



A Macro Analysis of Labour Market Dynamics in Uttar Pradesh: 1993-2021

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ABSTRACT

This study examines labour market dynamics in Uttar Pradesh from 1993 to 2021, with three main objectives: 1) analyzing long-term labour market trends, 2) evaluating non-agricultural employment quality, and 3) proposing evidence-based policy recommendations.

We use secondary data sources, including the National Sample Survey Office (NSSO) and Periodic Labour Force Survey (PLFS) data. Despite regional data limitations, we employ cross tables for nuanced insights.

Findings reveal concerns: declining Labour Force Participation Rate (LFPR) and Worker Population Ratio (WPR), rising unemployment, and a reliance on informal work with job insecurity. Average monthly earnings show nominal increases, but real wage improvements are uncertain due to inflation. Access to social security and written job contracts for non-agricultural workers has eroded, leaving many vulnerable to economic shocks.

Policy recommendations include economic diversification, skill development, formalizing informal work, strengthening social safety nets, labour market information facilitation, promoting inclusive growth, enforcing labour laws, and instituting youth employment programs.

These measures aim to cultivate a more inclusive, equitable, and resilient labour force, fostering sustainable economic growth and social well-being in Uttar Pradesh.

Keywords:- Labourforce, Unemployment, WPR, Social Security Benefits, Earning, Worker

Introduction:

Uttar Pradesh is the most populous state in India, with a population of over 200 million people. It is also the second-largest state in terms of area. Uttar Pradesh is located in the northern part of India, and it borders the states of Haryana, Himachal Pradesh, Rajasthan, Madhya Pradesh, Chhattisgarh, Jharkhand, Bihar, and Nepal.

The economy of Uttar Pradesh is based on agriculture, manufacturing, and services. Agriculture is the largest sector, employing over 50% of the workforce. Manufacturing is the second-largest sector, and it is growing rapidly. Services are the third-largest sector, and they include tourism, transportation, and telecommunications.

Uttar Pradesh has a number of geographic characteristics that have shaped its economy and labour market. The state is located in a fertile river valley, which is ideal for agriculture. The state also has a number of mineral resources, which are used in manufacturing. Uttar Pradesh has a young population, which is a potential source of labour. However, the state also has a high illiteracy rate, which can hinder economic development.

Uttar Pradesh has made some significant achievements in recent years. The state has reduced poverty, increased literacy rates, and improved infrastructure. However, there are still many challenges that need to be addressed. The state needs to create more jobs, improve the quality of education, and reduce inequality.

The study of the labour force in Uttar Pradesh is important for a number of reasons. First, it can help to identify the challenges and opportunities facing the state's economy. Second, it can help to develop policies to improve the labour market. Third, it can help to track the progress of the state's economy.

Literature review

Kumar and Baliyan (2020) explore the declining trend in labour force participation rates for women in India, which has been especially pronounced in Uttar Pradesh. Their study, drawing upon census data, seeks to understand the major economic activities and sectors where women in the state are employed. This research also delves into the trends in women's employment levels over several decades. Their inquiry into the proximate factors behind the low and declining levels of women's employment in Uttar Pradesh provides valuable insights into the complex dynamics of gender and labour force participation.

Mishra and Singh (2018) contribute to the discourse by conducting a disaggregated analysis of employment structure, casualization, and wage differentials in rural Uttar Pradesh. Their study reveals a significant transformation in the rural employment structure, marked by a shift from agriculture to non-agricultural sectors. They emphasize the growing presence of casual workers, particularly in construction, and highlight the social and regional determinants of this trend. By examining the conversion of cultivators into casual labourers, they shed light on distress-driven diversification. This research provides critical insights into the changing nature of rural employment in the state.

Kumar (2015), in his study on the changing pattern of rural non-farm employment in Uttar Pradesh, underscores the significance of rural non-farm employment (RNFL) as an alternative to agricultural employment. The study reveals a rapid increase in RNFL, particularly in the 2000s, with a pronounced impact on male workers. The growth of RNFL in Uttar Pradesh outpaces the national average, with the construction sector leading the way. The study also delves into regional disparities, highlighting that southern and western regions exhibit relatively higher non-farm employment. Additionally, it underscores the prevalence of casual workers in non-farm employment, shedding light on the status of non-farm workers in the state.

Pathak (2010) contributes to the discussion by addressing the complex interplay between poverty and inequality in Uttar Pradesh. His decomposition analysis of poverty between 1993-94 and 2004-05 in the state reveals a decrease in poverty but an increase in inequality. Importantly, the study underscores stark inter-regional and intra-regional differences within Uttar Pradesh. It identifies the southern region, Bundelkhand, as making impressive progress in poverty reduction. Furthermore, the study provides insights into the implementation of anti-poverty programs in the state, shedding light on the challenges and opportunities in addressing poverty and inequality.

These studies collectively form a rich backdrop for our research, providing valuable insights into labour force dynamics, gender participation, rural employment transformations, and poverty and inequality issues in Uttar Pradesh. They offer a contextual framework for our examination of labour market trends in the state, enhancing our understanding of the complexities and challenges within the labour market landscape.

Research Gap for the Study

Despite the valuable insights provided by existing literature on labour force dynamics, gender participation, rural employment, and poverty and inequality issues in Uttar Pradesh, there exists a notable research gap. The existing studies have laid a strong foundation for understanding various aspects of the state's labour market, but they primarily focus on specific dimensions in isolation. To address this gap, our study takes a holistic approach, aiming to integrate these dimensions into a comprehensive analysis of the changing dynamics of the labour market in Uttar Pradesh from 1993 to 2021. While previous research has explored individual facets of labour force participation, employment structure, poverty, and inequality, a comprehensive and nuanced examination of these factors in tandem is still lacking.

Our study seeks to fill this research gap by synthesizing and analyzing a diverse set of labour market indicators and their interplay over nearly three decades. By encompassing trends in labour force participation, job composition, quality of employment among non-agricultural workers, and social security benefits, we aim to provide a comprehensive overview of the labour market in Uttar Pradesh. Furthermore, our study utilizes a unique cross-table methodology to address the challenge of data disaggregation below the regional level, providing insights into the labour market at a more granular level than previously explored.

In essence, the research gap that our study addresses is the absence of a comprehensive, multidimensional analysis of the labour market in Uttar Pradesh that can inform evidence-based policy recommendations. By bridging this gap, our research aims to contribute significantly to the understanding of labour market dynamics and provide actionable insights for policymakers, researchers, and stakeholders invested in the socio-economic development of Uttar Pradesh.

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Need of the study

The state of Uttar Pradesh, with its vast and diverse population, plays a pivotal role in India's socio-economic landscape. However, amid its economic progress, the dynamics of the labour market have been subject to significant shifts. As the demographic and economic heart of Northern India, Uttar Pradesh has witnessed changes in labour force participation, job composition, and social security benefits over the years. Understanding these transformations is not only a matter of academic inquiry but also of paramount practical importance. The need for this study arises from the imperative to comprehensively examine and comprehend these labour market trends, their underlying factors, and their consequences for the socio-economic fabric of the state. It is only through a rigorous analysis of these trends that evidence-based policies can be formulated to enhance labour market conditions,

promote inclusivity, and facilitate sustainable economic growth in Uttar Pradesh. This study aims to bridge the gap between academic exploration and actionable policy recommendations, offering a crucial resource for policymakers, researchers, and stakeholders invested in the future of Uttar Pradesh's labour force.

Objectives of the Study:

1. **Examine Long-term Labour Market Trends:** To conduct a thorough analysis of the evolving labour market dynamics in Uttar Pradesh spanning the period from 1993 to 2021, identifying key shifts and patterns.
2. **Evaluate Quality of Non-agricultural Employment:** To assess the quality of employment among non-agricultural workers in Uttar Pradesh, considering factors such as job security, wage differentials, and social security benefits.
3. **Formulate Policy Recommendations:** To formulate evidence-based policy recommendations aimed at enhancing the labour market conditions in Uttar Pradesh, promoting inclusivity, and fostering sustainable economic growth.

Data and methods

The analysis in this study primarily relies on secondary data, with the key source being various rounds of the National Sample Survey Office (NSSO) household data on 'Employment-Unemployment.' This dataset encompasses a wide array of employment and unemployment dimensions, making it a valuable resource for our research. Specifically, we draw insights from the household data of the last four major rounds of NSSO quinquennial surveys, spanning the 50th (1993-94), 55th (1999-2000), 61st (2004-05), and 68th (2010-11) rounds. Additionally, we incorporate annual data from the Periodic Labour Force Survey (PLFS) spanning from 2017-18 to 2021-22, which provides a contemporary perspective on employment and unemployment dynamics. The extraction and management of this extensive dataset are conducted using specialized software tools, ensuring accuracy and reliability.

It is essential to acknowledge a limitation of the NSSO data, namely, its inability to be disaggregated below a regional level, as defined by groups of districts by the National Statistical Office (NSO) of India. To navigate this constraint, our methodology involves the development of various cross tables. These tables serve as a powerful analytical tool, allowing us to explore and present nuanced insights into the labour force trends in Uttar Pradesh, despite the data's regional limitations. This comprehensive data-driven approach forms the backbone of our analysis, enabling us to shed light on the complex dynamics of the labour market in the state.

Results of The Study

A. Trends in labour Force Participation in Uttar Pradesh

The labour force participation rate (LFPR) is the percentage of the population in the age group 15-64 who are either employed or unemployed. The worker population ratio (WPR) is the number of workers in the age group 15-64 divided by the total population in the same age group. The unemployment rate is the percentage of the labour force who are unemployed.

Table 1: Trends of LFPR, WPR and Unemployment Rate in Uttar Pradesh among 15-64 Age group

Year	LFPR	WPR	Unemployment Rate
1993-94	61.2%	60.5%	1.1%
1999-2000	58.7%	57.8%	1.4%
2004-05	61.3%	60.6%	1.1%
2011-12	54.0%	53.0%	1.7%
2021-22	53.3%	51.5%	3.4%

Note: This result is estimated by the authors self from extracting unit level data of NSSO of the corresponding year

The table 1 shows that the LFPR in Uttar Pradesh has declined from 61.2% in 1993 to 53.3% in 2021. This decline is due to a number of factors, including the aging population, the decline in agriculture, and the lack of job opportunities in the non-farm sector. The WPR has also declined from 60.5% in 1993 to 51.5% in 2021. This decline is due to the same factors that have led to the decline in the LFPR. The unemployment rate has increased from 1.1% in 1993 to 3.4% in 2021. This increase is due to the decline in the LFPR and the WPR.

Interpretation:

- The decline in the LFPR and WPR indicates that there is a growing number of people who are not working or seeking work in Uttar Pradesh. This is a worrying trend, as it could lead to social and economic problems.

- The increase in the unemployment rate indicates that there are more people who are unemployed than before. This is also a worrying trend, as it could lead to poverty and social unrest.

B. Trends in Job composition in Uttar Pradesh

In this section we want to outlines the distribution of job types over time, including unpaid jobs, self-employment, casual work, and regular employment..

Table 2: Trends in Job Composition in Uttar Pradesh

Year	Unpaid Job	SelfEmployed	Casual Work	Regular
1993-94	29.9%	39.9%	20.1%	9.0%
1999-2000	28.6%	38.6%	20.5%	10.8%
2004-05	32.7%	38.7%	17.4%	10.1%
2011-12	24.8%	37.5%	25.1%	10.9%
2021-22	23.5%	44.1%	16.9%	12.1%

Note: This result is estimated by the authors self from extracting unit level data of NSSO of the corresponding year

This table shows the distribution of workers in Uttar Pradesh by job type for the age group 15-64 from 1993 to 2021.

- The proportion of workers in unpaid jobs has declined from 29.9% in 1993 to 23.5% in 2021. This decline is due to the decline in agriculture and the growth of the non-farm sector.
- The proportion of self-employed workers has remained relatively stable, at around 44%.
- The proportion of casual workers has increased from 20.1% in 1993 to 26.9% in 2021. This increase is due to the growth of the informal sector and the lack of job opportunities in the formal sector.
- The proportion of regular workers has increased from 9.0% in 1993 to 12.1% in 2021.

Interpretation:

- The decline in the proportion of unpaid workers and low proportion of regular workers indicates that there is a growing number of people who are working in the informal sector. This is a worrying trend, as workers in the informal sector often have low wages, poor working conditions, and no social security benefits.
- The increase in the proportion of casual workers indicates that there is a growing number of people who are working in insecure jobs. This is also a worrying trend, as casual workers are more likely to be unemployed or underemployed.

C. Trends in Average Monthly earning of Working person in Uttar Pradesh

Table 3: Average Monthly Earning (Nominal Price) of a Working Person in Uttar Pradesh

Year	Avg Monthly Earning
2017-18	Rs. 6972.3
2018-19	Rs. 7272.0
2019-20	Rs. 6751.9
2020-21	Rs. 6975.6
2021-22	Rs. 7348.4

Note: This result is estimated by the authors self from extracting unit level data of NSSO of the corresponding year

This table 3 shows the average monthly earnings of working persons in Uttar Pradesh in nominal rupees from 2017 to 2021. The relatively modest increase in nominal values in Table 3 suggests that there has been very little improvement in the earnings of working individuals in Uttar Pradesh over the specified years. However, it's crucial to emphasize that this nominal increase may not necessarily translate into an actual improvement in the real living standards of the workforce.

When we consider the impact of inflation, which can diminish the purchasing power of money over time, it becomes evident that the real value of these earnings may not have significantly improved. In other words, the small nominal increase may not have been sufficient to offset the rising cost of living and maintain or enhance the actual well-being of the workers.

D. Trends in Social security Benefits for Non- Agricultural Worker in Uttar Pradesh

Table 4: Percentage of Non-Agriculture Worker getting Formal Agreements

Year	Social Security Benefits	Written Job Contract	Eligible for Paid Leave
2004-05	23.5%	20.6%	28.5%
2011-12	13.6%	15.8%	18.0%
2017-18	15.6%	16.2%	19.3%
2018-19	17.0%	17.2%	19.3%
2019-20	16.2%	16.1%	22.0%
2020-21	16.9%	17.6%	22.5%
2021-22	13.3%	15.4%	19.2%

Note: This result is estimated by the authors self from extracting unit level data of NSSO of the corresponding year

Table 4 shows the changing safety nets among non-agriculture workers in Uttar Pradesh from 2004 to 2021. The proportion of non-agriculture workers with social security benefits has declined from 23.5% in 2004 to 13.3% in 2021. This decline is due to the lack of government policies to provide social security to workers in the informal sector.

The proportion of non-agriculture workers with written job contracts has also declined from 20.6% in 2004 to 15.4% in 2021. This decline is due to the growth of the informal sector and the lack of enforcement of labour laws. The proportion of non-agriculture workers eligible for paid leave has remained relatively stable, at around 19%.

Interpretation:

The decline in the proportion of non-agriculture workers with social security benefits, written job contracts, and paid leave is a worrying trend. This indicates that there is a growing number of workers who are not protected by these essential safety nets.

Conclusion

This research study has undertaken a comprehensive examination of labour force trends in Uttar Pradesh from 1993 to 2021, delving into critical aspects of employment, job composition, earnings, and social security benefits. The findings presented herein underscore several noteworthy trends that warrant serious consideration and policy attention.

The declining trends in both the Labour Force Participation Rate (LFPR) and the Worker Population Ratio (WPR) reveal a growing portion of the population in Uttar Pradesh disengaging from the labour force. This disconcerting trend can be attributed to multifaceted factors, including demographic shifts, the diminishing role of agriculture, and a shortage of opportunities in the non-farm sector. Concurrently, the increasing unemployment rate is indicative of an alarming rise in joblessness, posing imminent threats to poverty alleviation and social stability.

Examining the composition of employment in Uttar Pradesh further unveils a concerning reliance on informal and precarious work arrangements. The decline in unpaid jobs is accompanied by a surge in casual work, a category characterized by insecurity and vulnerability. While the proportion of self-employed individuals remains stable, the lack of formal job security and social security benefits for the majority of workers in the state raises grave concerns about their economic well-being and social protection.

The analysis of average monthly earnings in nominal terms highlights an incremental pattern, which could partly be attributed to inflation and economic growth. However, it is crucial to note that these nominal increases may not necessarily translate into improved real wages for workers, considering the impact of inflation on purchasing power.

Furthermore, the examination of social security benefits for non-agricultural workers underscores a distressing decline in access to essential safety nets such as social security benefits and written job contracts. This diminishing protection leaves a significant portion of the workforce in Uttar Pradesh exposed to economic shocks and devoid of essential safeguards.

Policy Recommendations

Based on the comprehensive analysis of labour force trends in Uttar Pradesh, several policy recommendations emerge as imperative for addressing the current challenges and ensuring a more inclusive and resilient labour market:

1. **Promote Diversification of Economic Activities:** Encourage economic diversification by facilitating the growth of non-farm sectors. This can be achieved through targeted policies that support small and medium-sized enterprises (SMEs) and promote entrepreneurship.
2. **Invest in Skill Development:** Prioritize investments in skill development programs to enhance the employability of the workforce. Skills training should align with the evolving needs of industries, fostering a better match between skills and job opportunities.
3. **Formalize Informal Employment:** Develop policies and mechanisms to formalize informal employment, particularly in the informal sector. This should include initiatives to provide written job contracts, social security benefits, and access to paid leave for informal workers.
4. **Enhance Social Safety Nets:** Strengthen social safety nets to ensure that vulnerable workers have access to essential benefits such as health care, unemployment insurance, and retirement pensions.

5. **Facilitate Labour Market Information:** Establish a comprehensive labour market information system to monitor employment trends, job vacancies, and skill requirements. This information can guide policymakers, job seekers, and employers in making informed decisions.
6. **Promote Inclusive Growth:** Implement policies aimed at inclusive growth, ensuring that the benefits of economic development are distributed equitably across different segments of the population. This includes addressing regional disparities in employment opportunities.
7. **Enforce Labour Laws:** Strengthen the enforcement of labour laws and regulations, particularly in the informal sector, to protect workers' rights and improve working conditions.
8. **Youth Employment Programs:** Develop targeted youth employment programs to address the specific challenges faced by young job seekers, including skills development and access to job opportunities.

These policy recommendations are designed to address the multifaceted challenges observed in Uttar Pradesh's labour market and pave the way for a more inclusive, equitable, and resilient labour force. Implementing these measures can contribute to sustainable economic growth, poverty reduction, and improved social well-being in the state.

Bibliography

Kumar, Nomita P., and Kavita Baliyan. "Waning Participation of Women in Uttar Pradesh's Labour Market: Some Proximate Determinants." Working Paper 223, Giri Institute of Development Studies, August 2020.

Mishra, Nripendra Kishore, & Singh, Udai Bhan. "Employment structure, casualization and wage differential in rural Uttar Pradesh: a disaggregated analysis." *Area Development and Policy*, vol. 4, no. 2, 2018, pp. 177-200. doi: 10.1080/23792949.2018.1538701.

Kumar, Manoj. "Changing Pattern of Rural Non-Farm Employment: A Case Study of Uttar Pradesh at Regional Level." *Academic Journal of Economic Studies*, Faculty of Finance, Banking and Accountancy Bucharest, "Dimitrie Cantemir" Christian University Bucharest, vol. 1, no. 2, 2015, pp. 9-23, June.

Pathak, Durgesh Chandra. "Poverty and Inequality in Uttar Pradesh During 1993-94 to 2004-05: A Decomposition Analysis." *SSRN Electronic Journal*. doi: 10.2139/ssrn.1725804.

Singh, Ajad, and Dr. Ombir Singh. "Trends and Determinants of Labour Force Participation in Uttar Pradesh: Insights from PLFS Data 2021-22." In O. Singh & R. Srivastava (Eds.), *Indian Economy: Achievements, Prospects and Challenges*, pp. 285-302. Bharti Publications, 2023.

Singh, Ajad, and Menka Singh. "Trends and Determinants of Labour Force Participation in Bihar: Insights from PLFS Data 2021-22." *International Research Journal Of Modernization In Engineering Technology And Science (IRJMETS)*, Volume 05, Issue 06, June 2023, pp. 1-9.

Singh, Ajad, and Malti Kapoor. "Trends of Labour Force Participation Rate in Rajasthan and its Major Determinant Factors." *International Journal of Research Publication and Reviews (IJRPR)*, Volume 03, Issue 12, December 2022.

Singh, Ajad, Dr. Rakesh Sihmar, and Suraj Kumar Singh. "Trends and Dynamics Of Uttarakhand's Labour Force: A Gender Perspective." *International Research Journal Of Modernization In Engineering Technology And Science (IRJMETS)*, Volume 05, Issue 06, June 2023, pp. 2245-2253.