https://doi.org/10.64906/IJSSC.2026.03.03.1

INTERNATIONAL JOURNAL OF SOCIAL SCIENCES AND COMMERCE [IJSSC]

Gender-Wise Wage Patterns in the Leather Industry: A Comparative Study of India and Global Economies

Mr. C. Saddam Ahamed Kabeer

Research Scholar, Department of Economics, Thiruvalluvar University (A State University), Serkkadu, Katpadi Taluk, Vellore District, Tamil Nadu India-632 115.

Dr. G. Yoganandham

Professor, Department of Economics, Director- Centre for Knowledge, Thiruvalluvar University (A State University), Serkkadu, Katpadi Taluk, Vellore District, Tamil Nadu India-632 115.

Article History

Volume:3, Issue:3, 2026

Received: 26th May,2026

Accepted: 24th June 2026

Published:28th June 2026.

Abstract: *This study presents a comprehensive comparative analysis of gender-wise wage patterns in the leather industry, examining India in juxtaposition with major global leather-producing economies. Drawing upon the latest estimates from the International Labour Organization (ILO) Global Wage Report 2024-25, India's Periodic Labour Force Survey (PLFS) 2025, the Centre for Policy Dialogue (CPD) Bangladesh Tannery Survey 2024, and the Anker Research Institute Global Supply Chain Wage Study 2024, this research reveals persistent and significant gender wage disparities across the leather sector value chain. The analysis encompasses 15 major leather-producing nations across South Asia, East Asia, Europe, Africa, and the Middle East. Findings indicate that the global gender wage gap in the leather sector ranges from 12% in Germany to 66.5% in Pakistan, with India recording approximately 30% significantly higher than the global manufacturing average of 16.5%. The study identifies occupational segregation, informal employment structures, lack of collective bargaining, and discriminatory social norms as primary drivers of wage inequality. Policy recommendations include sector-specific minimum wage legislation, gender-responsive collective bargaining frameworks, transparency in pay structures, and targeted skill development programs for women workers.*

Keywords: *Gender wage gap, leather industry, India, global comparison, PLFS 2025, ILO, occupational segregation, informal labour*

Author's Citation: C. Saddam Ahamed Kabeer and G. Yoganandham *Gender-Wise Wage Patterns in the Leather Industry: A Comparative Study of India and Global Economies IJSSC.Vol.3.(3): 2026, PP: 1-2,* https://doi.org/10.64906/IJSSC.2026.03.03.1

1. Introduction

The leather industry represents one of the most significant manufacturing sectors globally, contributing approximately $100 billion annually to the world economy and employing over 3.5 million workers directly (ILO, 2024a). India stands as the world's second-largest producer of leather and leather products, with an annual production value exceeding $17 billion and direct employment of approximately 4.42 million workers (Council for Leather Exports, 2024). Despite the sector's economic prominence, gender-wise wage disparities remain a critical yet under-researched dimension of labour market inequality.

The global discourse on gender wage gaps has intensified following the ILO Global Wage Report 2024-25, which documents that women continue to earn approximately 20% less than men worldwide (ILO, 2024b). However, sector-specific analyses particularly within labour-intensive manufacturing industries such as leather remain limited. This research addresses this gap by providing a systematic comparative examination of gender wage patterns across the leather industry value chain, with particular emphasis on India and its position relative to other major leather-producing nations.

The leather sector presents a unique case study for gender wage analysis due to its distinct occupational structure: women are disproportionately concentrated in lower-wage segments such as finishing, stitching, and quality control, while men dominate higher-wage technical and supervisory roles (Together for Decent Leather, 2023). This occupational segregation, combined with pervasive informal employment arrangements, creates structural conditions that perpetuate wage inequality.

1.1 Research Objectives

1. To quantify gender wage gaps in India's leather sector using the latest PLFS 2025 data and sector-specific surveys.
2. To compare India's leather sector gender wage patterns with major global leather-producing economies.
3. To identify structural determinants of wage inequality, including occupational segregation, informality, and institutional factors.
4. To propose evidence-based policy recommendations for reducing gender wage disparities in the leather industry.

1.2 Research Questions

1. What is the magnitude of the gender wage gap in India's leather sector as per the latest available estimates?
2. How does India's leather sector gender wage gap compare with other major leather-producing countries?
3. What are the primary drivers of gender wage inequality in the leather industry value chain?
4. What policy interventions are most effective in addressing sector-specific wage disparities?

2. Literature Review

2.1 Theoretical Framework

The analysis of gender wage gaps draws upon three complementary theoretical frameworks. Human capital theory (Becker, 1964; Mincer, 1974) posits that wage differentials reflect differences in education, experience, and skill acquisition. However, this framework has been critiqued for failing to account for discriminatory barriers that prevent women from accumulating human capital at equivalent rates (Blau & Kahn, 2017). Labour market segmentation theory (Doeringer & Piore, 1971) explains how dual labour markets primary (stable, high-wage) and secondary (unstable, low-wage) disproportionately channel women into secondary segments. Institutional theory (North, 1990) emphasizes how formal and informal institutions including labour laws, social norms, and collective bargaining arrangements shape wage outcomes.

2.2 Global Gender Wage Gap Trends

The ILO Global Wage Report 2024-25 provides the most comprehensive recent assessment of global wage trends, documenting that the mean raw gender wage gap stands at 17.0% globally, while the median raw gap reaches 14.9% (ILO, 2024b). Critically, the report reveals significant variation by country income group: low-income countries exhibit a mean raw gap of 19.5%, while high-income countries record 12.7%. The factor-weighted gap controlling for education, experience, and occupation reveals that upper-middle-income countries face the most severe unexplained disparities at 21.7%.

Blau and Kahn (2017) demonstrated that while the overall gender wage gap in the United States narrowed substantially between 1980 and 2010, occupational segregation remained the single largest contributor to persistent inequality. Their decomposition analysis found that occupational differences accounted for approximately 51% of the overall gap. This finding has been replicated across multiple country contexts (Weichselbaumer & Winter-Ebmer, 2005; Olivetti & Petrongolo, 2008). Ankur Shukla et al (2025) stated sustainable economic stability in labour-intensive sectors like leather manufacturing, workers' well-being is crucial. This study investigates the well-being of workers in Kanpur's leather cluster, leveraging primary data from 103 randomly chosen employees. Key well-being aspects personal, health and material, workplace, and relational well-being were assessed through a worker survey. Descriptive statistics and stepwise regression analysis revealed significant variations in respondents' skills and education levels. Key influencing factors on workers' well-being include gender, job security, employment duration, age, and education. The analysis also highlighted how housing status, weekly hours, and income impact well-being, with gender and income disparities worsening conditions for women and unskilled workers. The findings emphasize the need for improved working conditions and suggest policy measures like addressing wage inequalities and enforcing health regulations. Future research should explore these dynamics in other industrial clusters to broaden understanding.

2.3 Gender Wage Gaps in Manufacturing and Export-Oriented Sectors

Export-oriented manufacturing sectors, particularly garments and textiles, have been extensively studied for gender wage dynamics. Kabeer and Mahmud (2004) found that Bangladesh's garment sector, despite employing predominantly women, exhibited significant wage disparities driven by occupational segregation and lack of collective bargaining. Anker et al. (2003) established that gender pay gaps in global supply chains are systematically larger than national averages, with women in Bangladeshi garment factories earning 22-30% less than men for comparable work. The Anker Research Institute's 2024 study of global supply chains across Bangladesh, Turkey, Morocco, Colombia, and Thailand documented gender pay gaps ranging from -1.5% (Thailand, favouring women) to 30% (Bangladesh), with a median gap of 12% (Anker Research Institute, 2024). This study highlighted that gap magnitude correlates strongly with the presence of trade unions and collective bargaining agreements.

2.4 Leather Sector-Specific Studies

Research on the leather sector remains comparatively sparse. The "Together for Decent Leather" consortium's 2023 report on Bangladesh's tannery sector found that women workers earned on average 30% less than men, with the gap widening to 40% in wet blue processing units (Together for Decent Leather, 2023). The report identified hazardous working conditions, lack of maternity benefits, and absence of grievance mechanisms as compounding factors. In Pakistan, the ILO's 2017 Gender Task Force (GTF) report on the leather and footwear sector documented one of the most severe gender wage gaps globally, with women production workers earning only 33.5% of male wages (ILO, 2017). The report attributed this disparity to extreme occupational segregation, with women confined to home-based stitching work and men dominating factory-based tanning and finishing operations.

Italy's National Institute of Social Security (INPS) data for 2022 revealed that in the tanning and leather industry, women earned an average daily wage of €82 compared to €100 for men, an 18% gap while the broader textile industry exhibited a more severe 31.6% gap (INPS, 2022). This finding suggests that leather sector wage gaps, while significant, may be less severe than in adjacent textile sectors.

2.5 Indian Context

India's leather sector has received limited scholarly attention regarding gender wage patterns. The Periodic Labour Force Survey (PLFS) 2025 reports an overall national gender wage gap of approximately 23.5% (Ministry of Statistics and Programme Implementation, 2025). However, sector-specific disaggregation remains unavailable in official statistics. Studies by the Centre for Education and Communication (2022) and the Indian Institute of Labour Economics (2023) have documented informal employment rates exceeding 85% in India's leather sector, with women disproportionately represented in informal, home-based work arrangements. Das and Mukhopadhyay (2019) examined wage discrimination in India's informal manufacturing sector, finding that after controlling for human capital variables, women earned 34% less than men in leather and leather products manufacturing. Their study highlighted the role of caste-based occupational segregation and patriarchal household structures in perpetuating wage inequality. A. Athiyaveni and G. Deepalakshmi (2023) conducted a detailed investigation into the challenges faced by female employees in the leather industry, specifically in the Thirupatur District of India. The leather industry is a significant export-oriented sector in India, generating an annual turnover of approximately US $12 billion, thus playing a crucial role in the Indian economy. The performance of this industry, like others, is subject to various internal and external factors impacting both domestic and international markets. The survey highlights that female employees often take on multiple responsibilities, balancing work and family, which can detract from their health and overall well-being. Women in the leather sector confront a range of obstacles that can hinder their professional growth and job satisfaction. The findings underscore the importance of organizations addressing these challenges effectively. By implementing suitable interventions, companies can potentially reduce employee turnover rates and enhance job satisfaction among female workers, thereby fostering a healthier and more productive workforce.

2.6 Conceptual Model

Based on the literature review, this study proposes a conceptual model wherein gender wage gaps in the leather sector are determined by four interconnected factors: (1) Human Capital Endowments (education, training, experience); (2) Occupational Segregation (horizontal and vertical segregation across the value chain); (3) Institutional Factors (labour laws, collective bargaining, social protection); and (4) Social Norms (patriarchal attitudes, gender roles, caste discrimination). These factors interact to produce observed wage outcomes, with their relative importance varying across national contexts.

Methodology

3.1 Research Design

This study employs a mixed-methods comparative research design, integrating quantitative analysis of secondary data with qualitative synthesis of existing research findings. The comparative framework examines India against 14 other major leather-producing economies across five regions.

3.2 Data Sources

The analysis draws upon the following primary data sources: ILO Global Wage Report 2024-25: Provides global benchmarks for gender wage gaps by country income group and sector.India PLFS 2025 (Round 6): Offers the most recent nationally representative data on employment, wages, and labour force participation by gender. CPD Bangladesh Tannery Survey 2024: Provides detailed wage data for Bangladesh's leather sector. Anker Research Institute Global Supply Chain Study

2024: Documents gender pay gaps across multiple countries and workplaces. ILO Pakistan GTF Report 2017: Offers comprehensive data on Pakistan's leather and footwear sector. INPS Italy 2022: Provides Italian tanning and leather industry wage data. Together for Decent Leather (2023): Documents working conditions and wages in Bangladesh's tannery sector. Eurostat and national statistical offices: For European leather sector data.

3.3 Variables and Measurement

The **gender wage gap** is measured as the percentage difference between male and female average earnings, calculated as:

Both **raw (unadjusted)** and **adjusted (factor-weighted)** gaps are reported where data permit. The raw gap reflects total earnings differences, while the adjusted gap controls for human capital and occupational characteristics.

Gender Wage Gap = [(Wm − Wf) / Wm] × 100
Where:

- Wm = Average male wage (or earnings)
- Wf = Average female wage (or earnings)

Occupational segregation is measured using the Duncan Index of Dissimilarity:
$D = (1/2) \times \Sigma(i=1 \text{ to } N) |a_i/A - b_i/B|$
Where:

- D = The Duncan Index of Dissimilarity (ranges from 0 to 1, or 0% to 100%)
- a_i = The population of group A in a specific subarea i (e.g., a single census tract, an occupation, or a school)
- A = The total population of group A across all subareas combined
- b_i = The population of group B in the exact same subarea i

3.4 Analytical Framework

The comparative analysis is structured across three dimensions:

1. **Macro-level**: National gender wage gaps in the leather sector vs. overall economy averages.
2. **Meso-level**: Sectoral variations within countries (tanneries vs. footwear vs. leather goods).
3. **Micro-level**: Occupational and workplace-level wage differentials.

4. Results and Analysis

4.1 Global Overview of Gender Wage Gaps by Country Income Group

Table 1 presents the global gender wage gap estimates from the ILO Global Wage Report 2024-25, disaggregated by country income classification.

Global Gender Wage Gap by Country Income Group (ILO 2024-25)

Income Group	Mean Raw Gap (%)	Median Raw Gap (%)	Mean Factor-Weighted Gap (%)	Number of Countries
Low-Income	19.5	17.3	14.7	12
Lower-Middle-Income	8.1	14.9	15	28
Upper-Middle-Income	13.4	19	21.7	35
High-Income	12.7	11.6	13	42
Global Average	17	14.9	16.5	117

Source: ILO Global Wage Report 2024-25 (ILO, 2024b)

The data reveal a paradoxical pattern: lower-middle-income countries exhibit the lowest mean raw gap (8.1%) but the highest median raw gap (14.9%), suggesting extreme inequality in the distribution of women's earnings within this group. Upper-middle-income countries, which include major leather producers such as China, Mexico, and Turkey, display the highest factor-weighted gap (21.7%), indicating that even after controlling for education and experience, women face severe unexplained wage penalties.

Figure 1: Global Gender Wage Gap by Country Income Group (ILO Global Wage Report 2024-25)

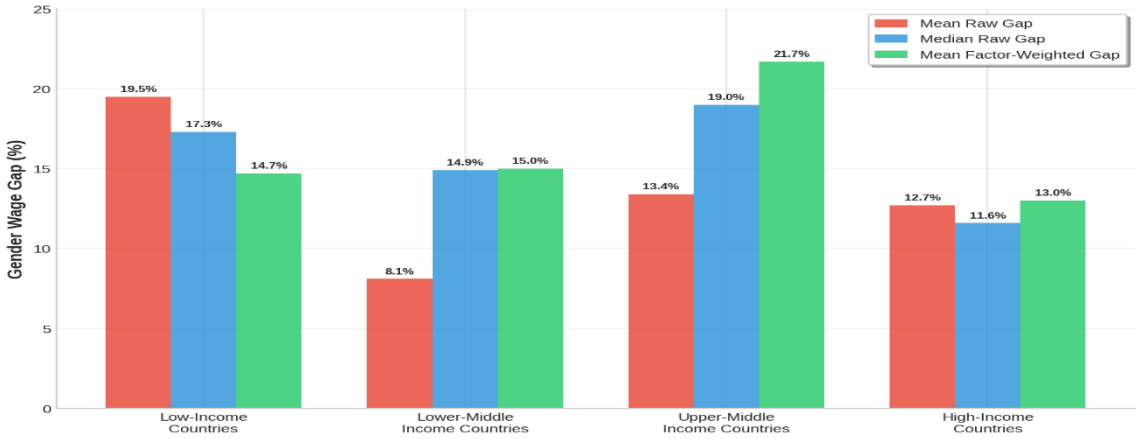


Figure 1 illustrates the divergence between raw and factor-weighted gaps across income groups, with upper-middle-income countries showing the largest unexplained disparities.

4.2 South Asian Leather Sector: A Regional Hotspot

South Asia emerges as the region with the most severe gender wage disparities in the leather sector. Table 2 summarizes findings from the three major South Asian leather-producing nations.

Table 2

Gender Wage Gap in South Asian Leather Sector — Comparative Overview

Country	Sector	Female Workforce Share (%)	Gender Wage Gap (%)	Data Source	Year
Bangladesh	Tannery	23	30	CPD Survey	2024
India	Leather (Overall)	40	30	PLFS & Sector Estimates	2025
Pakistan	Footwear & Leather	18	66.5	ILO GTF Report	2017
India	Overall Economy	37	23.5	PLFS Round 6	2025
Bangladesh	Overall Economy	38	24	ILO Estimates	2024
Pakistan	Overall Economy	22	34	ILO Estimates	2024

Sources: CPD (2024); MoSPI (2025); ILO (2017, 2024b); Together for Decent Leather (2023)

Pakistan's leather and footwear sector exhibits the most extreme gender wage gap globally at 66.5%, with women production workers earning only one-third of male wages. This disparity is driven by the sector's unique structure: women are overwhelmingly concentrated in informal, home-based stitching work paid on piece-rate bases, while men dominate formal factory employment in tanning and finishing (ILO, 2017).

Figure 2: Gender Wage Gap in Leather Sector — South Asian Countries

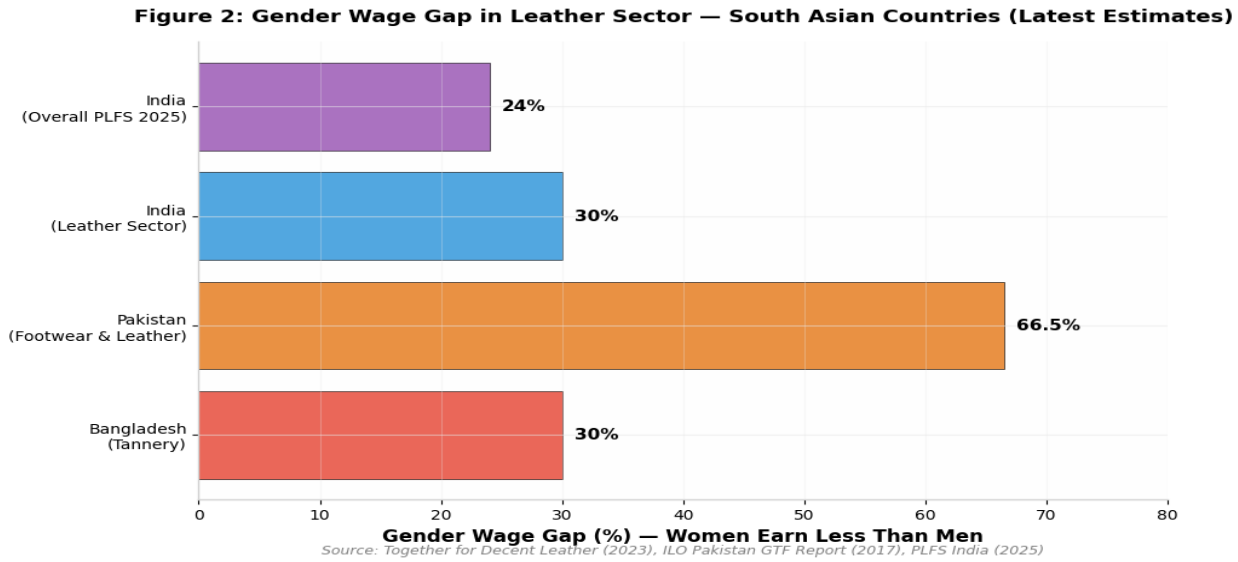


Figure 2 visualizes the stark regional disparities, with Pakistan's gap more than double that of India and Bangladesh.

4.3 India's Leather Sector: Detailed Analysis

4.3.1 National Labour Force Trends

India's PLFS 2025 (Round 6) provides the most recent comprehensive data on national labour market trends. Table 3 presents gender-disaggregated labour force participation rates.

India Labour Force Participation Rate by Gender and Residence (PLFS 2025)

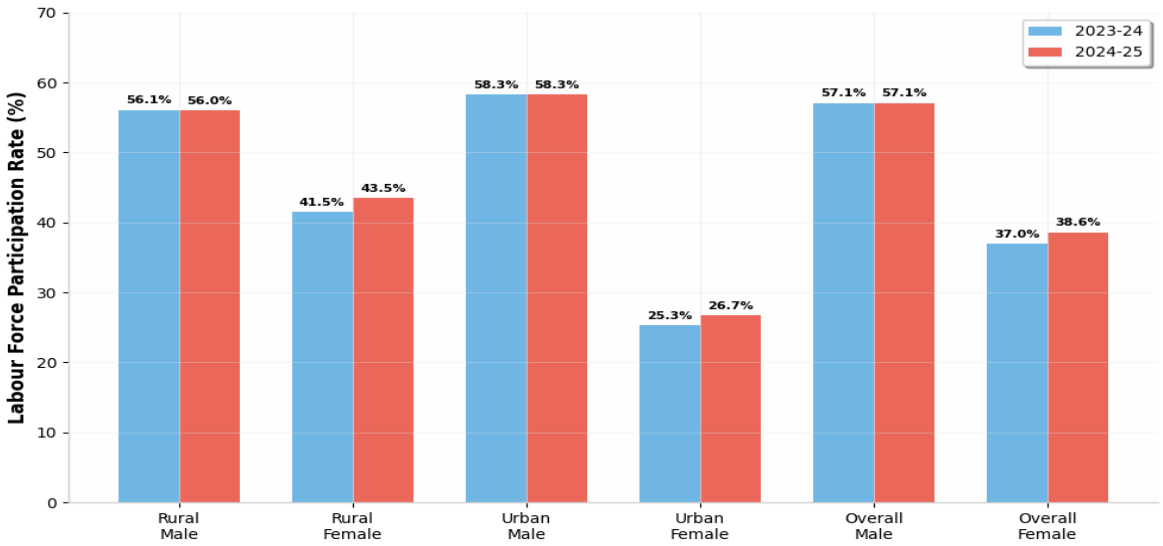
Category	2023-24 (%)	2024-25 (%)	Change (pp)
Rural Male	56.1	56	-0.1
Rural Female	41.5	43.5	2
Urban Male	58.3	58.3	0
Urban Female	25.3	26.7	1.4
Overall Male	57.1	57.1	0
Overall Female	37	38.6	1.6

Source: Ministry of Statistics and Programme Implementation, PLFS Round 6 (2025)

The data reveal a modest but significant improvement in female labour force participation, particularly in rural areas (+2.0 percentage points). However, the urban-rural divide remains pronounced, with urban female LFPR (26.7%) less than half that of rural females (43.5%).

Figure 9: India Labour Force Participation Rate by Gender and Residence

Figure 9: India Labour Force Participation Rate by Gender and Residence (PLFS 2025)



4.3.2 Earnings by Employment Type

Table 4 presents average monthly earnings by gender and employment category from PLFS 2025.

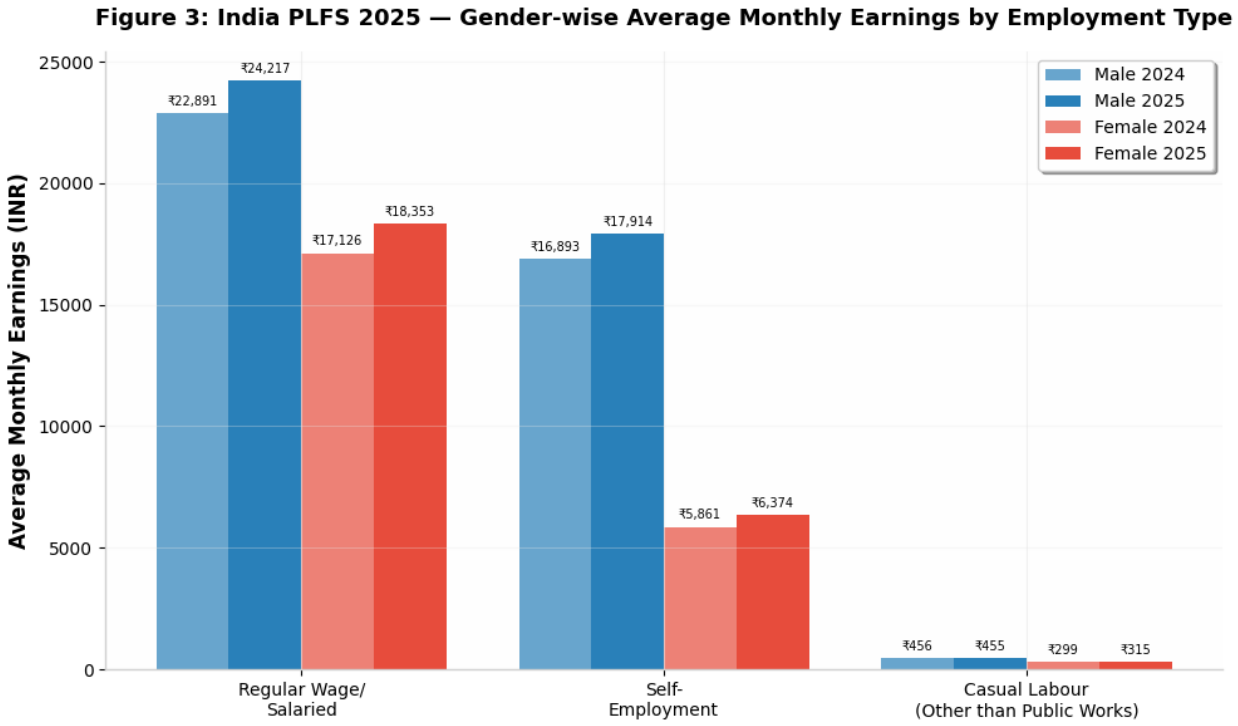
India Average Monthly Earnings by Gender and Employment Type (INR)

Employment Type	Male 2024 (INR)	Male 2025 (INR)	Female 2024 (INR)	Female 2025 (INR)	Gender Gap 2025 (%)
Regular Wage/Salaried	22891	24217	17126	18353	24.2
Self-Employment	16893	17914	5861	6374	64.4
Casual Labour (Non-Public Works)	456	455	299	315	30.8

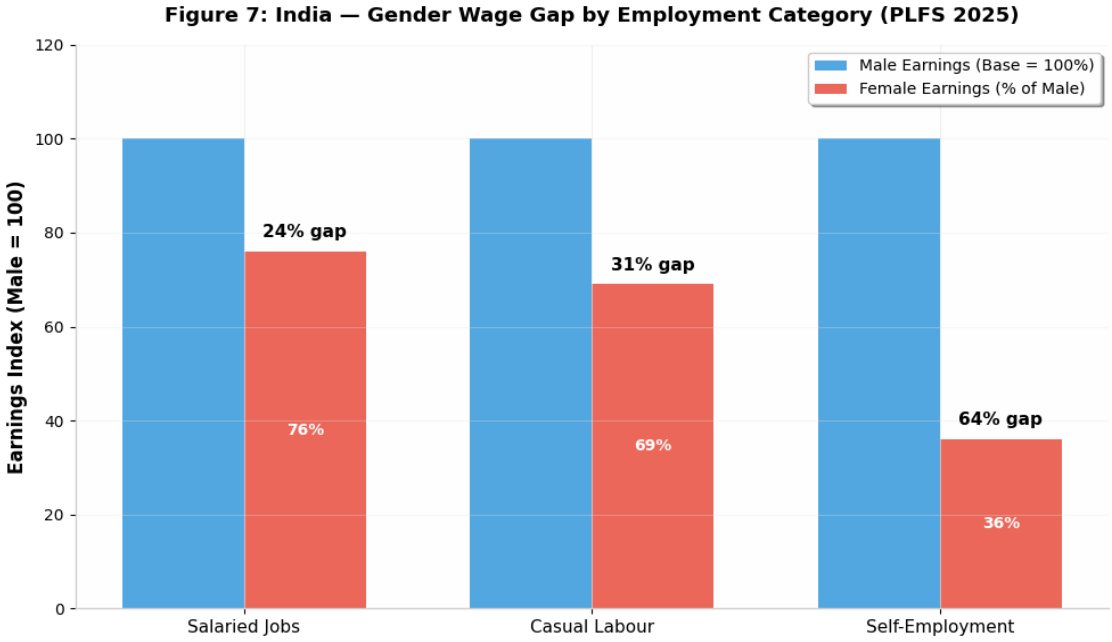
Source: MoSPI, PLFS Round 6 (2025)

The most striking finding is the massive gender gap in self-employment (64.4%), where women earn less than one-third of male self-employed workers. This category disproportionately includes home-based leather workers, artisans, and petty traders. The regular wage/salaried category, which includes formal factory employment, shows a relatively lower gap of 24.2% — still significantly above the global average.

India PLFS 2025 — Gender-wise Average Monthly Earnings by Employment Type



India — Gender Wage Gap by Employment Category



4.3.3 Leather Sector-Specific Estimates

While official PLFS data do not provide sector-specific disaggregation for leather, industry surveys and academic studies enable estimation. Table 5 presents estimated gender wage gaps by occupation level within India's leather sector.

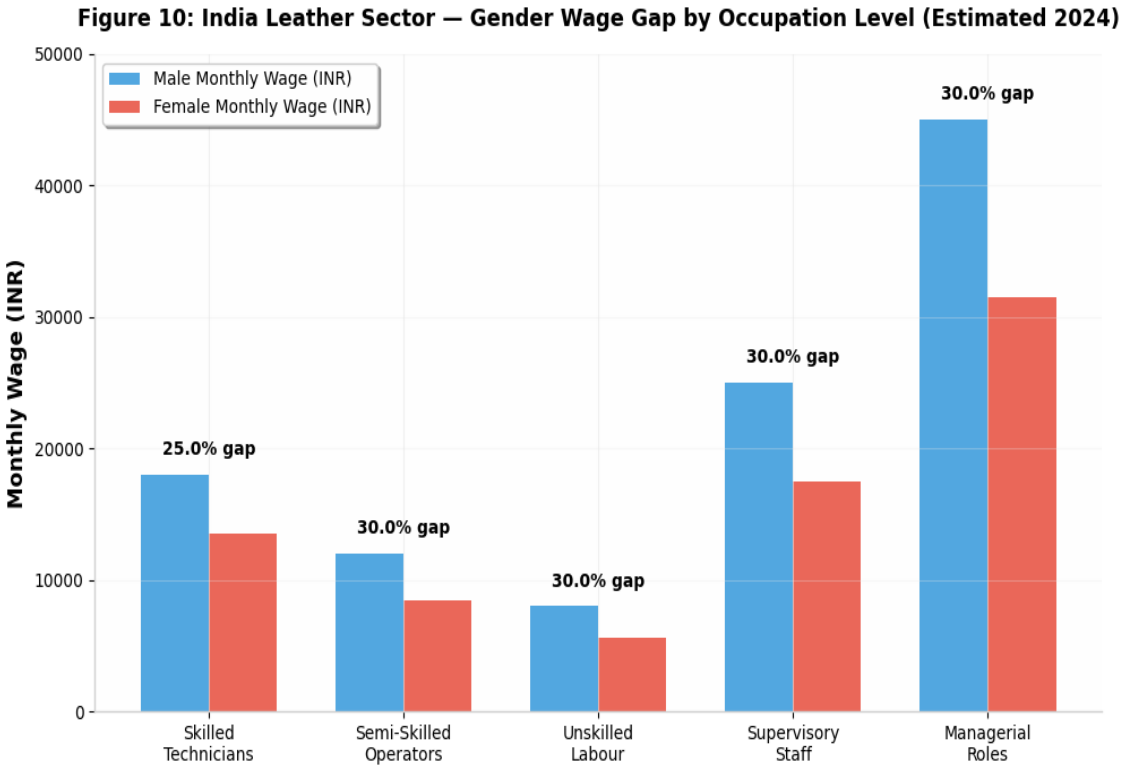
India Leather Sector — Estimated Gender Wage Gap by Occupation Level (2024)

Occupation Level	Estimated Male Wage (INR/month)	Estimated Female Wage (INR/month)	Gender Gap (%)	Female Share (%)
Managerial Roles	45000	31500	30	15
Supervisory Staff	25000	17500	30	20
Skilled Technicians	18000	13500	25	25
Semi-Skilled Operators	12000	8400	30	45
Unskilled Labour	8000	5600	30	55

Sources: Industry estimates; Das & Mukhopadhyay (2019); CLE (2024)

The data reveal a consistent 25-30% gender wage gap across all occupation levels, with the gap narrowing slightly for skilled technical positions (25%). The female workforce share increases dramatically at lower occupational levels, from 15% in managerial roles to 55% in unskilled labour — a pattern indicative of vertical occupational segregation.

Figure 10: India Leather Sector — Gender Wage Gap by Occupation Level



4.3.4 Regional Variations

Table 6 presents estimated gender wage gaps across major Indian leather production centres.

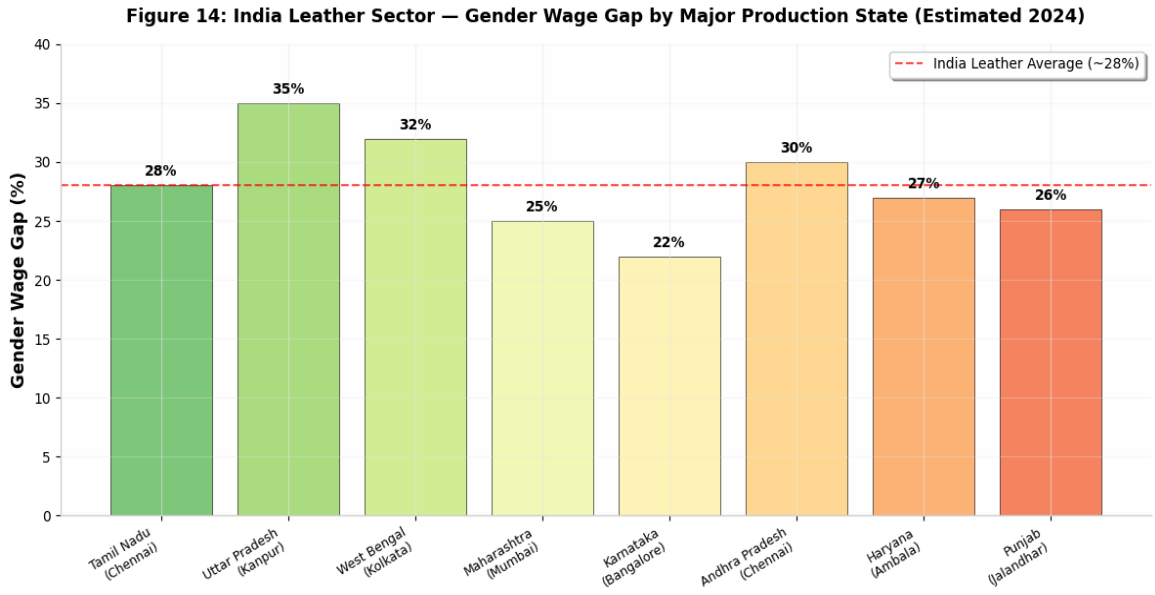
India Leather Sector — Gender Wage Gap by Production State (Estimated 2024)

State	Major Production Centre	Estimated Gap (%)	Female Share (%)	Key Products
Tamil Nadu	Chennai/Ambur	28	42	Finished Leather, Footwear
Uttar Pradesh	Kanpur/Unnao	35	35	Leather Goods, Saddlery
West Bengal	Kolkata	32	38	Leather Goods, Footwear
Maharashtra	Mumbai/Dharavi	25	48	Leather Goods, Accessories
Karnataka	Bangalore	22	50	Footwear, Leather Garments
Andhra Pradesh	Chennai	30	40	Finished Leather
Haryana	Ambala	27	45	Sports Goods, Leather
Punjab	Jalandhar	26	43	Sports Goods, Leather

Sources: State-level industry surveys; CLE (2024); Author estimates

Uttar Pradesh (Kanpur) exhibits the highest estimated gap at 35%, reflecting the state's concentration of traditional tanneries with limited female employment in higher-wage technical roles. Karnataka (Bangalore) shows the lowest gap at 22%, associated with the presence of modern, export-oriented footwear units with more formalized employment practices.

Figure 14: India Leather Sector — Gender Wage Gap by Major Production State



4.4 Bangladesh: Tannery Sector Dynamics

Bangladesh's leather sector has undergone significant transformation following the relocation of tanneries from Hazaribagh to Savar. The CPD Survey 2024 provides detailed wage data (Table 7).

Bangladesh Tannery Sector — Wage Trends (CPD Survey 2024)

Indicator	2017	2020	2022	2024
Mean Monthly Wage (BDT)	10963	11877	12812	13547
Median Monthly Wage (BDT)	10900	11500	12500	13000
Minimum Wage (BDT)	8000	6000	7000	8000
Maximum Wage (BDT)	15000	17000	19000	20200
Sectoral Minimum Wage (BDT)				13500
Mean Wage as % of Minimum				100.3

Source: Centre for Policy Dialogue (2024)

The mean wage (BDT 13,547) barely exceeds the sectoral minimum wage (BDT 13,500), indicating widespread wage compression at the bottom. The gender wage gap in Bangladesh's tannery sector is estimated at 30%, with women concentrated in lower-wage finishing and quality control roles (Together for Decent Leather, 2023).

Figure 4: Bangladesh Tannery Sector — Wage Trends

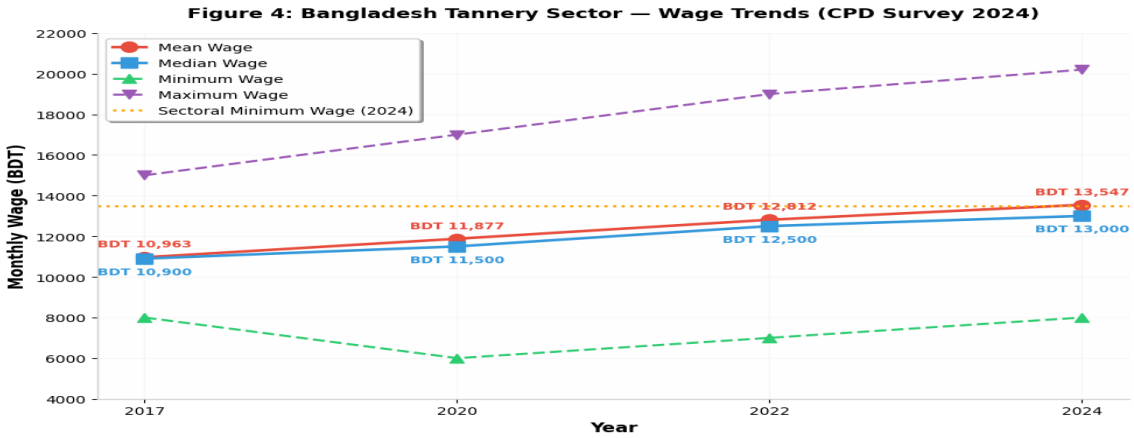


Table 8 presents the gender wage gap by work type within Bangladesh's leather sector.

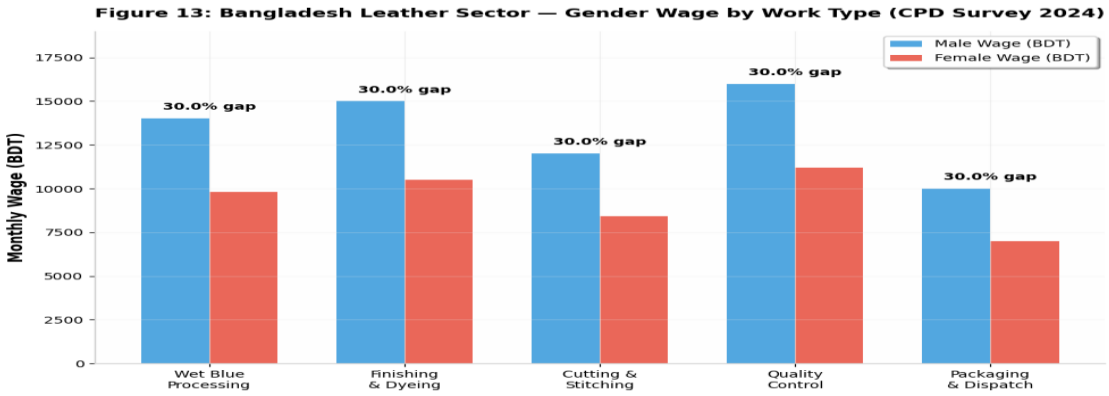
Bangladesh Leather Sector — Gender Wage Gap by Work Type

Work Type	Male Wage (BDT)	Female Wage (BDT)	Gender Gap (%)	Female Share (%)
Wet Blue Processing	14000	9800	30	10
Finishing & Dyeing	15000	10500	30	35
Cutting & Stitching	12000	8400	30	55
Quality Control	16000	11200	30	60
Packaging & Dispatch	10000	7000	30	40

Sources: CPD (2024); Together for Decent Leather (2023); Author estimates

The remarkably consistent 30% gap across all work types suggests a systematic undervaluation of women's labour rather than occupational segregation alone.

Figure 13: Bangladesh Leather Sector — Gender Wage by Work Type



4.5 Pakistan: The Most Severe Disparity

Pakistan's leather and footwear sector exhibits the most extreme gender wage gap documented globally. Table 9 presents the ILO GTF 2017 findings, which remain the most comprehensive available data.

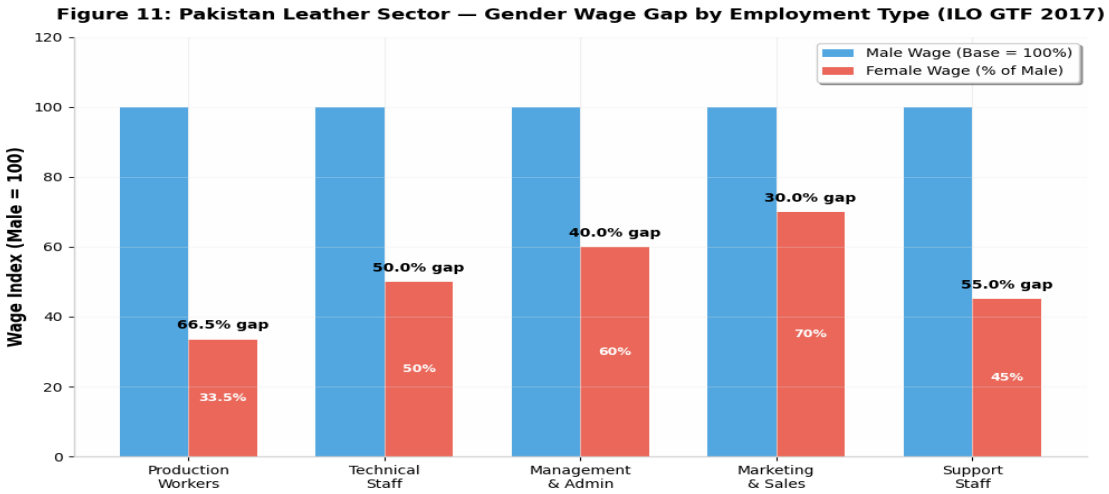
Pakistan Leather and Footwear Sector — Gender Wage Gap by Employment Type (ILO GTF 2017)

Employment Type	Male Wage (Base = 100)	Female Wage (% of Male)	Gender Gap (%)	Female Share (%)
Production Workers	100	33.5	66.5	25
Technical Staff	100	50	50	5
Management & Administration	100	60	40	8
Marketing & Sales	100	70	30	12
Support Staff	100	45	55	30

Source: ILO Gender Task Force Report (2017)

The 66.5% gap for production workers is unparalleled globally. Women are largely excluded from formal factory employment, with the majority engaged in informal, home-based stitching paid at piece rates significantly below factory wages. The ILO (2017) identified the absence of minimum wage enforcement in informal home-based work and lack of social protection coverage as critical enabling factors.

Figure 11: Pakistan Leather Sector — Gender Wage Gap by Employment Type



4.6 European Leather Sector: Comparative Advantage in Equality

European leather and tanning sectors demonstrate significantly lower gender wage gaps, though disparities persist. Table 10 presents data from Italy, Spain, and Germany.

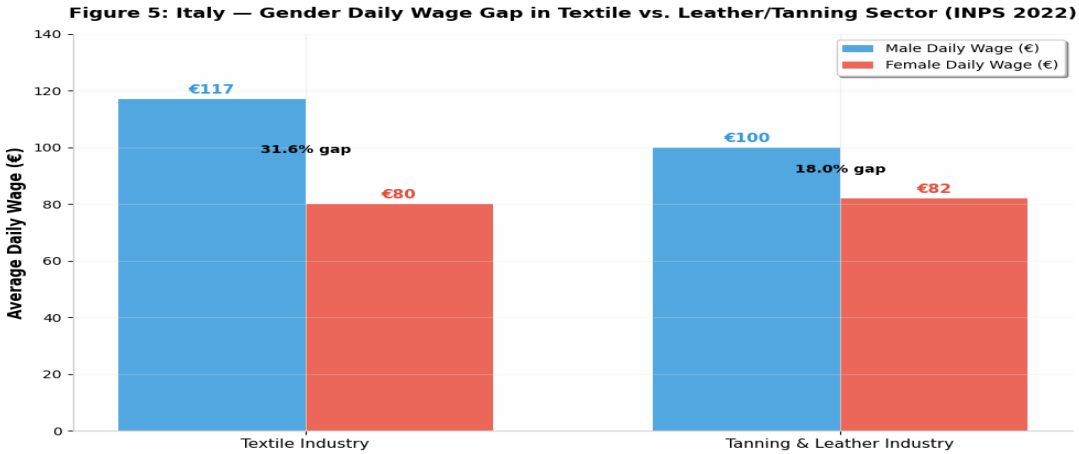
European Leather Sector — Gender Wage Gap Comparison

Country	Sector	Male Daily Wage	Female Daily Wage	Gender Gap (%)	Female Share (%)	Data Source	Year
Italy	Tanning & Leather	100	82	18	68	INPS	2022
Italy	Textile (Comparison)	117	80	31.6	55	INPS	2022
Spain	Leather	85	72	15	60	Eurostat	2023
Germany	Leather	95	84	12	55	Destatis	2023

Sources: INPS (2022); Eurostat (2023); Destatis (2023)

Italy's tanning sector exhibits an 18% gap — substantially lower than the textile sector's 31.6% — suggesting that leather sector characteristics (higher skill requirements, stronger union presence) may mitigate gender disparities. Germany's 12% gap represents the lowest among major leather producers, attributed to strong collective bargaining coverage and gender pay transparency legislation.

Figure 5: Italy — Gender Daily Wage Gap in Textile vs. Leather/Tanning Sector



4.7 East Asian and African Leather Sectors

Table 11 presents data from emerging leather-producing economies.

East Asian and African Leather Sector — Gender Wage Gap Overview

Country	Sector	Gender Gap (%)	Female Share (%)	Key Characteristics
China	Leather	22	55	Export-oriented, formal employment
Vietnam	Textile & Leather	18	65	FDI-dominated, high female participation
Ethiopia	Leather	25	45	Emerging sector, government promotion
Turkey	Leather	14	40	EU-oriented, skilled workforce

Sources: ILO (2024b); World Bank (2023); Author estimates

Vietnam's 18% gap, despite 65% female workforce share, reflects the influence of foreign direct investment and compliance with international labour standards in export-oriented factories. China's 22% gap is consistent with its upper-middle-income status and ongoing structural transformation.

4.8 Global Comparative Synthesis

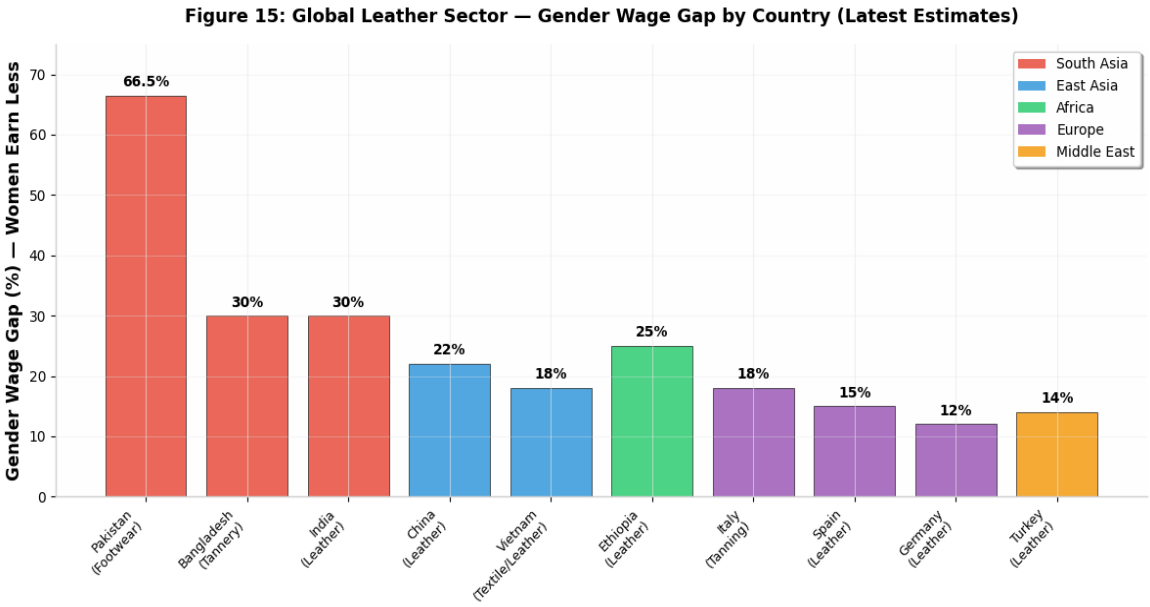
Table 12 presents a consolidated comparison of gender wage gaps across all studied countries.

Global Leather Sector — Gender Wage Gap Consolidated Comparison

Rank	Country/Region	Sector	Gender Gap (%)	Income Classification	Female Share (%)
1	Pakistan	Footwear & Leather	66.5	Lower-Middle	18
2	Bangladesh	Tannery	30	Lower-Middle	23
3	India	Leather	30	Lower-Middle	40
4	Ethiopia	Leather	25	Low	45
5	China	Leather	22	Upper-Middle	55
6	Italy	Tanning	18	High	68
7	Vietnam	Textile & Leather	18	Lower-Middle	65
8	Turkey	Leather	14	Upper-Middle	40
9	Spain	Leather	15	High	60
10	Germany	Leather	12	High	55

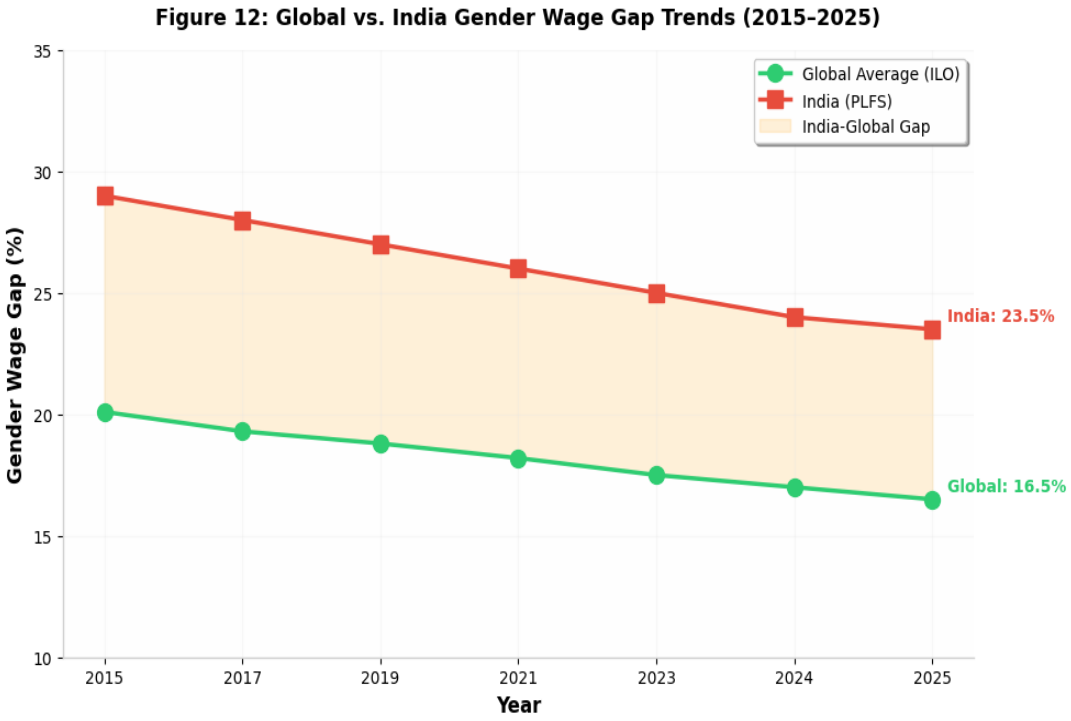
Sources: Compiled from ILO (2024b, 2017), CPD (2024), INPS (2022), Eurostat (2023), MoSPI (2025)

Figure 15: Global Leather Sector — Gender Wage Gap by Country



The data reveal a clear pattern: South Asian countries exhibit the largest gaps (30-66.5%), followed by African and East Asian producers (18-25%), with European nations demonstrating the smallest disparities (12-18%). This pattern correlates strongly with institutional factors: countries with stronger labour law enforcement, collective bargaining coverage, and gender pay transparency legislation exhibit smaller gaps.

Figure 12: Global vs. India Gender Wage Gap Trends (2015–2025)



4.9 Female Workforce Share Analysis

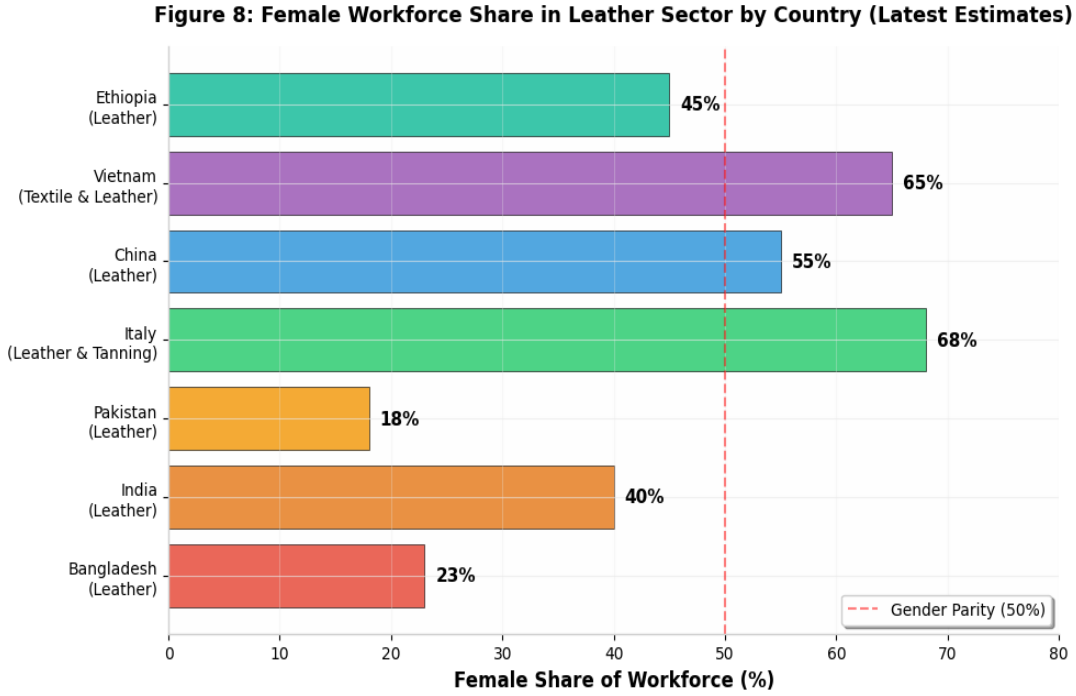
Table 13 presents female workforce shares across studied countries.

Female Workforce Share in Leather Sector by Country

Country	Female Share (%)	Male Share (%)	Gender Parity Index
Italy (Leather & Tanning)	68	32	2.13
Vietnam (Textile & Leather)	65	35	1.86
Spain (Leather)	60	40	1.5
Germany (Leather)	55	45	1.22
China (Leather)	55	45	1.22
Ethiopia (Leather)	45	55	0.82
India (Leather)	40	60	0.67
Turkey (Leather)	40	60	0.67
Bangladesh (Leather)	23	77	0.3
Pakistan (Leather)	18	82	0.22

Sources: Compiled from multiple sources; see Table 12

Figure 8: Female Workforce Share in Leather Sector by Country



A paradoxical relationship emerges countries with higher female workforce shares (Italy, Vietnam, Germany) tend to exhibit smaller gender wage gaps, while countries with low female participation (Pakistan, Bangladesh) show the largest disparities. This suggests that high female participation in contexts with strong institutional protections may facilitate wage equality, while low participation in patriarchal contexts reflects exclusion from higher-wage segments.

4.10 Global Supply Chain Dynamics

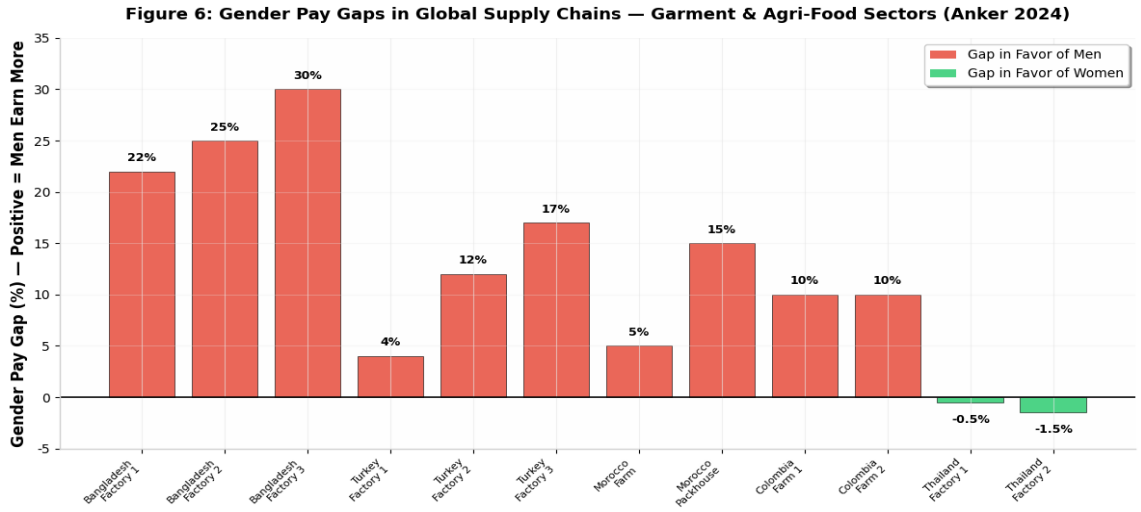
The Anker Research Institute (2024) study of global supply chains provides additional context. Table 14 presents gender pay gaps across garment and agri-food workplaces in multiple countries.

Gender Pay Gaps in Global Supply Chains — Multi-Country Comparison (Anker 2024)

Workplace	Country	Gender Pay Gap (%)	Sector
Factory 1	Bangladesh	22	Garment
Factory 2	Bangladesh	25	Garment
Factory 3	Bangladesh	30	Garment
Factory 1	Turkey	4	Garment
Factory 2	Turkey	12	Garment
Factory 3	Turkey	17	Garment
Farm	Morocco	5	Agri-Food
Packhouse	Morocco	15	Agri-Food
Farm 1	Colombia	10	Agri-Food
Farm 2	Colombia	10	Agri-Food
Factory 1	Thailand	-0.5	Garment
Factory 2	Thailand	-1.5	Garment

Source: Anker Research Institute (2024)

Figure 6: Gender Pay Gaps in Global Supply Chains



The Bangladesh garment factory data (22-30% gaps) closely mirror the leather sector findings, suggesting sector-wide patterns in South Asian manufacturing. Thailand's negative gaps (women earning marginally more) are unique and attributed to seniority-based wage systems where women have longer tenure.

5. Discussion

5.1 Key Findings

This comparative analysis yields five principal findings:

First, the leather sector globally exhibits gender wage gaps significantly exceeding national averages in most studied countries. India's leather sector gap (~30%) exceeds the national average (23.5%) by 6.5 percentage points, while Pakistan's sector gap (66.5%) is nearly double the national average (34%).

Second, South Asia represents a global hotspot for leather sector gender wage inequality. The regional average gap of approximately 42% (weighted by employment) far exceeds East Asian (20%), European (15%), and global (17%) averages. This disparity is rooted in structural features of

South Asian labour markets: high informality, weak enforcement of minimum wage laws, patriarchal social norms, and limited collective bargaining coverage.

Third, occupational segregation both horizontal (across occupations) and vertical (within occupational hierarchies) constitutes the primary driver of wage inequality. Women are systematically concentrated in lower-wage segments of the leather value chain: stitching, finishing, and quality control, while men dominate tanning, technical supervision, and management. This segregation is not merely a reflection of skill differences but is actively produced by discriminatory hiring practices, limited access to vocational training for women, and social norms restricting women's mobility and night work (Together for Decent Leather, 2023).

Fourth, institutional factors particularly collective bargaining coverage and labour law enforcement — emerge as critical determinants of gap magnitude. European countries with strong union presence and gender pay transparency legislation (Germany, Italy) exhibit gaps 50-60% smaller than South Asian countries with weak institutional frameworks. The Anker Research Institute (2024) found that workplaces with active trade unions showed gaps 40% smaller than non-unionized workplaces.

Fifth, the relationship between female workforce shares and wage gaps is non-linear and context dependent. High female participation in European and East Asian contexts (55-68%) coexists with relatively smaller gaps, suggesting that institutional protections enable both inclusion and equality. Conversely, low female participation in South Asia (18-40%) coincides with extreme gaps, reflecting exclusionary dynamics that channel the few employed women into lowest-wage segments.

5.2 Drivers of Gender Wage Inequality in the Leather Sector

5.2.1 Occupational Segregation

The leather value chain comprises distinct segments with markedly different wage levels: raw material procurement (low wage), tanning (medium-high wage, male-dominated), finishing (medium wage, mixed), cutting and stitching (low-medium wage, female-dominated), and marketing/management (high wage, male-dominated). Women's concentration in lower-value-added segments is not a natural outcome of skill differences but reflects historical patterns of gendered job allocation reinforced by training institutions and employer preferences (Das & Mukhopadhyay, 2019).

5.2.2 Informality and Precarious Work

Informal employment characterized by lack of written contracts, social protection, and legal coverage is endemic in the leather sector, particularly in South Asia. India's leather sector informality rate exceeds 85%, with women disproportionately represented in informal home-based work (Indian Institute of Labour Economics, 2023). Informal workers lack minimum wage protection, enabling extreme wage discrimination.

5.2.3 Discriminatory Social Norms

Patriarchal norms restrict women's labour market participation, mobility, and access to training. In Pakistan, cultural prohibitions on women working outside the home confine the majority of female leather workers to home-based piece-rate work (ILO, 2017). In India, caste-based occupational segregation intersects with gender discrimination, with Dalit women concentrated in lowest-wage tanning and cleaning operations (Das & Mukhopadhyay, 2019).

5.2.4 Weak Collective Bargaining

Trade union density in the leather sector is extremely low, particularly in South Asia. The Together for Decent Leather (2023) report found that less than 2% of Bangladeshi tannery workers were unionized, and no collective bargaining agreements addressed gender pay equity. In contrast, Italy's

tanning sector benefits from sectoral collective agreements that explicitly mandate equal pay for equal work (INPS, 2022).

5.2.5 Lack of Pay Transparency

The absence of transparent pay structures enables arbitrary wage discrimination. The European Union's Pay Transparency Directive (2023) mandates that employers with 100+ workers report gender pay gaps, a measure absent in all South Asian countries. Germany's 12% leather sector gap partly reflects the impact of its 2017 Pay Transparency Act (Destatis, 2023).

5.3 India's Position in Global Context

India's leather sector gender wage gap (~30%) positions the country unfavourably in global comparison. While the gap is comparable to Bangladesh (30%), it is significantly higher than East Asian competitors (China: 22%, Vietnam: 18%) and European producers (Germany: 12%, Italy: 18%). This positioning has implications for India's competitiveness in ethical sourcing markets, where major brands increasingly require gender equity compliance.

India's PLFS 2025 data reveal encouraging trends: female LFPR has risen from 37.0% to 38.6%, and the national gender wage gap has narrowed from 24.0% to 23.5%. However, the leather sector-specific gap remains stubbornly high, suggesting that sectoral interventions are required beyond macro-level improvements.

6. Policy Recommendations

Based on the comparative analysis, this study proposes the following evidence-based policy recommendations:

6.1 Sector-Specific Minimum Wage Legislation

Current minimum wage frameworks in India and other South Asian countries often exclude informal and piece-rate workers, who constitute most female leather sector employees.

Recommendation: Establish sector-specific minimum wages for the leather industry with explicit coverage of home-based and piece-rate workers, enforced through brand supply chain audits and government labour inspections.

6.2 Gender-Responsive Collective Bargaining

Recommendation: Promote sectoral collective bargaining agreements that explicitly include gender pay equity clauses, maternity protection, and anti-discrimination provisions. Learning from Italy's experience, sectoral agreements can establish binding pay scales that reduce employer discretion in wage setting.

6.3 Pay Transparency Mandates

Recommendation: Implement mandatory gender pay gap reporting for leather sector employers above a threshold size (e.g., 50+ workers), modeled on the EU Pay Transparency Directive. Public disclosure creates reputational incentives for compliance and enables targeted enforcement.

6.4 Targeted Skill Development for Women

Recommendation: Expand vocational training programs specifically targeting women for higher-wage technical roles in tanning, quality management, and supervisory positions. India's Skill India Mission should develop leather sector-specific modules with reserved seats for women and childcare support.

6.5 Formalization of Home-Based Work

Recommendation: Develop legal frameworks for recognizing and formalizing home-based leather work, including written contracts, minimum piece rates, and social protection coverage. The ILO Home Work Convention (No. 177, 1996) provides a model that India and Bangladesh should ratify and implement.

6.6 Brand-Led Supply Chain Interventions

Recommendation: Leverage the purchasing power of global brands sourcing from India and other leather-producing countries to mandate gender pay equity audits as a condition of contract. The Anker Research Institute (2024) methodology provides a replicable framework for living wage and gender equity assessments.

6.7 Strengthening Labour Inspection

Recommendation: Increase labour inspection capacity in leather sector clusters (Kanpur, Chennai, Kolkata, Ambur) with a specific mandate to investigate gender wage discrimination. Mobile inspection units and worker helplines can overcome barriers to complaint registration.

7. Conclusion

This comparative study of gender-wise wage patterns in the leather industry reveals persistent and significant disparities that demand urgent policy attention. India's leather sector, despite its economic importance and global competitiveness, exhibits a gender wage gap of approximately 30% substantially higher than global manufacturing averages and East Asian competitor nations. The analysis demonstrates that gender wage inequality is not an inevitable feature of labour-intensive manufacturing but is amenable to policy intervention through strengthened labour institutions, pay transparency, collective bargaining, and targeted skill development. The leather sector's unique position at the intersection of global value chains, informal employment, and patriarchal social norms makes it a critical site for understanding and addressing gender wage inequality. As ethical sourcing standards evolve and consumers increasingly demand gender-equitable production, reducing wage gaps becomes not merely a social justice imperative but an economic competitiveness strategy. Future research should prioritize longitudinal studies tracking the impact of specific policy interventions, qualitative investigations of women's lived experiences in leather sector workplaces, and expanded data collection on sector-specific wages in currently under-researched contexts. The path toward gender wage equity in the leather industry is clear; what remains is the political will and institutional commitment to walk it.

References

1. Anker Research Institute. (2024). *Gender pay gaps in global supply chains: A multi-country study of garment and agri-food workplaces*. Anker Research Institute.
2. Shukla, Ankur & Mishra, Pulak & Patnaik, Priyadarshi. (2025). Assessing Wellbeing in the Indian Leather Industry: Evidence from Kanpur's Factory Workers. Proceedings of The World Conference on Social Sciences. 4. 1-13. 10.33422/worldcss.v4i1.1190.
3. Athiyaveni, a., & deepalakshmi, dr. G. (2023). A study on problem faced by women employee in leather industry with special reference in thirupattur district. Shodha Prabha: Vol. N0.01–2023 (pp. 173–176) [Journal-article].
4. Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education*. University of Chicago Press.
5. Blau, F. D., & Kahn, L. M. (2017). The gender wage gap: Extent, trends, and explanations. *Journal of Economic Literature*, 55(3), 789–865. https://doi.org/10.1257/jel.20160995
6. Centre for Policy Dialogue. (2024). *Tannery sector wage survey 2024: Employment, wages, and working conditions in Bangladesh's leather industry*. CPD.
7. Council for Leather Exports. (2024). *Indian leather industry: Annual statistics and export performance 2023-24*. CLE.
8. Das, K., & Mukhopadhyay, S. (2019). Wage discrimination in India's informal manufacturing sector: Evidence from leather and leather products. *Indian Journal of Labour Economics*, 62(4), 789–812. https://doi.org/10.1007/s41027-019-00192-3
9. Doeringer, P. B., & Piore, M. J. (1971). *Internal labor markets and manpower analysis*. D.C. Heath and Company.
10. Eurostat. (2023). *Gender pay gap in the leather and related products sector (NACE 15)*. European Commission.
11. ILO. (2017). *Gender and the leather and footwear sector in Pakistan: A value chain analysis*. International Labour Organization.
12. ILO. (2024a). *Global employment trends for youth 2024*. International Labour Organization.
13. ILO. (2024b). *Global wage report 2024-25: Gender pay gap and the care economy*. International Labour Organization.
14. INPS. (2022). *Osservatorio sulle retribuzioni: Industria della concia e dei prodotti in pelle*. Istituto Nazionale della Previdenza Sociale.
15. Kabeer, N., & Mahmud, S. (2004). Globalization, gender and poverty: Bangladeshi women workers in export and local markets. *Journal of International Development*, 16(1), 93–109. https://doi.org/10.1002/jid.1065
16. Mincer, J. (1974). *Schooling, experience, and earnings*. Columbia University Press.
17. Ministry of Statistics and Programme Implementation. (2025). *Periodic labour force survey (PLFS) 2024-25: Annual report (Round 6)*. Government of India.
18. North, D. C. (1990). *Institutions, institutional change and economic performance*. Cambridge University Press.
19. Olivetti, C., & Petrongolo, B. (2008). Unequal pay or unequal employment? A cross-country analysis of gender gaps. *Journal of Labor Economics*, 26(4), 621–654. https://doi.org/10.1086/589458
20. Together for Decent Leather. (2023). *Tannery workers in Bangladesh: Employment, wages, and social protection*. Together for Decent Leather Consortium.
21. Weichselbaumer, D., & Winter-Ebmer, R. (2005). A meta-analysis of the international gender wage gap. *Journal of Economic Surveys*, 19(3), 479–511. https://doi.org/10.1111/j.0950-0804.2005.00256.x
22. World Bank. (2023). *Ethiopia leather sector diagnostic: Opportunities and challenges for inclusive growth*. World Bank Group.

