



Munich Personal RePEc Archive

# **Regional Disparities in Wage Employment Dynamics: A Decade of Economic Reforms in India**

Mukherjee, Dipa

Department of Economics, Narasinha Dutt College

2008

Online at <https://mpra.ub.uni-muenchen.de/35048/>  
MPRA Paper No. 35048, posted 28 Nov 2011 08:43 UTC

# **REGIONAL DISPARITIES IN WAGE EMPLOYMENT DYNAMICS: A DECADE OF ECONOMIC REFORMS IN INDIA**

[preprint version, in Indian Journal of Regional Science, Vol. 41, No. 1, June, 2009]

**Dipa Mukherjee\***

## ***Abstract***

*Employment creation and wage security have been primary goals of developing countries both from a national and a regional perspective. The present paper analyses the wage-employment scenario in India in the post-reform period with special emphasis on the regional dimension. The workforce structure is exhibiting upward mobility across wage classes, moving towards regular employment, and shifting in favour of tertiary sector jobs – the pace decelerating in the second half of the study period. There is a shift of middle wage level jobs from regular to casual employment, leading to declining inequality among casual workers and increased inequality among regulars. However, availability of mandays is decreasing, especially among casual workers. At the regional level, employment opportunities are getting narrowed down in the high income states but those who are employed are getting better remuneration. On the other hand, in the low income states, number of wage workers is rising but earning per worker is going down. Increasing disparity between workers of High and Low Income States, and between Regular & Casual workers are concerns that need to be addressed. Creating more mandays of work in the high income states and facilitating capacity building through education and skill formation in the low income states should be the policy focus.*

## **I. INTRODUCTION**

One of the major objectives of the economic planners in a labour surplus economy is to utilise its human resource up to the fullest extent. Apart from utilising available manpower optimally, this also helps in uplifting living standards of its citizen through provisioning of remunerative jobs. As a result, employment creation and wage security are primary goals of developing countries. This is true for India too, and since the Sixth Five Year Plan, wages and employment have been the thrust areas in our planning process. It was accepted at an early stage that mere creation of employment opportunities would not be enough for a populous country like us, and the nature of the jobs would also be important. Given the highly skewed nature of distribution of productive assets in our country, the likelihood of workers being exploited by employers is substantial. While

---

\* Senior Lecturer, Dept of Economics, Narasinha Dutt College, Bellilious Road, Howrah - 711101, West Bengal, e-mail: medipa@rediffmail.com.

being gainfully employed or not creates a primary divide in the economy, a secondary divide is created along high or low wages, and regularity or otherwise of the job. And such divides by no means can be ignored. Thus, growth of employment, especially wage employment; nature of such employment growth, and associated trends in wages in different regions are factors that are important both from the context of resource utilisation, and that of eliminating poverty & regional inequality. In this paper we explore these issues in India with special reference to its regional aspects.

We use NSSO data on Employment and Unemployment from the 50<sup>th</sup>, 55<sup>th</sup> and 61<sup>st</sup> Round surveys pertaining to the years 1993-94, 1999-2000, and 2004-05. This paper contains five sections. In the next section some recent works on related issues are mentioned. In the third section we provide an overview of the trends in employment and wages in India in the post-reform period. The employment-wage linkage is discussed in the fourth section, and the dynamics of the wage-employment process in the fifth.

## **II. WAGES AND EMPLOYMENT – A BRIEF SURVEY**

There have been several explorations of the issues related to wages and employment, at the theoretical level and in the Indian context (see Wood, 1997; Kingdon, 1998; Katz and Autor, 1999; Agenor, 1996, 2004; and Papola, 2005; for brief review of both theoretical and empirical studies). Regional economics of wages and employment were discussed by Krugman (1991), Davis and Weinstein (1999, 2003), Hanson (2005), Redding and Venables (2004). A review of Globalisation and Labour Markets is in Horton, Kanbur and Mazumdar (1991). It has been shown that wage pressure often provides the inducement to technological innovation and also better working conditions (Banerjee, 2005). Though employment elasticity with respect to real wage is found to be negative, lowering of real wage does not necessarily lead to expansion of employment, and doing so beyond a certain level may accentuate the problems of poverty (Bhattacharya and Shaktivel, 2005). Even the overall rise in real wage may result from substantial rise in wage level for one group of workers only, thereby leading to rising inequality. Several studies have been put forward to analyse the kind of transformation that the wage structure is undergoing in the post-reform period in India – both at aggregate level and across gender, sector, region, and different educational levels. Vasudeva Dutta (2005) has found rising wage inequality among regular workers and declining wage inequality among casual workers during 1983-99 for the adult male workers. Shareef and Gumber (2005) found that the reforms programme has helped the urban workers only, while

benefits to the rural workforce are limited, concentrated mainly among the highly educated segment.

Against this backdrop, we would analyse the dynamics of employment and wages in India in the post-reform period. The interaction between them is preceded by a brief overview of trends in employment and wages.

### **III. TRENDS IN EMPLOYMENT AND WAGES**

#### **1. Employment Trends**

Total employment in India has increased from 300 million in 1993, to 340 million in 1999 (Table 1 & 2). During this period, population increased from 778 million to 920 million, and the active workforce from 311 million to 355 million. Thus, growth in labour-force lagged behind population growth rate during 1993-99 leading to a drop in Work Participation Rate from 40 per cent to 38.5 per cent. However employment had grown further slowly, and employment rate (as percentage of workforce) declined from 96.4 per cent to 95.8 per cent during this period. During 1999-2004 period, there has been a reversal of trend as regards labour market participation and WPR increased to 41 per cent. But employment growth still lagged behind growth in labour force and further declined to 95.7 per cent in 2004.

Against this backdrop, the share of wage employment in total employment has increased marginally from 43.2 to 43.3 per cent during 1993-99 but declined to 40.6 per cent during 2000-04. At the aggregate level, during the whole period, and especially in the second quinquenna, self-employment is on the rise. While a part of the self-employed are the Professionals (doctors, lawyers, etc.), a major part of them work on subcontract basis, are outside the employment coverage of the institutions they serve, and identify themselves as self-employed. This latter group, it must be remembered, are unorganised and without any social security. However, the trends are quite diverse in the two types of states. While in the Low Income Group (LIG) states share of Wage employment increased from 38 per cent in 1993 to 49 per cent in 2004, in the High Income Group (HIG) states this share actually decreased from 51 per cent to 30 per cent during the same period.<sup>1</sup> Thus, self-employment is on the rise in the HIG states.

Concentrating on wageworkers, substantial regional variation in share of wage employment exists, with wage employment being the predominant form in Chandigarh, Goa, Lakshadweep, Pondichery, Delhi, Tamilnadu, and Kerala. On the contrary, this share is significantly low in Himachal Pradesh, Arunachal Pradesh, Meghalaya, and Uttar

Pradesh, in all the years. Incidence of wage employment was significantly higher in the HIG states compared to the LIG states, and the gap between them had widened during 1993-99 period. However there is a reversal of trend during the last quinquenna with significant decline in the incidence of wage employment in the HIG states and substantial rise in LIG states resulting in incidence of wage employment in LIG states exceeding that in HIG states.

It is observed that during 1993-99 total wage employment has increased from 129 million to 147 million – growing at about 2.2 per cent pa, and to 153 million in 2004, growing at 0.9 per cent pa. At the regional level, there is a sharp contrast between the HIG and LIG states. While in the LIG states, Wage employment increased consistently over the decade, in the HIG states, it increased during 1993-99 period but declined sharply in the 1999-04 period. Even within states, the growth in wage employment is not uniform – number of wage workers declining in Arunachal Pradesh, Manipur, Mizoram, West Bengal, and the Andamans among the states during 1993-99. During 1999-04 too, Wage employment declined in Andhra Pradesh, Assam, Bihar, Goa, Maharashtra, Nagaland, Orissa, and Tamil Nadu. Within the wage employees, growth has been faster for Regular wage workers (3.2 per cent pa) compared to the Casual wage workers (1.6 per cent pa) during 1993-99. However, during 1999-04 period, regular employment is growing at the rate of 2.9 per cent pa and casual employment is declining at the rate of 0.3 per cent pa (Table 3).

## **2. Trends in Wages**

Trends in wages can be explored using both Wage per Manday or *Wage Rate*, and Wages per Worker per Week or *Average Weekly Earning*.

While the former is purely a measure of wage rates, the latter reflects availability of job per week also. We start with *Wage Rates* first. Wage rates, or average wage per manday which in real terms was 52 rupees in 1993, increased to Rs. 79 in 1999, and to Rs. 83 in 2004 (Table 4). Wage rates for the regular workers, on an average, are more than three times that of the casual workers. There are substantial regional disparities around these averages and while wage rates are considerably higher in Delhi, Chandigarh, the North-eastern states, Himachal Pradesh and most of the UTs, it is quite low in the lagging states like Orissa, Madhya Pradesh, Bihar and Tamilnadu. While Wage Rate increased at 7.2 percent pa during 1993-99, it increased by only 1.0 percent pa during 1999-04 period. During this period, major states of Gujarat, Andhra Pradesh, Rajasthan, Tamil Nadu, West Bengal, and Delhi suffered a decline in real wage rate.

It has already been mentioned that though overall wage rates have increased, the rate of growth has decelerated in the last quinquenna, and this is true for both the HIG and LIG states (Table 5). For the regular workers however, wage rates have declined in the LIG states and marginally increased in the HIG states.

If we now consider *Average Weekly Wage*, it is observed that in real terms, it has increased from Rs 365 in 1993 to Rs 467 in 1999, and to Rs 497 in 2004 (Table 6). The regular workers are however earning more than four times per week compared to the casual workers. In addition, while average weekly wage increased during both the quinquenna for the regular workers, it decreased in the second quinquenna for the casual workers. Average Weekly Wage is rising by about 4.2 per cent and 1.3 percent pa (Table 7) during 1993-99 & 1999-04 respectively. This deceleration in growth of weekly earnings is more prominent in LIG states compared to the HIG states. Considering growth in wage rates, it therefore follows that the weekly availability of jobs declined during 1993-99 period while it increased during 1999-04 period. However, this increase is concentrated among the regular workers only. While the ratio of regular to casual real wage rate per manday is declining, indicating some sort of convergence in daily wage rates, the ratio per week is found to be increasing which is due to continuous decline in the availability of job per week for the casual workers. This is a matter of serious concern.

#### **IV. EMPLOYMENT-WAGE LINKAGE**

While both employment and average wages are increasing at the aggregate level, our main purpose is to examine the movement of employment across different wage classes. For that purpose, we have formed six wage classes corresponding to average wage per day of - Less than Rs 20, 21-50, 51-100, 101-249, 250-499, and more than Rs 500 respectively. Frequency distribution of wage earners among these classes indicate that in 1993, about 72 per cent of the workers were in the bottom two wage classes, 26 per cent in the middle two, and the remaining 2 per cent only in the top two wage classes (Table 8). The corresponding figures for 1999 are 61 per cent, 33 per cent, and 6 per cent respectively and that for 2004 are 58 per cent, 36 per cent and 6 per cent, indicating that there has occurred a consistent shift of workers from the bottom-most classes to the middle and higher wage classes. This trend of upward mobility is more prominent for regular workers, wherein proportions of workers have decreased not only for the lower wage level jobs but for the middle wage classes also, and the top two wage classes exhibit

strikingly high employment growth rates. For the casual workers however, employment growth is highest for the middle wage classes.

It is thus observed that 1993-99 period has experienced not only rise in wage employment, but also remunerative job creation. The consistent shift from bottom to middle & higher level jobs indicates that Wage Employment expansion during this period is not absolutely as distress a phenomenon as often apprehended. There are regional differences in this pattern, which we discuss later.

During 1999-04 period, the pace of such remunerative job creation process has decelerated. Although in an overall sense there is a shift of employment from the bottom to the middle level and to some extent to the top-level jobs, this is because of such pattern followed by the casual workers. The Regular workers are experiencing a rise in the share of the bottom level jobs and a decline in that of top and middle-level jobs. Thus regular job creation is now being restricted in the lowest tier of jobs. There is substantial regional difference in this pattern though.

In the LIG states the trend of upward mobility is evident for the Casual workers in both the periods whereby share of middle level jobs is rising substantially and that of bottom level jobs declining (Table 9). For the Regular workers however, though an upward trend is followed in the first quinquenna, there is a reversal of trend in the second, and share of bottom level jobs are on a rise with a decline in shares of top and middle level jobs.

On the other hand, in the HIG states, the process of upward mobility is more prominent (Table 10) with not only the share but also the absolute number of workers in the bottom wage class declining in both the periods. As noted earlier, during the second quinquenna the absolute numbers of workers in the other two wage classes are also decreasing, but less than proportionately, leading to a rise in their shares. For the casual workers share of bottom level jobs is falling and that of middle level jobs rising keeping the share of top level jobs almost stagnant during the second period. For the regular workers on the other hand, this period witnessed a decline in the share of top and middle level jobs and rise in share of bottom level jobs, indicating a departure from the earlier trend of upward mobility.

Thus, the wage employment dynamics in the two types of states are distinctly different, especially in the second quinquenna. In the HIG states wage employment in all categories are declining along with a rising real wage and increased share of Top level jobs. On the other hand, in the LIG states, wage employment is expanding but with a declining real wage and rising share of Bottom wage classes for Regular workers, and stagnant real

wage and fall in share of Top wage class for the Casual workers. It thus appears that the well-off states are experiencing deteriorating labour market conditions in terms of its size while quality of employment in the lagging states are coming down.

This notion is confirmed if we look at the association between wage employment growth rates and various development indicators like Sectoral Output Growth Rates (state domestic product from Primary, Secondary, & Tertiary sectors), Rural Development Index, and Infrastructural Development Indices (Table 11). The associations are observed to be mostly negative, indicating that the high (output) growth and high development regions have experienced lower growth of wage employment while low growth areas have experienced higher wage employment expansion. This is another example of higher Work Participation in poorer societies.

The structure of workforce within the wage classes is also changing. Share of casual workers within the middle level jobs has increased from 24 per cent to 41 per cent (Table 12) during 1993-99 period and to 44 per cent during 2004 indicating gradual casualisation of middle level jobs. While the composition of regular and casual employment in top and bottom level jobs remained almost constant during 1993-99 period, during 1999-04 period share of regular employment has increased both for the top and bottom level jobs. This probably is due to top and bottom level regular jobs rising in the LIG states.

Thus, the wage employment scenario that we perceive in the post-reform decade is the outcome of a number of different phenomenon taking place simultaneously for distinctly different reasons. On one hand there is substantial casualisation of middle level jobs because of shift in the employment structure from middle level regular jobs to middle level casual jobs. This rising share of casual workers in the middle level jobs is evident in both HIG and LIG states over the decade but for two different reasons. In LIG states casual employment is rising more than proportionately to rise in regular employment. In the HIG states casual employment is rising whereas regular employment is falling. The substantial fall in the low wage level jobs for the casual workers on the other hand is perhaps the outcome of low-level casual jobs being outsourced to the self-employed. For the regular workers however, the rise in the share of top level jobs seems to be because of shift from self employment in Professional and Technical jobs to wage employment in Managerial, Executive and Administrative cadres, boosted no doubt by the corporatisation of the economy. The rise in the share of low-level jobs for the regular workers is mainly due to distress expansion of regular employment in the LIG states with falling real wage rate.



These structural shifts are leading to higher inequality between the LIG and HIG states no doubt. However, inequalities within the HIG states are increasing at a faster rate while within the LIG states, inequality is falling. Consequently, decomposition version of Theil Index shows that though the *Within-group Inequality* is dominant, *Between-group Inequality* is rising (Table 13). This inference is also supported by those obtained from examining the Gini coefficient of wage earnings (Table 14). Actually, poverty in LIG states is being shared while the affluence in the HIG states is not, leading to rising inequality at the national level.

## **V. CONCLUSION - DYNAMICS OF THE WAGE EMPLOYMENT PROCESS**

### **1. Summary**

Thus the broad trends of wage employment scenario reveals that during 1993-99 period, wage employment was increasing along with a rise in real wage rate in an overall sense and both for the regular and casual workers but mandays of job available per week was declining even for the regular workers. During the later period, regional differences cropped up in the broad trends. Both regular and casual wage employment declined in the HIG states along with a rise in real wage rate. Perhaps jobs are continuously and decisively getting transformed from regular to casual employment and then being outsourced to the self-employed. This transformation process in the HIG states is linked to a rise in real wages and mandays of job available indicating that this is a growth-oriented phenomenon. On the other hand, in the LIG states, regular employment is increasing with a fall in real wage rate whereas casual employment is increasing with almost stagnant wage rate. Since wage rates are already quite low in these states, especially for the casual workers, the employment expansion is no doubt a distress phenomenon. Thus in the HIG states employment opportunities are getting narrowed down but those who are employed are getting better remuneration. On the other hand, in the LIG states, number of wage workers is rising but earning per worker is going down.

Thus, the regional dynamics of wage-employment reveals that while employment and wage rates were rising in both the HIG and LIG states during 1993-99 period, in the later period there is some deterioration of the situation. While in the LIG states wage employment is expanding with declining real wage rate, in the HIG states wage rates are increasing but employment opportunities are themselves getting squeezed. As a fall out, wage inequality is increasing in the HIG states whereas in the LIG states it is declining mainly due to sharing of poverty and not sharing of wealth.

## 2. Policy Suggestions

Under such circumstances, it becomes imperative for the macroeconomic policies to be suitably formulated to counter the growing spatial and inter-personal inequalities in employment opportunities and wage earnings. It is evident that the employment structure is moving from regular to casual jobs. The focus should therefore be not only on creating more jobs but creating more mandays of work. In addition, the impetus should be on remunerative job creation in the low income states as wages are quite depressed therein. This may include steps for capability formation in these states. In the high income states, on the other hand, the focus should be on inclusive growth so that employment opportunities are not squeezed as they are being over the last decade. Only then balanced regional development will be achieved.

---

### Notes

<sup>1</sup> The states have been divided into Low Income Group (LIG) and High Income Group (HIG) accordingly as their Per Capita Net State Domestic Product are lower or higher than All India Per Capita Net Domestic Product respectively. The states belonging to LIG in all the three years are Andhra Pradesh, Assam, Bihar, Jammu & Kashmir, Madhya Pradesh, Manipur, Meghalaya, Orissa, Rajasthan, Tripura, and Uttar Pradesh. HIG states in all the three years have been Andaman & Nicobar, Chandigarh, Delhi, Goa, Gujarat, Haryana, Karnataka, Maharashtra, Mizoram, Pondicherry, and Punjab. Himachal Pradesh, Kerala, Sikkim, Tamil Nadu, and West Bengal were in LIG in 1993 but came up to HIG in 1999 & 2004. On the other hand, Arunachal Pradesh and Nagaland were in HIG in 1993 but went down to LIG in 1999 & 2004.

### Reference

- Agénor, Pierre-Richard (1996) - "The Labor Market and Economic Adjustment," IMF Staff Papers, 43 (June 1996), 261-335.
- Agénor, Pierre-Richard (2004) - The Economics of Adjustment and Growth, 2nd ed., forthcoming, Harvard, University Press (Boston, Mass.: 2004).
- Banerjee, Debdas (2005) - "Trends of Factor Income Distribution in Indian Factories", *The Indian Journal of Labour Economics*, Vol. 48, No. 2
- Bhattacharya, B.B. and Shaktivel, S. (2005) - "Employment, Wage and Output Relationship in India: A comparison of Pre and Post Reform Behaviour", *The Indian Journal of Labour Economics*, Vol. 48, No. 2
- Duraisamy, P. and Duraisamy, Malathy (2005) - "Regional Differences in Wage Premia and Returns to Education by Gender in India", *The Indian Journal of Labour Economics*, Vol. 48, No. 2
- Katz, L. and D. Autor (1999) - 'Changes in Wage Structure and Earnings Inequality', in O. Ashenfelter & D. Card (eds) *Handbook of Labor Economics*, North Holland
- Kingdon, G. G. (1998) - 'Does the Labour Market Explain Lower Female Schooling in India?' - *Journal of Development Studies*, Vol. 35 (1).

- Papola, T S (2005) – “Workers in a Globalising World: Some Perspectives from India”, Paper presented at the Conference on ‘Globalisation and Labour Mobility in India and China’, organised by Asian Business and Economic Research Unit (ABERU), at Monash University, Melbourne, Australia, 29-30 September 2005.
- Rustogi, Preet (2005) – “Understanding Gender Inequalities in wages and Income in India”, *The Indian Journal of Labour Economics*, Vol. 48, No. 2
- Shariff, Abusaleh and Gumber, Anil (1999) - “Employment and Wages in India: Pre and Post Reform Scenario”, *The Indian Journal of Labour Economics*, Vol. 42, No. 2
- Vasudeva Dutta, Puja (2005) - “Accounting for Wage Inequality in India”, *The Indian Journal of Labour Economics*, Vol. 48, No. 2
- Wood, A. (1997) – ‘Openness and Wage Inequality in Developing Countries: The Latin American Challenge to East Asian Conventional Wisdom’, *World Bank Economic Review*, Vol. 11 (1).
- Krugman, P. (1991) – ‘Increasing Returns and Economic Geography’, *Journal of Political Economy*, Vol. 99
- Davis, D. and D. Weinstein (1999) – ‘Economic Geography and Regional Production Structure: An Empirical Investigation’, *European Economic Review*, Vol. 43, No. 2
- Davis, D. and D. Weinstein (2003) – ‘Market Access, Economic Geography and Comparative Advantage: An Empirical Assessment’, *Journal of International Economics*, Vol. 59, No. 1
- Hanson, G. (2005) – ‘Market Potential, Increasing Returns, and Geographic Concentration’, *Journal of International Economics*, Vol. 61, No. 1
- Redding, S. and A. Venables (2004) – ‘Economic Geography and International Inequality’, *Journal of International Economics*, Vol. 62, No. 1
- Horton, S., R. Kanbur and D. Mazumdar (1991) – ‘Labor Markets in an Era of Adjustment: An Overview’, *Working Paper No. 694, The World Bank*

**Data Sources:**

- NSSO (1996) - *Unit Level Records on Sixth Quinquennial Survey on Employment and Unemployment in India 1993-1994*, NSS 50<sup>th</sup> Round - July 1993-June 1994, National Sample Survey Organisation, Government Of India.
- NSSO (2000) - *Unit Level Records on Sixth Quinquennial Survey on Employment and Unemployment in India 1999-2000*, NSS 55<sup>th</sup> Round - July 1999-June 2000, National Sample Survey Organisation, Government Of India
- NSSO (2006) - *Unit Level Records on Seventh Quinquennial Survey on Employment and Unemployment in India 1999-2000*, NSS 61<sup>st</sup> Round - July 2004-June 2005, National Sample Survey Organisation, Government Of India

Websites: [www.mospi.nic.in](http://www.mospi.nic.in), [www.planningcommission.nic.in](http://www.planningcommission.nic.in)