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Trends in wages and earnings in India: Increasing wage differentials in a segmented labour market

Anup K. Karan & Sakthivel Selvaraj

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# Trends in wages and earnings in India: Increasing wage differentials in a segmented labour market

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# Executive Summary

This paper is an attempt to look at the structure and trends of wages and earnings in the Indian labour market in the last two decades. It aims to provide a comprehensive picture of the variations in wage payments across different segments of the labour market and suggests policies to safeguard the interest of the most vulnerable in the labour market. It discusses the structure of the Indian workforce, the long term and short term trends in the real daily wage rates, along with a comparative picture of the pre- and post-liberalization scenarios of daily wages.

The paper shows that among both regular and casual workers, there has been a fall in growth in wages with increasing wage differential across different segments in the post-liberalization period. Female casual workers not only receive lower wages than their male counterparts, the differential is quite stark. Gender disparity of regular wages is on a rise in the rural sector. However, the overall gender differential in wages is declining over the years, implying a higher wage growth for female workers as compared to male workers. Non-farm wages in rural areas is higher than agricultural wages and the difference has widened during the post-liberalization period. Wage growth in the informal non-farm sector has decelerated and casual workers, particularly in the agricultural sector, have witnessed the slowest increase in wages during this period. Variation in wages across different industrial categories is more distinctive among urban casual workers with male average daily wage rates varying less across sectors.

Further, the paper points out that the increase in labour productivity has not been translated into increased growth in real wages, particularly for casual workers. The need to enhance the educational and skill capabilities of workers to combat poverty is highlighted. It shows that the Indian labour market has witnessed an overall setback in wage growth, particularly among the lower social strata of the workforce. The Minimum wages Act is poorly implemented, particularly in rural areas, and a large proportion of agricultural workers continue to get less than the prescribed minimum wages. Therefore, there is a need to make arrangements for the effective implementation of this Act. Overall, the paper argues that the low level of wages and the increasing wage differential across different segments of the labour market have resulted in widespread poverty among workers, particularly casual workers.



## Foreword

During the last one and a half decades, growth in employment and wages in India has been unsatisfactory. The overall economic growth has not been able to translate itself into an increment in the wages and earnings of the workforce. The present study, by Anup K. Karan and Sakthivel Selvaraj is an attempt to explore the levels of and trends in variations in wage payments across different segments of the labour market in India. It examines the structure of the Indian workforce, analyses the long term and short term trends in the real daily wage rates in both pre and post-liberalization phases in different states, highlights the inequality in wage payments within the different segments of the labour market, and assesses the magnitude of the working poor and incidence of poverty among different types of workers.

The findings of the paper show that the wage differential across different segments has been on the rise in the post-liberalization period. Gender differentials continue to exist, but have been declining over the years. Wage growth in the informal non-agriculture sector has decelerated and casual workers, particularly in the agricultural sector, have witnessed the slowest increase in wages during the post-liberalization period. The inequality in wage payment within each segment of the labour market also shows an increasing trend during the post-liberalization period. Further, the increase in wages has lagged behind increase in labour productivity all through the post-liberalization period. Education plays a very important role in ensuring higher wages for both regular and casual workers. The authors argue that the Minimum Wages Act is still poorly implemented, particularly in rural areas, and a large proportion of agricultural workers continue to get less than minimum wages. All these have resulted in high incidence of poverty among workers in general and casual workers in particular. The study highlights the need to enhance the educational and skill capabilities of workers to combat poverty.

This paper is part of a series of studies that have been launched by the ILO, Delhi office, coordinated by Sukti Dasgupta, Employment and Labour Market Policy Specialist, to analyse and understand the current employment challenges in India.

**Leyla Tegmo-Reddy**  
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## 1. Introduction

The New Economic Policy initiated during the early 1990s and involving liberalization and globalization of the domestic economy, was supposed to enhance the potential of investment opportunities and usher into the Indian labour market a substantial increase in the income and earnings of workers. However, several studies provide ample evidence that despite a modest overall performance by the Indian economy during the past one and a half decades,<sup>1</sup> the extent to which economic progress has translated into increased labour earnings and, consequently, poverty reduction, has been rather disappointing (Bhalla, 2002; Ghosh, 2004; Kijima and Lanjouw, 2005). Much of this concern arises in relation to the rural workforce, which accounts for 75 per cent of the total workforce in India (Sen and Ghosh, 1993; Nayyar, 1993; Bhalla, 1998; Sen, 1998). Accordingly, slow growth in labour earnings is one of the major reasons for the slower decline in poverty, particularly in the rural areas in the late 1990s and early 2000s (Sen, 1998; Bhalla, 2002; Deaton and Dreze, 2002).

The level of earnings and wages of a workforce is considered a robust indicator of the livelihood status of the population. Though in a general neo-classical framework, the level of wages and earnings of the workforce is determined by demand for and supply of labour, in developing countries, this is affected largely by strict labour market dualism (Heckman and Hotz, 1986) and strong entry barriers across different segments of the labour market. The Lewisian model of labour market dualism considers the coexistence of traditional and modern sectors of employment as largely explaining the wage differentials in a developing economy. In India, the labour market dualism has been documented widely in terms of formal-informal, employment status of workers, occupation types, sectors of employment, states and regions, etc. (Sen, 1994; Unni, 2001; Tendulkar, 2003; Das, 2003). Accordingly, wages and earnings of workers differ across different segments of the labour market (Sen, 1998).

Against this background, the present study, based on data from the National Sample Survey Organisation (NSSO),<sup>2</sup> attempts to study the structure and trends of wages and earnings in the Indian labour market and changes therein during the past two decades or so. In general, the paper provides a comparative scenario of the pre- and post-liberalization phases, covering the period from 1983 to 1993-94 and from 1993-94 to 2004-05, respectively. The present paper uses a segmented labour market approach to show the wage differentials across the different segments of the Indian labour market. Though the literature is replete with studies on wages and earnings in India, most of these studies are focused on either agricultural wages or levels of wages and earnings in the manufacturing sector. There are very few studies that present a comprehensive picture of wage levels and the trends across different segments of the labour market. The present paper is a modest attempt in this direction. The rest of the paper is organized as follows:

After presenting a review of the relevant literature in Section 2, Section 3 presents a brief overview of the structure of the workforce in India. Section 4 examines in detail the levels and trends in wages/earnings of workers. This section dissects long term and short term trends in the real daily wage rates and presents a comparative picture of daily wages before and after liberalization. In Section 5, we discuss

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<sup>1</sup> *Economic growth has accelerated substantially since the 1980s from a sluggish 'Hindu growth rate' of 3.5 per cent in the earlier decades.*

<sup>2</sup> *The National Sample Survey Organisation (NSSO) is a premier institution of the Government of India under the Ministry of Statistics and Programme Implementation, which collects household data on the employment and unemployment situation in India on a regular basis.*

in brief the role of two important factors, education and social groups, in wage fixation. Section 6 of the paper presents a detailed analysis of the levels of and trends in real wages across the different states of India. Inequality in wage payments within the different segments of the labour market has been presented in Section 7. The link between labour productivity and wage payment has been explored in Section 8. The role of minimum wages in determining the prevailing wages has been studied in Section 9, which also investigates the extent of implementation of minimum wages in different sectors. Section 10 presents an assessment of the working poor and incidence of poverty among different types of workers. Lastly, Section 11 offers conclusions and policy recommendations.

### Data source

In this paper, we have used unit record data collected by the National Sample Survey Organisation on Employment and Unemployment for four quinquennial rounds of survey in the 1980s and 1990s, and the latest round conducted in 2004-05. These survey rounds are: the 38<sup>th</sup> round of 1983; the 50<sup>th</sup>, 55<sup>th</sup> and 61<sup>st</sup> rounds of the agricultural years of 1993-94, 1999-2000 and 2004-05, respectively. The wage rates for casual workers in the non-agriculture informal sector have been calculated by using the unit data of the non-agricultural informal sector (NSSO, 55<sup>th</sup> round) survey of 1999-2000. Unless mentioned otherwise, the source of all tables and graphs used in this paper is the NSSO database as mentioned in this paragraph.

## 2. Context and literature

Available studies on wages and earnings in India suggest that rural and, in particular, agricultural wages have received the highest attention. During the 1970s and 1980s, the most notable of these studies were done by Krishnaji (1971), Jose (1974 and 1988), Lal (1976), and Laxminarayan and Tyagi (1977). These studies analysed rural and agricultural wages, which reported a significant rise in the real agricultural wages and in several states, particularly during the post green revolution period. During the 1980s, rural wages are shown to have accelerated quite sharply in a number of the poorer states (Jose, 1988).

However, studies conducted during the 1990s revealed a reversal in the tendency of wage rise, wherein the growth of wages registered a deceleration (Bhalla, 1998; Sen, 1998). Deaton and Dreze (2002) note that according to recent estimates based on 'Agricultural Wages in India (AWI)', real agricultural wages were growing at about 5 per cent per year in the 1980s and 2.5 per cent per year in the 1990s. But other recent studies do not support the trend of deceleration in real agricultural wages. Sharma (2001), for instance, using RLE (Rural Labour Enquiry, conducted by the NSSO) data, concluded that agricultural wages did not witness a decline during the 1990s contrary to the findings of studies based on the AWI data. Sundaram (2001) also rejects the view that there has been a slowdown in the rate of growth of mean daily wage earnings of adult labourers during the 1990s. These differences in findings are observed mainly on account of differences in data sources, which, in turn, differ in terms of coverage and definitions.<sup>3</sup> In any case, as far as NSSO data is concerned, this does not support the argument of declining trends in wage increase over the years for casual workers as such. However, there have been wide variations in the rate of growth of real wages across different segments of the labour market, while the studies reported a mixed trend of wage increase during the 1990s and later (Sen, 1994;

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<sup>3</sup> For details on the differences across various sources, see Himanshu (2005).

Parthasarthy, 1996; Bhalla, 1997; Unni, 1997; Sharma, 2001; Sundaram, 2001; Himanshu, 2005; Sundaram and Tendulkar, 2006).

Some studies also show that there has been impressive growth of wages and earnings during the 1990s. Bhalla and Das (2005), while exploring the trends in wages at the all-India and state levels, observe that there has been secular increase in wages all through the period of the 1980s and 1990s, and that the rate of increase has accelerated during the 1990s. Similarly, Sundaram and Tendulkar (2006) find acceleration in the real wages and earnings of the Indian labour force during the 1990s and specifically mention that the "most vulnerable section of both rural and urban labour markets was characterized by a healthy growth in real daily earnings and reduction in male-female earnings differentials". However, these studies report acceleration in real wages during the 1990s, mainly at the aggregate level.

At the disaggregate levels, these studies show slow or no rise in rural casual real wages in general, and agricultural wages in particular, during the 1990s. Unni (2005) notes a mixed trend for informal sector workers both in terms of employment growth and increase in real wage earnings. She notes that "the process of reforms that allowed small firms to expand capacity, de-reserved products, and allowed the inflow of new technologies, rejuvenated the unorganized manufacturing sector in the late 1990s. Many industries in the unorganized sector such as manufacture of machinery, motor vehicles and chemical products displayed fast growth of value added and labour productivity. The benefits of this growth were transferred to the workers in the sector in terms of growth of employment, accompanied by rapid rise of wage earnings per worker."

Unni also observes that "one of the negative outcomes of the policy changes (during the 1990s) was growing inequalities between various segments of the workers. The segment of the workforce that benefited the most was male skilled workers in regular employment. The urban workers also did better than their rural counterparts. There was increasing wage gap between the regular and casual, skilled and unskilled, and men and women workers."

Unni's observations are based on the unorganized manufacturing sector, which constitute up to 32 per cent of total unorganized sector units and approximately 37 per cent of total unorganized sector employment. What remains to be explored is what the reform process has done for the informal non-manufacturing sector units and workers, particularly across the sectors of construction; trade and repair services; transport, storage and communication services; and community and social services. These sectors constitute approximately 60 per cent of the total informal enterprises and approximately 52 per cent of the total informal employment.

In general, literature shows that the recent economic growth has been accompanied by deceleration in employment growth in the economy during the 1990s. This has been termed as the 'jobless growth' phenomenon (Mahendradev, 2002; Ghose, 2004). Ghosh (2005) notes that "the deceleration and even decline in organized sector employment was one of the more disturbing features of the period after 1990, especially given that industrial output increased manifold". In fact, slow employment growth has been one of the most important reasons of increased labour productivity, particularly in the organized manufacturing sector, during the 1990s. Bhattacharya and Sakthivel, (2005) note that though employment elasticity has been positive for most of the employment sectors in the post reform period, the growth in real wages has been rather shaky.

Further, whatever employment growth has taken place during the 1990s has been largely concentrated in the urban unorganized sector (GOI, 2006; Unni and Rani, 2003). This has resulted in increased out-migration of rural labour on the one hand and declining working conditions in urban areas on the other (Kundu, 1997 and 2002). Subsequently, this appears to have certainly helped employers to avoid many rules and regulations related to labour welfare in general and implementing minimum wages in particular (Unni, 2000; Deshpande et al., 2004).

Further, increased casualization of the workforce has reduced the bargaining power of labour in the post-liberalization era (Karan and Sarkar, 2003). As a result, increase in wages and earnings of workers has not been satisfactory as actual wages paid to workers, particularly in rural areas and in the urban unorganized sector, have not only been very low, but also, in many regions, even lower than the official minimum wages (Deshpande et al., 2004).

In a recent study, Saget (2006) shows that in the urban non-agriculture sector, most casual workers do get minimum wages or even higher on a daily basis, but most of these workers work for more than 10 or even 12 hours a day for those wages. In fact, the phenomenon of 'jobless growth', coupled with slower increase in real wages, has led many scholars to believe that during the post-liberalization period, the rate of poverty reduction has been much lower than is claimed officially by government agencies such as the Planning Commission.<sup>4</sup> It is also observed that whatever poverty reduction has taken place during the 1990s has not contributed to equality.<sup>5</sup>

A review of these studies<sup>6</sup> clearly indicates that though the average wages and earnings of the Indian workforce have increased in general during the 1990s, the growth in wages has not been commensurate with overall economic growth, and large variation in wage rates are observed across different segments of the labour markets. Low average wages and increasing wage differentials across different segments of the labour market have led the benefits of the recent economic growth to concentrate among the most secured job holders. A large section of the labour force, particularly daily wage earners and part of the self-employed, continue to face poverty. NCEUS (2007, p. 24) notes that high incidence of poverty among workers 'is an indicator of inadequate income levels and the extent of vulnerability of workers'. In the literature, poverty among the employed has generated great interest among different researchers in recent years. Much of this concern, in fact, arises with respect to inequitable distribution of the fruits of development. In general, this lot of the working population has been referred to as the 'labouring poor' and/or the 'working poor' (Sundaram and Tendulkar, 2002). They have been termed so mainly because despite being employed, their earnings are not sufficient to fight poverty.

Different estimates show that the proportion of the working poor to the total poor population in India has been around 35 per cent, while the headcount ratio (HCR) of poverty among the working

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<sup>4</sup> The Planning Commission estimates show a high decline of 10 percentage points in rural poverty from 36 per cent in 1991 to 26 per cent in 2001. Sundaram and Tendulkar's initial estimates (2001) also showed a 8.2 percentage point decline at the all India level. Deaton and Dreze (2002) also show a decline of around 7 percentage points. These estimates were based on adjusted NSS (1999-2000) data in order to make it more comparable with the previous rounds.

<sup>5</sup> Since major sources of data on consumption expenditure collected by the National Sample Survey Organization (NSSO) has lost direct comparability in 1999-2000 with that of earlier years (Sundaram and Tendulkar, 2001; Deaton and Dreze, 2002; Sen and Himanshu, 2004; Mazumdar and Sarkar, 2004), the recent debate has been rather inconclusive, and the focus of debate has shifted from comparing poverty trends to comparing levels of wages and earnings of the Indian workforce.

<sup>6</sup> For a recent review, see Kingdon (1998).

population is around 30 per cent (Sundaram and Tendulkar, 2002). Further, it has been well documented in literature that among different types of workers in India, the poverty ratio is the highest among casual labourers (See, for example, Bhalla, Karan and Shobha, 2006) constituting the bulk of the total working poor. These two studies, however, use the NSSO data up to 1999-2000 and no similar estimates are available after that. NCEUS, (2007), utilizing the NSSO data from 2004-05, documents widespread poverty among unorganized sector workers. In any case, most of these studies note reduction not only in poverty ratio, but also the headcount of poverty among the workers in general and casual workers in particular, over the years. However, the existing literature mostly focuses on estimating the headcount ratio and number of working poor and does not adequately address the issue of differential changes in poverty reduction across different types of workers. In general, there may be a high correlation between rate of poverty reduction and growth of wages and earnings across different segments of workers.

### 3. Structure of employment in India

Broadly, the working population is divided into two main components - wage labour and non-wage labour. Wage labour consists of regular salary/wage earners and casual labourers. The non-wage component consists of self-employed persons, which includes own-account workers, employers, and unpaid family workers. Regular paid employment can be considered as secure (Dickens and Lang, 1985), and self-employment as fairly secure, even though incomes from certain types of self-employment may be irregular, inadequate, and uncertain. But for the typical casual worker, neither employment nor income is certain (Bhalla, 2002; Sundaram and Tendulkar, 2006).

At the all-India level, approximately 60 per cent of the rural labour force and 45 per cent of the urban labour force is self-employed. After a long period of declining trends during the 1980s and 1990s, the proportion of the self-employed shows significant increase during the early 2000s. The proportion of regular employed has remained stagnant at around 7 per cent in rural and approximately 40 per cent in urban areas. The recent increase in self-employment has taken place mainly at the cost of casual employment, with the proportion of the latter declining from 37 per cent to 33 per cent in rural and from 18 per cent to 15 per cent in urban areas between 1999-2000 and 2004-05, respectively (Table 1).

Table 1 : Percentage distribution of workforce in India, 1983 to 2004-05

Employment status	1983	1987-88	1993-94	1999-2000	2004-05
<b>Rural</b>					
1. Self-employed	61.37	59.50	57.96	55.76	60.2
2. Hired	38.63	40.50	42.04	44.24	39.9
(i) Regular	7.15	7.79	6.45	6.83	7.1
(ii) Casual	31.49	32.72	35.59	37.41	32.8
<b>Urban</b>					
1. Self-employed	42.05	42.86	42.29	42.23	45.4
2. Hired	57.95	57.14	57.71	57.77	54.5
(i) Regular	39.80	40.36	39.40	40.03	39.5
(ii) Casual	18.15	16.79	18.31	17.74	15.0

Though the proportion of self-employed in the Indian workforce shows a long term declining trend over the years, this group still constitutes the single largest share. This section of the workforce does not operate in the labour market for wages or earnings, but earn profits out of their own enterprises. A small proportion of them are exclusively employers, while a large section of them work as owners/employers cum workers. Further, an overwhelming proportion of these self-employed workers are small and petty business holders, including small and marginal farmers, and many a time, their earning levels are as low as those of casual workers. A large section of the self-employed persons resort to casual labour work in order to supplement household income (Bhalla, Karan and Shobha, 2006). Needless to say, the level of earnings of most of the self-employed workers in the organized sector is much higher than those in the unorganized sector.

The most dismal state of affairs in the Indian labour market can be located in the category of casual wage labourers. While their work contract is terminated and renewed on a daily basis, poor working conditions and low wages yield them only poverty. Casual wage labour is not a homogeneous group of workers. Urban casual labourers are better placed in comparison to their rural counterparts because of better job opportunities in the urban informal sector. In rural areas, casual workers are engaged largely in agriculture at subsistence wages.

Further, among these three broad segments of the labour market, regular job markets, particularly in the organized sector, have strong and strict entry barriers based on various pre-qualifications of the labour force. In contrast, a large proportion of the self-employed and casual workforce keeps oscillating between the two, depending on the job availability in these two markets.

## **4. Trends in real daily wages/earnings**

The distinguishing feature of labour market duality in India can be located in the wage structure of the workers. The dichotomy in the wage structure is brought out here first in terms of casual-regular and sectoral wages. Rural-urban dualism is the most overriding characteristic across all the segments. Male-female differentials are also discussed in each of the sections.

### **4.1 Regular and casual wages**

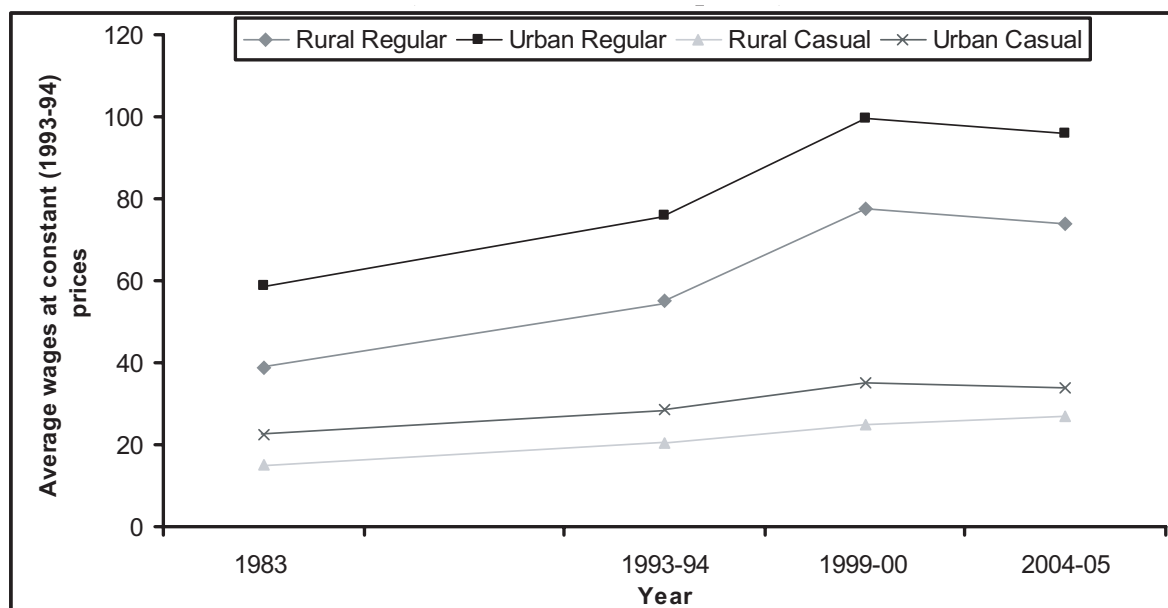
Table 2 presents prevailing daily earning/wage rates for the last two decades for regular and casual workers both in rural and urban areas at current and constant (1993-94) prices. Firstly, we observe that urban workers receive a higher wage rate than their rural counterparts both in the regular and casual segments of the labour market. In constant terms, the average daily wage rate of regular workers during 2004-05 was close to Rs 96 in urban areas as against roughly Rs 74 in rural areas. The respective wage rate during 1983 was approximately Rs 59 and Rs 39. Therefore, it appears that rural regular workers obtain less by one-fourth of what their urban counterparts receive. This trend is visible over the entire period under consideration and continues to remain so for multiple reasons. Urban regular workers are typically better educated and, hence, possess skills that fetch them higher returns compared to rural workers. Better and more varied opportunities are usually created and available in urban areas, which, in turn, yield higher returns for the regular workers. Such jobs are not only rare in rural areas, but also less lucrative, given the poor infrastructure in such areas.

Table 2 : Average daily wages (Rs) of regular and casual workers (15-59 years)

	1983	1993-94	1999-2000	2004-05
	<b>At current prices</b>			
<b>Regular</b>				
Rural	17.24	55.12	125.31	133.81
Urban	24.90	75.77	165.05	193.73
<b>Casual</b>				
Rural	6.76	20.54	40.23	48.89
Urban	9.51	28.77	57.98	68.68
	<b>At constant (1993-94) prices</b>			
<b>Regular</b>				
Rural	38.80	55.12	77.47	74.01
Urban	58.94	75.77	99.73	96.12
<b>Casual</b>				
Rural	15.21	20.54	24.87	27.04
Urban	22.51	28.77	35.03	34.08

A comparison of wage rates among casual workers vis-à-vis regular wage rates reveals that casual workers, both in rural and urban areas, receive wage rates that are a little above one-third of what the regular workforce is paid. The regular-casual wage differential widened sharply during the post-liberalization period as compared to the pre-reform period. Between 1999-2000 and 2004-05, the gap has reduced, but only due to a decline in regular wages, rather than any significant increase in the casual wage rates (Figure 1).

Figure 1 : Average daily wages/earnings (Rs) of regular and casual workers in India (at constant 1993-94 prices)





Interestingly, the long term rate of wage growth has been quite robust in both rural and urban areas during the period under consideration with a moderate decline in the post-reform period (1993-94 to 2004-05). The wage growth of urban regular workers witnessed a mild downturn from 2.42 per cent per annum in the pre-liberalization period (1983 to 1993-94) to 2.19 per cent per annum during the post-reform years (1993-94 to 2004-05). In fact, the wage growth of regular workers during the period, 1999-2000 to 2004-05, has been negative to the extent of -0.91 per cent per annum in rural areas, and -0.73 per cent per annum in urban areas (Table 3).

**Table 3 : Compound annual rate of growth (%) of regular and casual wages**

Sector	1983 to 1993-94	1993-94 to 1999-2000	1999-2000 to 2004-05	1993-94 to 2004-05
<b>Regular</b>				
Rural	3.40	5.84	-0.91	2.72
Urban	2.42	4.69	-0.73	2.19
<b>Casual</b>				
Rural	2.90	3.24	1.69	2.53
Urban	2.36	3.34	-0.55	1.55

As far as growth rate of casual wages is concerned, the rural workforce witnessed a fall in growth from 2.90 per cent in the pre-reform period to 2.53 per cent per annum in the post-reform years. Urban casual workers appear to have borne the brunt of the wage decline, the growth rate in this segment declining from a robust 2.36 per cent in the pre-liberalization era to 1.55 per cent per annum in the post-reform period. Though deceleration in wage growth during the post-liberalization period is witnessed across both regular and casual segments, this deceleration has been sharper in the case of casual wage labour.

We next turn to investigate the gender wage differential. We have computed the ratio of female to male wage rates, a simple indicator of gender differentials in wage payments (Table 4). A ratio less than 1 signifies women workers get lower wages than their male counterparts. A ratio closer to 1 denotes no gender differential in wage payments.

Table 4 shows that female regular workers not only receive lower wages, but that the differential is quite stark, roughly 40 per cent less in rural areas and 25 per cent less in urban areas for regular workers during 2004-05. The gender differential of regular wages has increased in rural areas, while it shows a mixed trend in urban areas over the years. The differential among rural casual workers remained almost constant between 1983 and 2004-05, while it appears to have marginally declined from female wages being around 50 per cent in 1983 to roughly 59 per cent in 2004-05 of male wages in urban areas. As far as gender differential among regular wage workers is concerned, the inequality in wages is apparently the lowest (roughly 25 per cent) in urban areas and remained so during the period under assessment. In rural areas, however, the wage differential, which remained not so high at 30 per cent during 1983, has shot up to 40 per cent in 2004-05. On the whole, the gender differential in wages seem to have largely declined, implying a higher wage growth for female workers as compared to male workers over the years.

Table 4 : Average daily regular and casual wages (Rs.) and ratio of females to males wages  
(at current prices)

Sector	1983	1993-94	1999-2000	2004-05
	<b>Males</b>			
<b>Regular</b>				
Rural	17.89	58.48	127.32	144.93
Urban	25.66	78.12	169.71	203.28
<b>Casual</b>				
Rural	7.80	23.18	45.48	55.03
Urban	11.12	32.38	63.25	75.10
	<b>Females</b>			
<b>Regular</b>				
Rural	12.81	34.89	78.61	85.53
Urban	19.50	62.31	140.26	153.19
<b>Casual</b>				
Rural	4.89	15.33	29.39	34.94
Urban	5.57	18.49	38.22	43.88
	<b>Females/Males</b>			
<b>Regular</b>				
Rural	0.72	0.60	0.62	0.59
Urban	0.76	0.80	0.83	0.75
<b>Casual</b>				
Rural	0.63	0.66	0.65	0.63
Urban	0.50	0.57	0.60	0.58

The higher wage growth for women workers, particularly urban regular workers, in the post-liberalization period can be accounted for by three important factors. One, before the 1990s, women's wages were highly suppressed. During the 1990s, though women's wages were still lower than those of men, the wage growth was higher for women workers. Two, during the 1990s, most of the subsidiary status women workers were observed to be withdrawing from the labour market. This led to increased average wages for women workers as most principal status workers are better paid than subsidiary status workers. Three, the increasing participation of women in education in general, and higher education in particular, has led to better placement of women workers in the labour market at least as compared to their status during the 1980s and earlier periods. In some sectors, women workers have outperformed men workers and even displaced men workers, particularly in the organized sector (Rustagi, 2003 and 2005).

Rural-urban duality is less stark among casual women workers. However, this is largely a reflection of suppressed wages of women casual workers both in the rural and urban areas. Among regular women workers, the rural-urban wage differential exists to the extent of 45 per cent in favour of urban regular workers. In addition, the differentials have increased over the years.

## 4.2 Sectoral daily wages

The sectoral structure of the daily earnings/wages exemplifies further segmentation in the Indian labour market. In general, workers in the government and organized sectors of employment are much better paid than their private and unorganized sector counterparts. The wage differentials across the sectors of employment are higher in the case of urban regular workers as against casual workers. This can perhaps be explained by education and skill-level differences among regular workers on the one hand, and concentration of a large informal sector in urban areas on the other. During 2004-05, higher wages are reported among sectors such as mining and quarrying; public utilities such as electricity, gas and water supply; and services including health and education (Table 5). It must be noticed that the mean wage rates in these sectors are among the highest because most of the regular workers in these sectors are employed in state-owned (Central, state and local-level government) enterprises.

**Table 5 : Average daily earnings/wages (Rs) for regular and casual workers in urban India, 2004-05 (at current prices)**

Sectors	Males	Females	Persons
<b>Regular</b>			
Agriculture	104.80	79.59	99.72
Mining & quarrying	359.41	186.30	352.09
Manufacturing (15-22)	113.22	65.58	107.54
Manufacturing (23-37)	189.41	102.16	182.20
Public utilities	340.51	233.34	333.66
Construction	171.47	191.75	172.95
Trade, hotels & restaurants	103.47	104.53	103.53
Transport, etc.	207.57	278.41	210.85
Services (65-74)	360.15	304.07	350.07
Services (75-93)	265.72	205.35	247.94
<b>Casual</b>			
Agriculture	56.60	34.65	46.68
Mining & quarrying	77.28	36.84	72.31
Manufacturing (15-22)	64.42	38.30	59.52
Manufacturing (23-37)	76.51	45.44	70.78
Public utilities	85.89	45.98	81.27
Construction	85.17	57.41	81.87
Trade, hotels & restaurants	61.99	41.18	59.56
Transport, etc.	82.06	39.12	81.48
Services (65-74)	90.99	32.34	86.37
Services (75-93)	68.57	47.16	55.66

*Notes: Figures in parentheses are NIC codes.*

It is no surprise that on an average, government-level jobs fetch decent wages. If we consider services (comprising the education and health sectors) vis-à-vis trade, hotels and restaurants, the former is largely under a government dispensation, while the latter falls under private and unorganized

dominance. The current wage rate in the former is one and a half times (roughly 70 per cent) higher than in the latter. Therefore, in sectors that are dominated by the government, wage levels are driven by them even in the presence of private players in that particular sector. But in other sectors such as trade, hotels and restaurants; construction; manufacturing, etc., the presence of the private informal sector steers wage levels and their growth, which is generally observed to be on the lower side.

However, the same does not hold true in the case of urban casual workers. The gap between the lowest and highest mean wage rates is around 30 per cent. The average daily wage appears to be the lowest in trade, hotels and restaurants (of around Rs 60) as against the highest wage rates of casual workers in the service sector (of roughly Rs 86). It is also interesting to note that wages of casual workers engaged in government jobs are in fact higher and act as a benchmark wage among similar workers.

The trend in real wages across sectors in the post-reforms period shows that while wage rates are not only relatively higher in government-owned sectors, the growth of wage rates among regular workers in urban India also appear to be comparably higher in sectors of government dominance than in sectors that are largely private and informal. This is borne out in Table 6.

**Table 6 : Annual growth rates (%) of sectoral wages of regular and casual workers in urban India**

Sectors	1993-94- 1999-2000	1999-2000- 2004-05	1993-94- 2004-05
<b>Regular</b>			
Agriculture	8.91	-10.20	-0.24
Mining & quarrying	9.27	2.02	5.91
Manufacturing (15-22)	1.56	-2.11	-0.13
Manufacturing (23-37)	4.75	-2.32	1.48
Public utilities	7.22	1.76	4.70
Construction	2.86	0.89	1.96
Trade, hotels & restaurants	6.03	-3.57	1.55
Transport, etc.	4.96	0.99	3.14
Services (65-74)	4.79	1.38	3.23
Services (75-93)	7.71	-0.61	3.84
<b>Casual</b>			
Agriculture	3.20	-2.54	0.55
Mining & quarrying	8.67	-4.98	2.24
Manufacturing (15-22)	4.70	-4.23	0.54
Manufacturing (23-37)	5.58	-3.03	1.57
Public utilities	2.71	-2.44	0.34
Construction	2.41	-0.17	1.23
Trade, hotels & restaurants	3.20	-2.76	0.45
Transport, etc.	2.34	0.59	1.54
Services (65-74)	5.74	1.34	3.72
Services (75-93)	0.40	1.95	1.10

*Notes: Figures in parentheses are NIC codes.*

In the post-reform years spanning 1993-94 to 2004-05, the highest growth in wage rates were recorded in mining and quarrying, followed by public utilities and services, all these dominated largely by government sectors. On the other hand, manufacturing wages appear to have declined sharply to negative figures. Wage growth in trade, hotels and restaurants registered little more than 1.5 per cent growth during the post-liberalization phase.

A similar trend is witnessed in the growth of inter-sectoral casual wages in urban India. For urban casual workers, mining and quarrying and services are the only two sectors that show 2-3 per cent annual growth rate in daily wages. In fact, except transport and services, all other sectors witnessed negative growth of daily wages during the period, 1999-2004. Although the growth for the entire post-reform period is positive, it has been negligible in most sectors. Most of these sectors are essentially private and unorganized.

### Agriculture and non-agriculture casual wages in rural India

Rural casual labour constitutes the single largest segment of the total workforce in India. Among rural casual labourers, agricultural labourers occupy a predominant position. Due to this, the rural agricultural wage rate is considered one of the most robust indicators of economic well-being, not only of agricultural labourers, but also the overall rural population (Deaton and Dreze, 2002). However, agricultural wages have not only been persistently lower than non-agricultural wages, the rate of increase in the former has lagged the latter (Figure 2). (For average daily wages in agriculture and non-agriculture in major states, see Appendix Table I).

Figure 2 : Average daily wages (Rs) of rural casual workers in farm and non-farm sectors (1983 to 2004-05) at constant 1993-94 prices

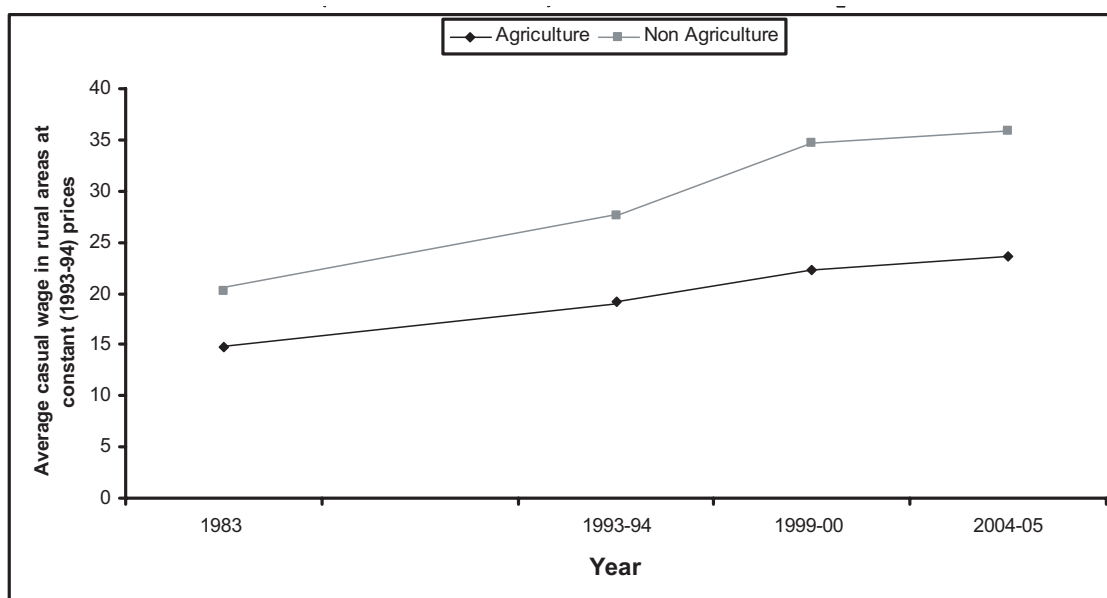


Figure 2 demonstrates that non-farm wages and their annual growth were higher than agricultural wages during the period from 1983 to 1993-94, and this difference has only widened during the period from 1993-94 to 2004-05. In fact, the higher rates of increase in the growth rates of casual wages during 1993-94-1999-2000 (as discussed in the above paragraphs) are contributed to significantly by higher

increase in the growth of non-agriculture wages; the growth of farm wages has decelerated during the entire post-reform period in comparison to the pre-reform period (Figure 2).

Among the various reasons for higher rise in real wages of non-agriculture activities are enhanced labour productivity, public interventions through employment generation programmes, and better implementation of the Minimum Wages Act. In contrast, the agriculture sector continues to be overcrowded, leading to low labour productivity and poor implementation of the Minimum Wages Act. All these led to a lower growth in real wages in agriculture during the post-reform years (1993-94 to 2004-05) as compared to that during the pre-reform period (Table 7).

**Table 7 : Annual growth rates (%) of rural casual daily wages in farm and non-farm sectors**

Sectors	1983 to 1993-94	1993-94 to 1999-2000	1999-2000 to 2004-05	1993 to 2004
<b>Males</b>				
Agriculture	2.50	2.48	1.23	1.91
Non-agriculture	2.73	3.38	0.53	2.07
<b>Females</b>				
Agriculture	2.66	2.62	0.90	1.91
Non-agriculture	3.17	4.74	1.37	2.07

The decline in the growth rates of agricultural wages during the post-liberalization years has been higher for female workers than for male workers. The ratio of rural agriculture to non-agriculture wages for male workers remained constant at around 0.70 throughout the period under consideration, but for female workers, it declined from 0.91 in 1983 to 0.75 in 2004-05. In fact, the increase in female non-farm wages has been steeper than male non-farm wages during the mid-1990s, leading to a higher agriculture-non-agriculture wage differential for female workers (Appendix Table II). The gender differential in farm and non-farm wage rates, and the annual growth therein, is clearly reflected in the respective female to male ratios of daily wages. While the female to male ratio of daily wages in agriculture has remained constant at around 0.70 over the years, the ratio in non-agriculture has increased, indicating declining gender differentials in this sector. Further, although the ratio of wages is less than one for all the three points of time in agriculture as well as non-agriculture, the ratios of annual growth (Table 7) is invariably more than one for all the segments (Appendix Table II).

#### **Wages of casual workers in the informal sector**

In view of the fast-expanding informal sector and informalization of workers in India, the daily wages of casual workers in the informal sector is an important factor that determines the standard of living, and extent and magnitude of poverty among casual workers in general, and urban casual workers in particular. Though the sectoral wages, as discussed in the foregoing section, provide enough evidence to obtain an idea regarding informal sector wages, we have analysed the 1999-2000 non-agricultural informal sector enterprises data from the NSSO 55th round for a clearer understanding, particularly for informal sector casual wage earners.

The estimated average daily wage of casual workers in the informal sector in 1999-2000 is

Rs 60.80 (Table 8). There is hardly any difference in the level of average daily wages paid to casual workers across rural and urban areas. However, one cannot undermine the fact that even within the informal sector, the daily wages of rural casual workers are a little lower than that of their urban counterparts. Similarly, female workers in both rural and urban areas get significantly lower wages than their male counterparts. In rural areas, the estimated average male daily wages are 1.7 times higher than that of females, in urban areas, 1.6 times. The sector-wise analysis of wages of male and female casual workers reveals that apart from the rural transport and urban mining and quarrying sectors, the average daily wages of male workers are higher than those of female casual workers in all the other sectors.

**Table 8 : Average daily wages (Rs) of casual workers in the informal non-farm sector across industry, 1999-2000**

Sectors	Rural			Urban		
	Males	Females	Persons	Males	Females	Persons
Mining & quarrying	67.6	38.4	61.9	70.6	91.1	73.7
Manufacturing	56.1	36.3	51.9	66.9	40.4	62.6
Public utilities	64.0	--	64.0	90.5	--	90.5
Construction	66.5	48.4	64.9	71.0	50.9	68.3
Trade, hotels & restaurants	53.7	40.8	53.1	52.9	38.8	51.4
Transport, etc.	72.7	86.8	72.8	65.2	54.5	65.0
Financial services & real estate	60.5	50.0	60.0	68.4	12.9	66.9
Community, social and personal services	77.5	29.5	59.7	60.3	28.6	40.6
Total	64.2	38.4	60.5	65.5	40.0	61.1

The variation in wages across sectors is more prominent in the case of urban casual workers (especially female workers) as compared to rural ones; across gender, male average daily wage rates vary less across sectors than rates for female workers. Lastly, the analysis of wage differential across sectors shows that in rural areas, the wage gap between male and female workers is the highest in community/social/personal services and the lowest in financial services. The corresponding sectors for urban areas are financial services and transport, respectively. To recapitulate, the overall results suggest that in the informal labour market, wages paid to male and female workers tend to be very low. Women workers in general and rural women workers in particular suffer from huge wage discrimination and are at a disadvantageous position vis-à-vis their male counterparts.

At the all-India level, the analysis of wages across various industries reflects large inter-sectoral disparities. Sectors such as community/social/personal services, trade, hotels and restaurants, and manufacturing, which account for a substantial proportion of total casual workers, are the ones where average daily wages paid are less compared to the all-India average. In rural areas, manufacturing, trade, and community/personal/social services and, in urban areas, community/personal/social services and trade, respectively, are the sectors in which wages are less than the all-India average.

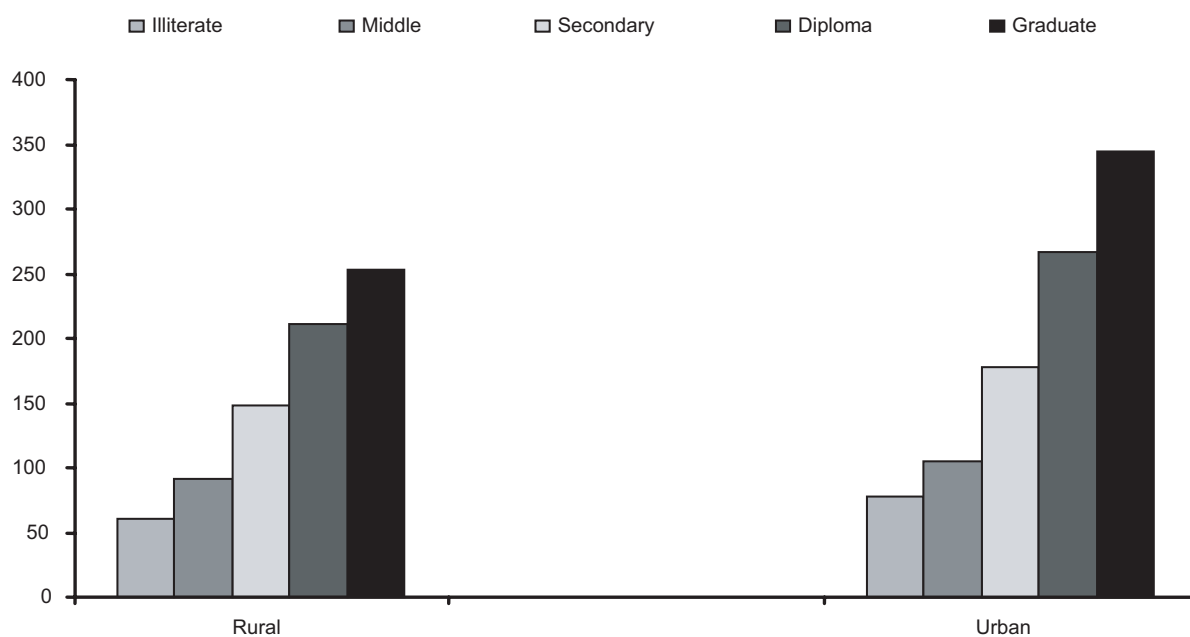
## 5. Education and social factors

As discussed in the beginning of this paper, an array of social and economic factors are responsible for determining wage levels in developing countries. Though we have not attempted to replicate the existing findings on the impact of these factors on wage determination, we have tried to show the role of two important variables - education and social group affiliation of workers in determining wage levels.

### 5.1 Wages across educational categories

The educational achievements of workers play an important role in determining earnings and wages in segmented labour markets. Workers with a higher degree of educational achievements face fewer barriers across the different segments of the labour market, while those with lower levels of education face strict barriers in entering the labour market. Accordingly, workers with higher educational achievements are likely to get higher wages as compared to those who are less educated. In general, there is a wide variation in the regular wages of workers across the educational categories of workers (Figure 3).

Figure 3 : Average daily earnings (Rs) of regular workers across educational categories, 2004-05



Even with the same level of education, the rural-urban divide remains, mainly because rural workers might be facing various other institutional barriers in accessing the high paid jobs in urban areas. This is reflected by the fact that wages in rural areas are lower than those in urban areas at each level of education (Figure 3). However, in both rural and urban areas, wages increase significantly with increase in the educational status of workers. However, the notable fact is that there are certain thresholds of educational status in both rural and urban areas beyond which wages increase significantly. In both rural and urban areas, there is not much difference in wages of illiterate and up to primary levels of education. Even a middle level of education brings about only a marginal difference in daily earnings. Wages increase significantly only after at least the secondary level of education.



In comparison to regular workers, the role of education has not been that important in the case of casual workers. However, there is a possibility that even among casual workers, the educated ones are in a better position to ask for the minimum wages announced by government. This is reflected by the fact that up to secondary level of education, casual wages show a steady increase in both rural and urban areas (Table 9).

Table 9 : Average daily wages (Rs) for casual workers by levels of education, 2004-05

Level of education	Males	Females	Persons
<b>Rural</b>			
Not literate	50.25	34.38	43.21
Literate but below primary	55.15	36.88	51.12
Primary	58.90	36.40	54.60
Middle	63.34	36.76	59.20
Secondary	61.67	36.16	58.37
Above secondary	61.96	37.59	59.66
<b>Urban</b>			
Not literate	67.52	43.09	58.37
Literate but below primary	75.01	48.42	71.06
Primary	75.41	43.34	70.09
Middle	80.85	43.53	76.85
Secondary	83.28	46.97	81.06
Above secondary	83.06	49.91	79.73

It is evident from Table 9 that although casual wages increase to some extent with increase in level of education up to secondary levels, the wage increase ceases or even declines with little margin after the secondary level of education. This might be because better educated persons join the casual labour markets only out of distress and they stay in casual labour markets for a temporary period. On the employer side, higher education of casual workers may not be as important as that of regular workers.

## 5.2 Wages across social groups

Daily wages/earnings show a wide range of variations across workers from different social groups. In general, workers from the lower social strata receive lower wages than their upper strata counterparts. Apart from the low educational achievements of workers from the lower social groups, various other kinds of social discrimination operate in tandem in the labour market, leading to lower than prevailing wage payments to them. Table 10 presents the rural-urban distribution in wages of casual and regular workers across scheduled castes (SCs), scheduled tribes (STs), and Others.

Table 10 : Average daily wages/earnings (Rs) across social groups in India, 2004-05

	Rural		Urban	
	Males	Females	Males	Females
<b>Casual</b>				
STs	45.63	33.33	62.69	42.49
SCs	54.92	36.06	72.35	44.31
Others	56.05	34.35	74.98	46.57
<b>Regular</b>				
STs	130.38	78.04	207.02	123.06
SCs	120.53	59.00	147.95	93.56
Others	178.67	113.37	240.04	197.36

Wages paid to SCs and STs are significantly lower than the wages paid to the Other categories. Wage differentials across social groups are more pronounced for regular workers than for casual workers and for male workers than for female workers. This is because majority of the casual workers come from the lower social groups, viz., the SCs and STs, so the average daily wage across social groups shows little difference across social groups. This differential is still lower in the case of female workers because, in India, women from the upper castes do not usually work as casual wage labour. Within male workers, other social groups receive distinctly higher wages than the SCs and STs.

Among the regular workers, the highest wage differential is reported among rural women. In the rural areas, there is a qualitative difference between employment qualities of women from Other categories, on the one hand, and women from SCs and STs, on the other. Most of the women workers from SCs and STs work as either attached labour with big landlords or in menial jobs with big contractors. These workers are counted as regular workers though they get lower wages than even daily casual workers. Sharma et al. (2002) find that in rural Bihar, the daily wages of attached women labourers in agriculture is approximately 75 per cent of the prevailing wage rates. In contrast, women from other categories are generally engaged in government jobs with much higher wage levels. STs in regular employment earn much better than SCs, both in rural and urban areas.

As far as growth of daily wages/earnings is concerned, the long term (1983 to 2004-05) and medium term (the pre- and post-reform years, spanning 1983 to 1993-94 and 1993-94 to 2004-05) compound annual growth rates of regular daily earnings have been higher for SCs and STs as compared with the Others group in both rural and urban areas. The rate of growth slowed down during the recent quinquennial period for SC/ST casual workers (Table 11), but the post-reform period witnessed an overall setback in wage growth, more particularly among the lower social strata of the workforce than in the other caste groups. Both casual and regular workers in urban areas suffered a sharp downturn in wage growth during the last quinquennial round. This appears to have affected the lower social caste groups much more than the Others category.

Table 11 : Average daily wages/earnings and its growth rates across social groups

	Rural				Urban			
	1983	1993-94	1999-2000	2004-05	1983	1993-94	1999-2000	2004-05
<b>Daily wage earnings (Rs) at constant 1993-94 prices</b>								
<b>Casual wages</b>								
STs	14.11	18.31	20.25	22	18.55	25.18	28.90	27
SCs	14.62	20.83	24.59	27	21.35	28.79	33.42	33
Others	15.40	21.11	25.65	28	22.24	28.43	36.17	35
<b>Regular wages</b>								
STs	22.45	46.28	75.28	65	45.51	71.19	107.70	94
SCs	25.32	42.37	63.25	59	41.39	58.29	83.45	68
Others	40.73	57.44	83.90	77	56.89	77.98	109.90	101
<b>Annual growth rates (in %)</b>								
	1983 to 1993-94	1993-94 to 2004-05	1999-2000 to 2004-05	1983 to 2004-05	1983 to 1993-94	1993-94 to 2004-05	1999-2000 to 2004-05	1983 to 2004-05
<b>Casual wages</b>								
STs	2.51	1.89	2.12	2.19	2.95	0.79	-1.02	1.84
SCs	3.43	2.35	1.80	2.87	2.89	1.22	-0.31	2.03
Others	3.05	2.54	1.64	2.79	2.37	1.96	-0.55	2.16
<b>Regular wages</b>								
STs	7.13	3.09	-3.00	5.04	4.35	2.57	-2.65	3.44
SCs	5.03	3.13	-1.22	4.05	3.31	1.36	-4.12	2.31
Others	3.33	2.65	-1.80	2.98	3.05	2.35	-1.74	2.69

## 6. Wage differentials and trends in real wages in states

All India average wages do not reflect the level of variation in wage levels across regions. In general, it has been argued that wages are highly suppressed in the poorer regions, while the developed regions have fairly high wage levels (Bhalla, 2002; Deaton and Dreze, 2002; Sen, 1998; Parthasarthy, 1996). Apart from the fact that general wage levels (particularly rural casual wages) are very low in the poorer states, the rural-urban and casual-regular dualisms are stark in most of the poorer states in India. Rural casual wages vary from a high level of Rs 120 per day in Kerala to a low of Rs 34 in Chhattisgarh, followed closely by Rs 36 in Madhya Pradesh and Rs 38 in Orissa and Maharashtra. Most of the developed states, such as Punjab, Haryana, Gujarat, Himachal Pradesh, and Tamil Nadu, have higher casual wages in both rural and urban areas as compared with those in the poorer states and the all India average (Appendix Table III). Although two poorer states, Chhattisgarh and Madhya Pradesh, have very low casual and regular wages, most of the poorer states such as Assam, Bihar, Jharkhand, Karnataka,

Orissa, and Jammu and Kashmir have high urban regular wages. The relative position of the different kinds of wages in the different states is presented in Chart 1.

**Chart 1 : Relative position of different major states in daily wages/earnings, 2004-05**

	Low	Average	High
<b>Rural</b>			
Regular	Andhra Pradesh, Assam, Chhattisgarh, Karnataka, Madhya Pradesh, Tamil Nadu, Uttar Pradesh, West Bengal	Gujarat, Rajasthan, Orissa	Bihar, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Kerala, Maharashtra, Punjab, Uttaranchal
Casual	Chhattisgarh, Madhya Pradesh, Karnataka, Bihar Andhra Pradesh, Orissa, Maharashtra	Jharkhand, West Bengal, Uttar Pradesh, Gujarat	Kerala, Jammu & Kashmir, Himachal Pradesh, Punjab, Haryana, Rajasthan, Tamil Nadu, Assam, Uttaranchal
<b>Urban</b>			
Regular	Andhra Pradesh, Chhattisgarh, Gujarat, Haryana, Madhya Pradesh, Rajasthan, Tamil Nadu, Uttar Pradesh, West Bengal	Kerala, Orissa, Uttaranchal	Assam, Bihar, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Maharashtra, Punjab
Casual	Andhra Pradesh, Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Orissa, Uttar Pradesh, West Bengal	Himachal Pradesh, Maharashtra, Rajasthan, Uttaranchal	Assam, Gujarat, Karnataka, Haryana, Tamil Nadu, Punjab, Jammu & Kashmir, Kerala

*Note: Low, medium and high has been defined in comparison to all-India wage rates*

The evidence suggests that most of the poorer states, which have a large proportion of the country's unskilled and less educated workforce, exhibit strict labour market segmentation reflected by wide differentials across different types of wages. In all the less developed and poorer states, the urban regular wages are higher than in many developed states such as Punjab, Haryana, Gujarat and Kerala, leading to very high disparity across casual and regular wages. These states also show very high rural-urban differentials in both the casual and regular wage segments. The rural casual to urban regular (the two extremes of the labour market segmentation) ratio is as low as 0.18 in Bihar, Jharkhand, and Maharashtra (Table 12). This implies that in these states, the average rural casual wage is less than one-fifths of the average urban regular wages.

Table 12 : Ratios of wage differential across states, 2004-05

	Casual R/U	Regular R/U	Rural C/RG	Urban C/RG	RC/URG
Bihar	0.74	0.67	0.26	0.24	0.18
Jharkhand	0.82	0.62	0.29	0.22	0.18
Maharashtra	0.56	0.70	0.26	0.33	0.18
Orissa	0.78	0.67	0.29	0.25	0.19
Karnataka	0.56	0.53	0.37	0.35	0.20
Chhattisgarh	0.82	0.71	0.29	0.26	0.21
Madhya Pradesh	0.72	0.52	0.40	0.29	0.21
Andhra Pradesh	0.74	0.54	0.45	0.33	0.24
<b>All-India</b>	<b>0.71</b>	<b>0.69</b>	<b>0.37</b>	<b>0.35</b>	<b>0.25</b>
Assam	0.85	0.55	0.47	0.30	0.26
West Bengal	0.80	0.65	0.40	0.33	0.26
Uttar Pradesh	0.83	0.69	0.43	0.35	0.29
Gujarat	0.69	0.78	0.38	0.43	0.30
Himachal Pradesh	1.26	0.69	0.45	0.25	0.31
Tamil Nadu	0.75	0.64	0.52	0.44	0.33
Uttaranchal	0.99	0.94	0.36	0.35	0.34
Rajasthan	0.93	0.78	0.44	0.37	0.34
Punjab	0.92	0.80	0.45	0.39	0.36
Jammu & Kashmir	0.87	0.70	0.55	0.44	0.38
Haryana	0.98	1.46	0.31	0.47	0.46
Kerala	0.94	0.77	0.81	0.66	0.63

*Notes**R/U: Rural to urban**RC/URG: Rural casual to urban regular*

*States with the all-India figure are arranged in ascending order of 'rural casual' to 'urban regular' wage ratios, i.e., the state with the highest disparity is at the top.*

In most of the less developed states such as Orissa, Karnataka, Chhattisgarh, Madhya Pradesh, and Andhra Pradesh, the ratios are approximately similar, with the rural casual wage being approximately one-fifth of the urban regular wage. In other less developed states such as Assam, West Bengal, and Uttar Pradesh, the ratios are little better than the all India average. In contrast, most of the developed states show a comparatively lower disparity across casual and regular wages and also across rural and urban areas. The least disparity in this regard is in Kerala, where the rural and casual wages are almost equal and the rural casual wages are approximately two-thirds of the urban regular wages.

Slow growth of rural casual wages during the post-liberalization period in most of the poorer states has contributed to the widening gap between casual and regular wages. In 10 of the 15 major

states, the average annual compound growths of rural casual wages have been lower during the period from 1999-2000 to 2004-05 as compared with that during the period from 1993-94 to 1999-2000 (Table 13).

**Table 13 : Annual average inter-quinquennial and decadal growth rates (%) of rural casual wages in states**

	1983 to 1993-94	1993-94 to 1999-2000	1999-2000 to 2004-05	1993-94 to 2004-05
Andhra Pradesh	3.06	3.54	3.54	3.54
Assam	1.47	1.83	3.27	2.48
Bihar	2.01	5.33	0.93	3.31
Gujarat	1.21	3.22	2.37	2.83
Haryana	2.16	3.46	1.42	2.53
Karnataka	4.10	3.81	1.60	2.80
Kerala	2.48	5.84	2.56	4.33
Madhya Pradesh	4.30	0.70	3.10	1.78
Maharashtra	3.41	3.62	0.80	2.33
Orissa	4.66	1.48	5.29	3.19
Punjab	3.94	0.44	-2.15	-0.75
Rajasthan	1.84	3.40	1.83	2.68
Tamil Nadu	5.57	6.05	1.91	4.15
Uttar Pradesh	3.22	2.78	3.03	2.89
West Bengal	2.50	3.06	-0.29	1.53

It is important to note that in Punjab, a developed state, the real wage growth has been negative during the last quinquennial. This has led to a widening in the casual-regular wages in that state. Maharashtra is another developed state where real casual wages have witnessed very slow growth during the entire post-liberalization period. Almost all the poorer states show a decline in growth in rural casual wages both during the last quinquennial and the entire post-liberalization period. Comparing wage growth between the last two quinquennials, we observe that the number of states displaying declining growth in the post-liberalization period has doubled to 10 during the period from 1999- 2000 to 2004-05 as compared to five in the period from 1993-94 to 1999-2000.

## 7. Inequality in wage payments

Apart from the wage differential across the different segments of the labour market, wage inequality also exists within each segment. Various studies in the past have indicated a high level of and increasing trend in inequality in wage payment in India. Acharya and Marjit (2000) report an increasing gap between the minimum and maximum range of wages in India. Deaton and Dreze (2002) highlight their finding that wage inequality among casual workers has increased in the post-reforms period, particularly in the poorer states.

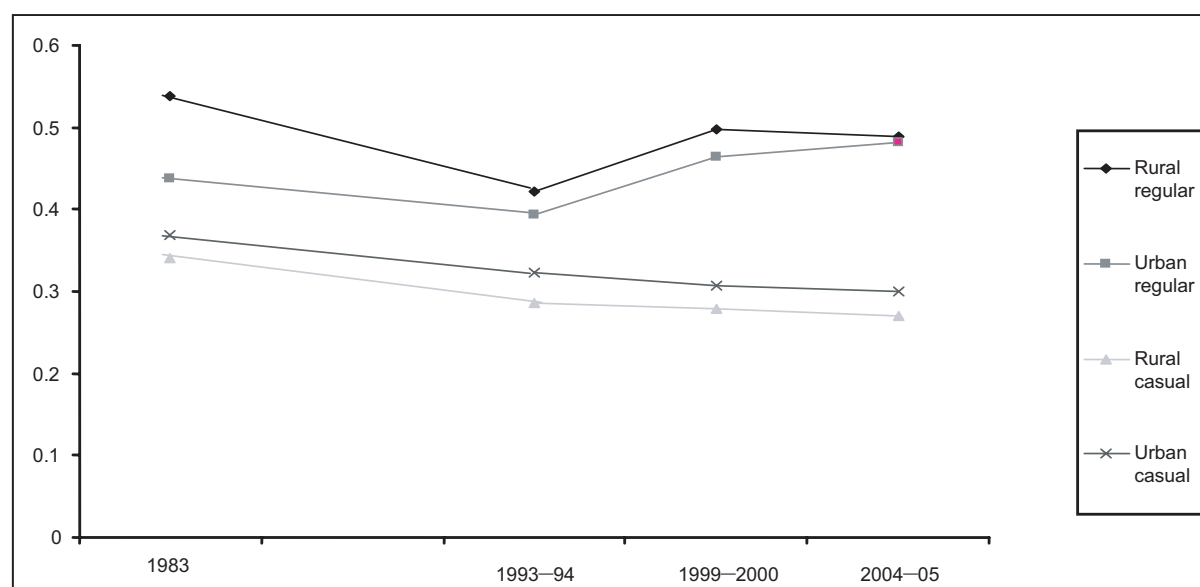
Galbraith et al. (2004) compute inequality measures using grouped data (grouped by industry and by industry and state) relating to earnings (calculated as the annual wage bill divided by the number of workers) in the organized manufacturing sector. In a more recent study, Dutta (2005) calculates inequality on the basis of individual record data and presents different types of measures of inequality; however, this analysis considers all types of workers taken together. In addition, it identifies various factors associated with wage inequality in India. However, none of these studies provide enough insights on the issue of wage inequality as most of these studies are either based on grouped data or do not provide enough dis-aggregation in order to obtain a clear idea about inequality in different segments of the labour markets.

In the following section, we attempt to compute 'wage inequality measures' using data on individual wage rates for all workers engaged in regular or casual wage employment separately and for male and female workers in all economic sectors, including agriculture, organized and unorganized manufacturing, and services. The levels of and trends in wage/earnings inequality among regular and casual workers are examined by using Gini coefficient measures separately for rural and urban settings.

### 7.1 Trends in inequality

In 1999-2000, inequality is highest for rural regular workers followed by urban regular, urban casual and rural casual. For all the four broad sets of workers under consideration, inequality has decreased in 1999-2000 as compared with 1983, but for regular workers, inequality has increased in 1999-2000 as compared with 1993-94. For casual workers, particularly in rural areas, inequality in daily wages has remained almost stagnant during the latter half of the 1990s (Figure 4).

Figure 4 : Trends in inequality (Gini coefficient) in daily wages/earnings



Dutta (2005) notes that overall, the data indicate that wage inequality among regular workers has risen between 1983 and 1999. However, we find that the increase is the result of increasing inequality in wages among urban regular workers. This implies that even among the urban regular component of the workforce, a large section of the poorer workforce has not witnessed wage increases in the same way as the top class of urban regular workers. In rural areas, inequality among regular workers has declined

in 1999-2000 as compared with 1983, although it has increased as compared with 1993-94. This pattern is reversed for casual workers, though there is some disagreement among the different measures of inequality. However, in the post-reforms period (1993-94 to 1999-2000), there is no sign of increasing inequality in any significant way among casual workers, particularly among the rural casual workforce. The Gini coefficient has stagnated at around 0.27 in rural areas and 0.29 in urban areas for male casual workers since the early 1990s. Among female casual workers, the inequality shows a marginal decline in rural areas in the post-reforms period. The inequality among rural casual female workers has also declined from 0.31 in 1983 to 0.24 in 1999-2000.

## 7.2 Inequality in male and female wages

Most of the rise in inequality in the daily earnings of regular workers during the latter half of the 1990s is contributed by the increasing inequality among female regular workers in both rural and urban areas. During this period, the inequality in daily earnings of regular male workers has risen marginally. Among rural casual workers, the sustained decline in inequality of daily wages for female workers is worth noting (Table 14).

Table 14 : Measures of inequality (Gini coefficient) for regular and casual daily wages/earnings, 1983 to 2004-05

	1983	1993-94	1999-2000	2004-05
<b>Persons</b>				
<b>Regular</b>				
Rural	0.5378	0.4218	0.4985	0.4889
Urban	0.4381	0.3928	0.4637	0.4815
<b>Casual</b>				
Rural	0.3399	0.2851	0.2794	0.2706
Urban	0.3688	0.3221	0.3078	0.3008
<b>Males</b>				
<b>Regular</b>				
Rural	0.5280	0.4028	0.4282	0.4661
Urban	0.4290	0.3803	0.4527	0.4640
<b>Casual</b>				
Rural	0.3235	0.2676	0.2651	0.2505
Urban	0.3317	0.2917	0.2850	0.2762
<b>Females</b>				
<b>Regular</b>				
Rural	0.5743	0.4849	0.7546	0.5488
Urban	0.4921	0.4570	0.5163	0.5463
<b>Casual</b>				
Rural	0.3079	0.2538	0.2376	0.2316
Urban	0.3277	0.3097	0.3080	0.2908



The main reason for the decline in inequality of wages among rural casual female workers is that earlier, casual wages for females were highly suppressed, and increasingly now, the gender bias in wages is coming down. As has been mentioned earlier, a recent phenomenon in this regard has been the gradual withdrawal of the subsidiary status female workforce from the labour market, where wages were low, particularly in the poorer and less developed states. Essentially, this signifies the increasing share of women workers in better paid jobs as compared with the earlier period. However, owing to the withdrawal of the subsidiary status female workforce from the labour market, the overall female labour participation rate has declined and those who continue in the labour market work for comparatively higher wages.

## 8. Labour productivity and wages: Some links

Labour productivity is commonly defined as output per worker. Due to paucity of reliable data on production and employment from the same source in India, conventionally, labour productivity is calculated as gross/net national/domestic product per worker. In this section, we follow a similar approach to measure labour productivity and changes therein. In the Indian context, many scholars have studied the relationship between employment, wages and labour productivity. Goldar (Goldar, 2004) shows that the declining share of wages in registered manufacturing is due to a decline (rise) in the relative marginal productivity of labour (capital). In a recent study, Bhattacharya and Sakthivel (2005) find that employment elasticity with respect to output is positive, but negative with respect to wages. These findings are in accordance with mainstream economic literature. On the basis of organized manufacturing sector data from the *Annual Survey of Industries (ASI)*, Goldar (2005) finds that during the post-reforms period, there has been a widening gap between labour productivity and wage rates.

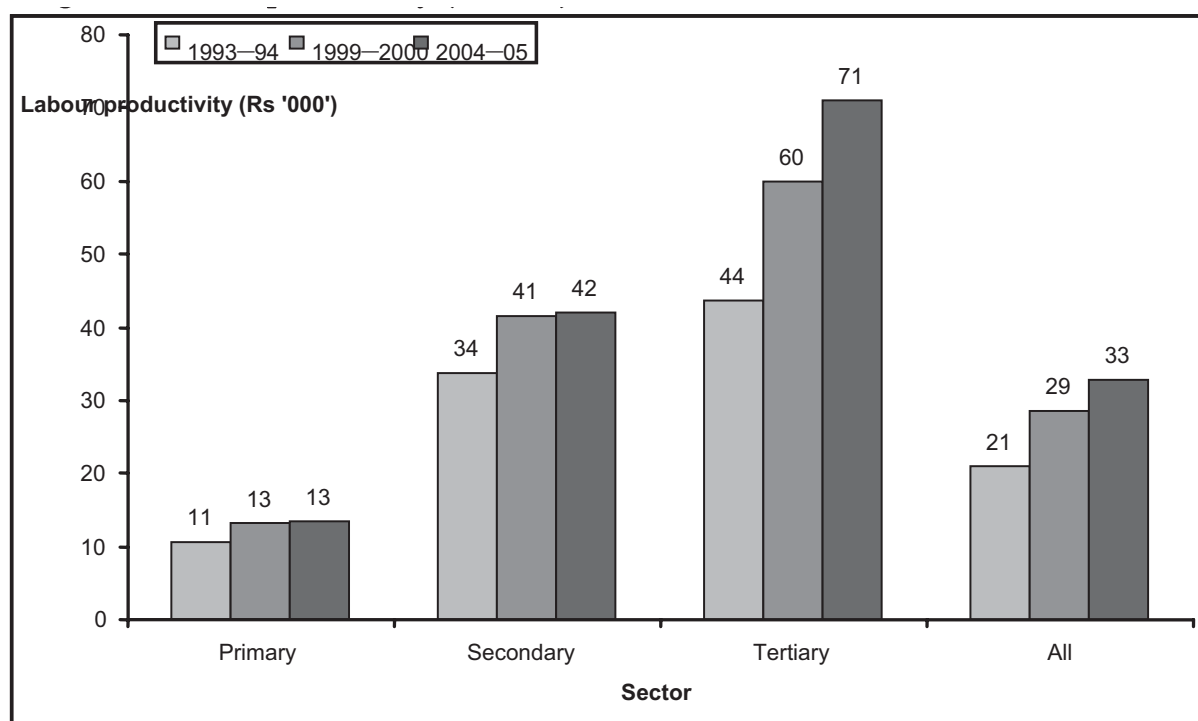
At the all-India level, labour productivity (calculated in terms of gross/net domestic product per worker) has increased during the 1990s. Sundaram (2001) shows that between 1993-94 and 1999-2000, labour productivity increased significantly in most sectors, except construction. The poor performance in construction has been attributed to the influx of workers to this sector in recent years. However, the increase in labour productivity has not been translated into increased wage share and/or increased growth in real wages, particularly for casual workers. Mahendra Dev (2002) notes that "changes in wage rates appear to lag behind changes in labour productivity, particularly for non-agricultural activities".

Firstly, we note that during the period from 1993-94 to 1999-2000, labour productivity grew at the rate of little more than 6 per cent per annum, but slowed down to approximately 3 per cent between 1999-2000 and 2004-05. However, the average growth of productivity has been above 4 per cent per annum during the entire post-reforms period. As against this, the real wages during the same period grew at the rate of less than 2.5 per cent per annum (approximately 2 per cent per annum for regular workers and slightly more than 2.5 per cent per annum for casual workers). This clearly shows that during the 1990s, the growth of wages and earnings of workers has lagged behind the growth of labour productivity. Though some of the productivity gain during the 1990s has been passed on to regular workers in the organized sector, casual and other unorganized sector workers have not benefited at all.

Among casual workers, urban women workers have realized somewhat better growth in daily wages, reflecting a significantly better sharing of increased labour productivity vis-à-vis their male counterparts. However, as mentioned earlier, much of the increased labour productivity is being shared by women workers at the cost of job loss.

At the sectoral level, labour productivity has been higher for the tertiary sector of employment (except for financial services), which has increased at a faster rate as compared with the other sectors. The analysis further shows that labour productivity has been the lowest, coupled with the slowest increase over the years, in the primary sector and has almost stagnated in both the primary and secondary sectors during the period, 1999-2004 (Figure 5). However, in all the three major sectors of employment, the growth of labour productivity has been positive during the post-reforms period from 1993-94 to 2004-05.

Figure 5 : Labour productivity (Rs '000) across different sectors, all-India



In agriculture, labour productivity has grown at a rate of 3.34 per cent per annum between 1993-94 and 1999-2000, but stagnated during the following period. The average growth of labour productivity during the post-reforms period in agriculture has been less than 2 per cent per annum (Table 15). We have seen above that the wage growth in agriculture during the same period has been approximately the same. From a general standpoint, workers in the agriculture sector are better placed in terms of sharing growth of productivity.

**Table 15 : Average labour productivity and growth rate of labour productivity in different sectors**

Sectors	Productivity (Rs)			CAGR (%)		
	1993-94	1999-2000	2004-05	1993-99	1999-2000	1993-2004
Industries						
Agriculture & allied activities	9980	12201	12234	3.41	0.05	1.87
Mining & quarrying	74415	118537	127629	8.07	1.49	5.03
Manufacturing	29528	40076	42240	5.22	1.06	3.31
Public utilities	140622	223727	222507	8.05	-0.11	4.26
Construction	34754	31677	31291	-1.53	-0.25	-0.95
Trade, hotels & restaurants	35770	45113	53895	3.94	3.62	3.80
Transport, etc.	49498	57962	81701	2.67	7.11	4.66
Financial services & real estate	255920	288842	239239	2.04	-3.70	-0.61
Community, social & personal services	26653	45941	53006	9.50	2.90	6.45
All	20912	28535	32762	5.32	2.80	4.17

Some studies<sup>7</sup> find that the link between wage increase and labour productivity in agriculture is rather weak. Bhalla (1998) notes that "the rise of real wages had very little to do with labour productivity in agriculture. Initially, in the late 1960s and early 1970s, when agriculture labour productivity went up, real wages had stagnated. After the mid-1970s, real wages went up everywhere... productivity was on a long-term decline." However, the relationship between labour productivity and wages becomes fairly clear when employment growth is also taken into consideration. It is important to note that during the 1970s and 1980s, the employment growth in agriculture was fairly good (except in the drought years in the late 1980s). During the entire period of the 1970s and early 1980s, employment growth in agriculture was more than 1.5 per cent per annum, which declined to less than 0.5 per cent per annum thereafter (Sen and Ghosh, 1993; Sen, 1994 and 1998). Hence, the growth in real wages in agriculture after the mid-1970s was accompanied by a decline in labour productivity mainly on account of high employment growth and higher employment elasticity with respect to agricultural GDP. The most disquieting feature of the post-liberalization period is that both real wages and employment growth in agriculture suffered a setback, while labour productivity in agriculture accelerated at a comparatively higher rate.

As far as the non-agriculture sector is concerned, the growth in real wages has more prominently lagged behind the growth in labour productivity (Table 15). In the non-agriculture sector, labour productivity increased by approximately 4-5 per cent per annum, while the growth in real wages saw a rise of only 2 per cent per annum during the post-liberalization period. However, in the non-agriculture sector, both real wages and labour productivity moved at a comparatively higher rate in sub-sectors such as public utilities, transport and retail trade and community services. The worst performance is reported

<sup>7</sup> For example, see Acharya and Papanek (1989) and Bhalla (1993) on the wage-productivity relationship in agriculture.

in sub-sectors of the services and manufacturing sectors. Since a large part of these sub-sectors are in the urban unorganized sector, despite the phenomenal increase in labour productivity during the 1990s, the gains have not resulted in a commensurate rise in real wages and earnings of workers as reflected by one of the slowest increases in real wages in these sub-sectors. Furthermore, labour productivity in the construction sector has declined over the years as reflected by the negative growth rate here (Mahendra Dev, 2002; Bhalla, 2002), but the increase in real wages in construction, particularly of women workers, has been perceptible.

## 9. Minimum wages and their implementation

We have seen in the above sections that daily wages of casual workers are not only lower than those of regular workers in both rural and urban areas, but also that the growth of wages has decelerated during the post-liberalization period. In order to safeguard the interests of casual workers, both Central and State governments have announced minimum wages to be implemented by all employers. The minimum wages are announced periodically<sup>8</sup> by almost all the state governments and the Central government for their respective jurisdictions of occupations.<sup>9</sup> Most of these occupations fall under the informal sector and are applicable for workers engaged in manual physical labour (Eyraud and Saget, 2005).

The basic idea behind the announcement of minimum wages, under the Minimum Wages Act, 1948, has been to prevent the exploitation of labour by payment of unduly low wages (Karan, 1997). As Eyraud and Saget (2005) note, "The main aim of the minimum wage is to protect the lowest paid workers in order to guarantee them a decent standard of living." Minimum wage represents an economic concept, not merely a legal one in terms of enforceability under law. However, apart from the fact that doubts have been raised about the efficacy of minimum wages to cover a minimum standard of living, a number of studies show that the Act has not been implemented properly and casual workers continued to receive lower wages than the minimum prescribed (Ghanekar, 1997; Karan, 1997; Unni, 2000; Anant, 2004). Here, we will show to what extent the announcement of minimum wages has been successful in securing payment of minimum wages to casual workers. The present analysis is limited up to 1999-2000 because many states have not revised minimum wages since 2002. In the foregoing analysis, the actual wages paid to casual workers have been compared with the prevailing minimum wages in 1999-2000. Further, since the analysis is limited to the aggregate state level, a comparison of actual wages has been done with the lowest range of the minimum wages announced. Since minimum wages are announced for a variety of occupations, which may be higher than the lowest range of the minimum wages at the aggregate state levels, the analysis in the paper will reflect the highest possible coverage of minimum wages.

Table 16 presents the proportion of casual labour receiving actual wages below the minimum range of the minimum wages announced by different state governments in 1999-2000. At the all-India level, more than half and approximately 30 per cent of the total number of casual workers in rural and urban areas, respectively, received actual wages below the minimum wages. The proportion is as high as 68 per cent in rural areas and 54 per cent in urban areas for female casual workers. Even in the states of Kerala and Tamil Nadu, where the casual wages are much higher than in the other states,

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<sup>8</sup> Expected to be revised every six months co-terminus with revision of dearness allowances of regular workers in government sectors.

<sup>9</sup> Nearly 1,200 scheduled occupations are covered under the Minimum Wages Act. Of these, 1,140 come within the jurisdiction of the various state governments.

approximately 13 per cent and 26 per cent of workers, respectively, do not get minimum wages. However, in most of the South Indian states, the proportion of casual labourers getting lower than minimum wages is lower than in other parts of the country.

In most of the poorer states such as Bihar, Madhya Pradesh, Orissa, and Uttar Pradesh, a very high proportion of casual workers do not receive minimum wages. In Orissa, the proportion of casual workers not getting minimum wages is as high as 90 per cent in rural areas and 70 per cent in urban areas. To a greater extent, this explains the high poverty ratio in the state. However, it is important to note that in a few developed states such as Gujarat, Haryana, and Maharashtra, the implementation of the Minimum Wages Act has been very poor as is reflected by the high proportion of casual workers getting actual wages well below the minimum wages announced by the state governments. It is important to note that all three states are highly industrialized states, reflecting the fact that it is not only in agriculture that actual wages are lower than minimum wages. One of the reasons for high proportions of labourers not getting minimum wages in these developed states is the relatively higher minimum wages in these states, followed by the large scale influx of migrant workers in these states from poorer regions.

**Table 16 : Percentage of casual workers receiving actual wages below minimum wages, 1999-2000**

State	Rural			Urban		
	Males	Females	Persons	Males	Females	Persons
Andhra Pradesh	16.03	56.74	35.18	7.19	26.72	13.03
Assam	15.16	43.00	20.15	4.35	35.98	12.38
Bihar	53.79	67.72	57.25	28.16	58.56	33.78
Gujarat	78.64	91.81	83.56	47.61	78.22	54.40
Haryana	67.45	81.48	69.96	68.53	91.33	72.64
Himachal Pradesh	1.97	18.30	2.71	2.51	12.65	3.45
Jammu & Kashmir	3.29	13.12	3.40	0.00	0.00	0.00
Karnataka	19.34	58.38	35.55	6.22	37.35	14.79
Kerala	3.08	10.81	4.86	3.68	26.40	7.39
Madhya Pradesh	86.57	92.65	88.98	58.41	88.88	67.29
Maharashtra	64.97	94.54	78.76	26.39	84.32	40.61
Orissa	87.78	96.58	90.65	68.96	91.86	76.09
Punjab	24.50	56.25	27.58	16.93	53.79	19.87
Rajasthan	12.75	40.37	18.62	7.94	29.57	11.39
Tamil Nadu	2.26	25.78	12.21	4.09	14.45	6.55
Uttar Pradesh	51.23	75.65	56.89	27.19	61.67	30.37
West Bengal	25.79	51.21	30.12	20.63	68.92	27.88
All India	42.92	68.26	51.52	23.32	53.52	29.97

Violation of minimum wages is widespread in the agricultural sector. A number of studies show that except during the busy agricultural seasons and in some agriculturally developed states, actual wages

paid to casual workers are far below the minimum wages (Parthasarthy, 1998; Dash, 1996). Based on the minimum range of the minimum wages announced by the Central and various state governments, the 1999-2000 NSSO data shows that more than 85 per cent of the workers who are not receiving minimum wages worked in the agriculture sector alone. Moreover, more than 90 per cent of the workers not getting minimum wages belonged to rural areas. The proportion of casual workers not receiving minimum wages varied from a high of more than 55 per cent in agriculture to a low of approximately 21 per cent in the construction and transport sectors. In all the non-agriculture sectors, the proportion is little more than 28 per cent (Table 17). However, it has to be remembered that since the present calculation is based on the minimum range of minimum wages, the real picture may be even worse if the sectoral minimum wages is taken into consideration.<sup>10</sup>

**Table 17 : Proportion of casual workers not receiving minimum wages in different sectors, 1999-2000**

Sectors of employment	Rural	Urban	All
Agriculture, etc.	55.71	45.12	55.42
Mining & quarrying	26.17	15.72	24.62
Manufacturing	34.14	25.31	31.03
Public utilities	30.68	6.70	25.46
Construction	23.68	16.94	21.09
Trade, hotels & restaurants	37.08	33.84	35.24
Transport, etc.	20.59	23.61	21.10
Finance, business activities, etc.	38.66	29.59	34.25
Administration, education, commercial services	39.33	53.16	44.61
All non-agricultural activities	29.26	26.28	28.10
Total	51.10	29.58	48.54

*Note: For calculating the proportion of workers not getting minimum wages only the lowest range of the minimum wages announced by different state governments and reported in the Ministry of Labour's Annual Report have been considered.*

Further, the nature of the problem with enforcement of minimum wages in rural and urban areas is quite different. In rural areas, and particularly in agriculture, actual wages are lower than the minimum wages on a daily basis. As far as daily wages in urban areas and in most non-agriculture enterprises are concerned, employers generally comply with the minimum wages norm. However, most of the workers work for much longer hours than stipulated in the Act. Hence, when calculated in terms of number of hours put in every day, a large proportion of the casual workers do not get minimum wages as per the norm.

In a recent study, Saget (2006) shows that in the urban non-agriculture sector, most casual workers do get minimum wages or even higher on a daily basis, but most of them work for more than

<sup>10</sup> In 1999, minimum wages were announced for more than 1,100 job categories falling under different sectors of employment. By considering different levels of minimum wages in different sectors, the proportion of workers getting less than minimum wages will increase as compared with what is shown in the present calculation.

10, or even 12, hours a day for the same wage. Moreover, these workers do not get any benefit of leave and/or compensation. Among the reasons for non-compliance with the norms of minimum wages related to working hours and leave, etc., are poor inspection of the enterprises, complexities of the minimum wage regulations, multiplicity of the rates, and inadequate efforts by the governments to popularize the existence of rules and rates in this regard (Saget, 2006).

However, despite the various problems with the implementation of the Minimum Wages Act, the role of the Act in pushing actual wages up cannot be downplayed (Parthsarthy, 1998; Mahendra Dev, 1995; Saget, 2006). Nevertheless, there is urgent need to make arrangements for better and more effective implementation of the Minimum Wages Act.

## 10. Poverty among workers

Low level of wages, particularly of casual workers, and high and increasing wage differentials across different segments of labour markets has led to widespread poverty among the employed. This section, in addition to assessing the magnitude of the 'working poor' in India, attempts to analyse the relative position of different types of workers on the poverty map and changes therein over time.

The magnitude of the working poor and incidence of poverty among the employed in India can be calculated by counting the employed persons belonging to poor and non-poor households separately. Applying the Mixed Recall Period (MRP)<sup>11</sup> on the Employment and Unemployment Survey (EUS)<sup>12</sup> of the 61<sup>st</sup> Round of the NSSO, the poverty ratio during 2004-05 is estimated (24.4 per cent) to be somewhat 3 per cent higher than the poverty ratio calculated by the Planning Commission (21.8 per cent, by using the MRP on consumption expenditure data of the same NSSO round). The Uniform Recall Period (URP) consumption distribution data, however, reports a higher poverty ratio in both rural (28.3 per cent) and urban areas (25.7 per cent)<sup>13</sup> (NCEUS, 2007). The EUS applying the MRP, however, estimates a higher poverty ratio in urban areas (25.4 per cent) than in rural areas (24.1 per cent). Based on applying the MRP on the EUS data, our estimates of the poverty ratio among the employed is 21.6 per cent<sup>14</sup> (20.1 per cent in rural areas and 24.4 per cent in urban areas).

Some other recent estimates of the working poor in India, after carrying out the necessary adjustments in EUS data to make it comparable with the CES data, show little lower incidence of poverty in general and among the employed in particular. NCEUS (2007) estimates of poverty among workers are 18.7 per cent in rural areas and 21 per cent in urban areas. Considering a poverty ratio of 21.6 per cent among workers, the total number of working poor in India during 2004-05 is estimated to

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<sup>11</sup> The Planning Commission, based on the NSSO's 61st Round Consumer Expenditure Survey (CES), reported two poverty estimates during 2004-05. One is based on the Uniform Recall Period (URP) to compare with the period prior to 1999-2000, while the other is based on the Mixed Recall Period (MRP) mainly to compare (but not strictly) with 1999-2000.

<sup>12</sup> In addition to the CES, which has been the basis of the official poverty ratio assessment by the Planning Commission, the Employment and Unemployment Survey (EUS), conducted separately during the 61st Round of the NSSO, also provides consumption expenditure distribution by using an abridged version of the consumption expenditure schedule.

<sup>13</sup> URP consumption distribution data reports a poverty ratio of 28.3 per cent in rural areas, 25.7 per cent in urban areas, and 27.5 per cent for the country as a whole in 2004-05. The corresponding figures obtained from the MRP consumption distribution data are much lower, such as 21.8 per cent in the rural areas, 21.7 per cent in the urban areas, and 21.8 per cent for the country as a whole.

<sup>14</sup> Since the workers' data is available in CES, we have used EUS data for calculating poverty among the employed.

be around 99 million (74 million in rural areas and 25 million in urban areas). The percentage of poor workers to total poor population in 2004-05 is around 37 per cent. Given the loss of direct comparability of poverty data over a long period of time, although a long term comparison of incidence of poverty among workers and total number of working poor is not possible, a broad approximation shows that over the years, the poverty ratio among workers has declined (Table 18). However, the share of working poor to the total number of poor has remained more or less stagnant, particularly between the periods, 1999-2000 and 2004-05.

**Table 18 : Total number of poor, working poor (millions) and share (%) of working poor to total number of poor in 1993-94, 1999-2000 and 2004-05**

Location and period	Survey/reference	Poor persons (millions)	Poor workers (millions)	% poor workers to total poor population	Poverty ratio among workers (%)
<b>Rural</b>					
1993-94	CES/URP	258.9	109.7	42.37	37.5
1999-2000	EUS/MRP	264.5	103.6	39.17	34.1
2004-05	EUS/MRP	188.3	74.08	39.34	20.8
<b>Urban</b>					
1993-94	CES/URP	70.8	23.7	33.47	29.2
1999-2000	EUS/MRP	79.4	25.3	31.86	27.0
2004-05	EUS/MRP	79.8	24.7	30.95	24.4
<b>Combined</b>					
1993-94	CES/URP	329.7	133.4	40.46	35.7
1999-2000	EUS/MRP	343.9	128.9	37.48	32.5
2004-05	EUS/MRP	268.1	98.78	36.84	21.6

*Note: CES: Consumption Expenditure Survey; EUS: Employment Unemployment Survey; URP: Uniform Recall Period; MRP: Mixed Recall Period.*

*Source: The figures for 1993-94 and 1999-2000 have been quoted from Sundaram and Tendulkar, 2002 (pp 47-8), while those for 2004-05 is based on Table 19 of this paper.*

Further, as has been mentioned in the foregoing discussions, workers are not a homogenous group and they enjoy varied levels of security in the labour market and receive various levels of wages. Although, the headcount ratio of poverty has declined across the segments of status of labour such as self-employed, regular wage earners, and casual labourers, the poverty ratio continues to remain significantly high among casual workers. Among all the workers, casual labourers enjoy the least job security and receive the lowest wages. The current poverty ratio among casual workers is estimated to be 32 per cent as against 18 per cent among the self-employed and 13 per cent among regular wage earners (Table 19). Further, it is important to note that the poverty ratio among casual labourers has been higher in urban areas than in the rural areas during all the three reference periods under consideration, with the difference only widening in 2004-05. In fact, the poverty ratios in 2004-05 were higher in urban areas than in rural areas across all the three major divisions of activity status of workers.



In the urban areas, any significant decline in the poverty ratio during the post-liberalization period can be noticed only among the self-employed, in which segment the poverty ratio declined from 31 per cent in 1993-94 to 25 per cent in 2004-05. Among the other two categories of workers (regular and casual), the poverty ratio has declined only marginally during the same period.

**Table 19 : Poverty ratio (%) among workers by status of activity**

Location and activity status of workers	1993-94	1999-2000	2004-05
<b>Rural</b>			
Self-employed	30.64	27.47	16.97
Regular	19.22	16.53	10.62
Casual	52.07	47.20	29.94
<b>Urban</b>			
Self-employed	30.93	28.83	25.25
Regular	16.17	14.45	14.76
Casual	53.42	50.58	47.50
<b>Combined</b>			
Self-employed	30.68	27.72	18.43
Regular	17.30	15.19	13.16
Casual	52.24	47.85	31.97

*Source: Same as in Table 18.*

The slower decline in poverty, particularly between 1999-2000 and 2004-05, in urban areas, among both regular and casual workers, can be linked directly to the high poverty ratio employed in the urban unorganized sector and the negative growth of real wages (as discussed in Section 4 of this paper) during the same period. Despite the fact that poverty decline has been slower among urban regular workers, it is not surprising that casual workers constitute the bulk of the working poor in India. However, an almost equal proportion of the working poor consist of self-employed people. In fact, the share of self employed to the total working poor has not only increased over the years (from 47 per cent in 1993-94 to 49 per cent in 2004-05), but has also surpassed the share of casual workers (43 per cent) for the first time in 2004-05.

The self-employed constituted around 47-49 per cent of the workforce in 2004-05. The proportion of self-employed to working poor was slightly lower in 1999-2000, but the proportion was the same when compared to casual workers. Regular workers constitute up to 9-10 per cent of the total working poor. However, what is important to note is that usually, the proportion of casual workers in general and poor casual workers in particular is underestimated because of conventional methods of classifying workers in the three major groups of 'self-employed', 'regular' and 'casual'. In fact, a large proportion of workers classified as self-employed and regular do join the casual workforce for short periods of time to supplement their family income (For details on this, see Bhalla, Karan and Shobha, 2006). These groups of workers often fare even worse in terms of poverty as compared to their counterparts who are full time casual workers.

Let us first examine the share of different types of workers to total poor workers and their distribution according to their subsidiary status of work. As has been mentioned earlier, in 2004-05, self-employed and casual workers constitute up to 49 per cent and 43 per cent, respectively, of the total working poor. The proportion of regular workers in the total poor workforce is just 9 per cent. The proportion of self-employed and casual workers in the total working poor is higher in rural areas than in urban areas, while the proportion of regular workers is higher in urban areas (Table 20). In rural areas, the poor self-employed are distributed across both the agriculture and non-agriculture sectors (NCEUS, 2007).

**Table 20 : Percentage distribution of poor workers by status of employment and subsidiary status of work, 2004-05**

Location and UPSS status of workers	Percentage distribution of poor UPSS workers by status of their subsidiary status					
	Percentage share	Self-employed	Regular	Casual	Non-workers	Total
<b>Rural</b>						
Self-employed	49.14	27.57	0.11	17.25	55.07	100
Regular	3.61	15.47	3.34	3.02	78.17	100
Casual	47.26	32.02	0.14	11.42	56.42	100
All workers	100	29.24	0.24	13.98	56.54	100
<b>Urban</b>						
Self-employed	46.9	13.94	0.43	2.89	82.74	100
Regular	23.86	2.62	1.79	1.05	94.54	100
Casual	29.24	5.93	0.25	8.85	84.97	100
All workers	100	8.89	0.7	4.19	86.21	100
<b>Combined</b>						
Self-employed	48.57	24.27	0.19	13.77	61.77	100
Regular	8.69	6.61	2.27	1.66	89.45	100
Casual	42.74	27.54	0.16	10.98	61.32	100
All workers	100	24.13	0.36	11.53	63.98	100

Further, in 2004-05, in addition to the full time casual workers (casual workers on the basis of their principal status or principal and subsidiary status taken together), around 14 per cent of the poor self-employed and 2 per cent of the poor regular workers pursued casual work as their subsidiary work. Both proportions are higher in rural areas than in the urban areas, reflecting a higher incidence of multiplicity of employment in rural areas than in urban areas. The total magnitude of such workers (principally self-employed or regular workers) is approximately 6-7 per cent of the total workforce. Considering all these casual workers together, the share of casual workers to total number of working poor goes up to around 50 per cent in 2004-05. It shows that casual workers constitute the single largest component of working poor in India. Poverty incidence is highest (32.35 per cent) among full time casual workers (pursuing casual work as both principal and subsidiary activities) and principally casual

workers but self-employed as subsidiary work (32.11 per cent) (Table 21). This group is followed by workers who are principally regular workers, but pursue casual work as their subsidiary activities (incidence of poverty being 31.86 per cent). The share of such workers to total workers and working poor is very small, about 2 per cent of the total working poor (See Table 20) and the majority of them are employed in the urban informal sector usually receiving much lower wages than their full time regular counterparts. Workers principally employed as self-employed, but mixing casual work as their subsidiary activities come in at third place in terms of incidence of poverty (30.47 per cent). The share of such workers to the total number of working poor is significant (around 14 per cent).

**Table 21 : Incidence of poverty (%) among workers by their principal and subsidiary activity status in 2004-05**

UPSS status of workers	Self-employed	Regular	Casual	Non-workers	All
Self-employed	17.28	12.59	30.47	17.38	18.43
Regular	11.06	15.85	31.06	13.15	13.16
Casual	32.11	25.31	32.35	31.86	31.97
All workers	21.92	15.93	31.21	20.38	21.59

The above discussion shows that the prevalence of poverty amongst the working population in India is almost the same as amongst the total population. Technically, this implies that work participation rates among members of both poor and non-poor households are almost the same. Within the group of poor workers, casual labourers constitute up to half the total number of working poor and the majority of them reside in rural areas. Among regular workers, poor workers are largely employed in the urban informal sector constituting up to 23 per cent of the total poor urban workforce and around 10 per cent of the total working poor.

## 11. Conclusions

The post-liberalization period in India is marked by fairly high economic growth and moderate employment growth. However, the growth of daily wages has lagged behind both output and employment growth. A large section of the Indian workforce, casual workers in both rural and urban areas and regular workers in the informal sector not only continue to earn much lower wages as compared with secure job holders such as regular workers in government and other organized sectors, but have also experienced slow wage growth during the post-liberalization period. Further, the wage differential across different segments has been on the rise in the post-liberalization period. Gender differentials in wages continue to exist, but have been declining over the years. Wage growth in the informal non-agriculture sector has decelerated and casual workers, particularly in the agriculture sector, have witnessed the slowest increase in wages during this period, though the inequality in wage payment within each segment of workers shows a declining trend. Further, increasingly fewer benefits of the increased labour productivity are being passed on to the workers.

Though some developed states such as Punjab and Maharashtra have witnessed declining wage growth during the recent past, in most of the poorer states, both wages and growth are significantly

low, the Minimum Wages Act is still poorly implemented, particularly in the rural areas, and a large proportion of agricultural workers continue to receive less than minimum wages. In non-agriculture sectors, although most workers do receive nominal minimum wages, they are required to work for extended hours in poor working conditions for the same wage.

The pattern of wages and earnings in different sectors reveals that employment and wage growth have not been simultaneous. The sectors of mass employment and higher employment growth have witnessed the slowest growth in wages, while the sectors of low employment and slower employment growth have witnessed high wage growth. This has led to the further widening of the existing wage inequalities across sectors. One of the most important reasons for this is that the majority of workers in the manufacturing, trade and transport sectors are engaged in the informal sector, where daily wages/earnings are very low. The informal sector as a whole has witnessed very slow growth in wages during the post-liberalization period. In the urban informal sector, the daily earnings of casual labourers are as low as one-third that of regular workers. Though the service sector in general shows high growth in labour productivity, the benefits have not been translated into enhanced wages/earnings for the majority of the workers, leading to high prevalence of poverty among workers in general and casual workers in particular. Although incidence of poverty among workers has declined over the years, the incidence is significantly higher and the rate of decline has been slower among casual labour as compared to those among other segments of the labour market. Within the regularly employed workforce, the incidence of poverty is high in the urban informal sector.

To recapitulate, wage growth during the post-liberalization period has been mainly sluggish for the casual and informal workforce. The better-off sections have gained at the cost of the more vulnerable sections. This requires urgent policy attention if the interests of the poor, less educated and semi-skilled workforce are to be safeguarded. In the era of economic liberalization, the labour market's dualism has sharpened and there is need to provide better options to workers in rural areas and in the urban informal sector to acquire education and skills. Ensuring minimum wages in rural areas and improving working conditions in the urban informal sector must be taken up on a priority basis so that workers in these sectors can reap the benefits of increased labour productivity in general and earn a decent livelihood in particular.

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Appendix Table I : Average casual daily wages in agriculture and non-agriculture for males and females in rural and urban areas in different states, 2004-05

State	Rural				Urban			
	Males		Females		Males		Females	
	Agriculture	Non-agriculture	Agriculture	Non-agriculture	Agriculture	Non-agriculture	Agriculture	Non-agriculture
Andhra Pradesh	59.66	45.65	39.69	29.78	66.50	47.89	41.81	30.28
Assam	67.05	59.45	49.24	54.60	73.67	60.00	50.49	
Bihar	58.00	44.22	33.25	38.95	60.58	47.84	138.13	34.05
Chhattisgarh	48.93	31.75	40.59	26.38	56.52	25.46	38.17	24.70
Gujarat	69.18	45.33	54.25	41.14	88.50	43.58	44.34	41.03
Haryana	79.18	73.98	54.46	59.96	80.30	75.00	37.65	63.58
Jammu & Kashmir	97.42	99.81	53.37		106.93	113.00	73.12	
Jharkhand	55.24	44.58	42.21	35.98	60.26	41.24	54.28	35.30
Karnataka	75.92	44.74	33.17	31.02	83.92	48.00	52.58	36.02
Kerala	138.93	124.17	59.41	74.11	139.99	120.07	73.56	72.12
Madhya Pradesh	49.78	38.23	42.31	29.10	53.27	42.18	47.59	30.50
Maharashtra	59.34	44.07	34.85	27.93	80.86	47.13	47.30	29.73
Orissa	49.33	39.25	35.01	28.97	55.05	48.42	34.70	33.63
Punjab	81.24	71.65	50.32	55.59	86.25	61.71	47.56	46.10
Rajasthan	62.56	63.27	50.17	51.77	68.16	51.93	44.41	43.09
Tamil Nadu	82.57	64.11	45.98	34.62	85.96	63.30	53.72	39.62
Uttar Pradesh	57.02	49.20	44.38	39.53	63.60	51.52	43.38	37.57
Uttaranchal	74.97	60.83	82.19	52.50	69.03	70.29	62.64	58.05
West Bengal	59.92	46.13	35.83	40.42	64.49	53.82	34.74	27.73
All states	69.01	48.91	44.30	33.69	77.25	58.09	48.77	34.89

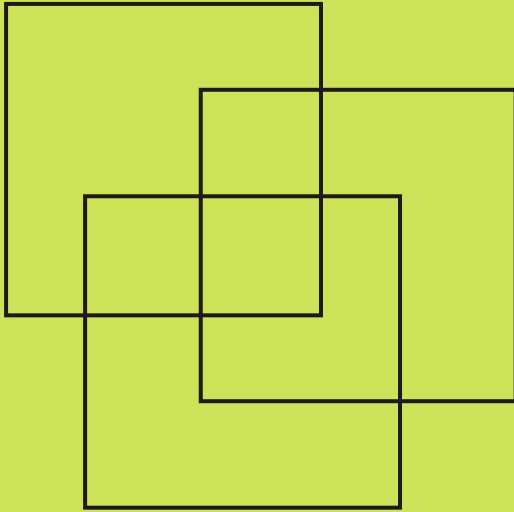
Appendix Table II : Average rural casual daily wages for males and females in agriculture and non-agriculture and ratios of inequalities for females to males and agriculture to non-agriculture

	1983	1993-94	1999-2000	2004-05
<b>Current prices</b>				
<b>Males</b>				
Agriculture	7.4	21.59	40.45	48.07
Non-agriculture	10.1	30.15	59.52	68.30
<b>Females</b>				
Agriculture	5.1	15.12	28.56	33.38
Non-agriculture	5.59	17.46	37.29	44.62
<b>Constant 1993-94 prices</b>				
<b>Males</b>				
Agriculture	16.65	21.59	25.01	26.59
Non-agriculture	22.73	30.15	36.80	37.78
<b>Females</b>				
Agriculture	11.48	15.12	17.66	18.46
Non-agriculture	12.58	17.46	23.05	24.68
<b>Ratios of inequalities</b>				
<b>Females/males</b>				
Agriculture	0.69	0.70	0.71	0.69
Non-agriculture	0.55	0.58	0.63	0.65
<b>Agri/non-agriculture</b>				
Males	0.73	0.72	0.68	0.70
Females	0.91	0.87	0.77	0.75

Appendix Table III : Average regular and casual daily wages for males, females and persons in rural and urban areas in different states, 2004-05

States	Regular						Casual					
	Rural			Urban			Rural			Urban		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons	Male	Female	Persons
Andhra Pradesh	106.23	56.61	93.81	183.34	132.05	172.18	50.3	30.88	42.13	64.71	36.29	56.99
Assam	145.51	73.83	128.82	249.81	151.31	232.51	62.59	53.29	60.18	73.73	56	70.49
Bihar	175.97	96.72	166.55	249.61	209.45	247.02	45.41	37.42	43.95	54.65	81.91	59.56
Chhattisgarh	122.7	79.69	115.61	180.2	69.03	161.93	37.6	28.55	34.07	47.62	32.43	41.32
Gujarat	132.8	108.25	129.38	173.64	110.74	165.8	52.8	43.17	49.72	83.46	46.35	71.95
Haryana	238.64	102.14	230.28	156.44	165.66	157.69	75.26	59.34	72.2	79.22	46.8	73.71
Himachal Pradesh	205.18	151.71	193.94	295.47	226.65	281.69	88.88	62	87.14	69.67	65.92	69.04
Jammu & Kashmir	180.79	111.84	175.46	259.46	196.4	251.04	100.24	53.39	96.14	111.82	81.01	110.57
Jharkhand	180.1	101.87	166.99	287.85	142.88	267.31	51.11	37.93	48.07	60.16	55.46	58.85
Karnataka	126.69	70.28	112.86	227.16	153.99	211.44	48.33	30.74	41.32	80.75	46.25	73.44
Kerala	163.8	119.85	146.83	203.04	170.9	191.03	134.86	65.75	119.51	137	66.96	126.81
Madhya Pradesh	103.16	31.49	88.44	184.07	104.78	168.83	38.58	30.53	35.76	51.55	42.02	49.57
Maharashtra	155.04	105.4	148.11	220.58	180.04	211.89	47.37	28.16	38.58	79.57	39.1	69.2
Orissa	139.93	93.81	133.62	211.93	144.3	198.71	42.29	29.65	38.45	54.41	33	49.51
Punjab	167.42	123.06	161.92	197.41	226.32	203.17	75.14	53.1	73.12	83.9	46.41	79.7
Rajasthan	146.59	87.41	140.14	184.26	156.16	180.24	64.33	52.03	62.12	69.15	48.26	66.53
Tamil Nadu	122.6	73.8	109.07	190.58	112.11	169.71	70.45	36.53	56.48	83.1	47.56	74.91
Uttaranchal	193.87	135.17	186.58	212.83	137.27	197.52	69.66	56.2	67.88	69.78	60.26	68.57
Uttar Pradesh	122.4	100.16	120.31	177.27	149.48	174.41	53.37	39.54	51.25	63.99	38.61	61.77
West Bengal	143.39	53.07	120.25	198.19	129.35	185.39	49.88	39.99	48.38	64	32.95	60.54
All-India	144.93	85.53	133.81	203.28	153.19	193.73	55.03	34.94	48.89	75.1	43.88	68.68





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