-Shram portal could be far lower than the actual number of informal workers because the registration on e-Shram is still a work in progress and the data mentioned above is as of January 30, 2023. It is possible that many workers who have registered on e-Shram could be part of the ESIC and EPFO networks.

In the main part of the report below, we have analysed the formal job sector trends in India, with special reference to Karnataka. The analysis has been made in four parts using data from EPFO, ESIC, the NPS (National Pension Scheme), and e-Shram. While the EPFO, ESIC, and NPS reflect the employment trends in the formal sector, the e-Shram data projects the job trends in the informal and unorganised sector.

EPFO PAYROLL DATA ANALYSIS

The all-India EPFO net payroll data for the last five years shows that about 6.25 crore net new subscribers joined the EPFO scheme from September 2017 to November 2022. It includes the newly added subscribers, those who exited, re-joined, and re-subscribed. The number of new EPFO subscribers during the same period is 6.09 crore, who may have joined the formal workforce for the first time. The last five years' data suggests there was an uptick in PF enrolment during 2021–22, with an enrolment of 1.38 crore net subscribers, indicating a higher number of people joining the formal workforce, a trend that is also continuing in 2022–23.

Table 1: Number of new EPFO subscribers and net subscribers from 2017-22 (as per new methodology)

Year	Number of new EPF subscribers	Net new EPF subscribers
2017-18 (from Sept 17)	84,57,404	73,84,814
2018-19	1,39,44,349	1,12,50,214
2019-20	1,10,40,683	94,72,468
2020-21	85,48,898	94,54,119
2021-22	1,08,65,063	1,38,20,141
2022 (April - November)	81,24,848	1,12,15,403
Total	**6,09,81,245**	**6,25,97,159**

In 2022-23 (from April to November), 81.24 lakh new subscribers joined the EPFO scheme and the formal workforce for the first time. The net payroll enrolment during the same period was 1.12 crore, signaling a higher rate of job creation and transition to the formal job sector in the first nine months of the year compared to the same period in the last financial year.

Table 2: EPFO India data for April to November 2022

Month	Number of new EPF subscribers	Net new EPF subscribers
April	10,55,578	14,30,336
May	10,45,639	13,83,813
June	11,43,830	15,19,941
July	11,59,350	15,50,435
August	10,52,120	14,15,563
September	10,00,356	14,05,564
October	7,68,643	11,08,592
November	8,99,332	14,01,159
Total	**81,24,848**	**1,12,15,403**

State-wise comparison of payroll figures shows Maharashtra, Karnataka, Tamil Nadu, Gujarat, and Haryana are the top five states with the highest EPFO enrolment in the last five years. These states have added 2.78 crore members of the total 4.60 crore net new EPFO additions in India between September 2017 and November 2022, as per the old methodology of the EPFO database. Therefore, these five states account for 60.54% of the overall net EPFO new payrolls generated since September 2017, creating more formal jobs and a higher rate of formalisation of the workforce than the remaining 23 states of India. Karnataka has the second highest net EPFO payroll creation at 49.94 lakh. Karnataka is next to Maharashtra (1.03 crore) in the net new subscription. The state is followed by Tamil Nadu (46.81 lakh), Gujarat (41.02 lakh), and Haryana (37.07 lakh).

Karnataka is also one of the fastest growing states, as per the Gross State Domestic Product numbers. An analysis of Karnataka's GSDP for the last five years (2017-22) from the Reserve Bank of India report shows the state has reported a compounded annual growth rate of 8.9%. Among the four other top formal job-creating states, Gujarat stands second, with an 8.2% CAGR.

Table 3: Top five states with net EPFO payrolls from September 2017 to November 2022 (as per old methodology)

State	Net EPFO subscribers	CAGR (GSDP real growth last 5 years)
Maharashtra	1,03,71,812	5%
Karnataka	49,94,712	8.9%
Tamil Nadu	46,81,011	7.1%
Gujarat	41,02,499	8.2%
Haryana	37,07,129	6.9%
Total	**2,78,57,163**	

Below is the year-wise data of net new EPFO payrolls in the top five states since September 2017. Maharashtra, Karnataka, Tamil Nadu, Gujarat, and Haryana have consistently topped the chart, except for 2018-19, when Delhi added a higher number of formal jobs overtaking Haryana. On average, Maharashtra has added 20 lakh employees to the formal workforce every year, whereas Karnataka is second, adding about 8.32 lakh formal jobs per year.

Table 4: State-wise EPFO net new payroll data from 2017 to 2022

States	2017-18 (from September)	States	2018-19	States	2019-20
Maharashtra	4,58,331	**Maharashtra**	15,75,943	**Maharashtra**	17,44,149
Karnataka	1,48,595	**Karnataka**	6,17,989	**Karnataka**	8,12,122
Tamil Nadu	1,38,765	**Gujarat**	5,55,525	**Tamil Nadu**	8,03,634
Gujarat	1,76,328	**Tamil Nadu**	5,02,020	**Gujarat**	7,15,146
Haryana	1,14,166	**Delhi**	3,96,395	**Haryana**	5,91,348

States	2020-21	States	2021-22	States	2022-23 (until November)
Maharashtra	14,95,493	**Maharashtra**	29,44,850	**Maharashtra**	21,53,046
Karnataka	7,54,982	**Karnataka**	15,01,013	**Karnataka**	11,60,011
Tamil Nadu	6,64,278	**Tamil Nadu**	14,17,006	**Tamil Nadu**	11,55,308
Gujarat	6,24,237	**Gujarat**	10,98,977	**Haryana**	9,32,448
Haryana	6,20,298	**Haryana**	10,63,809	**Gujarat**	5,78,003

Since the EPFO state data is published in the old methodology, a comparison of EPFO data for India and Karnataka using the old methodology over the last five years shows the state accounts for 10.49% of the total EPFO net payrolls added in the country. The state has on an average added 8.32 lakh formal jobs linked to EPFO annually. The state's contribution to the national EPFO additions was the highest in 2021-22 at 12.2%, compared to the previous four years.

Table 5. EPFO net new subscribers for India and Karnataka in the last five years

Year	India (new methodology)	India (old methodology)	Karnataka (old methodology)	% of KA to India
2017-18 (from September	73,84,814	15,52,940	1,48,595	9.5%
2018-19	1,12,50,214	61,12,223	6,17,989	10.1%
2019-20	94,72,468	78,58,394	8,12,122	10.3%
2020-21	94,54,119	77,08,375	7,54,982	9.79%
2021-22	1,38,20,141	1,22,34,625	15,01,013	12.26%
2022 (April – Nov)	1,12,15,403	1,05,42,392	11,60,011	11%
Total	**6,25,97,159**	**4,60,08,949**	**49,94,712**	**10.4%**

- *State data is published in the old methodology only.*

An analysis of EPFO payroll data for the South Indian states shows Karnataka and Tamil Nadu are the top formal job-generating states. Karnataka and Tamil Nadu added 49.94 lakh and 46.81 lakh net new EPFO members between September 2017 and November 2022, respectively. Telangana is a distant third by adding 27.82 lakh jobs in the formal sector, while Andhra Pradesh has added 10.49 lakh members, and Kerala has added the least number of formal jobs at 5.04 lakh.

Table 6: EPF net new payrolls added in the five southern states between September 2017 and November 2022:

States	2017-18 (Sept to April)	2018-19	2019-20	2020-21	2021-22	2022-23 (until Nov)	Total
Karnataka	1,48,595	6,17,989	8,12,122	7,54,982	15,01,013	11,60,011	49,94,712
Tamil Nadu	1,38,765	5,02,020	8,03,634	6,64,278	14,17,006	11,55,308	46,81,011
Telangana	94,407	4,04,079	4,38,697	4,17,091	7,57,548	6,70,238	27,82,060
Andhra Pradesh	54,286	1,51,024	1,62,166	1,87,086	2,73,104	2,22,147	10,49,813
Kerala	18,304	56,620	81,140	74,533	1,40,378	1,34,001	5,04,976

A study of industry- and sector-wise EPFO payroll data (Table 6) indicates that the "expert services" category (that includes manpower agencies, private security agencies, small contractors, etc.,) constitutes about 38% of the new formal jobs added in the last five years. The "expert services" category added 2.02 crore jobs to the formal sector in the last five years, whereas the remaining eight major sectors, including trading and commercial establishments, building and construction, engineering, developing electronic, mechanical, and general engineering products, textiles, and garment making, altogether added 1.56 crore jobs. Sectors and industries that added jobs in relatively smaller numbers were not considered in this analysis.

Table 7: Industry/sector-wise PF linked employee data (all industries are not included)

Industry	2017-18 (From Sept 17)	2018-19	2019-20	2020-21	2021-22	2022 (April to Nov)	Total
Expert services	9,54,297	27,98,272	35,21,187	37,02,953	51,67,400	41,21,761	2,029,16,622
Building & construction	1,54,845	4,52,675	5,13,766	4,66,721	6,03,086	5,72,551	27,63,644
Engineers- Engg contractors	2,09,826	4,06,651	4,22,191	3,11,799	6,18,479	5,93,214	25,62,160
Trading – Commercial establishments	39,335	3,82,623	5,22,641	3,42,805	8,67,423	5,99,670	28,48,361
Electric, mechanical or general engineering products	39,426	3,01,241	3,81,283	3,83,408	4,91,430	5,56,159	21,52,947
Establishments engaged in cleaning, sweeping services	60,207	1,39,640	1,78,371	2,50,182	3,32,253	3,09,443	12,70,096
Textiles	-686	1,05,941	1,67,123	1,71,866	3,10,216	1,38,201	8,92,661
Manufacture, marketing and usage of computers	50,487	2,13,192	2,70,350	2,01,862	4,36,692	3,03,079	14,75,633
Others	25,793	1,08,262	1,51,473	2,18,173	3,35,552	8,29,719	16,68,972

Gender-wise analysis of EPFO payroll data shows male employees clearly outnumber women in terms of new enrolments in the formal job sector. Around 4.7 crore men (77.42%) newly joined the formal workforce between September 2017 and November 2022, whereas the number of women who newly enrolled in the formal job sector during the same period was 1.37 crore. (It should be noted that new subscribers are not the same as net subscribers).

The number of new enrolments among women fell sharply during the Covid year (2020–21), but it picked up the following year. Women account for approximately 22.66% of the 6.07 crore new EPFO enrolments in the last five years, which is comparable to India's female labour force participation rate of 19-30% (depending on the survey we refer to). However the percentage of women is increasing from year to year, going from 20.9% in 2018-19 to 26.3% in 2022-23, a very encouraging sign showing increasing number of women joining the formal work force.

Table 8: New additions to EPFO payroll data gender-wise split

Year	Male	Female	% of female	Transgender	Total
2017-18 (From Sept 17)	69,23,343	15,32,496	18.1%	1,565	84,57,404
2018-19	1,10,20,080	29,23,962	20.9%	305	1,39,44,347
2019-20	85,18,567	25,20,661	22.8%	274	1,10,39,502
2020-21	66,03,664	19,45,016	22.7%	139	85,48,819
2021-22	81,02,042	27,62,764	25.4%	135	1,08,64,941
2022 (until Nov)	58,49,037	20,94,664	26.3%	82	79,43,783
Total	**4,70,16,733**	**1,37,79,563**	**22.7%**	**2,500**	**6,07,98,796**

51.3% of EPFO net new subscribers between September 2017 and November 2022 fall in the age range of 18 to 25. This aligns with India's demography, with over half of the population (52%) below 30. Of the 6.25 crore net EPFO subscribers who joined the formal workforce in the last five years, 3.21 crore are in the age group of 18–25. The second highest number of employees to have joined the formal workforce is those in the age band of 29-35. Around 1.09 crore people in this age group of have subscribed to the EPFO since September 2017.

Table 9: Age band of EPFO net new subscribers from September 2017 to November 2022

Year	18 and below	18-25	26-28	29-35	35 and above
2017-18 (From Sept 17)	51,766	36,21,056	9,65,826	13,50,913	13,95,253
2018-19	1,01,851	56,41,038	13,86,142	19,99,329	21,21,854
2019-20	90,583	50,56,538	10,76,090	15,85,116	16,64,141
2020-21	74,743	48,59,426	11,27,131	16,15,413	17,77,406
2021-22	79,443	72,43,982	18,81,250	23,83,306	22,32,160
2022 (April to Nov)	58,339	56,99,111	16,03,762	20,10,465	18,43,726
Total	**4,56,725**	**3,21,21,151**	**80,40,201**	**1,09,44,542**	**1,10,34,540**

ESIC DATA ANALYSIS

Employees State Insurance Corporation (ESIC) is another government social security scheme that helps measure new additions to the formal workforce. The central government has mandated that all factories and shops with 10 or more employees be covered under the ESIC scheme. Around 7.64 crore new members were registered with the ESIC and made the monthly contribution between September 2017 and November 2023, of which about 82% were male and just about 17% were female. The gross enrolments of new subscribers with ESIC show that the higher number of enrolments (1.51 crore) was reported in 2019-20, followed by 2018-19 (1.49 crore). Relatively fewer members (1.15 crore) enrolled during the Covid year in 2020–21. Of the 7.64 crore employees who joined ESIC since September 2017 many of them have ceased paying contribution over the years. As many as 2.77 crore employees paid the contribution in November 2022, while 1.68 crore members ceased to pay contribution during the same time. The relatively low percentage of women in ESIC shows that more women prefer higher paying service jobs.

Table 10: Number of newly registered employees who contributed to the ESIC scheme from 2017-2022

Year	Male	Female	%of female workers	Others	Total
2017 (from Sept) -18	70,40,477	12,95,044	15.5%	408	**83,35,929**
2018-19	1,24,77,559	24,87,796	16.6%	617	**1,49,65,972**
2019-20	1,24,36,076	27,08,698	17.8%	487	**1,51,45,261**
2020-21	96,33,468	18,71,494	16.2%	340	**1,15,05,302**
2021-22	1,21,60,216	27,52,021	18.4%	461	**1,49,12,698**
2022-23	NA	NA		NA	**1,15,36,217**
Total	5,37,47,796	1,11,15,503	16.9%	2,313	**7,64,01,379**

Maharashtra and Tamil Nadu have registered the highest number of new ESIC members (31.14 lakh and 28.22 lakh, respectively), as of March 2021 demonstrating the higher share of industry in their GDP. (The state-wise data for months post March 2021 is not available). It is followed by Karnataka (23.83 lakh), Uttar Pradesh (18.25 lakh), and Haryana (16.88 lakh). The trend is similar to that of EPFO payroll additions, where Maharashtra, Karnataka, Tamil Nadu and Haryana top the list. It is a clear indication that these four states generate a higher number of formal jobs in India compared to the rest of the states. Gujarat which is has the fourth highest number of EPFO registrations, does not make it to the ESIC's top five list. Gujarat has added just about 12.52 lakh new ESIC members as of March 2021. Even though industry is a very high percentage of GDP in Gujarat, automation is creating more highly skilled jobs there.

Table 11: Top five states with ESIC coverage as on March 31, 2021

States	Number of employees registered with ESIC
Maharashtra	31,14,170
Tamil Nadu	28,22,130
Karnataka	23,83,920
Uttar Pradesh	18,25,800
Haryana	16,88,440

Among the South Indian states, as of March 2021, Tamil Nadu and Karnataka recorded the highest number of ESIC enrolments (28.22 lakh and 23.83 lakh, respectively), again, similar to the trend seen in the EPFO subscription. These two states are followed by Telangana (12.81 lakh), Andhra Pradesh (9.66 lakh), and Kerala (8.15 lakh). The higher number of ESIC subscribers in Tamil Nadu compared to Karnataka could be an indication of higher industrialisation in TN, with a higher share of GDP in the industrial sector.

Table 12: ESIC coverage in South Indian states as on March 31, 2021

States	Number of employees
Tamil Nadu	28,22,130
Karnataka	23,83,920
Telangana	12,81,480
Andhra Pradesh	9,66,560
Kerala	8,15,190

The ESIC data for the last five years shows that of the 7.64 crore new members who joined the social security scheme and paid contributions in the last five years, nearly half of them (47.7%) belong to the 18–25 age band. Overall, 62.17% of the new ESIC subscribers fall between the ages of 18 and 28, a trend similar to that of EPFO, indicating a larger share of youth in the formal workforce.

Table 13: Age-wise ESIC data for the last five years

2017 (September) – 2022 (November)	
Age band	**Employees who paid ESIC contribution**
Less than 18	1,74,837
18-25	3,65,82,897
26-28	1,10,14,600
29-35	1,48,52,201
35 and above	1,37,76,844

NATIONAL PENSION SCHEME DATA ANALYSIS

Similar to the EPFO and ESIC, the National Pension System (NPS) database too reflects the number of formal jobs added in the Indian employment market. As far as the NPS data is concerned, as of September 2022, around 92.6 lakh people had contributed to the NPS from the central government, the state government, and the corporate sector. The formal jobs created under the NPS over the last five years saw a marginal increase, with around 27.8 lakh people joining the scheme between September 2017 and September 2022. A total of 55.7 lakh members have subscribed to NPS through the state government, which is the highest among the three sectors, followed by the central government employees (22.8 lakh) and the corporate sector (14 lakh). We have excluded Atal Pension Yojana in the analysis.

Table 14: The annual cumulative NPS subscriber's data for the last five years

Year	Central government	State government	Govt NPS total	Corporate sector	Total
2017-18	19,21,673	38,67,544	**57,89,217**	6,95,831	**64,85,048**
2018-19	19,84,564	43,21,325	**63,05,889**	8,03,015	**71,08,904**
2019-20	21,01,972	47,53,870	**68,55,842**	9,73,560	**78,29,402**
2020-21	21,75,846	51,40,504	**73,16,350**	11,25,163	**84,41,513**
2021-22	22,83,671	55,76,986	**78,60,657**	14,04,569	**92,65,226**

The gender breakdown of new NPS subscribers over the last five years shows that male subscribers outnumber female subscribers by a large margin. It is similar to the subscribers' pattern among EPFO and ESIC, indicating that male employees outnumber female employees by a large number in the Indian formal job sector. The table below shows that of the 30.2 lakh newly added NPS members since September 2017, nearly 65% of them are men, but the percentage of women here is higher than EPFO and ESI.

Table 15: Gender-wise split of new NPS subscribers added in the last five years:

Year	Male	Female	%of female employees	Transgender	Total
2017 (from Sept) -18	3,31,918	1,21,524	26.8%	4	4,53,446
2018-19	5,33,620	2,16,699	28.8%	7	7,50,326
2019-20	5,38,417	2,18,696	28.8%	21	7,57,134
2020-21	4,52,368	1,76,432	28.05%	27	6,28,827
2021-22 (till October)	2,98,043	1,35,315	31.22%	46	4,33,404
Total	**21,54,366**	**8,68,666**	**28.7%**	**105**	**30,23,137**

However, the age-wise analysis of the NPS data indicates a reverse trend compared with EPFO and ESIC. A large number of EPFO and ESIC subscribers are in the age range of 18–28, whereas in the case of the NPS, most subscribers are in the age range of 29 and above.

Table 16: NPS age-wise data of existing subscribers

Age band	2017 (from September) -18	2018-19	2019-20	2020-21	2021-22 (as of Oct 22)
18-21 years	32,103	36,229	35,049	11,381	15,928
22-25 years	4,31,700	4,37,372	4,08,330	2,67,231	2,80,428
26-28 years	8,44,402	8,64,314	8,55,936	6,73,322	6,17,305
29 – 35 years	21,43,203	23,21,893	26,14,371	28,26,029	24,79,975
35 years and above	21,14,343	23,63,638	28,61,286	37,44,535	34,21,265

E-SHRAM DATA ANALYSIS (UNORGANISED SECTOR JOBS)

Analysis of the EPFO and ESIC data places Karnataka among the top five states for generating formal employment in India. However, in the informal sector, just about 73.81 lakh workers from Karnataka have registered on the e-Shram portal, the national database of unorganised workers. The state does not figure in the top five list, unlike in the formal sector database. At the national level, as many as 28.55 crore informal workers have registered on the e-Shram portal as of January 30, 2023.

The actual number of informal workers in Karnataka could be a lot higher than the data reflected on the e-Shram portal. As discussed previously, if the estimated number of working population in Karnataka is 2.99 crore, of which 24.74% (73.97 lakh) employees are in the formal sector, the remaining 2.25 crore can be considered as informal sector employees. Therefore, we can estimate that around 1.51 crore informal workers in Karnataka are yet to register on the e-Shram portal.

Similarly, if India has an estimated working population of 57 crore, of which 20% (11.4-crore) are employed in the formal sector, 45.6 crore people are likely to be working in the informal sector. Since around 28.55 crore people have already registered on the e-Shram portal, we can say that around 17.05 crore employees in the informal sector are yet to register on the e-Shram.

Uttar Pradesh, with an estimated population of 24.1 crore, has registered the highest number of informal workers at 8.3 crore, which is nearly one-fourth of the total registrations on the e-Shram portal. I.e., one fourth of UP's population has declared themselves to be informal sector workers. UP is followed by Bihar (2.85 crore), West Bengal (2.57 crore), Madhya Pradesh (1.68 crore), and Maharashtra (1.34 crore) with the highest number of informal workers registered on e-Shram.

Table 17: Top 5 states to register unorganised workers on e-Shram portal

States	Registrations completed
Uttar Pradesh	8,30,03,616
Bihar	2,85,53,102
West Bengal	2,57,81,742
Madhya Pradesh	1,68,68,114
Maharashtra	1,34,42,479

At all-India level sector-wise registrations, more number of workers have registered from agriculture sector (14.92 crore), followed by domestic and household workers (2.79 crore), construction (2.58 crore), apparel (1.78 crore), and miscellaneous (1.21 crore). Overall, around 52% of the informal job registrations are from the agriculture sector, while 48% are from various other sectors in the non-agriculture category.

Table 18: Top five informal occupation sectors in India (as on December 2022)

Sector	Number of registered workers
Agriculture	14,92, 98,530
Domestic and household workers	2,78,67,466
Construction	2,58,75,410
Apparel	1,78,21,622
Miscellaneous	1,21,15,713

Separately, the sector-wise data for Karnataka shows the highest number of informal workers are also registered in the agriculture sector (30.20 lakh), similar to the trend in the rest of India. Apparel and construction are the two other top sectors, similar to the informal sector employment trends in India.

Table 19: Top five informal occupation sectors in Karnataka (as on December 2022)

Sector	Number of registered workers
Agriculture	30,20,541
Construction	8,73,071
Apparel	6,80,195
Automobile and transportation	3,38,004
Miscellaneous	3,16,707

Unlike the formal workforce, where the majority of the subscribers are male, among the unorganised workers, more women have registered on the e-Shram portal than their male counterparts. Of the total number of registered unorganised workers, 52.80% are women and 47.20% are men. But this may not mean that the number of female unorganised workers is higher than male workers in India. The figures only show that women workers have a higher number of registrations than male workers.

Table 20: e-Shram registration gender-wise split

Gender	Number of workers registered
Male	13,47,87,061
Female	15,07,95,369

Of the 28.55 crore unorganised workers registered on the e-Shram portal, the highest number of workers are young, in the age group of 18–40 (62.04%), followed by workers in the age band of 40–50 (22.41%), and 50 and above (12.77%). Roughly 2.8% of the workers are in the age group of 16–18. Unlike the EPFO and ESI, separate data for 18-25 age band is not available on e-Shram.

Table 21: e-Shram registration age-wise split

Age band	Percentage of workers registered
16-18	2.78
18-40	62.04
40-50	22.41
50 and above	12.77

CONCLUSION

The comprehensive analysis of various employment and related databases presented in this report shows that Karnataka has a large number of people formally employed, at nearly 24.74%, which is 4.74 percentage points higher than the national average of 20%. Karnataka is one of India's significant job creating states. It accounted for 10.4% of net EPFO payrolls added in India since September 2017. Karnataka has been creating on average 13.58 lakh formal jobs every year in the last five years, according to an analysis of EPFO and ESIC data. Karnataka's share of India's gross domestic product (GDP) was 8.8% (in 2021-22).

Formal job creation has been happening at a fast pace, especially in the last few years. But there is a **need to perform a detailed analysis of formal job creation in every district.** This disaggregated micro-dataset will help policymakers attain a holistic view of formal employment trends in Karnataka and introduce necessary interventions to accelerate formal job creation.

Although Karnataka has been doing well at generating formal jobs, the state government **needs to evolve a policy to bring informal workers into the ambit of the formal sector.** Introducing a scheme similar to the Pradhan Mantri Rojgar Protsahan Yojana, where the government pays employers' contributions to the EPS for the creation of new jobs, can help in this direction.

In addition, **the Karnataka government must identify 10 poor and backward districts and introduce an incentive programme focused on these districts.** The government could pay an employer a monthly incentive of Rs 2,000–Rs 3,000 in the first few months for every local job created. The incentive program, if implemented for two years, would encourage more employers to make the transition from informal to formal employment. It will help create more formal jobs in poorer districts. This program will also enable these districts to grow faster than the state and will have a multiplier effect on the state GDP.

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Notes