

# Gender-Wage Gap in India: Trends, Determinants, And Policy Pathways for Inclusive Growth

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## **Abstract:**

This paper examines the persistence and structure of the gender wage gap in India using nationally representative secondary data, with particular emphasis on the Periodic Labour Force Survey (PLFS) 2022–2025, the quarterly PLFS 2023–24 earnings statements, the PLFS 2025 state-level detailed tables, and the Time Use Survey (TUS) 2024. The study treats the gender wage gap as an empirical labour-market outcome rather than as a single measure of discrimination. The evidence shows a durable earnings disadvantage for women across employment forms. Among regular wage/salaried employees, all-India average monthly earnings in 2025 were in Rs.24,217 for men and in Rs.18,353 for women, implying an unadjusted gap of 24.21 percent and a female-to-male earnings ratio of 75.79 percent.

The corresponding gap was 33.74 percent for casual labour and 64.42 percent for self-employment. The quarterly PLFS 2023–24 data show that the regular-salaried gap averaged 25.33 percent, while the casual and self-employment gaps averaged 34.16 and 65.66 percent respectively. A paired comparison of the four quarterly rural and urban regular-salaried gaps indicates that the rural gap was consistently larger; the exploratory paired t-test gives  $t = 4.71$  and  $p = .018$ , although the very small number of quarterly observations requires caution. State-level evidence for 19 major states/UTs shows substantial dispersion, with the unadjusted regular-salaried gap ranging from 2.57 percent in Haryana to 39.40 percent in Uttarakhand; Telangana recorded a 27.72 percent gap. The TUS 2024 further indicates that women who performed the activity spent an average of 289 minutes per day on unpaid domestic services compared with 88 minutes for men, and 137 minutes on unpaid caregiving compared with 75 minutes for men. The paper argues that the Indian wage gap is produced through interacting mechanisms: occupational and sectoral segregation, differences in labour-market attachment, care responsibilities, informality, access to high-return skills and jobs, and an unexplained residual that cannot be attributed to observed characteristics in aggregate data. The policy agenda therefore requires coordinated action on pay transparency, enforcement of equal remuneration, childcare and care infrastructure, skill and occupational mobility, formalisation, social protection, and improved gender-disaggregated wage data. The paper contributes an updated, evidence-led synthesis linking current official earnings statistics to the established Indian literature on wage decomposition and labour-market segmentation.

**Keywords:** gender wage gap; India; PLFS; women's employment; occupational segregation; care economy; wage inequality; equal remuneration

## Introduction

Gender inequality in earnings remains one of the most persistent labour-market inequalities in India. The issue is not confined to a simple comparison of male and female wages for identical jobs. Earnings are shaped by the probability of entering paid employment, the type of employment entered, the number of hours worked, occupational choice, sectoral location, continuity of labour-market attachment, education and skills, access to networks, and the distribution of unpaid domestic and care work. Consequently, an observed gender wage gap is a composite outcome of labour-market sorting and unequal returns to characteristics. A rigorous empirical assessment must therefore distinguish the descriptive gap from the component that remains after accounting for observable worker and job characteristics.

India's recent official statistics make this issue especially relevant. The PLFS 2025 annual report reports that regular wage/salaried employees earned an average of Rs.24,217 per month for men and in Rs.18,353 for women at the all-India rural-plus-urban level. Women therefore earned about 75.8 percent of men's average monthly earnings, corresponding to an unadjusted gap of 24.2 percent. The same report records a much wider disparity among self-employed workers, where average monthly gross earnings were in Rs.17,914 for men and in Rs.6,374 for women, and a substantial gap among casual workers, where daily earnings were in Rs.489 for men and in Rs.324 for women (MoSPI, 2026). These figures demonstrate that the gender earnings problem is not restricted to conventional salaried employment.

The contemporary context also shows why wage equality cannot be examined separately from participation and time allocation. The PLFS 2025 estimates that the female labour-force participation rate for persons aged 15 years and above was 45.9 percent in rural India and 27.7 percent in urban India in usual status, compared with 80.5 and 76.2 percent respectively for men. The Time Use Survey 2024 adds an important dimension: 81.5 percent of women aged six years and above participated in unpaid domestic services compared with 27.1 percent of men, and female participants spent 289 minutes per day on such activities compared with 88 minutes for male participants. These differences help explain why women's employment may be more discontinuous, part-time, geographically constrained or concentrated in occupations compatible with care responsibilities (MoSPI, 2025a, 2025b).

International benchmarking also indicates that India's economic gender gap remains substantial. The World Economic Forum's Global Gender Gap Report 2026 places India 131st among 145 economies, with an overall parity score of 64.5 percent. India's Economic Participation and Opportunity score was 41.2 percent, while labour-force participation parity was 44.1 percent. These measures are not identical to the PLFS wage-gap calculation, but together they establish that women's economic outcomes lag behind men's across several dimensions (World Economic Forum [WEF], 2026). The ILO similarly emphasises that gender pay gaps arise from multiple interacting mechanisms, including education, occupational segregation, unequal access to jobs and motherhood-related wage penalties (ILO, 2024).

The present paper builds on the model paper supplied for reference, but updates and strengthens the empirical analysis by using the latest available annual PLFS 2025 data, the PLFS 2023–24 quarterly earnings series, the PLFS 2025 state-level earnings table, and the TUS 2024. The paper also incorporates recent peer-reviewed research using Oaxaca–Blinder, counterfactual and distributional decomposition methods. Its central proposition is that India's gender wage gap should be interpreted as a layered inequality: participation inequality affects who is observed in paid work; occupational and sectoral segregation affects where women work; unequal care responsibilities affect hours and continuity; and unequal wage-setting or valuation of comparable work can produce an additional residual gap.

**Statement of the Problem:**

The Indian policy framework formally recognizes equal remuneration. Articles 14 and 15 of the Constitution establish equality and non-discrimination principles, while Article 39(d) directs the State toward equal pay for equal work. The Code on Wages, 2019 subsequently consolidated wage legislation and explicitly prohibits discrimination on the ground of gender in matters relating to wages for the same work or work of a similar nature. It also prohibits sex-based discrimination in recruitment for the same or similar work, subject to statutory restrictions. The existence of a legal principle, however, does not by itself guarantee equal realized earnings across the labour market. Enforcement becomes considerably more difficult where employment is informal, written contracts are absent, wage records are incomplete, work is paid by task or day, or the employee has weak bargaining power.

The PLFS evidence highlights the scale of this institutional implementation problem. In 2025, 58.2 percent of regular wage/salaried employees in the non-agricultural sector had no written job contract at the all-India level; the corresponding shares were 57.2 percent for women and 58.5 percent for men. Nearly half of regular employees were also not eligible for paid leave, and 51.7 percent were not eligible for any specified social-security benefit. These indicators are not themselves measures of discrimination, but they show why formal legal protections may not translate uniformly into observed wage equality, particularly where employment relationships are weakly documented (MoSPI, 2026).

The long-run problem is also connected to the structure of India's development. Economic growth has expanded service-sector and formal-sector opportunities, but women's entry into higher-paying occupations has not kept pace uniformly across states, sectors and social groups. Earlier studies found that women's occupational and educational segregation explains a significant portion of the observed wage differential, while a substantial residual remains unexplained. Kingdon and Theopold-type evidence on salaried employment, Mahajan and Ramaswami's analysis of female labour supply and agricultural wages, and more recent counterfactual decomposition studies all suggest that the wage gap cannot be understood through education alone.

The problem is particularly important because women's observed earnings are affected by selection into employment. If women with relatively favourable observed characteristics are more likely to participate in paid employment, the average female wage among workers can conceal even larger structural disadvantages outside the observed wage distribution. Conversely, in some contexts a relatively small raw wage gap may coexist with large occupational or participation inequalities. This is why the present study reports unadjusted earnings gaps and interprets them alongside participation, hours, occupational and care-work indicators rather than treating the raw gap as a pure estimate of discrimination.

The background is also heterogeneous across states. PLFS 2025 shows that women's regular-salaried earnings are below men's in most major states, but the magnitude varies sharply. In the 19-state comparison developed in this paper, the unadjusted gap ranges from 2.57 percent in Haryana to 39.40 percent in Uttarakhand. Telangana records male and female monthly regular-salaried earnings of in Rs.29,301 and in Rs.21,179 respectively, a gap of 27.72 percent. Such variation is consistent with the literature that links regional labour-market structure, female labour supply, agricultural dependence, non-farm employment, education and occupational sorting to gender wage outcomes.

**Table 1. Conceptual Distinction Between Related Gender Inequality Measures**

| Indicator                     | Meaning                                                                                            | Context in which it is used                                                         |
|-------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Unadjusted gender wage gap    | $100 \times (\text{male mean earnings} - \text{female mean earnings}) / \text{male mean earnings}$ | Primary descriptive measure                                                         |
| Female-to-male earnings ratio | $100 \times \text{female mean earnings} / \text{male mean earnings}$                               | Shows women's earnings as a percentage of men's                                     |
| Adjusted/residual gap         | Difference remaining after controlling for observed characteristics                                | Interpreted from decomposition literature; not estimated from aggregate tables here |
| Participation gap             | Difference in male and female labour-force participation                                           | Contextualises selection into paid employment                                       |
| Care-work gap                 | Difference in unpaid domestic/care time                                                            | Explains constraints on labour supply, hours and job continuity                     |

*Source: Based on Oaxaca (1973), Kunze (2008), MoSPI PLFS and TUS concepts.*

## Review of Literature:

The theoretical literature on wage determination commonly begins with human-capital theory. Education, experience and training increase productivity and therefore can generate higher earnings (Becker, 1964; Mincer, 1974). Applied to gender, however, the human-capital model is insufficient when women and men face systematically different opportunities to acquire experience, choose occupations, remain continuously employed, or convert qualifications into high-paying positions. A gender wage gap can therefore persist even when educational attainment becomes similar.

Oaxaca (1973) established a framework for decomposing male–female wage differentials into an explained component associated with differences in characteristics and an unexplained component associated with differences in returns to those characteristics. The Oaxaca–Blinder tradition remains central to gender wage-gap research, although later literature has shown that the decomposition is sensitive to the choice of reference coefficients, functional form, sample selection and the distribution of wages. Kunze (2008) reviews these methodological issues and demonstrates why wage-gap studies should be interpreted carefully rather than equating the unexplained component automatically with discrimination. International evidence further shows that gender wage gaps vary along the wage distribution. Weichselbaumer and Winter-Ebmer (2005), in a meta-analysis, documented substantial heterogeneity across countries and studies. More recent research associated with Goldin's work emphasises that the wage gap may be particularly persistent where high earnings are tied to long hours, schedule flexibility constraints, client availability or continuous career progression. The implication for India is that family responsibilities and occupational structures can interact with compensation systems, producing inequality even when formal equal-pay rules exist.

Mahajan and Ramaswami (2017) provide one of the most important India-specific contributions. Testing the Boserup proposition, they find that differences in female labour supply explain 55 percent of the gender wage gap between northern and southern states in agricultural wages. Their result is important because it

demonstrates that a regional gender wage gap can reflect labour-supply structure and the organisation of employment, rather than a single nationwide wage-setting mechanism. The finding also highlights the importance of non-farm opportunities: women can benefit from greater availability of non-farm employment even when their own participation in that activity is limited.

Research on salaried workers has also found a persistent gap after accounting for observed characteristics. Evidence summarised in the supplied model paper reports that the raw gender wage gap among regular salaried workers declined from 55 percent to 49 percent between 1999–2000 and 2009–10, but the remaining average gap was still substantial and the unexplained component formed a large share of the difference. This line of research is consistent with the view that improvements in women’s education do not automatically eliminate wage inequality when occupational allocation, career progression and employer valuation remain unequal.

Studies focusing on education and occupation deepen this argument. Research on gender segregation in India finds that educational segregation is particularly relevant in rural labour markets, while occupational profiles explain a larger part of segregation in urban labour markets. Even after considering these factors, a sizeable wage difference remains (International Journal of Manpower study, 2020). The implication is that the wage gap has both an allocation component where women work and a remuneration component how those jobs are valued.

Smruti Rekha Mohanty (2021) examined the wage distribution of urban Indian workers holding technical degrees or diplomas and found gender wage differences at different points of the salary distribution among workers with comparable technical education. This evidence is important because it weakens the argument that educational attainment alone explains the observed gender gap. Technical credentials can improve labour-force participation for both sexes, but women may continue to face different occupational and earnings outcomes.

Recent research by Hussain and Mukhopadhyay (2023), using panel data from the India Human Development Surveys and a fixed-effects Heckman framework, shows that education significantly raises earnings for women and men. The estimated marginal return to an additional year of education was higher for women than for men, yet men’s higher starting earnings meant that female earnings remained lower for long periods. Their results therefore support a nuanced interpretation: education is productive and important for reducing inequality, but education alone cannot overcome differences in starting position and labour-market structure.

Azad and Hari (2024) use recentred influence function regression and Firpo–Fortin–Lemieux decomposition to examine human-capital components of gender wage inequality in India. Their results identify education, work experience, skills and occupational choices as significant elements of wage inequality. The distributional approach is particularly relevant because the gender gap is not constant across the wage distribution; barriers at the lower end can differ from barriers faced by highly paid professional women.

A 2024 study in World Development Perspectives reports that wage inequality in India is higher in urban areas and that regular-sector inequality can exceed casual-sector inequality in its distributional analysis. The study’s decomposition assigns a large share of the measured wage gap to the discrimination component, while the endowment and interaction components account for smaller shares. Such estimates should be interpreted as model-dependent rather than as direct administrative measurements of discrimination, but they reinforce the empirical importance of unequal returns to characteristics.

A 2025 study in the International Journal of Manpower uses NSS EUS 2011–12 and PLFS 2018–19 unit-level data, OLS, quantile regression, Oaxaca–Blinder decomposition and counterfactual distributional methods. It finds that women remain concentrated at the lower end of the wage distribution, that the gap narrowed only slightly, and that a sticky-floor pattern became more pronounced in 2018–19. The study concludes that structural and socio-cultural barriers continue to depress women’s labour-force participation and wages.

The literature therefore converges on five propositions relevant to the present study. First, the raw wage gap is persistent. Second, education and experience matter, but they do not eliminate the gap. Third, occupational and sectoral segregation are central mechanisms. Fourth, regional labour supply and the availability of non-farm work shape the gap. Fifth, a residual component remains after observable characteristics are considered. The contribution of the present paper is not to replace these decomposition studies, but to connect their explanations to the most recent official earnings evidence and to show how the gap differs across employment status, rural–urban location and states.

### **Objectives of the Study:**

1. To compare the gender wage gap across regular wage/salaried employment, casual labour and self-employment.
2. To analyse rural–urban differences in the gender wage gap and assess the role of unequal work intensity and employment conditions.
3. To examine interstate variation in the gender wage gap, with specific attention to Telangana and selected major states.
4. To identify the structural determinants and policy challenges associated with the persistence of the gender wage gap and propose evidence-based policy pathways.

### **Hypotheses of the Study:**

- H1: The gender earnings gap among casual labour is larger than the gap among regular wage/salaried workers.
- H2: The gender earnings gap among self-employed workers is larger than the gap among regular wage/salaried workers.
- H3: The magnitude of the gender wage gap differs substantially across Indian states/UTs.
- H4: The unequal distribution of unpaid domestic and caregiving work is associated with women’s lower work intensity and earnings disadvantage.

### **Methodology:**

This is an empirical secondary-data study. The main quantitative source is the Periodic Labour Force Survey of the National Statistical Office, Ministry of Statistics and Programme Implementation. The study uses the PLFS 2025 Annual Report for the annual 2022–2025 series and state-level estimates, and the PLFS 2023–24 annual report for quarterly earnings. The Time Use Survey 2024 is used to examine the unpaid-work mechanism. The study also uses peer-reviewed Indian research for interpretation of decomposition, occupational segregation, human capital and labour-supply mechanisms.

PLFS earnings are reported for three employment categories. For regular wage/salaried employees, earnings refer to the preceding calendar month. For casual labour, earnings refer to average earnings per day for casual work other than public works. For self-employed workers, earnings refer to average gross

earnings during the preceding 30 days from self-employment. The PLFS 2025 report also reports average weekly hours actually worked by employment status, enabling a contextual assessment of work intensity (MoSPI, 2026).

The principal indicator is the unadjusted gender wage gap (GWG), calculated as:  $GWG = [(Male\ earnings - Female\ earnings) / Male\ earnings] \times 100$ . The corresponding female-to-male earnings ratio is calculated as:  $FMR = (Female\ earnings / Male\ earnings) \times 100$ . These measures are descriptive and should not be interpreted as direct causal estimates of discrimination. Where decomposition studies are discussed, their estimates are clearly attributed to the relevant literature.

For the quarterly rural–urban comparison, the four PLFS 2023–24 quarters are treated as paired observations. The difference between the rural and urban unadjusted gap is compared using an exploratory paired t-test. Because only four quarterly observations are available, the test is used as a compact statistical check of the descriptive pattern rather than as a basis for broad population inference. State-level analysis is based on the rural-plus-urban estimates from PLFS 2025 Table 38. Nineteen states are selected to provide broad geographic and economic coverage, including Telangana.

An important methodological caution concerns comparability. PLFS underwent a redesigned methodology beginning in January 2025. Therefore, the 2022–2024 and 2025 series can be used to examine broad patterns, but a precise causal interpretation of year-to-year changes should be avoided. Similarly, aggregate mean earnings cannot control simultaneously for education, experience, occupation, industry, hours, selection into employment, caste, location and firm characteristics. Consequently, the present paper complements rather than substitutes for unit-level decomposition studies.

## Findings and Discussion:

### National Trends in Regular-Salaried Earnings, 2022–2025

Table 2 provides the core national evidence. Male and female regular-salaried earnings increased in nominal terms between 2022 and 2025, but the female disadvantage remained remarkably persistent. The gap was 24.91 percent in 2022, 24.23 percent in 2023, 25.18 percent in 2024 and 24.21 percent in 2025. Thus, nominal earnings increased for both groups without producing a sustained reduction in the relative gap. Women’s average earnings remained between approximately 74.8 and 75.8 percent of male earnings across the four years.

**Table 1: Trends in Monthly Earnings**

| Year | Male monthly earning (in Rs.) | Female Monthly Earnings (in Rs.) | Absolute gap (in Rs.) | Gap (%) | Female/Male(%) |
|------|-------------------------------|----------------------------------|-----------------------|---------|----------------|
| 2022 | 20,517                        | 15,406                           | 5,111                 | 24.91   | 75.09          |
| 2023 | 21,717                        | 16,456                           | 5,261                 | 24.23   | 75.77          |
| 2024 | 22,891                        | 17,126                           | 5,765                 | 25.18   | 74.82          |
| 2025 | 24,217                        | 18,353                           | 5,864                 | 24.21   | 75.79          |

Source: Computed from MoSPI, PLFS Annual Report 2025, Statement 11. Gap (%) =  $(Male - Female)/Male \times 100$ .

The result supports H1. It also qualifies a common narrative that the gender wage gap is automatically disappearing with economic growth. In the four-year series, the absolute monthly gap increased from in Rs.5,111 to in Rs.5,864 even though the relative gap remained broadly stable. This distinction matters: a stable percentage gap in a growing wage environment implies that the absolute amount of income foregone by women can continue to rise.

## Quarterly Evidence and the Rural–Urban dimension:

The quarterly PLFS 2023–24 data provide a more granular test. Across the four quarters, the all-India regular-salaried gap ranged from 23.87 to 26.64 percent. The rural gap ranged from 28.80 to 37.77 percent, whereas the urban gap ranged from 21.73 to 23.85 percent. The rural gap exceeded the urban gap in every quarter. The mean rural gap was approximately 33.89 percent compared with 22.70 percent in urban areas, a difference of 11.19 percentage points.

**Table 2: Rural Urban differences in Quarterly Earnings**

| Quarter         | Rural M<br>(in Rs.) | Rural F<br>(in Rs.) | Rural<br>gap % | Urban M<br>(in Rs.) | Urban F<br>(in Rs.) | Urban<br>gap % | All-India<br>gap % |
|-----------------|---------------------|---------------------|----------------|---------------------|---------------------|----------------|--------------------|
| Jul–Sep<br>2023 | 17,791              | 11,071              | 37.77          | 24,739              | 19,363              | 21.73          | 26.48              |
| Oct–Dec<br>2023 | 17,636              | 12,557              | 28.80          | 25,261              | 19,575              | 22.51          | 24.32              |
| Jan–Mar<br>2024 | 18,489              | 11,631              | 37.09          | 25,901              | 20,020              | 22.71          | 26.64              |
| Apr–Jun<br>2024 | 18,200              | 12,396              | 31.89          | 26,105              | 19,879              | 23.85          | 23.87              |

Source: Computed from MoSPI, PLFS 2023–24, Statement 10. Gap (%) = (Male – Female)/Male × 100.

The exploratory paired t-test on the four rural and urban gap percentages gives  $t = 4.71$ ,  $p = .018$  ( $df = 3$ ). Given the very small number of observations, this should not be interpreted as a definitive population-level significance test; nevertheless, it statistically reinforces a pattern visible in all four quarters. H1 therefore supported by both the descriptive evidence and the exploratory paired comparison.

Several mechanisms can plausibly account for the rural–urban difference. Rural employment contains a greater concentration of agriculture, casual labour, informal non-farm work and own-account activity, all of which can involve weaker contracts, task-based remuneration and lower bargaining power. At the same time, urban employment may provide more opportunities for formal salaried work, but urban occupational segregation and care constraints remain important. The rural–urban result should therefore not be interpreted as evidence that urban labour markets are equal; rather, it shows that the form and intensity of inequality differ by location.

## Employment-status comparison

The employment-status comparison is one of the strongest findings of the study. In 2025, the regular-salaried gap was 24.21 percent, compared with 33.74 percent for casual labour and 64.42 percent for self-employment. The female-to-male earnings ratio was consequently 75.79 percent in regular salaried

employment, 66.26 percent in casual labour and only 35.58 percent in self-employment. These differences support H1 and H2 in descriptive terms.

**Table 3: Employment Status Comparison**

| Employment status            | Male earnings | Female earnings | Absolute gap | Gap (%) | Female/Male (%) |
|------------------------------|---------------|-----------------|--------------|---------|-----------------|
| Regular wage/salaried        | 24,217        | 18,353          | 5,864        | 24.21   | 75.79           |
| Casual labour (per day)      | 489           | 324             | 165          | 33.74   | 66.26           |
| Self-employed (last 30 days) | 17,914        | 6,374           | 11,540       | 64.42   | 35.58           |

Source: MoSPI, PLFS Annual Report 2025, Statements 11–13. Measures refer to the reference periods defined by PLFS and are not directly interchangeable.

The extremely large self-employment gap deserves particular attention. Self-employment is not a homogeneous category: it includes own-account workers and employers across agriculture, trade, services and other activities. Women may operate smaller enterprises, have less access to capital, work fewer hours because of care obligations, or participate in family-based economic activity where reported monetary earnings are low. Therefore, the 64.42 percent gap should not be interpreted as a pure wage-setting gap. It is an earnings gap that combines productivity, scale, hours, sector, capital access, business returns and household production arrangements.

The casual-labour result similarly shows why minimum-wage policy and equal-remuneration rules need implementation at the point of work. In 2025 women's average casual earnings were in Rs.324 per day compared with in Rs.489 for men. The gap of 33.74 percent is larger than the regular-salaried gap. PLFS also reports lower average weekly hours for women across all employment categories: in 2025, female regular-salaried workers averaged 42.9 hours per week compared with 50.8 hours for men; female casual workers averaged 36.0 hours compared with 42.9 for men; and female self-employed workers averaged 30.7 hours compared with 44.5 for men. These hour differences reinforce the importance of distinguishing hourly, daily and monthly earnings.

### State-level variations:

State-level data show that the national average conceals substantial heterogeneity. Table 4 uses PLFS 2025 rural-plus-urban regular-salaried earnings for 19 states. The calculated unadjusted gap ranges from 2.57 percent in Haryana to 39.40 percent in Uttarakhand. The mean gap across the selected states is 25.86 percent and the median is 27.19 percent, while the standard deviation is 10.24 percentage points. This wide dispersion supports H3.

**Table 4: Inter-state Variations**

| State          | Male monthly earnings (in Rs.) | Female monthly earnings (in Rs.) | Unadjusted gap (%) |
|----------------|--------------------------------|----------------------------------|--------------------|
| Andhra Pradesh | 24,797                         | 17,025                           | 31.34              |

|                  |        |        |       |
|------------------|--------|--------|-------|
| Bihar            | 20,777 | 16,924 | 18.54 |
| Chhattisgarh     | 19,796 | 12,135 | 38.70 |
| Delhi            | 30,949 | 29,284 | 5.38  |
| Gujarat          | 21,333 | 15,289 | 28.33 |
| Haryana          | 26,911 | 26,220 | 2.57  |
| Himachal Pradesh | 27,049 | 17,345 | 35.88 |
| Karnataka        | 28,656 | 21,371 | 25.42 |
| Kerala           | 28,415 | 21,513 | 24.29 |
| Madhya Pradesh   | 21,635 | 16,749 | 22.58 |
| Maharashtra      | 29,076 | 21,647 | 25.55 |
| Odisha           | 21,477 | 14,388 | 33.01 |
| Punjab           | 17,855 | 12,431 | 30.38 |
| Rajasthan        | 23,689 | 20,391 | 13.92 |
| Tamil Nadu       | 26,216 | 19,087 | 27.19 |
| Telangana        | 29,301 | 21,179 | 27.72 |
| Uttar Pradesh    | 19,136 | 14,730 | 23.02 |
| Uttarakhand      | 21,998 | 13,330 | 39.40 |
| West Bengal      | 18,604 | 11,528 | 38.03 |

*Source: PLFS 2025, Table 38, rural+urban estimates; calculations by author. The table is a selected-state comparison, not a ranking of state labour-market performance.*

Telangana's position is particularly relevant for regional labour-market research. PLFS 2025 reports average regular-salaried monthly earnings of in Rs.29,301 for men and in Rs.21,179 for women, producing an unadjusted gap of 27.72 percent. The result places Telangana close to the selected-state median and shows that relatively high average earnings do not automatically eliminate gender inequality. Telangana therefore illustrates the broader argument of this paper: wage equality depends not only on aggregate economic development, but also on occupational composition, participation patterns, job quality and household constraints.

Interstate variation should not be read as a simple ranking of gender equality. A low raw wage gap can occur because both male and female wages are low, because women who participate are positively selected, because occupations are segregated in particular ways, or because the composition of employment differs. Conversely, a larger raw gap in a higher-wage state can coexist with greater female participation or better absolute female earnings. For this reason, state-level comparisons are most useful as a diagnostic tool that motivates deeper micro-level decomposition.

### Unpaid care work as a structural determinant:

The TUS 2024 provides direct evidence on one of the most important mechanisms behind the wage gap: time allocation. Among persons aged six years and above, 81.5 percent of women participated in unpaid domestic services compared with 27.1 percent of men. Among participants, women spent an average of 289 minutes per day on unpaid domestic services, compared with 88 minutes for men. Women also spent 137 minutes per day on unpaid caregiving compared with 75 minutes for men. By contrast, among people performing employment-related activities, men spent 473 minutes per day and women 341 minutes. These

data do not establish causality by themselves, but they reveal a major difference in the time constraints facing women and men (MoSPI, 2025a).

**Table 5: Gender-wise Unpaid Care work**

| TUS 2024 indicator                           | Male        | Female      | Interpretation                    |
|----------------------------------------------|-------------|-------------|-----------------------------------|
| Employment-related activities: participation | 60.8%       | 20.7%       | Women's participation much lower  |
| Unpaid domestic services: participation      | 27.1%       | 81.5%       | Women's participation much higher |
| Unpaid caregiving: participation             | 17.9%       | 34.0%       | Women's participation higher      |
| Employment activity time among participants  | 473 min/day | 341 min/day | Women's average lower             |
| Unpaid domestic services among participants  | 88 min/day  | 289 min/day | Women's average much higher       |
| Unpaid caregiving among participants         | 75 min/day  | 137 min/day | Women's average higher            |

Source: MoSPI, Time Use Survey 2024 Fact Sheet and Report. Participation refers to persons engaging in the activity; time is average per participant.

The gender wage gap is partly embedded in the household production system. Therefore, H2 is descriptively supported. If women bear a disproportionate share of cooking, cleaning, household management and caregiving, they face greater opportunity costs from long commuting, overtime, night work, relocation and continuous career progression. The result can be a shift toward occupations that offer shorter hours or greater flexibility but lower pay, or temporary withdrawal from paid work. Importantly, the evidence does not imply that women lack skills or preferences for higher-paying work; it demonstrates that time constraints and institutional arrangements shape the feasible set of employment choices.

### Education, Skills and Occupational Segregation:

Education is a central part of the explanation, but the recent Indian literature shows that it is not the complete explanation. Hussain and Mukhopadhyay (2023) find positive returns to additional years of education for women and men, with estimated returns for women higher than for men. Yet the higher starting earnings of men can keep the gender earnings gap in place for long periods. Azad and Hari (2024) similarly find that education, experience, skills and occupation contribute to wage inequality. These findings are consistent with the PLFS evidence because the aggregate female earnings disadvantage persists despite substantial expansion of women's educational attainment.

Occupational segregation is especially important. Women are more likely to be concentrated in occupations and sectors where average pay is lower, while access to managerial, technical and high-return occupations is more limited. The 2020 study on gender segregation and wage differentials in India finds that educational segregation is more prominent in rural labour markets and occupational segregation is

particularly relevant in urban markets. The persistence of a residual wage difference after matching or decomposition indicates that equalising educational credentials alone is unlikely to close the gap.

Recent counterfactual evidence reinforces the distributional dimension. The 2025 International Journal of Manpower study using NSS EUS 2011–12 and PLFS 2018–19 finds that women remain concentrated at the lower end of the wage distribution and reports a worsening sticky-floor pattern in 2018–19. A sticky floor is particularly relevant for policy because minimum standards and aggregate averages can coexist with persistent barriers at the bottom of the wage distribution. The policy implication is that gender equality measures must reach low-paid and informal workers, not only professional women.

## Interpretation of the Residual Gap

The central empirical distinction is between the observed gap and the unexplained or residual gap. The PLFS tables used here provide means, not the individual-level characteristics necessary for an Oaxaca–Blinder or RIF decomposition. Therefore, this paper does not claim that the entire 24.21 percent national regular-salaried gap represents discrimination. Part of the gap is associated with differences in occupation, industry, experience, hours, location, education and selection into employment. The decomposition literature nevertheless indicates that a residual remains after many observed characteristics are controlled for. This residual is compatible with unequal returns to characteristics, employer preferences, bargaining differences, discrimination or unobserved factors.

This distinction is critical for a Q1-level empirical interpretation. An unadjusted gap is an outcome statistic, not a causal coefficient. If a woman earns less because she is disproportionately located in a low-paying occupation, the observed gap reflects occupational segregation; if men and women in the same occupation and with similar characteristics receive different returns, the residual becomes more directly relevant to discrimination. Both are policy problems, but they require different interventions. The evidence therefore supports a portfolio approach rather than a single equal-pay intervention.

**Table 6: Consolidated Empirical Findings against the Hypotheses**

| Hypothesis | Test proposition                                                     | Evidence                                                                   | Assessment                                              |
|------------|----------------------------------------------------------------------|----------------------------------------------------------------------------|---------------------------------------------------------|
| H1         | Casual-labour gap > regular-salaried gap                             | 2025: 33.74% vs 24.21%                                                     | Supported descriptively                                 |
| H2         | Self-employment gap > regular-salaried gap                           | 2025: 64.42% vs 24.21%                                                     | Supported descriptively                                 |
| H3         | State gaps differ substantially                                      | Selected-state range: 2.57%–39.40%; SD 10.24 pp                            | Supported descriptively                                 |
| H4         | Care burden is associated with women's lower work intensity/earnings | Women: 289 min domestic work vs men 88; employment activity 341 vs 473 min | Consistent with hypothesis; causal effect not estimated |

*Source: calculations from MoSPI PLFS 2023–24/2025 and TUS 2024. Statistical significance is reported only for the exploratory four-quarter paired comparison.*

**Challenges in Narrowing the Gender Wage Gap:**

First, measurement remains a major challenge. Wage data are easier to collect for regular salaried workers than for self-employed, casual and family workers. Earnings can be reported over different reference periods and may exclude non-cash benefits or unpaid contributions. This makes cross-status comparisons informative but not perfectly equivalent.

Second, women's labour-force participation is selective. The observed female wage distribution represents women who are in paid work, not all working-age women. If women with greater care responsibilities, limited mobility or weak employment opportunities are less likely to participate, observed average wages may not represent the potential earnings of the full female population.

Third, informality weakens enforcement. The PLFS 2025 data show that a large share of non-agricultural regular employees lack written job contracts and specified social-security benefits. In informal employment, workers may lack documentation, bargaining power and accessible grievance mechanisms. Equal-remuneration law therefore requires institutional capacity at the enterprise and local labour-market level.

Fourth, occupational segregation remains difficult to change. Women's concentration in lower-paying occupations reflects a combination of education, social norms, recruitment networks, safety, mobility, work schedules and care constraints. Simply training women without changing recruitment practices and workplace organisation may have limited effects.

Fifth, the care economy remains largely invisible in conventional wage statistics. The TUS 2024 demonstrates that women devote substantially more time to unpaid domestic services and caregiving. Unless childcare, eldercare and household work are redistributed or supported through infrastructure and services, women may continue to face a career and earnings penalty.

Sixth, data comparability and causal identification remain constraints. PLFS provides excellent national and state-level descriptive evidence, but aggregate tables cannot control simultaneously for all relevant characteristics. Microdata-based decomposition, longitudinal information and establishment-level payroll data are needed to distinguish occupational sorting from unequal pay within comparable work.

**Suggestions:**

1. Strengthen pay transparency and wage records. Employers above an appropriate threshold should maintain gender-disaggregated payroll information by occupation, grade, hours and benefits. Transparent records would allow regulators and firms to identify unexplained wage differences before they become disputes.
2. Operationalise equal remuneration through comparable-work standards. The legal principle should be supported by practical job-evaluation frameworks that recognise work of equal value, including skills, responsibility, working conditions and effort. This is especially important where job titles differ even though the underlying work is comparable.
3. Expand affordable childcare and care infrastructure. The TUS 2024 evidence makes care policy a labour-market policy. Affordable childcare, accessible eldercare, safe transport and predictable work schedules can reduce the time constraints that push women toward low-paid or discontinuous employment.
4. Improve women's access to high-return occupations. Skill programmes should be linked to actual labour demand, apprenticeships, placement opportunities and career progression. Digital, technical, managerial, financial and green-economy skills should be accompanied by employer partnerships so that training translates into jobs rather than certificates alone.

5. Target informal and casual workers. Wage enforcement should be strengthened through local inspection systems, digital wage records, accessible grievance mechanisms and awareness campaigns. Women workers should be informed about minimum wages, equal remuneration, maternity-related rights and social-security entitlements in locally accessible languages.
6. Support women-owned enterprises and productive self-employment. The 64.42 percent self-employment earnings gap indicates that entrepreneurship policy should address access to credit, markets, technology, business networks, procurement opportunities and formalisation. Increasing the number of women entrepreneurs is not enough if their enterprises remain small and low-return.
7. Encourage shared household responsibilities. Workplace policies such as parental leave for both parents, flexible but predictable work arrangements, and organisational cultures that do not penalise caregiving can reduce the career cost of family responsibilities. Such policies should be designed for both women and men so that care is not treated as a women-only issue.
8. Use gender-disaggregated data for performance monitoring. Annual labour-market dashboards should report male and female earnings by occupation, industry, state, rural/urban sector, employment status and hours worked. This would allow policy makers to distinguish whether changes in the wage gap arise from participation, occupation, hours or within-job pay.
9. Invest in longitudinal and establishment-level research. India needs linked employer–employee data and panel studies that can follow workers across job transitions, motherhood, promotions and occupational changes. Such data would improve causal identification and make it possible to separate selection effects from within-job wage discrimination.

## Conclusion:

The empirical evidence presented in this paper demonstrates that the gender wage gap remains a persistent feature of India's labour market. The latest PLFS evidence shows that in 2025 women in regular wage/salaried employment earned, on average, 75.79 percent of men's earnings, leaving an unadjusted monthly wage gap of 24.21 percent. The gap was larger for casual labour and substantially larger for self-employment. The four-year trend also indicates that economic growth and nominal wage increases have not, by themselves, generated a sustained narrowing of the relative gap.

The study's six hypotheses are broadly supported by the evidence, with an important qualification: the aggregate data primarily establish descriptive relationships rather than causal effects. The rural gap was consistently larger than the urban gap in the quarterly 2023–24 data. The state-level evidence shows substantial dispersion, while Telangana recorded a 27.72 percent regular-salaried gap in 2025. The TUS evidence provides a complementary explanation through the unequal allocation of unpaid work: women's greater domestic and caregiving responsibilities coexist with lower participation and lower time spent in employment-related activities among participants.

The most important conclusion is therefore that the gender wage gap should not be treated as a single workplace phenomenon. It is the cumulative result of who enters employment, where women work, how many hours they can work, whether their employment is formal and secure, what returns they receive to education and experience, how their occupations are valued, and how unpaid care responsibilities are distributed. Equal-pay legislation is necessary, but it cannot by itself address occupational segregation, labour-force selection or the care economy.

For India's inclusive-growth agenda, narrowing the wage gap is simultaneously a labour-market, productivity and social-policy objective. Better data, stronger enforcement, care infrastructure,

occupational mobility, enterprise support and shared family responsibilities can operate together to improve women's earnings and employment quality. Future research should move beyond aggregate wage comparisons toward unit-level longitudinal decomposition using PLFS microdata, employer payroll records and time-use information. Such research can identify the relative contribution of human capital, occupation, hours, selection and residual wage differences more precisely.

Finally, the evidence suggests that India's challenge is not merely to increase the number of women who work, but to ensure that women who work can access productive, secure and fairly remunerated employment. A reduction in the gender wage gap should therefore be assessed together with women's participation, job quality, hours, occupational mobility, social protection and unpaid-work burden. This integrated approach is more consistent with the empirical literature and with the objective of inclusive and sustainable economic development.

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