



Beyond participation: Mapping women's employment crisis in Punjab

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Abstract

This study examines long-term trends in women's labour force participation in Punjab using unit-level data from five key rounds of the National Sample Survey Office (NSSO)—50th (1993–94), 55th (1999–2000), 61st (2004–05), 68th (2011–12)—and the Periodic Labour Force Survey (PLFS) 2017–18. Employing trend analysis, tabulations, and visual representations, the study explores gendered employment patterns across caste groups, educational levels, and age cohorts. The findings reveal a sharp decline in female Labour Force Participation Rate (LFPR), from 28.6% in 1993 to 16.4% in 2017, alongside a widening gender gap. Caste-wise analysis shows SC/ST women historically had higher LFPR than OBC and General category women, though participation declined across all groups post-2004. Educational analysis reveals a paradox: increasing literacy has not led to higher employment, with the most educated women often showing the lowest LFPR. Additionally, a shift from unpaid to wage-based employment is noted, but most women remain in insecure, informal jobs with limited access to written contracts, paid leave, or social security. The study underscores the need for inclusive, caste-sensitive, and skill-linked employment policies that improve both the quantity and quality of women's work in Punjab.

Keywords: Women's labour participation, Gender gap, Social groups, Employment quality, Informality, Education, Punjab

JEL Classification: J16, J21, J31, O15, R23.

Introduction

Punjab, one of India's most agriculturally prosperous states, presents a paradox in terms of gender and employment. Despite high per capita income, improved infrastructure, and a historically strong agrarian economy, Punjab has consistently reported one of the lowest female labour force participation rates (LFPR) in the country. The state's demographic profile, marked by a relatively high literacy rate and declining fertility, would typically suggest favourable conditions for increased female employment. However, the ground reality reflects systemic exclusions rooted in socio-cultural, caste-based, and gendered norms.

Women's labour force participation in India has been declining over the past two decades, falling from 32% in 2005 to under 20% by 2019, as noted by PLFS data. Punjab mirrors this trend but with even steeper declines, especially among urban, educated, and upper-caste women. Traditional gender roles, limited employment opportunities in female-friendly sectors, and the undervaluation of women's work in household enterprises contribute to this persistent marginalization.

In Punjab, social identity—particularly caste, education, and gender—plays a critical role in determining access to paid work. SC/ST women are more likely to participate out of economic necessity but are overrepresented in low-paid, informal jobs. General category women, despite higher education, often withdraw from the workforce due to social norms and lack of suitable opportunities. OBC women occupy

a middle space but face similar constraints. These patterns underline the need to go beyond aggregate participation rates and examine the quality of employment—the nature of jobs (unpaid, casual, regular), earnings, job security, and access to social protection.

Understanding the intersections between social structure and labour market outcomes is essential for designing inclusive and effective employment policies. This study seeks to fill that gap by offering a disaggregated, longitudinal analysis of women's employment in Punjab using NSSO and PLFS data from 1993 to 2017. It not only tracks the decline in female participation but also evaluates the changing composition and quality of women's work, providing a more comprehensive picture of gender inequality in the labour market.

Review of Literature

Understanding women's labour force participation (LFPR) in India—and more specifically in Punjab—requires situating the discourse within broader socio-economic and structural transformations. Scholarly literature over the past four decades has investigated gendered patterns of work, often pointing to paradoxical trends where economic growth coexists with stagnant or declining female participation. This review adopts a thematic approach to survey key contributions in the field, particularly focusing on caste, education, and rural–urban divides. Each cited study is examined for its objectives, methodological framework, and empirical findings.

A) Historical and National-Level Trends in Female LFPR

One of the foundational studies on gendered work patterns in India is by Neetha (2002) ^[14], who analyzed NSSO data from the 1980s and 1990s to demonstrate the persistence of informal employment among women despite macroeconomic shifts. Her work highlighted how women's employment remained precarious, concentrated in low-paying, unprotected sectors. Using unit-level data from the 50th (1993–94) and 55th (1999–2000) NSS rounds, she found that self-employment and unpaid family labour were predominant among rural women, while urban female employment was increasingly casualized.

Chaudhary and Verick (2014) ^[2] extended this discourse by evaluating post-liberalization trends, using NSSO data from 1993 to 2011. Their analysis revealed a U-shaped curve in female LFPR, where women's participation initially declines with development but eventually rises when educational attainment translates into skilled employment. However, in India, this transition appeared arrested. The authors attribute this to a mix of social norms, household income effects, and limited demand for female labour in urbanizing economies.

Kapsos, Silberman, and Bourmpoula (2014) ^[8], in an ILO research paper, examined the declining female LFPR between 2004–05 and 2011–12 using NSSO rounds 61 and 68. Their decomposition analysis attributed this fall largely to a reduction in agricultural employment and a lack of commensurate non-farm opportunities, particularly for rural women. They highlighted the structural rigidity of India's labour market and the failure of skill development policies to absorb women into expanding service sectors.

B) Caste and Labour Market Inequality

Caste remains a central axis shaping employment access and job quality in India. Thorat and Newman (2007) ^[18] offered compelling evidence of caste-based discrimination in labour markets. Using field experiments and audit studies, they demonstrated how Scheduled Caste (SC) applicants faced explicit bias in formal hiring, even when qualifications were controlled.

In an NSSO-based analysis, Deshpande (2011) ^[4] examined caste and gender intersectionality in employment outcomes using data from the 61st round. Her findings revealed that SC and Scheduled Tribe (ST) women, while exhibiting relatively higher LFPRs, were often engaged in poorly remunerated and insecure forms of labour. On the other hand, General category women showed lower participation but better employment quality when they did work. Deshpande emphasized the need to recognize “distress-driven” participation among marginalized women, as opposed to “empowerment-driven” entry among privileged groups.

Majumdar (2010) ^[11] used mixed methods to study Dalit women's participation in Uttar Pradesh and Bihar. Drawing on NSSO data and qualitative interviews, she highlighted how caste hierarchies intersected with local power dynamics to confine Dalit women to low-status agricultural work. Social stigma limited their mobility, access to markets, and bargaining power, creating a vicious cycle of low productivity and dependence on exploitative employers.

More recently, Mehrotra and Parida (2017) ^[12] revisited caste-wise employment data using PLFS 2017–18 and emphasized the divergence in job quality across social groups. While SC/ST women continued to dominate in casual and unpaid work, OBC and General category women showed modest gains in formal employment, though their overall participation rates declined. The authors argued that social identity continues to mediate both entry and upward mobility within the labour market.

C) Education and the Participation Paradox

A recurring theme in literature is the paradox of rising female education coexisting with declining LFPR—a phenomenon most acutely observed in Punjab and other prosperous northern states. Kingdon and Unni (2001) ^[10] were among the first to highlight this trend using NSS data from the late 1990s. They found that while secondary education increased among women, their participation in paid work did not, largely due to gendered expectations of domesticity and job scarcity in female-friendly sectors.

Das, Jain-Chandra, and Kochhar (2015) ^[3], using panel data and regression analysis, reinforced this paradox. Their study, drawing from NSSO and IHDS data, suggested that higher education among women did not lead to greater participation because of job mismatch, rigid work schedules, and safety concerns. The authors emphasized that India's labour demand structure remained skewed against women, especially those with mid-level qualifications who were neither absorbed in agriculture nor in high-skill urban services.

Fletcher, Pande, and Moore (2017) ^[5] offered a micro-level explanation by examining female education and workforce participation in rural India. Using village-level surveys and PLFS-like data, they found that educated women faced a “social penalty” when working outside, leading to voluntary withdrawal despite qualifications. Cultural norms, marriage patterns, and stigma against working women were stronger determinants than skill mismatch per se.

Chatterjee, Murgai, and Rama (2015) ^[1] conducted a state-wise decomposition of LFPR trends using NSS 61st and 68th rounds. Punjab, along with Haryana and Gujarat, showed the sharpest decline in female participation despite rising educational levels. The study concluded that economic prosperity did not automatically translate into greater female employment; instead, it sometimes led to “income effects,” where women withdrew from the labour force as household earnings improved.

D) Rural–Urban Employment Disparities

Spatial location significantly influences women's access to employment. Rural areas, despite limited infrastructure, often show higher LFPR due to agricultural labour and unpaid family work. Urban regions, while offering diversified employment opportunities, often reveal lower female participation due to competitive labour markets, skill constraints, and cultural barriers.

Kannan and Raveendran (2012) explored this divide using NSS data from the 50th to the 66th rounds. Their analysis

demonstrated that rural women's work was increasingly informal, seasonal, and low-paying, whereas urban women faced entry barriers into formal sectors. They also noted a rise in "discouraged worker" effects in urban India, especially among educated women unable to find suitable jobs.

Mukhopadhyay and Tendulkar (2006)^[13] emphasized the role of spatial and sectoral segmentation in shaping women's work. They argued that urban employment creation has been largely male-centric, with women confined to household services, small-scale retail, and informal manufacturing. Their study used disaggregated NSS data and found that lack of female role models, poor transport, and absence of crèches were key deterrents.

State-specific studies like that of Kaur and Kaur (2013)^[9] focused on Punjab, analyzing urban-rural disparities using NSSO Rounds 61 and 68. Their findings indicated a steeper drop in urban female LFPR, attributed to the cultural premium on women's domestic roles, higher income thresholds, and stigma around wage work. The authors noted that while rural women were more likely to be employed, they remained trapped in vulnerable jobs with little upward mobility.

E) Quality of Employment and Informality

Beyond participation, scholars have increasingly focused on the quality of women's employment—an area where the disparities are even more glaring. Informal work, lack of contracts, unpaid labour, and wage gaps remain endemic features of women's employment across states.

Hirway and Jose (2011)^[7] argued for a multidimensional approach to labour statistics. Using time-use surveys and NSS data, they contended that official LFPR underestimated women's work, particularly unpaid household production and care activities. Their study called for redefining "work" in a way that includes informal caregiving, home-based production, and unpaid subsistence activities.

Sarkar, Sahoo, and Klasen (2019)^[15] analyzed the determinants of employment quality using PLFS data. They found that even when women were employed, they were significantly more likely to be in casual, unpaid, or self-employed positions, with minimal access to benefits or legal protections. They proposed structural reforms such as childcare subsidies, legal recognition of informal workers, and incentives for gender-equitable hiring.

Kapsos *et al.* (2014)^[8] also underscored the feminization of informal employment in India. Their sectoral analysis indicated that sectors witnessing job growth—like construction, retail, and domestic work—largely employed women informally, with poor working conditions. For Punjab specifically, informalization persisted despite its agrarian prosperity, suggesting that economic wealth alone cannot improve job quality without institutional intervention.

F) Punjab-Specific Literature

Although fewer in number, state-specific studies on Punjab offer critical insights into its unique socio-economic fabric. Sidhu (2005)^[16] provided a gendered analysis of labour in Punjab's green revolution economy. He argued that

technological change and mechanization displaced women from agricultural work, leading to a structural withdrawal rather than voluntary choice.

Singh and Singh (2010)^[17] conducted a primary survey in central Punjab districts to assess gender-based division of labour. They found that women, despite contributing significantly to pre- and post-harvest tasks, were undercounted in official statistics. The study also highlighted how upper-caste women faced mobility restrictions, while Dalit women were employed in menial or servile jobs.

A recent study by Gill and Kaur (2018)^[6] used PLFS and NSSO data to assess the socio-economic determinants of female LFPR in Punjab. Their regression results showed that education, caste, marital status, and location significantly influenced participation. Notably, the study pointed to the limited impact of government skill schemes and the lack of alignment between women's aspirations and available jobs.

The literature reviewed above reveals that women's labour force participation in India—and particularly in Punjab—is shaped by a complex interplay of caste, education, spatial location, and socio-cultural norms. While national trends point to a decline in LFPR, Punjab stands out for its sharper decline despite higher literacy and economic prosperity. Structural inequalities, discriminatory practices, and rigid gender norms continue to constrain both participation and job quality. Studies repeatedly emphasize that increasing education alone is insufficient; targeted policy measures must address the broader ecosystem of work, including safety, mobility, skill matching, and formalization. This study builds on these insights to explore longitudinal shifts in female employment in Punjab, offering a caste- and education-disaggregated view using unit-level NSSO and PLFS data.

Research Gap

Despite extensive research on women's labour force participation (LFPR) in India, critical gaps remain, particularly concerning the state of Punjab. Most existing studies emphasize national-level trends and rarely provide longitudinal analyses beyond 2011. The introduction of the Periodic Labour Force Survey (PLFS) in 2017–18 has not been fully leveraged to examine recent state-specific shifts. Moreover, while caste is acknowledged as a determinant of employment outcomes, few studies offer disaggregated, caste-specific trends in female LFPR within Punjab over time. The intersection of social identity with employment quality—especially how caste and education jointly affect job type, wage security, and informality—remains underexplored. Similarly, the paradox of declining LFPR among more educated women has been discussed, but without linking it to employment quality indicators like job security or benefits. Age-specific variations in women's work participation, such as the sharp withdrawal among younger and middle-aged groups, also lack systematic investigation. Additionally, Punjab's unique socio-cultural barriers—ranging from patriarchal norms to aspirational middle-class withdrawal from paid work—have not been sufficiently examined in the context of employment data. This study seeks to bridge these gaps by conducting a caste-,

education-, and age-disaggregated longitudinal analysis using NSSO and PLFS data, with a specific focus on job quality, informality, and social exclusion.

Objectives of the paper

- To track changes in female labour force participation in Punjab from 1993 to 2017.
- To compare employment patterns by gender and between rural and urban areas.
- To examine how caste and education affect women's employment outcomes.
- To analyse the types of jobs women hold—unpaid, casual, regular, or self-employed.
- To suggest policy measures for improving women's employment in Punjab.

Data and Methodology

This study is based on secondary data from five official employment surveys conducted by the National Sample Survey Office (NSSO) and the Periodic Labour Force Survey (PLFS). The datasets include the 50th (1993–94), 55th (1999–2000), 61st (2004–05), and 68th (2011–12) rounds of NSSO's Employment–Unemployment Surveys, and the first annual PLFS round (2017–18). These surveys are nationally representative and offer detailed household-level data on employment and demographic characteristics.

The analysis focuses on women aged 15–64 years in Punjab. Key variables used in the study include Labour Force Participation Rate (LFPR), Worker Population Ratio (WPR), and Unemployment Rate (UR), disaggregated by gender, caste (SC/ST, OBC, General), education (Illiterate, Upto 10th, 10th and above), age group, and rural–urban location. Additionally, job types—unpaid work, casual labour, regular employment, and self-employment—have been analyzed to capture the nature and quality of women's work. For non-agricultural female workers, indicators such as written job contracts, paid leave, and access to social security benefits were also examined (available from the 61st round onward).

The unit-level data were extracted using statistical software. The datasets were cleaned and harmonized across rounds to ensure comparability, especially where coding structures or variable formats had changed.

Estimates were weighted using the official sample weights provided in each dataset to reflect population-level patterns. Descriptive statistics, trend lines, and cross-tabulations were used to examine changes over time. Visualizations and tables were generated to present findings clearly and consistently.

A key limitation is that NSSO and PLFS data are only disaggregated up to the regional level—groups of districts—within each state. Hence, the analysis cannot capture intra-state variations or district-level trends in Punjab. Additionally,

informal and home-based work, especially common among women, may be underreported or misclassified in these surveys.

Despite these constraints, the data offer a reliable basis to examine long-term trends in women's labour participation and employment quality. By combining five major survey rounds and using consistent filtering and classification methods, the study presents a robust view of how women's work has evolved in Punjab between 1993 and 2017.

Employment Patterns in Punjab

Gender Gap in LFPR (Male vs Female) Over Time

Table 1 and Figure 1 present a time-series analysis of labour force participation rates among males and females aged 15–64 years in Punjab, using unit-level data from five rounds of NSSO and PLFS surveys. The data reveals a persistent and widening gender gap in labour force participation over a span of 24 years.

In 1993, male LFPR stood at a high 87.0%, while female LFPR was significantly lower at 28.6%, resulting in a gender gap of 58.4 percentage points. This disparity slightly narrowed by 1999, when female LFPR increased to 35.3% and the gap reduced to 50.2 percentage points. The trend of improvement continued into 2004, which marked the lowest recorded gender gap in this period—44.8 percentage points—driven by a peak in female LFPR (41.0%).

However, the subsequent years saw a sharp and sustained decline in female participation. By 2011, female LFPR had fallen back to 28.3%, nearly reverting to 1993 levels, while male LFPR also declined modestly to 81.6%. This led to a resurgence in the gender gap, widening again to 53.3 percentage points.

The most dramatic change occurred by 2017, when female LFPR plummeted to 16.4%, its lowest level in the observed period. Male LFPR declined marginally to 78.8%, but the resulting gender gap soared to 62.4 percentage points—the highest recorded in the series. This sharp divergence highlights a troubling trend of female withdrawal from the labour market, despite relatively stable male participation.

Table 1: Gender Gap in Labour Force Participation Rate (LFPR) among the Working-Age Population (15–64 years) in Punjab

Year	Male LFPR (%)	Female LFPR (%)	Gap (Percentage Points)
1993	87.0	28.6	58.4
1999	85.5	35.3	50.2
2004	85.8	41.0	44.8
2011	81.6	28.3	53.3
2017	78.8	16.4	62.4

Source: Author's estimates based on unit-level data from NSSO (Rounds 50th, 55th, 61st, 68th) and PLFS 2017–18.

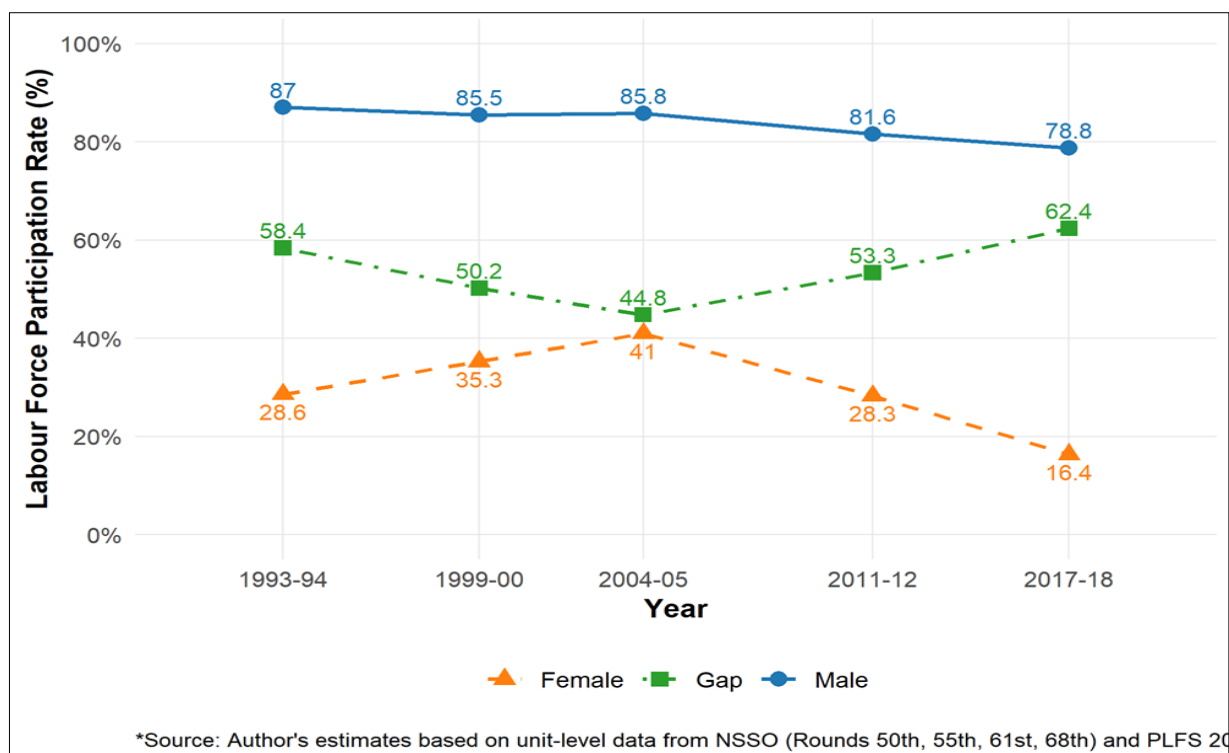


Fig 1: Trends in Male and Female Labour Force Participation Rate (LFPR), and Gender Gap among Working-Age Population (15–64 years) in Punjab

Figure 1 visually reinforces these patterns, showing near-linear decline in female LFPR since 2004, contrasted with a more gradual decline in male LFPR. The gender gap curve, plotted as the difference between male and female LFPR, demonstrates a U-shaped pattern—initial narrowing till 2004 followed by a consistent widening.

This trend points toward structural and social barriers that disproportionately affect women's employment. Several factors likely contribute to this decline:

- Rising household incomes and education levels without matching job opportunities for women, especially in urban areas.
- Patriarchal norms that prioritize domestic responsibilities over paid work.
- Lack of childcare facilities, safe transportation, and flexible work arrangements.
- Agricultural mechanization and the decline of female-intensive rural employment.

Disaggregation by social group and location (explored in subsequent sections) further reveals that rural and SC/ST women, who historically showed higher participation, are now also experiencing steep declines, underscoring the pervasiveness of the issue.

In sum, Table 1 and Figure 1 highlight a deepening gender divide in labour participation in Punjab. Despite being an economically advanced state, Punjab reflects the broader paradox in India—where women's access to education and resources has not translated into greater engagement in the labour force. Addressing this requires a focused policy response that improves the availability, accessibility, and acceptability of work for women.

Female Labour Force Participation by Social Group in Punjab (1993–2017)

Table 2 and Figure 2 present female Labour Force Participation Rate (LFPR) trends across three major social groups in Punjab—Scheduled Castes and Scheduled Tribes (SC/ST), Other Backward Classes (OBC), and General category—covering the period from 1993 to 2017. The data reveal both persistent inequalities and significant shifts in work participation across caste groups, particularly in the post-2004 period.

A key finding is the consistently higher LFPR among SC/ST women compared to their OBC and General category counterparts. In 1993, SC/ST women recorded an LFPR of 30.7%, which was higher than General category women (27.6%). This trend continued and even widened in subsequent years, especially during the early 2000s. By 2004, LFPR had peaked for all groups, reaching 38.5% for SC/ST, 43.8% for OBC, and 41.9% for General category women. This period coincided with rising rural employment and a demand for female labour in agriculture and informal services.

Table 2: Female Labour Force Participation Rate (LFPR) by Social Group among the Working-Age Population (15–64 years) in Punjab

Year	SC/ST (%)	OBC (%)	General (%)
1993	30.7	NA	27.6
1999	36.0	36.1	34.5
2004	38.5	43.8	41.9
2011	29.8	23.9	28.6
2017	18.1	18.3	14.1

Source: Author's estimates based on unit-level data from NSSO (Rounds 50th, 55th, 61st, 68th) and PLFS 2017–18.

However, post-2004, all social groups witnessed a sharp and continuous decline in LFPR. By 2017, participation rates dropped to 18.1% for SC/ST, 18.3% for OBC, and a striking low of 14.1% for General category women. The decline was steepest for General women, who saw their participation reduce by over 65% between 2004 and 2017. OBC women—whose data become available only from 1999—also experienced a notable decline after an initial peak in 2004. This divergence across caste groups, particularly after 2004,

signals the emergence of caste-based disparities in women's access to labour markets. While SC/ST women historically engaged in labour-intensive and low-paying jobs—often due to economic necessity—their participation appears increasingly constrained by structural job loss in rural and informal sectors. In contrast, General category women—who tend to be more educated and urban—face social and cultural barriers to labour market entry, especially in the absence of “respectable” or formal employment opportunities.

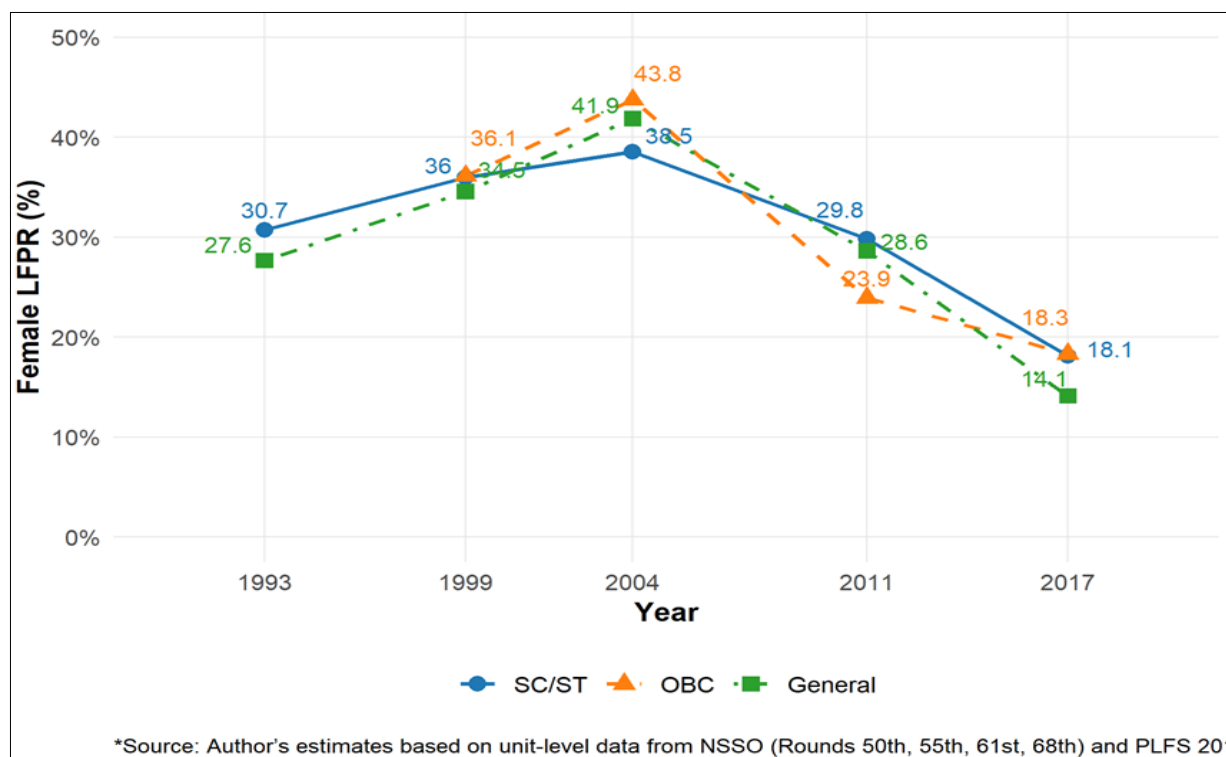


Fig 2: Trends in Female LFPR by Social Group in Punjab

Compared to national trends, these patterns in Punjab are particularly stark. Studies at the all-India level (e.g., Deshpande 2011; Mehrotra & Parida 2017) [4, 12] also confirm that SC/ST women show higher participation rates, but often in more precarious forms of work. In Punjab, the overall LFPR decline is sharper, and the gap between participation and employment quality is more pronounced.

In conclusion, Table 2 and Figure 2 highlight how caste continues to structure labour market access for women in Punjab. While SC/ST women participate more out of necessity, General category women face cultural and structural barriers to meaningful work. The analysis underscores the need for caste-sensitive employment policies that not only promote participation but also ensure dignity, security, and upward mobility for all women, regardless of social background.

Female LFPR by Education Level in Punjab (1993–2017)

Table 3 and Figure 3 illustrate the labour force participation rates (LFPR) of working-age women (15–64 years) in Punjab across three educational categories: Illiterate, Up to 10th standard, and 10th and above, over the period from 1993 to 2017. The data reveal a paradoxical pattern—higher education

levels have not led to increased participation in the labour force. Instead, more educated women appear to withdraw from work, especially after 2004, challenging conventional assumptions about education and empowerment.

In 1993, the LFPR was highest among illiterate women (33.1%), followed by those educated up to 10th standard (25.4%) and the least among women with education above 10th (22.5%). This inverse relationship between education and LFPR remained consistent over the next two decades. By 1999, all groups experienced a rise in participation—most notably illiterate women (42.8%)—suggesting an expansion in rural or informal work opportunities during that period.

The peak was recorded in 2004, when LFPR reached 48.2% for illiterate, 39.8% for up to 10th, and 34.5% for 10th and above. This upward trend coincided with a high demand for female labour in agriculture, household enterprises, and low-skilled services. However, the post-2004 period saw a steep and consistent decline in participation across all education levels. By 2017, the LFPR had dropped dramatically to 19.6% for illiterate women, 11.2% for those with education up to 10th, and 18.6% for those with higher education.

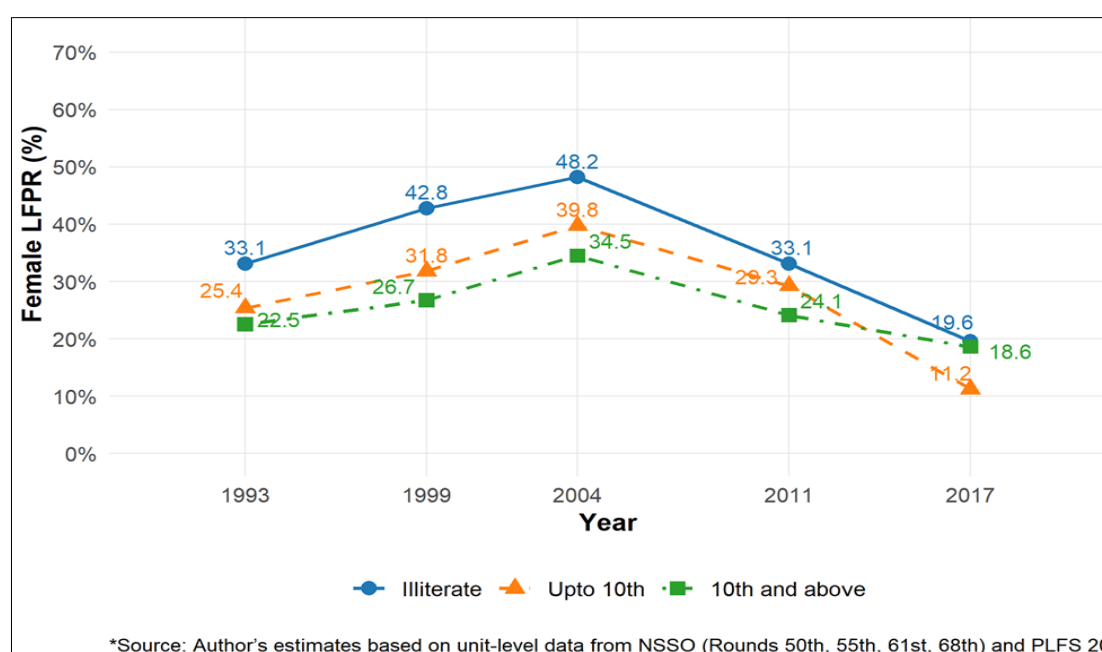
Table 3: Female Labour Force Participation Rate (LFPR) by Education Level among the Working-Age Population (15–64 years) in Punjab

Year	Illiterate LFPR (%)	Upto 10th LFPR (%)	10th and above LFPR (%)
1993	33.1	25.4	22.5
1999	42.8	31.8	26.7
2004	48.2	39.8	34.5
2011	33.1	29.3	24.1
2017	19.6	11.2	18.6

Source: Author's estimates based on unit-level data from NSSO (Rounds 50th, 55th, 61st, 68th) and PLFS 2017–18.

Notably, the sharpest decline occurred among literate women, especially those with mid-level education (up to 10th standard), whose LFPR fell by over 70% between 2004 and 2017. Even among women with 10th and higher education, participation declined despite rising literacy and school completion rates in

the state. This contradiction—higher education accompanied by lower economic engagement—has been widely observed in Indian labour market studies (Kingdon & Unni, 2001; Chatterjee *et al.*, 2015) ^[10].

**Fig 3:** Trends in Female LFPR by Education Level in Punjab

This trend highlights a structural disconnect between rising educational attainment and labour market integration. Education alone is not translating into workforce participation, especially without parallel investment in skill training, job creation, and social norms transformation.

Policy interventions must go beyond expanding education access and focus on creating dignified, skill-matched, and flexible work opportunities for women. This includes improving vocational training, ensuring gender-sensitive recruitment, expanding safe transport, and promoting female entrepreneurship—especially for educated women currently on the margins of the labour force.

In sum, Table 3 and Figure 3 underscore a troubling yet vital insight: education is necessary but not sufficient to ensure women's economic inclusion in Punjab. The failure to convert educational gains into employment outcomes demands urgent policy attention.

Female LFPR by Age Group in Punjab (1993–2017)

Table 4 and Figure 4 provide a detailed view of female labour force participation in Punjab across three age groups—15–29

years (youth), 30–44 years (middle-aged), and 45–64 years (older working-age)—over a 24-year period. The data reveal a declining trend in LFPR across all age cohorts, with the steepest decline observed among younger women (15–29), raising significant concerns about long-term female labour market engagement.

In 1993, LFPR among the 30–44 age group was the highest at 37.9%, followed by 45–64-year-olds at 29.8%, and youth at 21.7%. This age-based gradient is consistent with expectations: women in their 30s and early 40s often balance economic necessity with domestic responsibilities, while younger women may still be in education or face constraints related to early marriage.

By 1999 and especially 2004, LFPR had increased across all age groups. The 30–44 age group peaked at 50.3%, confirming their historical role as the backbone of women's labour participation. Youth LFPR rose to 33.9%, likely reflecting expanding low-skill job opportunities and family economic needs. Similarly, women aged 45–64 recorded an LFPR of 40.8%, their highest in the observed period.

However, the post-2004 period marked a turning point, with participation rates declining sharply across all age groups. By 2011, LFPR among young women dropped to 22.9%, and fell further to just 12.7% by 2017, indicating a massive withdrawal from the labour force. The 30–44 group declined from 50.3% in 2004 to 21.3% in 2017, while the 45–64 age group declined to 15.7% in the same year. This drop is concerning as it reflects not just individual choices but structural barriers and labour market failures.

The sharp decline among youth (15–29) is especially alarming. Possible reasons include:

- **Early marriage and childbirth**, which reduce continuity in education and delay workforce entry.
- **Limited job opportunities for educated young women**, especially in rural areas or non-agricultural sectors.
- **Safety and mobility concerns**, particularly in commuting to workplaces or training centres.
- **Cultural expectations** discouraging young women from seeking paid work, particularly outside the home.

The declining LFPR among middle-aged women (30–44), historically the most active group, suggests growing domestic constraints, reduced flexibility in employment, and job loss in traditional sectors like agriculture and informal services. Similarly, the decline among older women (45–64) may reflect both health-related barriers and reduced demand for semi-skilled labour.

Table 4: Female Labour Force Participation Rate (LFPR) by Age Group among the Working-Age Population (15–64 years) in Punjab

Year	15–29 (%)	30–44 (%)	45–64 (%)
1993	21.7	37.9	29.8
1999	27.8	43.6	37.8
2004	33.9	50.3	40.8
2011	22.9	36.2	28.0
2017	12.7	21.3	15.7

Source: Author's estimates based on unit-level data from NSSO (Rounds 50th, 55th, 61st, 68th) and PLFS 2017–18.

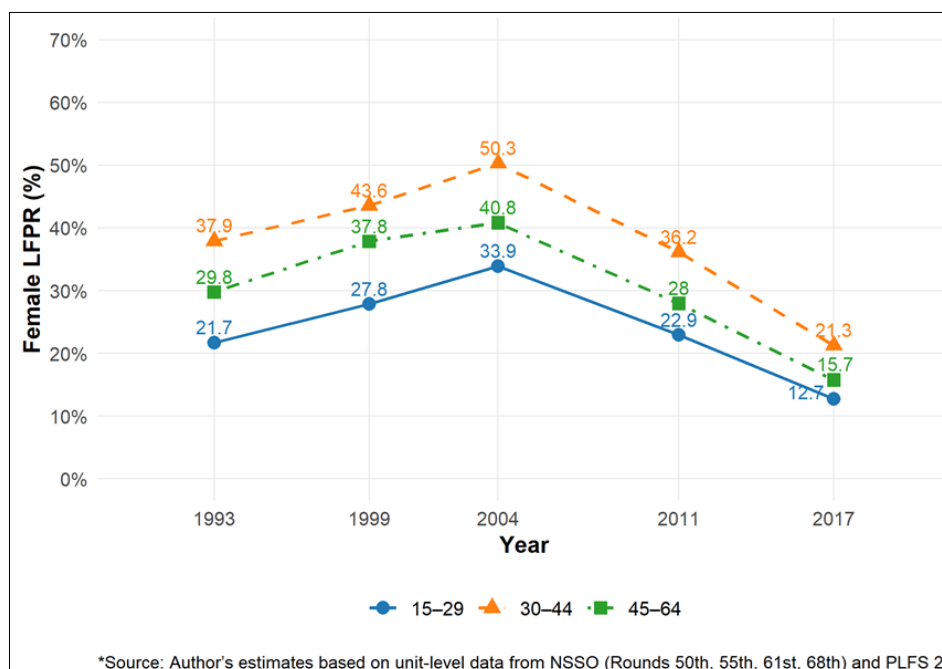


Fig 4: Trends in Female LFPR by Age Group in Punjab

These patterns point to a broader **age-cohort crisis** in female employment. The intergenerational reduction in work participation could have long-term consequences, such as economic dependency, skill atrophy, and reduced bargaining power in both domestic and public spheres.

To reverse these trends, age-targeted employment strategies are essential:

- For young women, focus on safe, skill-linked, and flexible job creation through digital platforms, apprenticeships, and community-based enterprises.
- For middle-aged women, policies should include workplace flexibility, provision of childcare, and re-skilling opportunities to re-enter the labour market.
- For older women, social protection and part-time or home-based employment options can help extend working years.

In conclusion, Table 4 and Figure 4 highlight a critical decline in women's labour engagement across all age groups in Punjab. Without urgent and targeted policy intervention, the state risks further marginalizing a large section of its female population from economic activity.

Composition of Women's Work in Punjab (1993–2017)

Table 5 and Figure 5 provide a detailed breakdown of the types of employment held by working women in Punjab across five data points from 1993 to 2017. The four categories include unpaid work, casual jobs, regular wage employment, and self-employment. These data reveal a major structural shift in the nature of women's work, moving gradually from unpaid family labour to more formal and market-oriented roles—particularly in the form of regular wage work.

In 1993, nearly half of the working women in Punjab were self-employed (46.4%), followed by a significant share engaged in unpaid family work (32.3%). Casual jobs accounted for 10.8%, and only 8.6% of women held regular wage jobs. This

distribution reflects a labour market dominated by informal work and subsistence-based economic activities, with limited access to salaried employment for women.

Table 5: Distribution of Women Workers by Job Type in Punjab

Year	Unpaid Work (%)	Casual Jobs (%)	Regular Jobs (%)	Self-Employed (%)
1993	32.3	10.8	8.6	46.4
1999	42.3	6.9	9.8	39.7
2004	34.3	5.6	11.4	42.3
2011	23.8	11.3	19.3	43.7
2017	7.6	12.8	39.6	28.1

Source: Author's estimates based on unit-level data from NSSO (Rounds 50th, 55th, 61st, 68th) and PLFS 2017–18.

By 1999, the share of unpaid work rose sharply to 42.3%, indicating an increase in women's participation within the family or household-based economic units. This trend, however, began to reverse in subsequent years. By 2011,

unpaid work had declined to 23.8%, and by 2017, it had plummeted to just 7.6%, reflecting a significant decline in invisible and unremunerated labour.

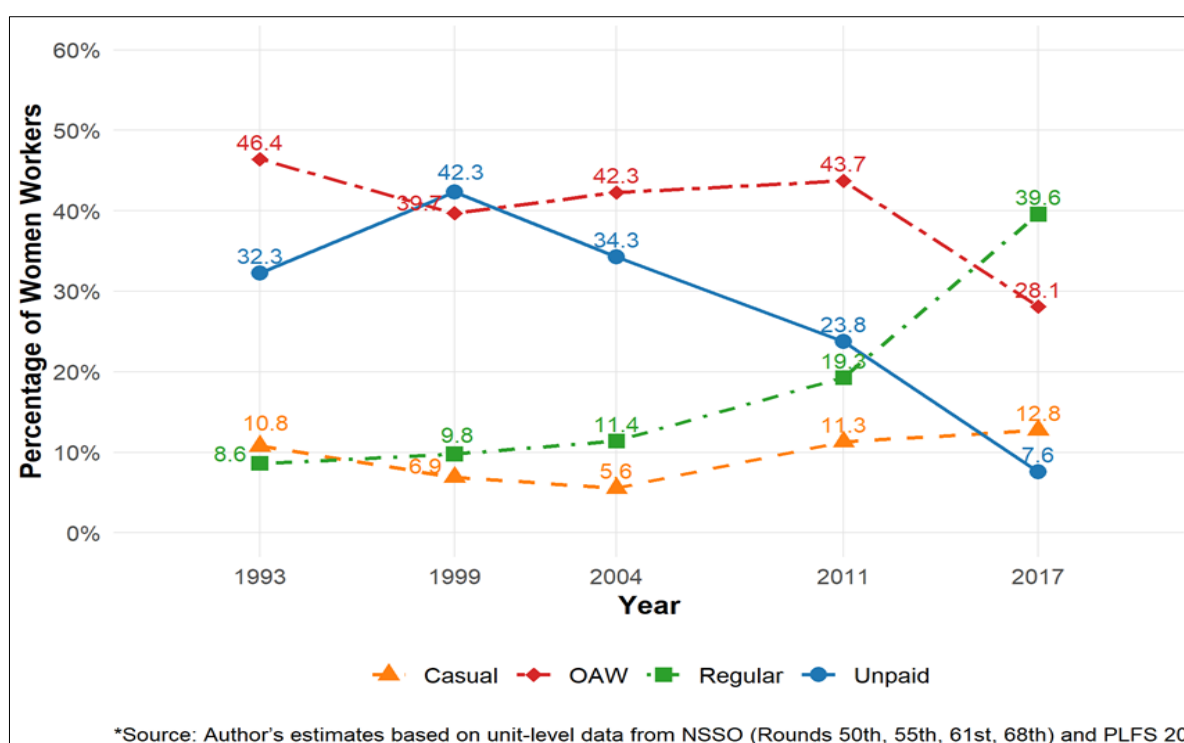


Fig 5: Trends in Employment Type among Women Workers (15–64 years) in Punjab

The most striking change over this 24-year period is the rise in regular wage/salaried employment, which increased from 8.6% in 1993 to nearly 40% in 2017. This indicates a growing preference or necessity among working women for stable, predictable income sources, particularly in education, healthcare, and clerical services. Casual employment remained relatively modest but increased slightly from 10.8% in 1993 to 12.8% in 2017, suggesting continuing reliance on irregular and low-paying jobs, especially among poorer women.

Conversely, self-employment, which initially dominated women's employment landscape, declined steadily from 46.4% in 1993 to 28.1% in 2017. This drop likely reflects reduced returns from family enterprises, rising aspirations for formal employment, and limited access to credit, markets, and training needed to sustain self-employment.

These aggregate patterns mask caste-based differences in employment types:

- SC/ST women have historically been overrepresented in unpaid and casual jobs, largely due to poverty, landlessness, and limited educational attainment. For these women, unpaid work often takes the form of labour on family farms or as unpaid helpers in household enterprises, and casual jobs typically include agricultural wage labour, construction, and domestic work.
- In contrast, General category women—with higher levels of education and socio-economic mobility—are more likely to be found in regular wage jobs or self-employment in teaching, clerical work, tailoring, or small-scale businesses. However, even among these groups,

participation in self-employment has declined in recent years, indicating constraints in entrepreneurship or household withdrawal from informal work.

The overall trend suggests a gradual formalization and feminization of regular wage work, but also highlights rising inequality in access to quality jobs. While more women now appear in salaried positions, this improvement is not uniform across caste or class. Access to regular employment still depends heavily on educational qualifications, social capital, and urban residence.

In conclusion, Table 5 and Figure 5 reflect a transition from invisibility to market engagement in women's employment in Punjab, with a notable shift toward regular wage jobs. However, this transformation remains incomplete and uneven. The declining share of self-employment and unpaid work may indicate progress, but it also raises questions about shrinking informal safety nets for women and the unmet need for decent, secure, and inclusive jobs across all social groups.

Social Security and Safety Nets for Non-Agricultural Female Workers in Punjab (2004–2017)

Table 6 and Figure 6 present the proportion of non-agricultural female workers in Punjab with access to key employment benefits—social security, written job contracts, and paid leave—based on data from the 61st (2004–05), 68th (2011–12) rounds of NSSO and the 2017–18 PLFS. The data expose the persistent vulnerability and informality that characterize women's work outside agriculture in Punjab, even in the context of rising regular wage employment.

In 2004, around 37.3% of non-agricultural female workers reported access to social security benefits such as provident

fund, pension, or health insurance. However, this figure dropped significantly in the following years, declining to 27.8% in 2011 and further to 26.1% by 2017. This downward trend signals a deterioration in the quality of employment, as fewer women are covered under statutory welfare schemes despite increased participation in salaried jobs.

Table 6: Access to Social Protection among Non-Agricultural Female Workers in Punjab

Year	Social Security Benefits (%)	Written Job Contract (%)	Eligible for Paid Leave (%)
2004	37.3	30.3	51.8
2011	27.8	29.6	33.9
2017	26.1	30.1	38.4

Source: Author's estimates based on unit-level data from NSSO (Rounds 61st, 68th) and PLFS 2017–18.

Similarly, the proportion of women with a written job contract remained stagnantly low—30.3% in 2004, 29.6% in 2011, and only marginally increasing to 30.1% in 2017. Written contracts are a critical indicator of formal employment, ensuring clarity in work conditions and legal enforceability. The near-constant figure across 13 years points to the pervasive informality in women's employment in Punjab.

The situation is equally concerning when examining access to paid leave. In 2004, over half (51.8%) of non-agricultural female workers reported entitlement to paid leave, but this figure fell drastically to 33.9% in 2011. Though there was a slight improvement by 2017 (rising to 38.4%), the overall trend remains below 2004 levels. The volatility in paid leave access reflects the growing precarity and contractual instability in women's non-agricultural employment.

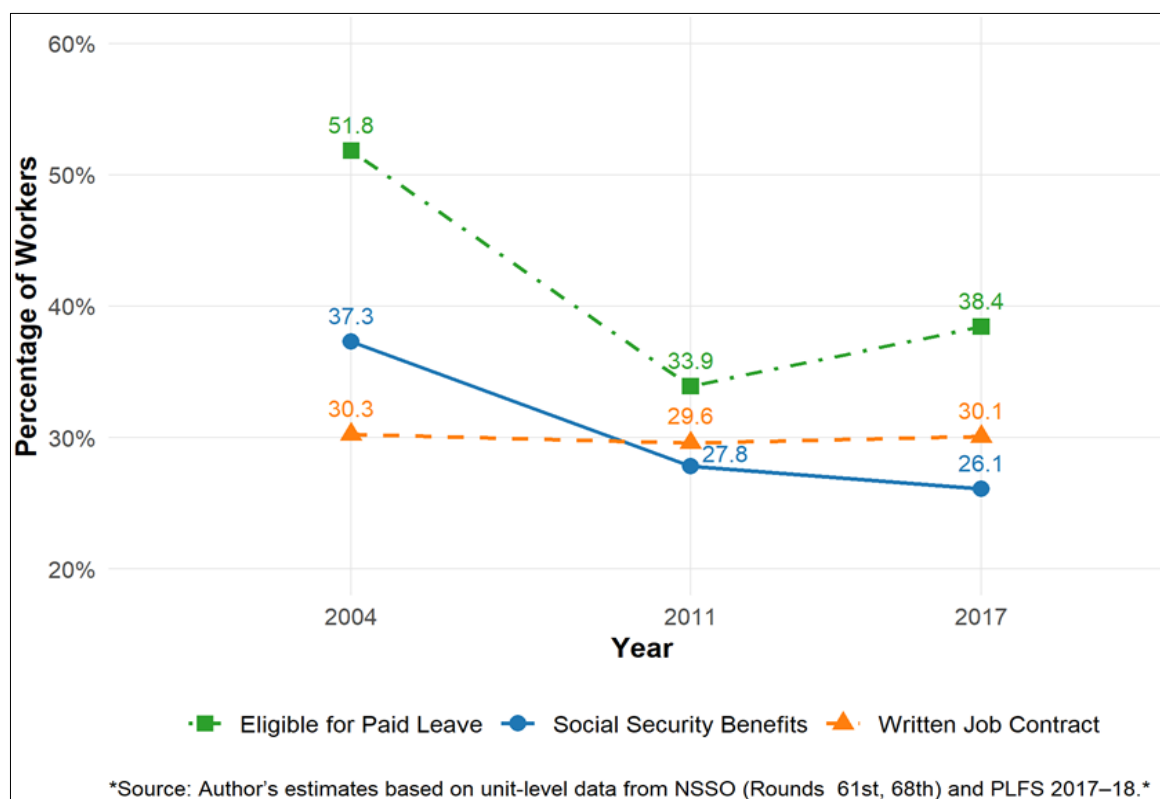


Fig 6: Trends in Job Security Indicators for Women Workers in Punjab

These indicators collectively underscore a critical insight: even as more women shift from unpaid or self-employed work to wage employment, the quality of these jobs remains poor. The majority of women employed in non-agricultural sectors continue to work without formal contracts, social protection, or job security. This contradiction—rising regular work but persistent informality—points to a pattern of *informalization within formal-looking jobs*, especially in low-end services such as private schooling, domestic help, tailoring, or sales work.

Several factors contribute to this persistent gap in protection:

- High concentration of women in informal enterprises, small firms, or household-based work where compliance with labour laws is weak.
- Lack of enforcement of labour rights, particularly in private and unregulated sectors employing women.
- Gendered labour segmentation, which relegates women to low-pay, low-security occupations that are not prioritized in policy interventions.
- Limited union representation and legal awareness among women workers, reducing their bargaining power for contracts and benefits.

In conclusion, Table 6 and Figure 6 highlight a critical failure of the employment system to provide secure and dignified work for women in Punjab, despite broader shifts toward regular wage jobs. Improving women's access to written contracts, paid leave, and social security must become a priority for policymakers, especially in non-agricultural sectors where the risk of exploitation and exclusion remains high.

Major Findings of the Study

This study reveals several critical trends in women's labour force participation (LFPR) and employment quality in Punjab between 1993 and 2017, based on NSSO and PLFS data.

- **Declining Female LFPR and Widening Gender Gap**
Despite improvements in literacy and economic development, female LFPR in Punjab declined sharply—from 28.6% in 1993 to 16.4% in 2017. In contrast, male LFPR declined modestly, widening the gender gap from 58.4 to 62.4 percentage points.
- **Caste-Based Disparities**
SC/ST women consistently reported higher LFPRs than OBC and General category women. However, all groups saw a decline post-2004. General category women, despite being more educated, had the lowest LFPR at 14.1% in 2017.
- **Education Paradox**
Higher education did not improve participation. LFPR for women with education beyond 10th standard dropped from 34.5% in 2004 to 18.6% in 2017, suggesting a disconnect between education and employment opportunities.
- **Age-Wise Withdrawal**
Youth (15–29) and middle-aged (30–44) women experienced steep LFPR declines—reflecting barriers like early marriage, childcare, and job scarcity.

Shift in Job Composition

Unpaid work declined significantly (from 32.3% in 1993 to 7.6% in 2017), while regular jobs rose (to 39.6%), though largely informal and insecure.

Poor Job Quality and Social Security

Access to benefits like written contracts, paid leave, and social security remained low. In 2017, only 26.1% of non-agricultural women had social security coverage.

In summary, Punjab has seen a decline in both participation and employment quality for women, with disparities by caste, education, and age. Addressing these challenges requires targeted, inclusive policies that link education to decent work and expand protections in the informal sector.

Conclusion and Policy Recommendations

This study highlights a troubling decline in women's labour force participation (LFPR) in Punjab between 1993 and 2017, despite rising educational attainment and economic growth. More importantly, it reveals that aggregate LFPR figures alone do not capture the full picture. A deeper understanding of employment quality—including job type, income security, and access to benefits—is essential for assessing women's real position in the labour market.

The analysis shows that structural inequalities based on caste, education, and age play a defining role in shaping employment outcomes. SC/ST women continue to be overrepresented in low-paid, insecure jobs, while better-educated women—especially from the General category—are increasingly absent from the labour force due to lack of suitable work. Age-wise trends show young and middle-aged women withdrawing from employment, largely due to socio-cultural constraints, limited childcare support, and a shortage of flexible and safe work environments.

These patterns reflect the urgent need to shift from a supply-side focus (education, skill training) to a demand-oriented approach that creates dignified, inclusive, and accessible work opportunities. Without such efforts, the gains made in women's education and health will fail to translate into economic empowerment or broader gender equity.

Policy Recommendations

- Promote regular and formal employment by incentivizing private sector firms to hire women through tax rebates, wage subsidies, or procurement-linked gender hiring targets.
- Expand skill development programs, especially for SC/ST and rural women, by linking training to local market demands and offering placement support.
- Strengthen social protection for informal women workers through expanded coverage of maternity benefits, health insurance (e.g., PMJAY), and pensions.
- Support women-led entrepreneurship and SHGs by easing credit access, offering digital tools, and developing local infrastructure in both rural and urban areas.
- Address caste-specific employment barriers through targeted outreach, job reservations in local industries, and inclusive workplace practices.

- Create safe, flexible workspaces by investing in women-friendly public transport, workplace crèches, and flexible scheduling norms through public-private collaboration.

Together, these policies can transform Punjab's labour landscape and advance women's economic inclusion as a cornerstone of inclusive development.

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