

## **Educational Expansion and Labour Market Realities: An Analysis of Employment Quality in India**

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### **Abstract**

Despite sustained economic growth and rising levels of educational attainment, the quality of employment in India has either not improved or has deteriorated. This paper examines the link between education and employment quality using nationally representative Government of India data for 2009-10 and 2018-19. The study is based on crucial dimensions of decent work as proposed by the International Labour Organization. The findings indicate a weak and uneven relationship: while higher education levels are associated with better job quality, a significant share of educated workers remains trapped in informal and insecure employment. In addition, there exists a huge gender gap, with educated women more likely to be in secure employment than their male counterparts, potentially reflecting selective labour market participation. The persistence of low-quality jobs among the educated points to a structural disconnect between human capital formation and labour market absorption. The paper underscores the need for policy interventions that go beyond educational expansion to address the deteriorating quality of employment and to promote more inclusive and equitable labour market outcomes.

### **Keywords:**

education, employment, quality of employment, stability and security of work, social security, gender gap.

### **1. Introduction**

India's development trajectory in recent decades has been marked by strong economic growth and considerable expansion in access to education. Public policy efforts, including the Right to Education Act (2009), the Sarva Shiksha Abhiyan, and skill development initiatives, have contributed to rising enrolment and literacy rates across states and social groups. At the same time, India's demographic dividend presents an opportunity to transform educational gains into productive employment. However, despite these advances, a growing body of research indicates that improved educational attainment has not translated uniformly into better employment outcomes, especially in terms of the quality of jobs available to the working population. However, despite these gains, the employment outcomes for many educated individuals remain limited, particularly in terms of the quality of employment.

While the relationship between education and labour market participation has received considerable attention in both policy and academic discourse, employment quality remains a relatively underexplored area in the Indian context. By employment quality we mean "a decent and productive work in conditions of freedom, equity, security and human dignity" (ILO, 2008, 4). In India, where informal and precarious employment continues to dominate the labour market – especially among the youth and even among those with higher levels of education – the

question of whether and how education facilitates access to decent work has become increasingly significant.

Several studies have examined the relationship between educational attainment and employment outcomes in India (Afridi et al., 2016; Das, 2006; Das and Desai, 2003; Kingdon and Unni, 2001; Klasen and Pieters, 2015; Sundaram et al., 2015). However, much of this research has focused on employment participation – that is, whether individuals with more education are more likely to enter the labour force. A dominant theme in this literature is the “U-shaped” relationship between education and labour force participation, particularly among women. While these studies offer valuable insights into labour market entry, they tend to overlook the quality of employment that individual’s access once they are employed. There is limited empirical work exploring whether higher educational attainment leads to better job quality.

Against this backdrop, this study seeks to examine the linkages between education and employment outcomes in India, with a particular focus on the quality of employment across different educational levels. Drawing on secondary data from sources such as the Periodic Labour Force Survey (PLFS) and the National Sample Survey Office (NSSO), the study aims to provide an empirical assessment of employment quality across educational categories. The analysis mainly focuses on gender-based differences in employment quality across varying levels of education and examines how these patterns have evolved over time. By shifting the analytical lens from mere participation to the nature and quality of employment, this study contributes to a more comprehensive understanding of the education-employment nexus in India. It seeks to provide new empirical insights into the structural disconnect between rising educational attainment and the persistence of low-quality jobs, especially among women and the moderately educated.

This paper highlights that educational expansion alone cannot ensure inclusive and equitable outcomes in the labour market. Bridging the structural gap between human capital formation and labour market absorption is essential – particularly for women and moderately educated individuals. As India strives to leverage its demographic dividend and fulfil its sustainable development goals, aligning educational advancement with improvements in employment quality will be crucial to fostering inclusive and equitable growth.

The paper is organised into six sections. Section 2 presents the review of literature and identifies key research gaps. Section 3 outlines the methodological framework adopted in the study. Sections 4 and 5 report the empirical findings and provide a detailed discussion of the results. Finally, conclusion and policy recommendations have been presented in the last section.

## **2. Literature Review and Gaps**

The link between education and employment has long been a focus in development economics and labour studies. Human capital theory (Becker, 1964; Schultz, 1961) suggests that investment in education enhances individual productivity and improves job prospects. However, in India, this relationship is far more complex. Despite significant expansion in educational attainment, particularly among youth, employment outcomes have not improved proportionately. The India

Employment Report 2024 by the International Labour Organization (ILO) and the Institute for Human Development (IHD) underscores a serious mismatch between education and employment. In 2022, over 65% of unemployed youth had completed at least secondary education, a steep rise from 35% in 2000, and the unemployment rate among graduates stood at 29%, compared to just 3.4% among illiterate youth.

Several studies attribute this disconnect to structural issues in the education system. Scholars notably, Tilak (2021) argue that curricula are overly theoretical and disconnected from market needs, with limited focus on vocational or technical skills. The ILO-IHD report (2024) similarly notes that only 4% of Indian youth have received formal skill training, contributing to a persistent skill mismatch in fast-growing sectors like IT, finance, and telecommunications. Bhalla (2018), using long-term data, observes that although education levels have risen, job creation particularly in skilled sectors has not kept pace, leading to underemployment and declining labour force participation, especially among women.

This mismatch is further complicated by social inequalities. Das et al. (2015) and Sarkar, Sahoo, and Klasen (2019) show that even when women and individuals from disadvantaged groups achieve comparable education levels, they often face lower employment outcomes due to factors such as restrictive gender norms, lack of mobility, and weak social networks. Sarkar et al. (2019) also note that female labour force participation declines with higher education levels among certain groups. Their analysis patterns highlight the limitations of relying solely on educational expansion to improve employment outcomes.

Additional evidence shows growing dissatisfaction among educated youth regarding the quality of jobs. Rathore (2019) finds that 42% of literate youth are unhappy with their employment due to low wages, job insecurity, or poor working conditions, with slightly higher dissatisfaction in urban areas. Kumar and Sahu (2013) argue that although education is expanding, skill development remains uneven, especially for rural populations and women. They stress that unless educational expansion is aligned with the demands of the labour market, its impact will remain limited.

The growing informalisation of the labour market further undermines the promise of education. Mehrotra (2019) points out that even within the formal sector, the share of salaried workers with written contracts and social security is declining. This indicates that educational attainment alone does not guarantee access to decent work. The 2024 EPW review reinforces this, noting that many graduates end up in self-employment or insecure jobs due to a lack of opportunities in the formal sector. Similarly, the Education for All in India report (2023) argues that despite government efforts in skill development and entrepreneurship, poor coordination and weak industry linkages have reduced programme effectiveness. Bairagya (2023) adds that even technical education does not ensure employment, and the situation varies significantly across states backward regions facing greater challenges. His findings highlight the spatial inequalities in employment outcomes, despite educational gains.

While several studies have examined the link between education and employment, there is limited research on how the quality of employment varies by gender and how these patterns have changed over time. Most existing work focuses on overall employment levels or educated unemployment, without analysing key indicators such as job security, wages, and access to social protection across genders. This study addresses this gap by examining how employment outcomes differ between men and women over time, using national survey data, and highlights the evolving relationship between education and employment quality in India.

### 3. Methodology

To analyze the linkages between education and employment, this study follows the multidimensional framework of decent work as articulated by the International Labour Organization (ILO). The idea of ‘decent work’ was first articulated in 1999 by the ILO Director-General in his report to the 87th Session of the International Labour Conference (ILO, 2008: 4). This framework covers ten substantive elements corresponding to the four strategic pillars of the Decent Work Agenda (full and productive employment, rights at work, social protection and the promotion of social dialogue): employment opportunities; adequate earnings and productive work; decent working time; combining work, family and personal life; work that should be abolished; stability and security of work; equal opportunity and treatment in employment; safe work environment; social security; and social dialogue, and employers’ and workers’ representation (ILO, 2012: 7). This study focuses on three key dimensions of employment quality: employment opportunities, stability and security of work, and coverage of social security. Based on these dimensions, certain indicators are given by ILO. We selected key indicators first for these three dimensions, given as categories and then chose variables according to data availability (refer to Table 1).

**Table 1: Dimensions, indicators, categories and variables, taken for our study**

Sl no	Dimensions	Indicators	Categories taken for our study	Variables taken for our study (working age 15-64 years)
1.	Employment opportunity	Employment to population ratio	workforce participation rate (WPR)	workforce participation rate (WPR) (for persons 15 years and above)
		Unemployment rate	unemployment rate	unemployment rate (UR) (for persons 15 years and above)
		employment by status	categories of workers	% of self-employed, casual and regular workers out of total workers
2.	Stability and security of work	Precarious employment	job contracts	% of workers with written job contracts out of total regular salaried/wage and casual workers
3	Social	Share of	social security	% of workers eligible for

	security	population benefitting from a pension.	benefits	social security benefits (i.e. PF/pension, gratuity, maternity benefit etc.) out of total regular salaried/wage and casual workers
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Source: ILO (2012) table no-A: 16-17.

*Employment Opportunity*, a key element of decent work, is comprised of indicators “which permit the analysis of the quality of employment measured through the lens of informal employment and other key components of total employment” (ILO 2012, 45). The employment situation is typically assessed using indicators such as the employment-to-population ratio (or workforce participation rate) and the unemployment rate, both of which offer insights into labour market engagement. In addition, nature of employment opportunity is gauged through the distribution of workers across various employment categories, which together help capture the overall characteristics of work within the economy.

*Stability and security of work* is a dimension that allows the differentiation of workers into those whose jobs are characterized by a degree of relative permanence and soundness from others (ILO, 2012: 127). We have measured this by taking the percentage share of workers having written job contracts, across different levels of education.

*Social security* covers all the measures that provide benefits, whether in cash or in kind, to secure protection, inter alia, from lack of work-related income (or insufficient income) caused by sickness, disability, maternity, employment injury, unemployment, old age, or death of a family member; lack of access or unaffordable access to health care; insufficient family support, particularly for children and adult dependants; general poverty and social exclusion. (ILO 2012, 148). We have measured this by taking the percentage share of workers who are getting any kind of social security benefits from the employers, such as pensions, provident fund, health benefits, maternity benefits, paid leave, etc.

The analysis is based on individual level data set published by the Government of India for the year 2009-10, 2018-19. This individual-level data for fifteen major states within the working-age group 15-64 years have been used for our analysis. The total number of working-age individuals in the sample is 2,76,002 for 2009-10 (1,71,002 in rural areas and 1,05,000 in urban areas) and 1,20,350 for 2018-19 (69,379 in rural areas and 50,971 in urban areas). Data have been disaggregated by gender, and the usual status approach has been adopted to reflect long-term employment conditions. Educational attainment is classified using NSSO categories, and variable selection is guided by both ILO recommendations and data availability.

#### **4. Education and employment quality**

Before proceeding to the main analysis, we examine the educational attainment of the overall population in India to understand the broader trends in educational progress.

##### **4.a. Educational profile of the working-age population**

<http://jier.org>

India has made notable progress in educational attainment, with a rising share of the population with secondary and higher levels of education and a decline in the proportion of not-literate individuals. However, a large segment still remains at the lower end of the educational spectrum, especially in rural areas (refer to Table 2)

Moreover, there exists both rural-urban and gender gaps in terms of education. Rural populations, particularly women, continue to show higher rates of illiteracy and lower access to higher education compared to their urban counterparts. Although, over time, educational attainment has increased among females, especially at secondary levels, there still exists huge differences with that of male, particularly in rural areas.

**Table 2: Percentage distribution of persons of age 15 years and above by highest level of education successfully completed**

Sl no	Educational level	2009-10		2018-19		2009-10		2018-19	
		Rural male	Rural female	Rural male	Rural female	Urban male	Urban female	Urban male	Urban female
1	Not literate	26	49.8	21.3	40.1	10.4	23.6	8.8	19.5
2	Literate upto primary	25.3	21.9	18.5	17.8	16	17.2	13.2	14.3
3	Literate upto middle school	20.5	13.5	23.5	17.7	17.5	15.3	20	18.2
4	Secondary and above	28.1	14.8	36.7	24.4	56.1	43.9	58.1	48

Source:NSSO (2011;38), NSSO(2020;45)

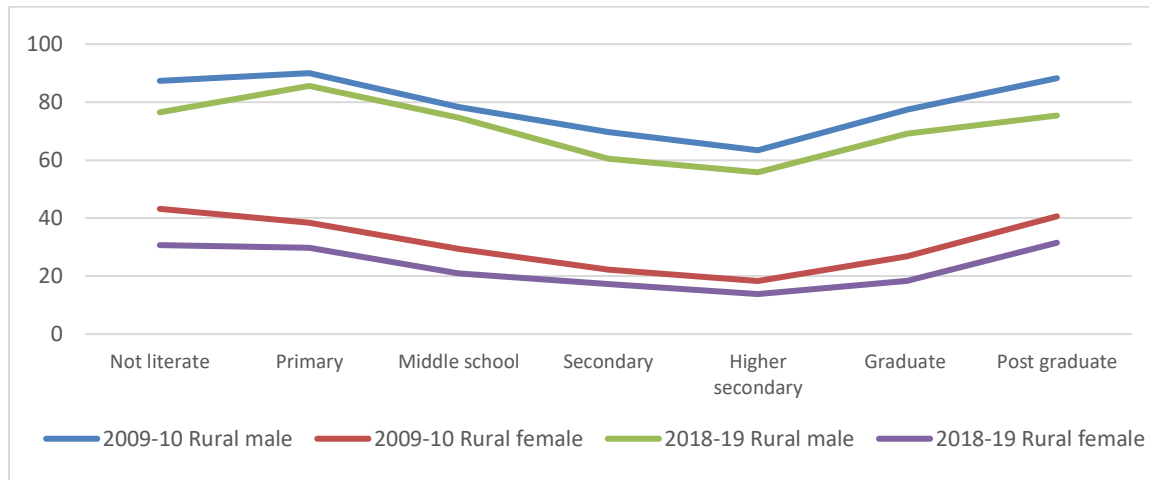
Given the overall improvements in educational attainment – especially among women – a key question arises as to whether such progress has been accompanied by improved employment outcomes. Next, we examine the quality of employment across different levels of education.

#### **4.b. Employment opportunities**

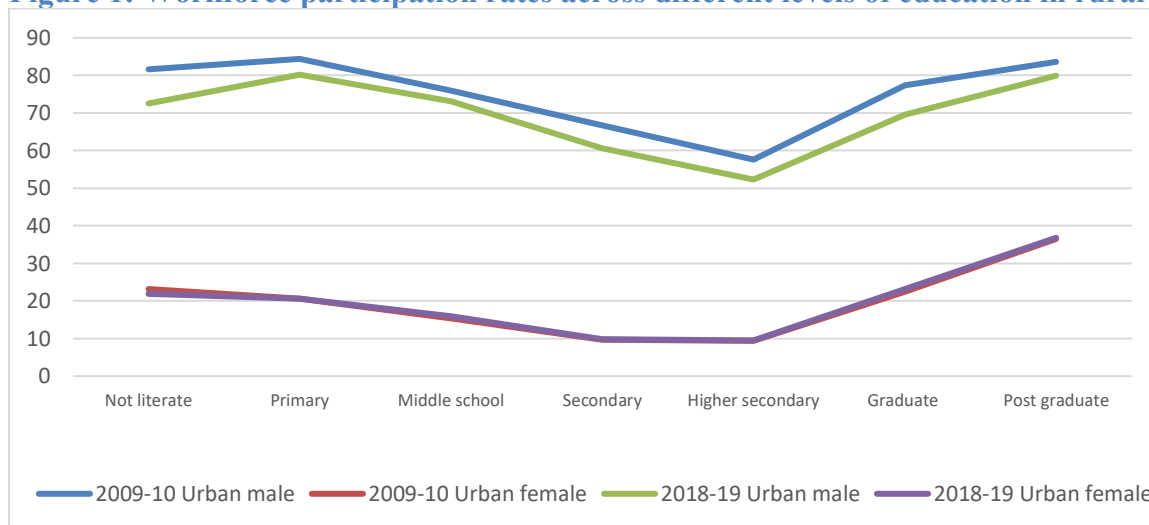
*4.b.(i). Workforce participation rates:* As noted by the other researchers' U-shaped relationship between educational attainment and workforce participation has been observed during both 2009-10 and 2018-19, particularly among females, as noted by several researchers (Figure 1-2 and Table 1A-appendix). The participation rates are relatively high among the illiterate, declines sharply with middle to secondary education, and rises again at the graduate and postgraduate levels. This trend is consistent in both 2009-10 and 2018-19, though overall participation has declined over time.

In addition, both rural-urban and gender disparities persist in educational attainment among workers. Across all levels of education and in both rural and urban areas, female participation rates remained consistently lower than those of males, highlighting a persistent gender gap. Alarming, even among those having a higher level of education (i.e.

post graduate and above), only about one-third of females were employed, while it was three-fourths among males.



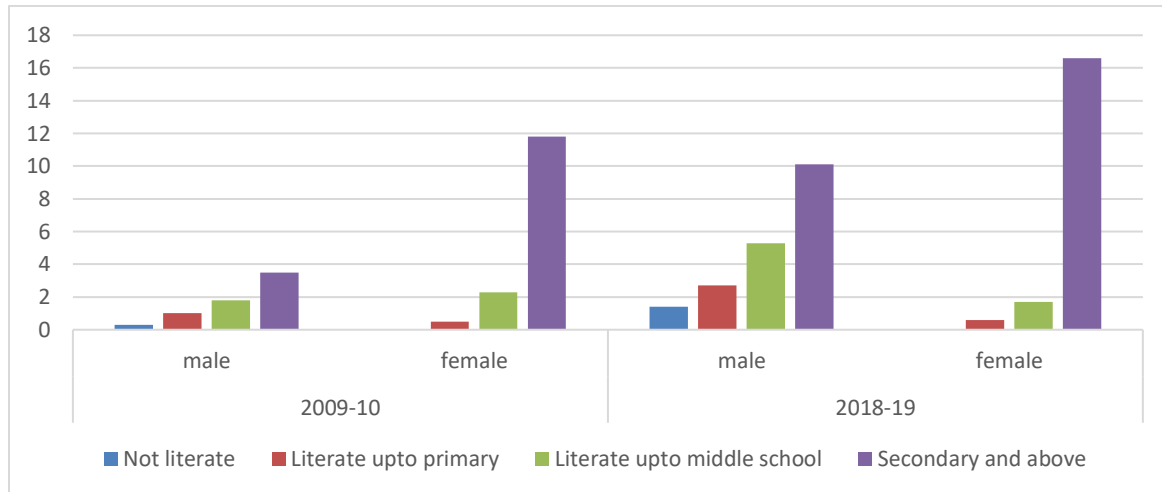
**Figure 1: Workforce participation rates across different levels of education in rural areas**



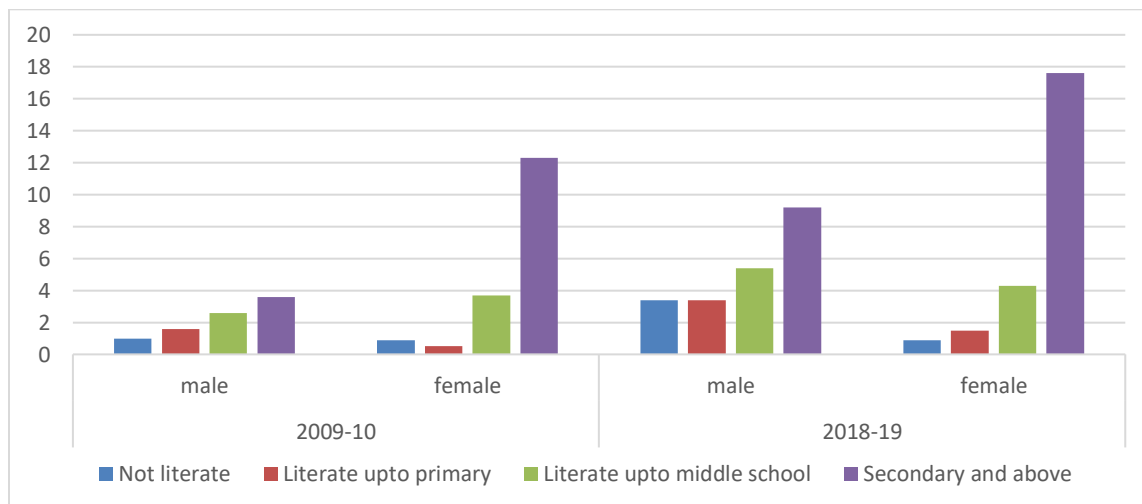
**Figure 2: Workforce participation rates across different levels of education in urban areas**

*4b.(ii). Unemployment rates:* Contrary to prevailing perceptions that higher education ensures better employment outcomes, unemployment rates were in fact higher among the educated during the study period (Figure 3-4 and Table 2A). This paradox was especially pronounced among educated females, whose unemployment rates consistently exceeded those of their male counterparts. Most notably, unemployment among the educated has worsened over time for both genders. In 2009-10, approximately 12% of educated females in both rural and urban areas were unemployed; this figure rose to 17-18% by 2018-19. Among educated males, the unemployment rate increased from around 4% to 9-10% over the same period. These trends point to deepening structural constraints in the labour market, such as the inadequate absorption capacity of the

formal sector, skill mismatches, and persistent gender barriers, which continue to undermine the employment prospects of even the most qualified individuals.



**Figure 3: Unemployment rates of persons of age 15 years and above, across different levels of education in rural areas**



**Figure 4: Unemployment rates of persons of age 15 years and above, across different levels of education in urban areas**

*4b.(iii). Category of workers: Self-employed/regular wage or salaried workers/casual workers:* Across all levels of education, self-employment remains the dominant form of work for both men and women, although the pattern varies by educational attainment and gender. In 2009-10, over half of all male and female workers were self-employed, a trend that persisted in 2018-19, albeit with slight variations (see Tables 3 and 4).

Among male workers, self-employment is particularly high for those with education up to secondary and higher secondary levels. For female workers, self-employment is most common among those with low to moderate levels of education. In contrast, regular employment increases



significantly with higher education. The share of male workers in regular jobs peaks among those with diploma or certificate qualifications (77% in 2018-19), while among females, it rises most sharply among graduates and postgraduates (over 81%). Casual employment is more prevalent among those with no or low education, though it declined between the two survey rounds. In 2018-19, over one-third of illiterate women and about 22% of illiterate men were casually employed.

**Table 3: Percentage distribution of workers across different categories and levels of education among males**

Sl no	Educational level	Self emp. (%)	Regular (%)	Casual (%)	Self emp. (%)	Regular (%)	Casual (%)
		2009-10			2018-19		
1	Not literate	46.1	6.4	47.5	53.0	9.6	37.4
2	Formally literate	48.3	9.6	42.1	66.3	1.7	32.0
3	Literate up to primary	50.0	11.8	38.3	51.8	18.7	29.5
4	Literate up to middle school	52.5	14.8	31.7	52.1	23.9	24.0
5	Literate up to secondary	58.8	22.8	18.5	52.6	28.1	19.3
6	Literate up to higher secondary	60.5	28.9	10.6	51.7	36.3	12.0
7	Diploma/Certificate	35.9	56.5	7.6	28.7	62.9	8.3
8	Graduate and above	43.0	54.5	2.6	38.3	59.2	2.5
	<b>Total (%)</b>	51.1	20.3	28.6	50.1	29.0	21.0

Source: Author's estimation from unit level data NSSO (2011,2020)

**Table 4: Percentage distribution of workers across different categories and levels of education among females**

Sl no	Educational level	Self emp. (%)	Regular (%)	Casual (%)	Self emp. (%)	Regular (%)	Casual (%)
		2009-10			2018-19		
1	Not literate	51.3	4.7	44.0	54.5	12.0	33.4
2	Formally literate	49.2	7.1	43.7	53.3	16.6	30.2
3	Literate up to primary	55.8	8.3	36.0	54.3	20.0	25.7
4	Literate up to middle school	60.8	10.9	28.3	54.2	26.3	19.5
5	Literate up to	61.3	22.1	16.6	48.8	35.1	16.1

	secondary						
6	Literate up to higher secondary	55.1	37.9	7.0	40.7	52.0	7.2
7	Diploma/Certificate	20.7	76.0	3.3	18.8	76.9	4.4
8	Graduate and above	19.7	79.0	1.4	17.4	81.6	1.0
	<b>Total (%)</b>	51.2	14.4	34.4	47.5	30.3	22.1

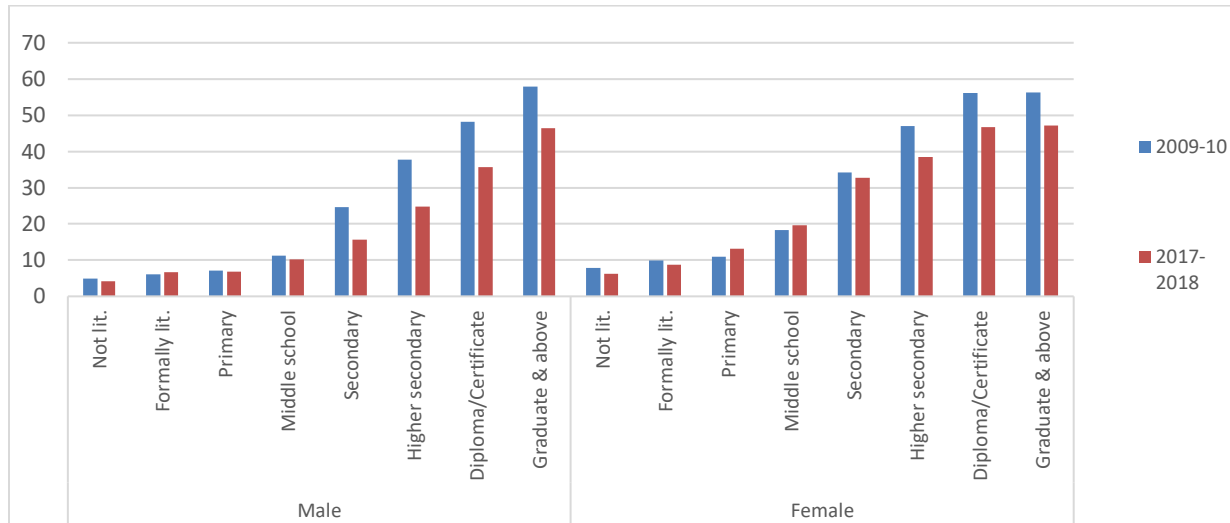
Source: Author's estimation from unit level data NSSO (2011,2020)

#### 4c. Stability and security of work

*4c(i). Job contracts:* The nature of job contracts is a critical indicator of employment quality, reflecting the degree of stability and security available to workers. The analysis suggests a strong positive association between educational attainment and access to more stable forms of employment (see Figure 5 and Table 3A). Workers with higher levels of education are considerably more likely to be employed with written job contracts. However, educational attainment alone does not ensure stable employment. A substantial share of even the most educated workers remains without written contracts, indicating that improved qualifications have not been matched by a corresponding increase in stable employment opportunities. In particular, more than 40 percent of highly educated workers continue to lack contractual security, pointing to a disconnect between rising educational levels and the nature of job engagements available in the labour market.

In contrast to conventional expectations, female workers report higher access to written job contracts than their male counterparts across most education levels. This trend may be attributed to the occupational distribution of women, who are more likely to be employed in those sectors (such as education, healthcare and public administration) where the incidence of written contracts is higher.

Most disturbingly, the share of workers with written job contracts – irrespective of gender – has been declining over time, indicating a weakening of employment security and a shift towards more precarious forms of work, even among the educated.

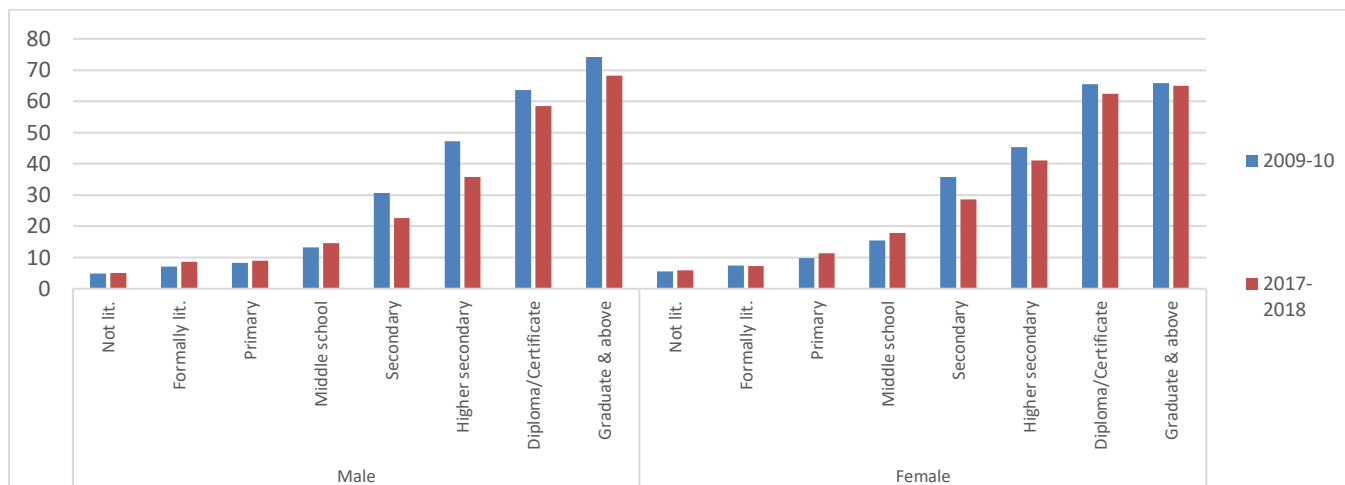


**Figure 5: Percentage of employed (within working age) with job contracts across different levels of education**

#### 4d. Social security

*4d(i). Social security benefits:* Social security coverage also illustrates a positive association with educational attainment, with educated workers having access to employment-related benefits (refer to Figures 6 and Tables 3A). Most explicitly, across most education levels, female workers report slightly higher coverage than their male counterparts.

Over time, the social security coverage among workers shows a mixed picture. There has been a gradual improvement in social security coverage among workers with lower levels of education, but a decline is observed at the higher end of the educational spectrum. This reversal is particularly concerning, as nearly one-third of highly educated workers remained outside the ambit of social security benefits in the recent period. The persistence of such gaps – across both male and female workers – suggests that rising educational attainment alone is insufficient to ensure adequate employment protection, underscoring the structural limitations of the labour market.



**Figure 6: Percentage of employed (within working age) with social security benefits across different levels of education**

## 5. Discussion

Despite substantial improvements in educational attainment – especially among women and rural populations – a significant portion of the Indian workforce remains concentrated in low-quality, insecure employment. A striking trend is the U-shaped relationship between education and workforce participation among women: high participation among the illiterate, a dip at moderate education levels, and a rise again at higher education levels. However, even among the most educated women, only about one-third are employed, compared to three-fourths of equally educated men, pointing to persistent gender barriers in the labour market.

Further, self-employment dominates across most education levels, with regular salaried jobs increasing only at the highest education tiers, especially among diploma holders and graduates. Yet, rising education does not guarantee job security – more than 40% of highly educated workers still lack written job contracts, and a substantial number remain without social security coverage. This suggests that while education enhances employment prospects to an extent, labour market structures have failed to create enough quality jobs, particularly for women and the moderately educated.

Moreover, the persistently low workforce participation rates among females – regardless of their educational attainment – can be explained by a range of factors including demographic characteristics, reproductive responsibilities, socio-cultural norms, rising household incomes, and increased domestic duties (Deshpande and Kabeer, 2019; Klasen et al., 2020; Sarkar et al., 2019; Srivastava and Srivastava, 2010). Additionally, women often opt out of the labour force when the available jobs are of poor quality. Rather than accepting low-paid, insecure, or non-remunerative employment, many educated women prefer to remain unemployed or withdraw from the labour market altogether (Bairagya, 2018). This behavioural pattern is reflected in the findings: despite their lower participation, a greater proportion of educated women are employed in formal, regular wage jobs that offer written contracts and social security benefits. In contrast, men are traditionally viewed as the primary bread winners of the family, so they are more likely

to accept any form of work, regardless of quality, which results in higher overall participation but not necessarily better employment conditions.

The relatively better employment quality among women, particularly the educated, suggests a selective entry into the labour market, where women tend to join only when job conditions are perceived to be favourable. On the other hand, illiterate or less-educated individuals (both men and women) often lack such discretion due to limited qualifications and economic necessity, leading them to accept any available job. This explains their higher participation rates and lower unemployment, despite being concentrated in poor-quality, insecure work

Additionally, the findings suggest evident mismatch between rising education levels and the structure of employment opportunities in India. The labour market has not evolved in tandem with the expansion of educational attainment. A significant share of graduates and diploma holders are either unemployed or are engaged in jobs without any work-related benefits. This mismatch suggests that the current education system does not adequately prepare individuals for the demands of the labour market, especially in terms of vocational and technical skills. Furthermore, urban-rural differences further complicate this picture. While urban areas generally offer better job quality – such as higher incidence of regular employment and access to social security – urban women face unique challenges such as unsafe commuting environments, social expectations around mobility, and greater competition. These factors often discourage their labour market participation despite their higher education levels. The differences in employment outcomes between men and women highlight the urgent need for labour market reforms that are specifically designed to support and include women. There must be active policy intervention to create decent jobs for educated women, including expanding access to safe transport, workplace safety, flexible work arrangements, and affordable childcare.

Despite sustained economic growth over the past two decades, the Indian labour market has not witnessed a commensurate improvement in the quality of employment. A large share of new employment remains concentrated in the informal sector, lacks security and access to social protection. This disconnect between economic growth and decent employment highlights a critical structural issue: growth alone is insufficient to ensure inclusive and sustainable labour market outcomes. Without targeted policy interventions to enhance the quality of employment, particularly for women and the moderately educated, the benefits of growth are likely to remain unequally distributed. If rising educational attainment continues to be decoupled from quality employment, especially for women who constitute nearly half of the working-age population, the country risks underutilising its human capital and undermining long-term economic and social development.

## 6. Conclusion

This study aimed to examine the linkages between education and employment in India, with a specific focus on the quality of employment. While rising educational attainment (especially among women) been associated with improved employment quality, such as greater access to regular jobs, written contracts, and social security benefits, it has not translated into proportionate employment opportunities. The persistent gap, particularly the high unemployment

among educated women, indicates a misalignment between education and labour market absorption

A notable paradox emerges: despite relatively better employment quality among educated women compared to men, their overall employment rates remain low, largely due to high and non-declining unemployment. This suggests that many women withdraw from or refrain from entering the labour market when decent employment is unavailable – choosing unemployment over precarious, informal, or low-quality work. Moreover, the findings on employment quality reveal that despite the advantages conferred by higher education, a significant share of even the most educated workers remain in jobs lacking contractual security and social protection. This underscores that education alone is not sufficient to ensure decent work; structural reforms are equally critical. Overall, these findings indicate that economic progress alone may not automatically lead to positive linkages between education and employment in general, and quality of employment in particular. Government intervention is necessary.

In light of the findings, several policy interventions are required to strengthen the link between education and employment, particularly for women. While the formalisation of employment remains a significant challenge due to the large informal sector and structural rigidities in the labour market, steps must be taken to gradually improve employment quality within both formal and informal segments. This includes expanding access to social security, promoting written contracts, and enhancing job security wherever possible. Education and training systems should be better aligned with the needs of the labour market, with an emphasis on skill-based, vocational, and digital training—especially for women. Addressing gender-specific barriers such as limited mobility, lack of childcare support, and social norms around work is equally important.

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## Appendix

Table 1A: Workforce participation rates as per usual status among persons of age 15 years and above, across different levels of education

Sl no	Educational level	2009-10		2009-10		2018-19		2018-19	
		Rural male	Rural female	Urban male	Urban female	Rural male	Rural female	Urban male	Urban female
1	Not literate	87.4	43.2	81.6	23.1	76.5	30.7	72.6	21.9
2	Primary	90	38.4	84.4	20.6	85.6	29.8	80.2	20.6
3	Middle school	78.4	29.4	76	15.4	74.7	21	73.1	15.9
4	Secondary	69.7	22.2	66.7	9.7	60.5	17.2	60.6	9.9
5	Higher secondary	63.4	18.3	57.6	9.4	55.8	13.8	52.3	9.5
6	Diploma/Certificate	73	33.9	73	39.3	66.4	34.3	73.7	34
7	Graduate	77.4	26.9	77.3	22.4	69.1	18.4	69.5	23.1
8	Post graduate	88.3	40.7	83.6	36.5	75.4	31.5	79.9	36.8

Source: NSO (2011, 2020)

Table 2A: Unemployment rates as per usual status for the persons of age 15 years and above, across different levels of education

Sl no	Educational level	2009-10		2018-19		2009-10		2018-19	
		Rural male	Rural female	Rural male	Rural female	Urban male	Urban female	Urban male	Urban female
1	Not literate	0.3	0	1.4	0	1	0.9	3.4	0.9
2	Literate up	1	0.5	2.7	0.6	1.6	0.5	3.4	1.5



	to primary								
3	Literate up to middle school	1.8	2.3	5.3	1.7	2.6	3.7	5.4	4.3
4	Secondary and above	3.5	11.8	10.1	16.6	3.6	12.3	9.2	17.6
	Total			5.5	3.5			7	9.8

Source: NSO (2011, 2020)

Table 3A: Percentage of workers with job contracts, social security benefits and those in unions, out of total workers within the working age group (15-64 years)

Sl no	Educational level	Stability and security of work				Social security			
		2009-10		2017-2018		2009-10		2017-2018	
		Male	Female	Male	Female	Male	Female	Male	Female
1	Not literate	4.9	7.8	4.2	6.2	4.9	5.6	5.1	5.9
2	Formally literate	6.1	9.9	6.6	8.7	7.2	7.4	8.6	7.2
3	Literate up to primary	7.1	10.9	6.8	13.2	8.3	9.8	8.9	11.3
4	Literate up to middle school	11.2	18.3	10.2	19.7	13.3	15.4	14.5	17.9
5	Literate up to secondary	24.7	34.2	15.6	32.7	30.6	35.7	22.7	28.5
6	Literate up to higher secondary	37.7	47.1	24.8	38.5	47.2	45.4	35.7	41.1
7	Diploma/Certificate	48.2	56.1	35.7	46.6	63.7	65.5	58.5	62.4
8	Graduate and above	57.9	56.3	46.4	47.2	74.2	65.9	68.2	65.0
	<b>Total</b>	22.3	25.6	19.7	27.6	27.8	26.5	29.1	32.7

Source: NSSO (2011) unit level data, authors' calculation