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## **GENDER INEQUALITY IN WAGE AND EMPLOYMENT IN INDIAN LABOUR MARKET**

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### **Abstract**

The labour market suffers from several imperfections, most of which act against the women. They face entry barriers which act as a deterrent and discourage them to enter labour market. Using nationally representative sample data collected by the National Sample Survey Organisation (NSSO) 2011-12 through quinquennial surveys on “Employment and Unemployment”, the paper tries to examine the prevalence of various forms of inequality and the condition of workers across formal and informal sectors, as well as across gender, location and work status. Oaxaca decomposition technique (Oaxaca 1973) is also used to examine the contribution of inequality factors to overall inequality. A substantial wage disparity is found across workers of different regions, sectors and gender. Women workers earn much lower wages than their male counterparts and the inequality among them is also much higher. The analysis also suggested a comparatively a high gender wage gap in various categories of activities. It is surprising to find that in India the wage disparity exists mainly because of large wage difference within the various categories of workers. Further, the examination of the sources of wage difference reveals that gender wage gap is mostly because of discrimination in wage distribution against women workers. The endowment is the greater contributing factor in case of wage gaps between regular and casual workers and also for rural and urban divides.

**Keywords:** Informal Employment, Wage Inequality, Labour Force Participation, Labour Market.

**JEL classification codes:** J46, J30, J82, J01.

## 1. INTRODUCTION

Liberalization has enabled India to achieve higher rate of growth but at the same time, it has also resulted in greater casualization of the labour force, feminization of jobs at lower levels, and greater exploitation of workers, especially of women workers. Moreover, the impressive growth rate of India in recent years has not led to an equally improved labour market conditions in the country. There are still a large number of working poor with gross inequality in income and employment conditions in the labour market.

The heterogeneous nature of Indian Labour Market in terms of its nature, skill requirement, mode of operation and others has a consequent effect on its wage rates. In India, inequality is the major concern since its independence and even various government reforms, globalization and recent growth scenarios have failed to address. Most of the studies in India, have although found an increasing pattern of consumption inequality along with income and wealth inequality since 1990's, they have reported a marginal increase in wage inequality among workers over the years which has declined in rural areas but slightly increased in urban areas (Rani 2008; Cacciamali, et. al. 2015). Mukherjee and Majumder (2011) explored the earning difference among various spatial and socio-economic group of workers in India and found an increasing disparities during last decade caused by both discrimination and endowment gaps. Discrimination was found to be the predominant factor behind wage disparities among genders vis-a-vis endowment difference and is increasing over time.

The two important features of India Labour market viz. Informality and inequality has been the intriguing factor that has not been researched properly so far. Analysis of wage inequalities in Indian labour markets, where majority of workforce are self-employed or casual and are engaged in informal sector, needs to go beyond simple monetary payment and wage calculations (Rustagi, P. 2005). Informal sector has emerged as an important component of an economy comprising a major source of livelihood and employment in India which has expanded most rapidly in recent decades.<sup>1</sup> Out of the total non-agricultural workforce in India, 86.3 per cent of the workers in 1999-00 and 86.3 per cent of the workers in 2004-05 were absorbed in informal sector. About 91.1 per cent of the total work force in 1999- 00 and 92.3 per cent of the total work force of about 458 million in 2004-05 were informal in nature [NSSO (1999- 00) and NSSO (2004-05)]. In addition, informal sector is contributory for national output in primary, secondary and tertiary sectors and exports. For instance, contribution of informal sector is 40 percent of the total industrial output and 35 percent of total exports (Bairagya, 2009). Das (2012) using the 61st (2004-05) NSSO survey data, making a regular- casual workers distinction found that

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<sup>1</sup> In India, the National Commission on Employment in the Unorganised Sector (NCEUS, 2007) defines "unorganised workers consist of those working in the unorganised enterprises or households, excluding regular workers with social security benefits, and the workers in the formal sector without any employment/ social security benefits provided by the employers".



private formal sector had the highest mean wage but it also exhibited the highest wage inequality compared to informal sector. Abraham (2017) also utilises the NSSO EUS round data set since 1999-00, finds that although overall wage inequality has declined in the first decade of the 21st century, the trend is not borne out across all employment group, the wage inequality has declined among IIE (Informally Informal Employment), increased among FE (Formal Employment) while it has remained stagnant or marginally increased among the IFE (Informally Formal Employment).

Wage disparities are bound to exist across occupations, regions and sector and nature of jobs, however the existence of inequality among men and women for same job with same level of skill reflects the existence of discrimination. Understanding of inequality based on wage inequality alone may not be sufficiently reflect the inequality in overall labour market, unless we also examine other non-wage (i.e condition of employment, in terms of different social security provided to the workers) inequality conditions of labour market among male and female workers.

Using nationally representative sample data collected by the National Sample Survey Organisation (NSSO) 2011-12 through quinquennial surveys on “Employment and Unemployment”, the paper tries to examine the prevalence of various forms of inequality and the condition of workers across formal and informal sectors, as well as across gender, location and work status by using Oaxaca decomposition techniques (Oaxaca 1973) to examine the contribution of inequality factors to overall inequality.

The main focus of this paper is to consider the gender disparities in wage and condition of works in the formal and informal labour market settings in India and to understand the existence of discrimination against women. For convenience, the paper is divided into five sections. After introduction, section II starts with the discussion of characteristics of workers in India. Section III examines the condition of wage workers in formal and informal sectors. Section IV analyses wage disparity between and within groups and it also analyses the disparity in wages due to endowment and discrimination and finally, the last section concludes and prescribes some policy suggestions.

## **2. CHARACTERISTICS OF WORKERS IN INDIA**

Gender inequality in income and employment can be understood by comparing men and women’s labour market participation and other characteristic associated with it. Table 1 and 2 show some selected characteristics of labour force in India across their location of work and gender. There has been a high and increasing disparity in labour force participation rate (LFPR) between men and women across rural and urban regions. The Labour force participation is much lower in India as compared to the rest of the world (64 per cent). And women’s labour

force participation rate is much lower and even lower than half of their male counterparts in rural and urban India. Women’s labour participation decision has been observed to be different from those for men in terms of age of entry, human capital attributes, marital status, reproduction and social class position affecting their mobility and so on (Sundaram 2001; Tilak 2002).

Although women constitute half of the total population, it has been found that women’s economic contributions in terms of labour are far below than men. In India Female Labour Force Participation Rate (LFPR) has been lower than that of man and majority of female workers figure in unpaid jobs and is over represented in informal sectors and among the poor groups. Available data suggests that Female Labour Force Participation Rate (LFPR) has remained stagnant for long time and more recently it has declined sharply from 33.3 per cent in 2004-05 to 26.5 per cent in 2009-10 to further 18.1 per cent in 2011-12 for rural areas and it has declined from 17.8 per cent to 14 percent and further to 13.4 per cent respectively in urban areas (NSSO 2011).

**Table 1.** Selected Characteristics across Gender & Region in India - 2011-12

		Rural		Urban	
		Male	Female	Male	Female
Total Population(millions)		395.8	378.7	163.3	150.6
Literacy Rate (%) <sup>#</sup> (7+yrs)		79.02	60.58	91.13	80.33
Out of Labour Force (%) <sup>#</sup>		45.33	81.89	44.00	86.60
<i>of which</i>	Domestic Duties (%) <sup>#</sup>	0.42	42.17	0.29	48.00
	Education/Training (%) <sup>#</sup>	30.44	25.10	29.42	25.97
Labor Force Participation Rate (%) <sup>#</sup>		54.67	18.11	56.00	13.40
Unemployment Rate (%) <sup>@</sup>		2.11	2.92	3.24	6.56

Source: NSSO 68<sup>th</sup> Round (2011-12) “Employment- Unemployment Survey”.

In 1993-94, almost 32.8 per cent of women in rural areas and only 15.5 per cent in urban areas were involved in work force. In 2011-12, only 18.11 per cent of rural women and 13.40 per cent of urban women are in the labour force. Thus, a proportionately large number of working age women is outside labour force. Nearly one fourth of them are found in educational institutions, while 42.17 per cent are engaged in various types of domestic duties in rural areas and a slightly higher percentage (48 per cent) of them in urban areas are in domestic duties. The unemployment rate is highest among the urban women at 6.56 percent as compared to 2.92 per cent for rural women, while the unemployment rate among male workers is found to be 2.11 per cent and 3.24 per cent in rural and urban areas respectively.

**Table 2.** Selected characteristics of workers in India – 2011-12

	Rural		Urban	
	Male	Female	Male	Female
Total Workers (millions)	190	60.8	83.5	17.9
<i>of which</i> Regular workers (%)	11.05	8.07	45.01	50.08
Self Employment (%)	52.06	52.81	40.22	35.97
Casual workers (%)	36.89	39.12	14.77	13.95
<b>Sectoral Distribution of Workers</b>				
Agricultural Workers	57.17	74.14	4.94	8.06
Non-Agricultural workers				
<b>Other characteristics</b>				
Percentage of workers with only subsidiary Activities	1.39	40.36	0.74	15.73
Percentage Workers with at least 12 years of formal edu	13.07	5.88	36.65	34.96
Percentage of workers with less than primary level of education	53.45	77.37	29.07	44.12

Source: same as Table 1.

Table-2 indicates a large percentage of workers in rural areas are either self-employed or casual workers. More than half of workers are self-employed in rural areas. While only 11.05 of male workers and 8 per cent of female workers are regular workers in rural areas, a proportionately large number of regular workers are found in urban areas (45 per cent of male and 50 per cent of female) as compared to rural areas. Sectoral distribution of workers highlights that a large per cent of rural women (74 per cent) are engaged in agriculture related activities as against only 57 per cent of male workers. In contrast, only 8 per cent of urban women are found in agriculture and related activities, which is quite natural.

Educational level of the labour force by gender indicates a high magnitude of gender disparity where there are a large proportion of women workers with less than primary level of education in both rural and urban areas as compared to male workers. Almost 77 per cent of rural women workers and 44 per cent of urban areas are less than primary educated. Only 5.88 per cent of rural female workers have completed 12 years of formal education, while this proportion is about 35 per cent in urban areas.

In urban areas, nearly half of women workers are regular workers and only 13.95 per cent are casual workers. Another important feature of women’s work force is the presence of large subsidiary workers among them. In rural areas, about 40 per cent of the women participating in the work force are engaged only as a subsidiary worker whereas, 1.39 per cent and 0.74 per cent of male workers are engaged as subsidiary workers in rural and urban areas respectively. Double burden of work and

cultural belief compels the women workers to be available for work for some part of the year only as a subsidiary worker.

The increasingly low official estimates of female LFPR in India may also be due to exclusion of a large number of women workers who are engaged in informal sector. Large proportions of women in informal sector works as a self-employed and operates from home and thus are likely to be excluded from the labour force enumeration. Women are over-represented in informal sector because of their need for flexibility to manage both productive, home-based income earning work, and many other unpaid activities within and outside the household and their reproductive functions. Women workers in informal sectors are generally unskilled, low educated and more vulnerable and are considered to be the cheap source of labour and are particularly the most marginalized section of workers. A large concentration of this small fraction of labour force in Informal sector highlights their marginalized condition under which they have to work. Against this backdrop, the present paper tries to explore gender inequality in Indian labour market. Towards that it focuses on the working conditions and wage situation of wage workers across formal and informal sectors and across gender. NSSO data base on Employment and Unemployment from 69th round survey for year 2011-12 has been used.

### 3. WORKING CONDITIONS OF WAGE WORKERS IN FORMAL AND INFORMAL SECTOR:

The majority of urban informal sector workers live in poor areas, lack basic health and welfare services and social protection and the conditions under which most of informal workers work are precarious, unhealthy and unsafe working environment. In 2011-12, excluding cultivation, there were 199.78 million workers, of which 158.80 million were in informal sector and only 40.98 million belonged to formal sector. In rural sectors, 14.4 million (79 per cent of total women workers in rural area) of women were employed in the informal sector, and 71.8 million (84.8 per cent) men were in informal sector. The urban informal sector employed 12.5 million (74.58 per cent) of women and 60.1 million (74.9 per cent) of men workers.

**Table 3.** Total employment in formal and informal sector (in millions) excluding cultivation, 2011-12

	Rural		Urban		Rural+Urban
	Male	Female	Male	Female	Persons
Informal	71.8 (84.8)	14.4 (79.03)	60.1 (74.9)	12.5 (74.58)	158.80 (79.48)
Formal	12.8 (15.2)	3.82 (20.97)	20.1 (25.1)	4.2 (25.42)	40.98 (20.52)
Total	84.60 (100)	18.22 (100)	80.20 (100)	16.76 (100)	199.78 (100)

Source: same as Table 1. Figures in parenthesis are row percentage.

Considering only the wage workers, non-agricultural Informal sector in India consisted of 39.8 million male and 5.80 million female workers in rural areas, and it constituted 28.6 million male and 6.5 million female workers in urban areas in 2011-12. In rural areas, it is found that as high as 91.9 per cent of male and 89.1 per cent of female informal workers do not enjoy any social security benefits in comparison to 41.7 per cent of male and 61.41 per cent of female in formal sector. While in urban areas, 87.5 per cent and 84.5 per cent of male and female informal workers do not enjoy any social security benefits against 26.9 per cent and 26.9 per cent of male and female formal workers respectively.

**Table 4. Employment Conditions across Formal/Informal Sectors – 2011-12**

		Total Wage Workers (in millions)	% of wage workers			
			Without any social security benefits	Without Maternity Benefits	Without paid leaves	Without written job contract
Urban Formal	Male	20.08	26.96		25.93	43.85
	Female	4.25	26.99	40.92	23.34	41.16
Rural Formal	Male	12.74	41.75		39.85	53.11
	Female	3.82	61.41	70.51	49.48	53.85
Urban Informal	Male	28.63	87.50		85.05	91.76
	Female	6.50	84.58	88.85	77.77	89.70
Rural Informal	Male	39.85	91.89		93.84	96.43
	Female	5.80	89.14	91.45	90.20	95.16

Source: same as Table 1.

Similarly, 91.4 per cent of informal women workers in rural areas and 88.8 per cent in urban area do not enjoy maternity benefits. And as high as 96.4 per cent of male and 95.1 per cent of female informal workers in rural areas work without written job contracts. Thus, it is observed that a large percentage of workers in informal sector work without any type of social security and that the workers in rural areas are the most deprived. A huge proportion of workers in informal sector do not enjoy social security such as paid leaves, maternity leave benefits, written job contracts, etc.

Looking into the wage conditions of wage workers in formal and informal sector, it is found that only 25 per cent of male workers and 30 per cent of female workers in informal sector gets regular monthly salary in rural areas whereas, it is 76.6 and 69.5 per cent of for male and female workers respectively in case of rural formal sector. Average daily wage rate is Rs 169.00 and Rs 129.79 in rural informal sector in comparison to Rs. 261 and Rs.166 in formal sector for male and female workers respectively. In the urban informal sector, only 56 percent of male and 71.7 percent of female workers got regular monthly salary and their respective average wage rate were Rs. 197 and Rs. 141. Although, a slightly higher percentage of

women workers got salary on monthly basis in informal sector but their average wage rate was comparatively lower than that of male workers. Almost 66.2 per cent of male and 58.5 per cent of women in rural informal sector are paid on a weekly or daily basis and in case of urban informal sector their proportion are 37.0 per cent and 21.9 per cent respectively. Nearly 6 per cent of men and 8 per cent of women workers in rural informal sector get piece rate payment. The presence of huge gender disparity in wage rate is quite evident from the table-5. In general wages are higher in formal compared to informal sector, in urban areas compared to rural areas and for males compared to females. However, females seem to bear additional brunt of wage disparity as they rank the lowest, so much so that women in rural formal sector earn less than men in urban informal sector and women in urban informal sector earn less than men in rural informal sector.

**Table 5. Wage Conditions across Formal/Informal Sectors – 2011-12**

		Total Wage Workers (in millions)	% of wage workers				Average Daily Wage Rate (Rs)
			Regular Monthly Salary	Weekly/ Daily Salary	Piece Rate Payment	Other type of payment	
Urban Formal	Male	20.08	95.09	3.38	0.71	0.82	330.99
	Female	4.25	94.85	3.45	1.53	0.17	273.35
Rural Formal	Male	12.74	76.63	18.51	2.59	2.27	261.10
	Female	3.82	69.53	19.59	5.18	5.70	165.80
Urban Informal	Male	28.65	56.82	37.14	4.71	1.33	197.05
	Female	6.50	71.74	21.95	4.77	1.54	140.85
Rural Informal	Male	39.86	25.01	66.16	6.20	2.63	169.00
	Female	5.80	30.14	58.54	8.43	2.89	129.79

Source: same as Table 1.

Table-6 represents the sector-wise distribution of workers in India in 2011-12 excluding cultivation. The distribution of workers across sectors shows that manufacturing, construction trade, hotel and restaurant were the major employment generating sectors in rural informal sector which taken together employed more than 70 per cent of men and 66 per cent of women workers engaged in rural informal sector. Even after excluding cultivation activities more than 17 per cent of women in rural informal sector are found engaged in agriculture and allied activities. Though for them, the highest share is of manufacturing, followed by construction and trading activities.

*Table 6. Distribution of workers by industry division in India, 2011-12*

	Rural				Urban			
	Informal Sector		Formal Sector		Informal Sector		Formal Sector	
	Male	Female	Male	Female	Male	Female	Male	Female
Agricultural & allied activities	4.52	17.66	0.82	1.06	1.39	2.10	0.29	0.16
Mining & quarrying	1.27	1.60	1.74	0.43	0.40	0.24	2.53	0.80
Manufacturing	18.57	38.46	21.27	7.12	22.93	33.80	24.29	12.75
Electricity, gas and water supply	0.20	0.29	3.98	0.43	0.77	0.64	3.54	2.65
Construction	32.88	14.06	20.04	28.34	13.52	5.84	4.59	1.67
Wholesale, retail trade & repair work, Hotel and restaurants	21.47	14.19	1.59	1.95	33.99	17.12	5.08	3.30
Transport, storage & communications	10.96	0.40	7.55	1.10	11.68	1.13	15.71	10.56
Financial intermediation, Real estate, business activities	0.95	0.35	2.74	1.20	2.08	1.30	7.57	7.72
Other services	9.17	12.99	40.26	58.36	13.24	37.83	36.40	60.39
Total Workers (in millions)	71.7	14.4	12.7	3.8	60.1	12.4	20.1	4.2

Source: same as Table 1.

Rural formal sector employs women workers mostly in services followed by construction and manufacturing activities. For males in rural informal sector, a large proportion is engaged in construction activities followed by wholesale trade, etc, and manufacturing. In urban formal sector, most of the women workers are engaged in services followed by manufacturing and transport & communication. In the urban informal sector female workers are mostly in Trade, Manufacturing, Construction, Other services and Transport & Communications activities. Whereas, Services and Manufacturing are the two most important activities for women workers in urban Informal Sector followed by Trade activities. This sectoral difference in gender distribution of workforce speaks of strong gender inequality in the wage labour market. This has been commented upon earlier by various researchers (Majumder, 2011; Mukherjee & Majumder, 2011) and is a major cause of wage disparity across gender.

#### **4. WAGE DISPARITY ESTIMATION**

Gender wage gap is often found among different industries and sectors of developing countries, the wage gap also expected to persist across different levels of educational attainment of workers and across urban or rural region. Most of the studies on gender differentials have supported the existence of gender inequality in wages (Deshpande & Deshpande 1999; Madheswaran & Shroff 2000). These studies have emphasised that the public sector pays better wages as compared to the private sector and women are unequally remunerated as compared to male counterparts. In some activities women are getting higher wages than men mainly because of longer years of work or experience (Mishra 1999).

The evidence of wage differential within occupations is also found to be substantial in many developing countries like India. The variation in the mean wages earned by different groups of workers could be because of the variation in endowment or skill of workers and also it could be because of the entry barriers in some jobs which discriminates one group against others even if they have adequate skill. Thus, this may be again because of two main reasons. First, the wage differential could be because of endowment gaps among gender groups. Second, this may be due to sheer discrimination in terms of low wage rates paid to certain group of workers even within the same occupation (Dolton and Kidd 1994; Mukherjee & Majumder, 2011; Majumder, ). In this section, we examine wage inequalities across different groups of workers and then decompose the gaps into Endowment factor such as education and the rest representing Discrimination factor.

On the basis of NSSO unit level data, we have calculated the gender wage/pay ratio between the average daily wage of female and male workers for various levels of educational attainment across different types of formal and informal sectors for both rural and urban areas. Higher level of educational attainment provides higher wage rate to workers. Analysis of average daily wage rate among



workers aged between 15-59 years of age shows a clear gender and sectoral wage gap with wage of women workers being lower than that of men in all categories of activities (Table-7).

Analyzing gender wage gap for different types of formal and informal activities by educational attainment showed large gender wage disparity in informal sector as compared to formal sector. Wage disparity is more prominent among informal self-employed workers in urban areas. Regularly informal workers with no education also face high gender wage disparity in comparison to others. Within formal sector, gender wage inequality is more among casual workers as compared to regular workers. Regular female workers in rural formal sector with up to primary levels of education are better off than their male counterparts. Wage disparity is also low for regular workers in urban formal sector which is expected because of the organised nature of such sector with several regulations and fixed pay structure in place.

**Table 7.** Gender wage gap ratio across nature of occupation by education group in rural and urban areas, 2011-12

Urban Nature of Wk	Illiterate		Up to Primary		Up to Schooling		Graduation		Above Graduation		All	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
Informal Sector												
Self Employed	0.82	0.55	0.84	0.23	0.52	0.54	0.60	0.11			0.66	0.26
regular workers	0.48	0.57	0.77	0.84	0.70	0.67	0.65	0.68	0.60	0.64	0.61	0.68
Casual workers	0.71	0.69	0.62	0.53	0.67	0.61	0.77	0.84			0.66	0.81
Formal Sector												
regular workers	0.57	0.81	1.26	0.61	0.44	0.85	0.79	0.85	0.65	0.82	0.78	0.81
Casual workers	0.73	0.80	0.77	0.66	0.65	0.46	0.56	0.73	0.52		0.71	0.68

Source: Author's Calculation from NSSO 68<sup>th</sup> Round unit level (2011-12) "Employment- Unemployment Survey".

#### 4.1. WAGE DIFFERENCES: BETWEEN AND WITHIN GROUPS

Disparities at the aggregate level are examined using Theil indices in Wage distribution by sector, gender, and region and activity status of the workers. We have decomposed the Theil Index into within-group and between-group inequality to identify the source of overall inequality in wage rate. This analysis consists of wage workers only who earns either in cash or in kind.

In India, women workers constitute only 22 per cent of the total labour force, while the men workers dominates with the three-fourth share of the total labour market. The men workers earn much higher wage rate than women workers irrespective of their sector and nature of work. Moreover, the wage inequality among women workers is much higher than those among men workers. The contribution of within group inequality is also significantly higher in case of gender division of the workforce in India (Table-8).

Rural workers in India constitute more than 70 per cent of total workers in India, but they earn less than one-third of what average urban workers earn. While there is comparatively higher wage inequality among urban workers as compared to rural workers. And the contribution of within group inequality is significantly more than contribution of between group inequalities in total wage inequality across workers by regions.

Informal sector is the major source of employment to a burgeoning Indian labour market that provides employment to around 80 per cent of the total workforce. The workers in the informal sector are also paid much less than one-third of the formal sector wage rate. On the other hand, workers in the formal sector not only enjoy higher wages but also relatively better working conditions than workers in informal sector. However, the wage inequality in formal sector is higher than that prevalent in the informal sector. And the overall wage inequality among the formal and informal workers in India exists mainly because of within group inequality.

Looking into the wage inequality among the workers by their employment status, the total wage workers constituted only 39.9 per cent of regular workers while the major proportion (60.1 per cent) of workers were engaged as casual workers. As expected there exists a huge wage gap between the casual and regular workers (Table-8). However, the wage inequality among the casual workers is much lower than that among regular workers. The result also indicates that a substantial portion of inequality in wage rate is explained by within group rather than between group inequalities.

It is found that between Group disparity accounts for less than 5 per cent of total inequality in most of segregated group wise inequality, except in formal and informal sector where Between Group accounts for nearly 29 per cent of total inequality. For all the others, most of the wage inequality is due to Within Group differences.

**Table 8.** *Decomposition of wage disparity (within and between)*

	Average Wage	Employment Share	Gini Index	Theil Index	Within	Between
Male	289.04	77.6	0.473	0.412		
Female	213.39	22.3	0.544	0.524		
Total inequality			0.489	0.435	0.429	0.006(1.30%)
Rural	186.66	71.2	0.467	0.384		
Urban	406.82	28.7	0.487	0.439		
Total inequality			0.489	0.435	0.417	0.019(4.32%)
Formal	538.01	20.5	0.404	0.303		
Informal	196.97	79.5	0.364	0.263		
Total inequality			0.477	0.411	0.292	0.118(28.83%)
Regular	403.83	39.9	0.356	0.308		
Casual	138.13	60.1	0.247	0.109		
Total inequality			0.489	0.435	0.404	0.0317

Source: Author’s Calculation from NSSO 68<sup>th</sup> Round unit level (2011-12) “Employment-Unemployment Survey”.

#### **4.2. WAGE DIFFERENCES: ENDOWMENT AND DISCRIMINATION**

Here we have examined the wage disparity between different groups of workers and decomposed that into components. As mentioned earlier, a part of a Wage gap is due to differences in endowment of the two groups of workers - known as Endowment Effect in Wage setting and another part may be pure discrimination in wage setting where workers with same endowment and in same occupation are paid lower wages.

It has already been mentioned that the differences between Male and Female wage rate are quite high. It is observed that a substantial part (80 per cent) of this difference in wage gap is due to discrimination between male and female workers while endowment gap explains only 20 per cent of gaps in wage settings. Lower employment opportunities of women in labour markets and women’s readiness to work even at lower wage rate due to economic and other structural conditions could be the prime reasons for such a situation in India.

**Table 9.** Wage disparity due to endowment and discrimination

	Wage Ratio	% due to endowment (Explained)	% due to discrimination (Unexplained)	Difference
Female/Male	0.738	0.083 (20.00)	0.338 (80.09)	0.422
Informal/Formal	0.364	0.413 (50.12)	0.420 (50.97)	0.824
Rural/Urban	0.458	0.325(53.90)	0.276 (45.77)	0.603
Casual/Regular	0.342	0.469(62.53)	0.281 (37.46)	0.751

Source: Author’s Calculation from NSSO 68<sup>th</sup> Round unit level (2011-12) “Employment-Unemployment Survey”.

Wage disparity among Formal and Informal workers is the most evident and huge with the Formal workers earning higher wage rate compared to Informal workers. This huge disparity is equally accounted for by endowment and discrimination factor, which indicates that lower wage rates of the informal workers are both due to their lesser educational levels and skill and due to discrimination and the existence of various entry barriers in formal sector that force them to undertake low paying informal jobs. It is also indicative of the fact that informal workers lags endowment as compared to their formal counterparts and thus it is necessary to improve their endowment level through quality education and imparting skill formation trainings.

Rural and urban wage gap is also found to be quite substantial. Results indicate that nearly 54 per cent of total Urban-Rural wage gap is explained by endowment difference, whereas 45.7 per cent is due to discrimination in wage settings. This is indicative of high spatial disparity in human development across rural and urban areas in India, accentuated by concentration of economic activities and opportunities in urban areas.

There is also a substantial wage gap between regular and casual workers as expected. And a larger percentage of this wage disparity is explained by endowment difference and the discrimination account for 37 per cent of wage settings.

Thus, we found differentiated wage rate across various occupation, gender, location. In case of gender wage gap, differences are mostly because of discrimination in wage distribution against women workers. The endowment is the greater contributing factor in case of wage gaps between regular and casual workers and also for rural and urban divides. While both endowment and discrimination factors equally explain the disparity in wage dispersion across formal and informal settings. Thus, we can safely construct a hierarchy in the labour market with the casual female workers in rural informal sector being at the bottom-most position in terms of wages, endowment and discrimination and regular male workers in formal sector at the top.

## CONCLUSION

Inequality in assets, consumption, educational attainment, standard of living and other indicators of livelihood are mainly attributed by the inequality in the labour markets especially in developing countries. This paper largely tries to explore the inequality in the Indian labour market with regard to the working conditions of the workers in terms of various social and employment security and the structure of wage distribution across formal/informal sectors, gender, work status, and across rural urban regions. The analysis utilises the NSS 68th round (2011-12) household level data on employment and unemployment in India.

There exists a huge disparity in the labour force participation rate among male and female workers across rural and urban areas and also across the type of employment they are involved in. Women workers constitute less than half of male work force in rural areas while in urban areas they consists of nearly one-third of men labour force. In terms of the nature of employment, it is found that majority of women in rural areas are either self-employed or casual workers and most of them are engaged in agricultural sector. Although half of the women labours in urban areas are found to be in regular jobs, they are basically involved in low productive low skilled jobs mostly in informal sector. Another important feature of women labour force is their presence in subsidiary activities in large number compared to their male counterparts.

The workers across different sectors not only face a wage disparity, but there exist a substantial disparity in the working conditions of the workers in terms of availability of various social and economic securities and mode of wage payment among formal and informal workers and among male and female workers across regions. A substantial wage disparity is found across workers of different regions, sectors and gender.

Women workers earn much lower wages than their male counterparts and the inequality among them is also much higher. The women in rural formal sector earn much less than men in urban informal sector and women in urban informal sector earn less than men in rural informal sector. On a whole, workers in the informal sector and casual workers earn only nearly 30 per cent of that of formal sector and regular workers. The average wage rate is found to be higher in formal sector, regular jobs and in urban areas as compared informal sector, casual and rural areas respectively. The analysis also suggested a comparatively a high gender wage gap in various categories of activities. However, the wage differential is found slightly higher in urban areas as compared to rural areas, and it is also higher among female workers, formal sector, and regular workers.

Decomposition of wage inequality by different sub-groups indicates that a major portion of wage inequality in India is accounted for by “within” group inequality rather than by “between” group inequality. It is found that “between”

group disparity accounted for less than 5 per cent of total inequality in most of segregated group wise inequality, except in formal and informal sector inequality where “between” group accounted for nearly 29 per cent of total inequality. It is surprising to find that in India the wage disparity exists mainly because of large wage difference within the various categories of workers.

Further, the examination of the sources of wage difference reveals that gender wage gap is mostly because of discrimination in wage distribution against women workers. The endowment is the greater contributing factor in case of wage gaps between regular and casual workers and also for rural and urban divides. While both endowment and discrimination factors equally explain the disparity in wage dispersion across formal and informal settings.

The labour market thus suffers from several imperfections, most of which act against the women. They face entry barriers which act as a deterrent and discourage them to enter labour market. This may be a strong reason behind low and declining female LFPR in India in recent decades. When they are in labour market, they are disproportionately slumped into low paying informal sector and the sectoral distribution is also not uniform across gender. They earn less, not only because they are less endowed but because of discrimination too. Several other structural deficiencies interact together to create a spread of unequal wages with the rural female casual workers in informal sector being at the lowest and the urban formal regular male workers at the topmost rung of the ladder. Such a wide chasm impedes the active and productive participation of women in the economic progress of the country. It is estimated that equal participation of women in economic activities may add 3- 4 per cent to the growth rate of GDP in India by 2030. Given that, policies must be adopted to address the inequality brought out clearly in the present paper. A few of them may include skill formation and education of women; encouraging female participation through flexibility in workspace and job responsibilities; eradicating discrimination in wage setting, strict imposition of labour laws; providing safe, secure and gender sensitive work space, crèche etc.

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