

# WOMEN AND WAGE GAPS: A CRITICAL ANALYSIS OF THE INDIAN SCENARIO

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## ABSTRACT

*Countries across the globe have made progress in enhancing the status of women in their respective societies, but women and men still live in a world that is marked by deep inequality in all spheres of life. Employment opportunities and outcomes are highly unequal. Gender continues to be a significant factor for determining wages in the Indian market. On an average, female employees earn 25 per cent less than their male counterparts according to the Monster Salary Index on gender for 2016. Though the Indian Government has taken various measures to address the bias against women workers, a persistent and wide gender pay gap exists. Since employment is critical for women's economic independence and is also considered an indicator of their overall status in society, the main objective of this paper is to analyse the status of female wage differentials in the labour market.*

## 1. Introduction

The gender wage gap measures the differences in the earnings of women and men in paid employment in the labour market. "It is one of the many indicators of gender inequality in a country that emerge on examining the labour market participation in terms of gender" (Education International, 2011). Gender inequality continues to be an enormous problem across the globe and within India. The gender-based wage gap is a concern that has persisted for over a century. Gender wage gaps are seen even in developed countries like the United States and Western Europe. Women constitute

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48 per cent (Census of India, 2011) of the population of India—half of its potential labour force. But the labour force participation rate (LFPR) of women in India stood at merely 28.6 per cent in 2014 (The World Bank, 2016). This implies that half the potential talent base in India is under-utilized (Zahidi & Ibarra, 2010).

There are sharp gender differentials in wage payments. This is partly because women often hold low-level, low-paying positions in female-dominated occupations. According to an International Labour Organisation (ILO) study on global employment trends (2004), data on six diverse occupation groups showed that in most economies, women still earn 90 per cent or less than less of what their male co-workers earn in a typically male-dominated occupation.

Discrepancies in wage payments to men and women in the labour market is a universal phenomenon regardless of the economic structure of a country (Newell and Reilly, 2001), Various theories have attempted to explain this imbalance in wage determination but most of them have proved inadequate, and thus, many challenges regarding wage discrimination and wage inequalities continue (Remesh, 2000). Wages and incomes in India have been rising over time; however, gender inequalities have not been bridged (Dev, 2002; Jose, 1987; Maatta, 1998).

A number of studies have examined the gender wage/pay gap in the labour market. Two prominent methods of analysis are the Blinder-Oaxaca decomposition technique (1973) and the method elucidated by Brown et al. (1980). The former method is used to differentiate between explained (or endowment or skill-determined) and unexplained (or treatment or unequal gender treatment) variations in gender wage/pay gaps; the latter method is used to differentiate between the two main components of discrimination in the labour market—unequal access to occupations and unequal pay within occupations. The dominant rationale for gender discrimination is provided by the human capital model of Becker (1962). According to this model, gender discrimination results from wage differences between equally productive men and women arising from a taste for discrimination, due to which women are less likely to invest in formal education as compared to men—translating into lower salaries. An alternative way to understand male/female wage differences is to account for the roles of bargaining and sorting. There is the possibility that women bargain less aggressively than men and thus obtain a smaller share of the surplus associated with their job (Babcock et al., 2006; Bowles et al., 2005, 2007). It is also possible that women sort into higher-paying jobs at a lower rate and are less likely to be employed at higher wage paying firms (Del Bono and Vuri, 2011; Hospido, 2009; Loprest, 1992). In the Indian context, Varkkey et al. (2017) have examined the gender pay gap in the organised sector using the Wage Indicator's (Paycheck.in) continuous

and voluntary online salary survey dataset and the ordinary least squares (OLS) regression technique. They found that the gender pay gap increases with age, education, skill, and occupational status, and is significantly higher for married women than single women. Other studies have found evidence that human capital difference (Madheswaran & Khasnobis, 2007) is a more prominent effect of gender discrimination with almost two-thirds (63.5 per cent) of the gender pay gap being explained by the same (Duraismy & Duraismy, 1998). It is also suggested that a greater part of the female earning's disadvantage results from wage discrimination, and not from their occupational distribution (Madheswaran & Lakshmanasamy, 1996).

Successive rounds of National Sample Survey Office (NSSO) data have been utilised to gather evidence on the gender pay gap. Kingdon and Unni (2001) examined the gender wage differential in the labour markets of Tamil Nadu and Madhya Pradesh for the period 1987-88 and found evidence of high wage discrimination against women workers in the Indian labour market and the insignificant role of education in combating this discrimination. Khanna (2012) examined the linkage between different wage levels and the gender wage differential across India for 2009-10 and found a higher male-female gap at the lower end of the wage distribution.

Joshi (2016) primarily used NSSO data to find that on the one hand, the decline in women's LFPR is governed primarily by the increasing participation of women in education due to improved economic conditions. On the other hand, a majority of rural women workers are concentrated in primary-sector activities such as agriculture, hunting, forestry, fishing, etc. Women are over-represented in the agricultural sector; if more industrialised regions are excluded, almost half of female employment is concentrated in this sector. It is suggested that women's LFPR needs to be encouraged by providing decent and productive employment avenues and investing in their education and training. Since there is a higher concentration of women in the primary sector, there is also a need to pay greater attention towards improving the productivity of the agricultural sector.

In the context of global public policy, the ILO (2018) mentions that "not only are women less likely than men to participate in the labour force, but when they do participate, they are also more likely to be unemployed and more likely to be in jobs that fall outside the scope of labour legislation, social security regulations and relevant collective agreements". It further argues that in societies where challenges and obstacles to women's equal participation persist, pathways to economic growth and social development are less likely to develop, necessitating policy interventions, focus and action.

The following sections discuss the provisions for women within the Constitution of India and provide an overview of workers in India; a broad sectoral division of the workforce; workforce participation rate by education level; gender wage gaps; and an analysis of the same based on education

level. The concluding section summarises the key points of the paper and contextualises the findings within the policy agenda.

## **2. Constitution of India and Status of Women**

Various laws have been brought out, both at the national and international level, to prevent discrimination against women workers. Article 39 of the Indian Constitution guarantees the principle of equal pay for equal work for both men and women. The Fair Wage Committee established in 1948 accepts the principle of equal wages. As per this committee, the equal pay principle does not apply when “male work” and “female work” are distinguished.

Though the Government of India has announced numerous laws to disallow disparities or discrimination against women workers, the gender pay gap (GPG) still exists. It is worth mentioning here that most of these government interventions were instituted decades before the liberalisation reforms of the 1980s, and not much has changed with respect to the status of women in Indian society and the structure of the labour market.

The state recognised the potential role of women in the economy with the first Five-Year Plan (1951-1956). The Planning Commission emphasised three major areas for women’s development—(a) education, (b) social welfare, and (c) health—to improve the welfare of women. However, the focus on women as a category in the development process has kept changing from welfare, development, and empowerment to inclusive growth.

An examination of economic trends shows that structures of inequalities persist in the sphere of occupational concentration, where women continue to be concentrated in lower-end jobs, thereby receiving lower wages. The discrimination and biases against women in the social sphere also permeate the economic sphere, not only through direct, legitimate routes, but also through mindsets and perceptions in the labour markets. In view of the above, this paper attempts to highlight the GPG in India using NSSO data.

## **3. An Overview of Workers in India**

Table 1 presents the sex-wise distribution of main workers across the country using data from the 2001 and 2011 Censuses. The table reveals a clear gender disparity at the all-India level. It also shows that in both rural and urban areas, the share of women main workers has increased. However, this increase was lower in rural areas as compared to urban areas. The table below shows that in all states, fewer female workers are employed as compared to their male counterparts.

In India, women constituted 48.61 per cent of the population during the 2001 Census, while their share among workers was only 26.22 per cent—far below their male counterparts. The female population in rural India increased slightly to 48.69 per cent in 2011, while their share in the workforce

increased at a higher rate, to 27.56 per cent in 2011. This may be attributed to the feminisation of agriculture in the country. Although they lagged far behind men even after this increase, this is an encouraging sign. The same holds for the urban sector as well (Tables 1 and 2). While women's share in the urban population increased from 47.38 per cent in 2001 to 48.16 per cent in 2011, their share in the workforce increased from 15.24 per cent to 18.49 per cent. The wide gap between rural and urban women workers may be because urban women are opting to continue their education rather than joining the world of work. The analysis highlights the wide gap between the proportion of women in the population and their participation in work. For attaining the objective of equitable and inclusive growth, the participation of women in work is essential.

**Table 1: Percentage Share of Male and Female in Total Workers (rural and urban areas)**

States	Rural				Urban			
	Census 2001		Census 2011		Census 2001		Census 2011	
	Male	Female	Male	Female	Male	Female	Male	Female
Andhra Pradesh	62.96	37.04	60.41	39.59	82.27	17.73	77.29	22.71
Assam	81.42	18.58	80.43	19.57	86.76	13.24	83.89	16.11
Bihar	82.46	17.54	80.05	19.95	90.23	9.77	86.61	13.39
Gujarat	73.87	26.13	76.96	23.04	89.16	10.84	87.50	12.50
Haryana	75.80	24.20	82.79	17.21	87.52	12.48	84.82	15.18
Jammu & Kashmir	83.75	16.25	87.03	12.97	89.40	10.60	87.51	12.49
Karnataka	68.29	31.71	66.42	33.58	79.66	20.34	76.13	23.87
Kerala	77.97	22.03	75.92	24.08	79.66	20.34	78.12	21.88
Madhya Pradesh	70.29	29.71	68.67	31.33	84.80	15.20	81.60	18.40
Maharashtra	61.90	39.10	61.07	38.93	84.43	15.57	79.99	20.01
Orissa	82.72	17.28	81.70	18.30	87.48	12.52	83.91	16.09
Punjab	79.28	20.72	86.51	13.49	87.53	12.47	85.13	14.87
Rajasthan	69.98	30.02	68.44	31.56	88.34	11.66	85.45	14.55
Tamil Nadu	63.25	36.75	62.28	37.72	76.72	23.28	74.65	25.35
Uttar Pradesh	86.34	13.66	82.93	17.07	90.96	9.04	86.58	13.42
West Bengal	84.13	15.87	85.02	14.98	85.92	14.08	83.27	16.73
All India	73.78	26.22	72.44	27.56	84.76	15.24	81.51	18.49

Source: Census of India, 2001, 2011

**Table 2: Percentage Share of Male and Female in Total Population  
(rural and urban areas)**

States	Rural				Urban			
	Census 2001		Census 2011		Census 2001		Census 2011	
	Male	Female	Male	Female	Male	Female	Male	Female
Andhra Pradesh	50.43	49.57	50.11	49.89	50.89	49.11	50.32	49.68
Assam	51.43	48.57	51.03	48.97	53.42	46.58	51.39	48.61
Bihar	51.93	48.07	52.06	47.94	53.55	46.45	52.77	47.23
Gujarat	51.41	48.59	51.30	48.70	53.18	46.82	53.18	46.82
Haryana	53.58	46.42	53.15	46.85	54.14	45.86	53.39	46.61
Jammu & Kashmir	52.15	47.85	52.42	47.58	54.97	45.03	54.36	45.64
Karnataka	50.59	49.41	50.52	49.48	51.50	48.50	50.95	49.05
Kerala	48.57	51.43	48.13	51.87	48.60	51.40	47.82	52.18
Madhya Pradesh	51.89	48.11	51.66	48.34	52.69	47.31	52.13	47.87
Maharashtra	51.02	48.98	51.24	48.76	53.39	46.61	52.55	47.45
Orissa	50.34	49.66	50.29	49.71	52.77	47.23	51.77	48.23
Punjab	52.91	47.09	52.43	47.57	54.08	45.92	53.33	46.67
Rajasthan	51.80	48.20	51.73	48.27	52.92	47.08	52.26	47.74
Tamil Nadu	50.20	49.80	50.17	49.83	50.46	49.54	50.00	50.00
Uttar Pradesh	52.53	47.47	52.15	47.85	53.30	46.70	52.79	47.21
West Bengal	51.28	48.72	51.21	48.79	52.84	47.16	51.44	48.56
India	51.39	48.61	51.31	48.69	52.62	47.38	51.84	48.16

Source: Census of India, 2001, 2011

#### 4. Broad Sectoral Divisions of the Workforce

There has been a substantial structural change in the economy after the 1990s which has led to a shift in the distribution of the workforce—female workers appear to be highly concentrated in the agricultural sector. Table 3 presents a sectoral distribution of the Indian workforce by sex. It reveals that during 2011-12, in rural areas, nearly 75 per cent of women were engaged in the agricultural sector while secondary and tertiary sectors employed 17.6 per cent and 8.3 per cent of female workers respectively. It is evident that more women work in the primary sector, while their share in the secondary and tertiary sectors is fairly lower as compared to their male counterparts. It is encouraging that women's share in the primary sector is declining may be

due to more and more women opting for education. High rates of decline were observed in the years 2009-10 and 2011-12.

**Table 3: Broad Sectoral Distribution of Workers (%) (UPSS) in India**

Year/Sector	Primary		Secondary		Tertiary	
	Male	Female	Male	Female	Male	Female
<b>Rural</b>						
1987-88	75.2	85.1	11.4	9.6	13.4	5.3
1999-2000	71.4	85.3	12.6	9.0	16.0	5.7
Change in 1999-2000 over 1987-88	-3.8	+0.2	1.2	-0.6	+2.6	+0.4
2004-05	66.5	83.3	15.6	10.1	17.9	6.5
Change in 2004-05 over 1999-2000	-4.9	-2.0	+3.0	+1.1	+1.9	+0.8
2009-10	63.0	79.4	19.0	13.0	18.0	8.0
Change in 2009-10 over 2004-05	-3.5	-4.1	+3.4	+2.9	+0.1	+1.5
2011-12	59.36	74.94	22.0	16.74	17.63	8.32
Change in 2011-12 over 2009-10	-3.6	-4.4	+3.0	+3.7	-0.4	+0.3
<b>Urban</b>						
1987-88	10.4	30.2	32.7	30.9	56.9	38.9
1999-2000	6.6	17.7	32.8	29.3	60.6	52.9
Change in 1999-2000 over 1987-88	-3.8	-12.5	+0.1	-1.6	+3.7	+14.0
2004-05	6.1	18.1	34.5	32.4	59.4	49.5
Change in 2004-05 over 1999-2000	-0.5	-0.4	+1.7	+3.1	-1.2	-3.5
2009-10	6.0	14.0	35.0	33.0	59.0	53.0
Change in 2009-10 over 2004-05	-0.1	-4.1	+0.6	+0.6	-0.4	+3.5
2011-12	5.64	10.91	35.25	34.0	59.1	52.35
Change in 2011-12 over 2009-10	-0.4	-3.1	+0.3	+1.0	+0.1	-0.6

Source: Various Reports of NSSO

Among rural workers, women are more likely than men to be engaged in the primary sector (agriculture) and correspondingly less in the secondary sectors. The sectoral employment data also reveal a significant shift towards the feminisation of agriculture.

The sectoral distribution of workers in urban areas is distinct from that of rural areas. In urban areas the tertiary sector is most dominant followed by the secondary sector; the primary sector engages only a small proportion of both male and female workers, but female workers outnumber male workers even in urban locations in this sector.

Female employment in services continues to be low and seems concentrated in sub-sectors that fall outside the formal economy—these are thus less remunerative and have limited options for social security. Domestic work, a sub-sector within personal services that engages

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a significant share of female workers, is a typical example. According to NSSO (2011), in 2009-10, around 23 per cent of female workers (UPSS) in services were engaged in private households, primarily as domestic workers (MoLE, 2011).

### **5. Education Level and the Workforce Participation Rate**

The workforce participation rate (WPR) is an important indicator of development that shows the ratio of the working-age population to the total population in any economy. The Census of India and the NSSO are the two main sources of data on the employment rate of the female workforce in India. None of the definitions used by these sources have been able to fully capture the extent of women's participation in the workforce.

Workers may be categorised according to their education level, and this may then be used to calculate education level-specific worker-population ratios. Education, especially professional and technical education, enables individuals to enter the workforce and earn a better income. Educational qualifications are directly related to gender differences in employment; wages are also directly linked to education.

Table 4 analyses the WPR by level of education and compares that of women with men. It reveals that the WPR was highest among illiterate women in rural areas. This also corroborates with the WFP of rural males. Nevertheless, with an increase in the level of education, the WPR amongst rural women declined significantly; however, the decline was marginal for men. Among rural female graduates, the WPR declined by about 5.5 percentage points between 1993-94 (36.6 per cent) and 1999-2000 (31.1 per cent) and increased to 34.5 per cent in 2004-05. It then suffered a fall of more than four percentage points by 2009-10 (29.7 per cent) and remained unchanged during 2011-12.

During the entire period (1993-2012), women with graduate or higher qualifications participated in the workforce more as compared to those with middle, secondary, and higher-secondary levels of school education in both urban and rural locations. For rural males with educational qualifications of graduate and above, the WPR was substantially higher, though a declining trend is observed for 2009-10 and 2011-12.

The WPR of women in urban locations is far lower than that of rural women. It has been argued that urbanisation-linked factors such as better and higher earning profiles for men, and the resultant dissuasion for the entry of women into the urban labour market; higher educational qualifications among women and the kinds of formal sector employment they seek, especially among women belonging to relatively better economic backgrounds; and the burden of household work and other responsibilities prevents them from supplying their labour in the market and so on (Rustagi, 2010). It has been observed that women belonging to middle-income groups



participate less in the labour market, possibly due to domestic responsibilities, despite their high levels of education. This aspect may be further investigated.

**Table 4: Workforce Participation Rate (%) in India by Level of Education**

Education Level	1993-94		1999-2000		2004-05		2009-10		2011-12	
	M	F	M	F	M	F	M	F	M	F
<b>Rural</b>										
Illiterate	91.8	50.0	89.5	51.3	89.2	55.0	87.4	43.2	88.0	41.8
Literate up to Primary	90.9	41.6	88.0	40.3	89.5	44.9	90.0	38.4	89.2	36.1
Middle	77.0	29.0	76.8	29.0	80.2	37.1	78.4	29.4	77.0	27.6
Secondary	72.8	25.8	73.7	25.7	73.2	30.5	69.7	22.2	66.8	22.2
Higher Secondary	68.6	23.4	71.3	20.6	70.9	25.2	63.4	18.3	61.8	17.6
Graduate and above	83.4	36.6	83.6	31.1	85.1	34.5	79.3	29.7	78.1	29.7
All	86.4	48.6	84.1	45.2	84.6	48.5	81.2	37.2	80.0	35.2
<b>Urban</b>										
Illiterate	87.0	30.0	83.9	27.1	83.1	30.4	81.6	23.1	83.2	24.0
Literate up to Primary	85.0	20.3	83.0	17.1	85.5	23.4	84.4	20.6	84.7	22.3
Middle	72.3	13.1	73.2	12.9	76.0	16.1	76.0	15.4	76.5	15.8
Secondary	67.7	13.4	66.8	12.4	67.3	12.3	66.7	9.7	65.1	11.0
Higher Secondary	60.7	14.7	60.8	12.4	60.8	12.9	57.6	9.4	58.3	10.8
Graduate and above	81.8	30.1	80.6	27.3	79.5	29.0	78.8	25.9	79.0	27.9
All	76.8	22.3	75.2	19.7	76.3	22.7	74.0	18.3	74.1	19.5

Source: Various Reports of NSSO

## 6. Analysis of Gender Wage Gaps

Wages and salaries levels reflect one’s access to decent and productive employment. The GPG (gender wage differential) refers to the difference between the wages earned by women and those earned by men. Various studies on the wage gap in India have shown that the unexplained

difference in the wages of males and females is 50-60 per cent (Duraismy and Duraismy, 1966). NSSO data for 2004-05, 2009-10 and 2011-12 show that in the case of women wage workers, considerable wage differentials prevailed in both rural and urban areas for all categories of employment.

Table 5 shows the average daily wages and salaries paid to salaried regular and casual workers in rural and urban areas for 2009-12. Regular salaried/wage employees are those who work in others' farm or non-farm enterprises (both household and non-household) and in turn receive a salary or wages on a regular basis. This category includes persons receiving time wages, persons receiving piece wages or a salary; and paid apprentices, both full-time and part-time. A person who is casually engaged in others' farm or non-farm enterprises (both household and non-household) and who in return receives wages according to the terms of a daily or periodic work contract is referred to as a casual wage labourer.

**Table 5: Average Daily Wages (in Rs.) of Regular and Casual Workers (15 to 59 years)**

Gender	2009-10			2011-12		
	Male	Female	Index of gender bias in wage payment	Male	Female	Index of gender bias in wage payment
<b>Regular Workers</b>						
Rural	249.15	155.87	0.63	322.28	201.56	0.63
Urban	377.16	308.79	0.82	469.87	366.15	0.78
<b>Casual Workers</b>						
Rural	101.53	68.94	0.68	149.32	103.28	0.69
Urban	131.92	76.73	0.58	182.04	110.62	0.61

Source: Various Reports of NSSO

The average daily wage for regular rural women employees was Rs.155.87 per day as against Rs.249.15 for men during 2009-10. The gender bias index in rural areas for regular women employees during 2009-10 was 0.63. The index was calculated as the ratio of female wages to male wages. A smaller ratio indicates a high gender bias. Urban regular women employees received better remuneration than rural women. When the remuneration was compared with that of men, it was still lower for urban women, but the gap is narrower than in rural areas—the gender bias index was 0.82.

There seems to have been no improvement in the wages paid to rural women between 2009-10 and 2011-12. Though the data did not show any change in the case of the rural wage gaps, the urban wage gaps appear to have reduced. It is worthwhile to mention that even though gender wage

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differentials exist, rural wages have been rising, reflecting an improvement in the quality of life of the rural population.

**Table 6: Average Wage/Salary Earnings per Day received by Regular Wage/Salaried Employees (Rural)**

States	NSS 66 <sup>th</sup> Round (2009-10)			NSS 68 <sup>th</sup> Round (2011-12)		
	Male	Female	Index of gender bias in wage payment	Male	Female	Index of gender bias in wage payment
Andhra Pradesh	198.31	93.84	0.47	251.28	225.01	0.90
Assam	248.31	95	0.38	343.97	179.71	0.52
Bihar	252.59	271.76	1.08	450.49	188.42	0.42
Gujarat	187.02	178.08	0.95	268.69	173.13	0.64
Haryana	299.11	202.04	0.68	396.44	357.38	0.90
Jammu & Kashmir	328.11	335.82	1.02	453.56	222.37	0.49
Karnataka	195.08	112.60	0.58	237.53	151.85	0.64
Kerala	290.79	213.29	0.73	368.44	240.45	0.65
Madhya Pradesh	154.03	138.15	0.90	270.94	108.56	0.40
Maharashtra	293.76	164.51	0.56	369.14	306.76	0.83
Orissa	293.87	151.72	0.52	245.30	223.23	0.91
Punjab	263.01	136.72	0.52	302.79	157.61	0.52
Rajasthan	261.55	112.99	0.43	328.61	177.86	0.54
Tamil Nadu	256.49	161.47	0.63	292.55	199.44	0.68
Uttar Pradesh	235.60	148.11	0.63	296.51	171.27	0.58
West Bengal	180.21	97.29	0.54	297.35	119.76	0.40
All India	249.15	155.87	0.63	322.28	201.56	0.63

Source: various rounds of NSSO

Women casual labourers appear to receive a lower remuneration than men in both rural and urban areas, which is low in itself by the standards of many developing countries. Further, women casual workers in urban locations received higher wages during both periods under consideration as compared to their rural counterparts, while the wage gap in rural areas was lesser. For urban women casual workers, the gender bias index reduced during 2011-12, showing an improvement. Gender disparity in wages in urban areas usually results from the employment of women in lower-paying activities.

It is observed that the gender wage gap tends to be much larger for casual workers than regular workers, in urban locations. Rural casual workers constitute the single largest segment of the total workforce of the country, and among them, agricultural workers occupy a predominant position. Rural agricultural wages are hence considered one of the most prominent indicators of economic well-being, not only of the agricultural workers themselves, but also of the rural population as a whole. Agricultural wages are not only low—they also increase at slower rates than non-agricultural wages. There may be various factors that contribute to higher wages in non-agricultural activities, such as enhanced labour productivity through education and training, policy interventions through employment generation programmes, etc.; in contrast, agriculture remains overcrowded and this leads to lower labour productivity and lower wages.

**Table 7: Average Wage/Salary Earnings per Day received by Regular Wage/Salaried Employees (Urban)**

States	NSS 66 <sup>th</sup> Round (2009-10)			NSS 68 <sup>th</sup> Round (2011-12)		
	Male	Female	Index of gender bias in wage payment	Male	Female	Index of gender bias in wage payment
Andhra Pradesh	341.63	248.05	0.73	427.82	244.30	0.57
Assam	491.19	380.92	0.78	615.23	561.63	0.91
Bihar	338.31	500.75	1.48	417.10	369.02	0.88
Gujarat	306.58	221.35	0.72	326.34	271.86	0.83
Haryana	316.91	330.10	1.04	810.93	635.59	0.78
Jammu & Kashmir	379.61	321.86	0.85	497.61	484.71	0.97
Karnataka	414.95	293.37	0.71	518.58	391.97	0.76
Kerala	450.76	320.61	0.71	519.84	412.47	0.79
Madhya Pradesh	325.15	230.33	0.71	459.66	320.58	0.70
Maharashtra	439.30	391.71	0.89	516.55	370.30	0.72
Orissa	358.89	238.48	0.66	457.66	286.42	0.63
Punjab	342.35	374.49	1.09	352.58	399.38	1.13
Rajasthan	374.42	317.85	0.85	417.14	412.89	0.99
Tamil Nadu	319.60	277.23	0.87	420.76	297.63	0.71
Uttar Pradesh	360.29	285.54	0.79	496.53	378	0.76
West Bengal	391.77	277.08	0.71	454.61	323.56	0.71
All India	377.16	308.79	0.82	469.87	366.15	0.78

Source: various rounds of NSSO

Both economic and non-economic factors are responsible for gender-biased wage structures. Sociological factors play a key role in determining gender roles, and hence, affect gender work participation. A number of studies have established that gender differentials in wage payments are actually the outcome of labour market discrimination, which is generally biased against women (Jacob and Lim, 1992).

State-level analysis shows that in some states, the gender wage gap was much higher than the national average for rural and urban locations (Tables 6 and 7).

Across the states the index of gender bias in wage payment varies from state to state. The data show that the index value (1.13) is highest for Punjab and lowest (0.57) for Andhra Pradesh in the case of urban areas and ranges from a high of 0.91 in Orissa to a low of 0.40 both in Madhya Pradesh and West Bengal for rural areas for 2011-12. It ranges from a high of 1.48 in Bihar to a low of 0.71 for the four states of West Bengal, Madhya Pradesh, Kerala and Karnataka for urban areas, and from a high of 1.08 in Bihar to a low of 0.38 in Assam for rural areas for 2009-10.

Overall, the gender bias index is worse for rural areas in comparison with urban areas at the All-India level, for both the 66th and 68th rounds of NSS data corresponding to the years 2009-10 and 2011-12 respectively. Though the rural-urban differential declines over the period from 2009-10 to 2011-12, it is still high. Moreover, within urban areas, the inter-state variation in the gender bias index is higher as compared to rural areas.

### 7. Education Level-wise Pay Gap Analysis

When analysed by the level of educational attainment, it was observed that wage gaps existed for all the levels of education for both rural and urban locations

**Table 8. Average Wage/Salary Earnings (in Rs.) per Day received According to General Education Level**

All India	NSS 66 <sup>th</sup> Round (2009-10)				NSS 68 <sup>th</sup> Round (2011-12)			
	Rural		Urban		Rural		Urban	
	Male	Female	Male	Female	Male	Female	Male	Female
Not Literate	135.72	65.47	156.6	92.56	174.37	89.31	207.65	123.43
Literate upto middle	160.04	80.32	183.80	114.38	202.48	104.27	237.24	132.81
Diploma/ Certificate	355.48	291.01	481.26	369.73	450.31	428.66	524.33	391.43
Graduate and above	403.05	285.98	634.92	499.98	550.23	377.85	805.52	609.69
All	249.15	155.87	277.16	308.79	322.28	201.56	469.87	366.15

Source: various rounds of NSSO

(Table 8). Some studies argue that gender gaps in income, employment, and wages may arise due to several factors, such as different human capital endowments; differences in the sectors and occupations that provide employment to women; and rigid social practices. According to Anupama (2010), a study conducted in Punjab showed that differences in labour market outcomes are purely due to a cultural bias in favour of males. In addition to the unequal burden of poverty, women are also faced within equalities of resource distribution, ownership, and access to economic resources, land, property, etc. (Rustagi, 2010).

## **8. Conclusions**

Over the years, there have been noticeable policy interventions to bring about equality between men and women. This paper concludes that gender gaps in wage payments exist in India though the economy is growing at a rapid rate. After analyzing employment intensity by sector, it has been observed that women are mainly concentrated in the primary sector and in lower-paying jobs. Female employment in the services sector continues to be low and seems concentrated in sub-sectors that fall outside the formal economy—these are less remunerative and have limited options for social security. Domestic work, a sub-sector within personal services, engages a significant share of female workers.

This paper showed that for all categories of employment, considerable wage differentials prevailed in both rural and urban areas. Women are not only concentrated in low-paying occupations in the unorganized sector and casual work—they are also subject to discrimination in wage payments irrespective of their educational attainments. One possible reason for this may be their lower bargaining power. Several laws have been enacted in the country to protect the rights of women. Our five year plans have also emphasised improving the quality of life of women.

There is a biased mindset that turns the labour market against women. As women are expected to take on a disproportionate share of household and family responsibilities, employers expect married women to be more constrained by such obligations, and as a result, there is a preference for men in employment, training, and promotions. Childcare leave and other socio-cultural factors add to the perpetuation of the gap (Varkkey & Korde, 2013).

The increased participation of women in the labour market can contribute greatly to the growth and development of the economy. There is a need to encourage greater participation of women in the labour market by providing decent and productive employment avenues and by reducing the wage gap. Since women workers tend to be more concentrated in the primary sector, there is a need to improve agricultural productivity. In order to achieve this, appropriate policy interventions that address gender discrimination in the labour market need to be implemented.

The issue of wage inequality is also central to the United Nations' Sustainable Development Goals (SDGs): "decent work for all women and men, and lower inequality, as among the key objectives of a new universal policy". As India is committed to the SDGs, there is a need to work towards promoting gender equality. Promoting equity in the labour market must be considered imperative to our country's goal of inclusive development.

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