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## **A Decade of Economics Reforms: Whither Employment?**

Mukherjee, Dipa

Dept of Economics, Narasinha Dutt College

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## **A DECADE OF ECONOMICS REFORMS: WHITHER EMPLOYMENT?**

**Dipa Mukherjee\***

### ***Abstract***

*Employment creation and wage security have been primary goals of developing countries. The present paper analyses the wage-employment scenario in India in the post-reform period. 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. Thus expansion of employment has not been as distress a phenomenon as often apprehended. 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. Perhaps jobs are continuously and decisively getting transformed from regular to casual employment and then being outsourced to the self-employeds. Increasing disparity between workers of High and Low Income States, and between White collar and Blue Collar occupations are concerns that need to be addressed. Creating more mandays of work and facilitating capacity building through education and skill formation 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 being gainfully employed or not creates a primary

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

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 are factors that are important both from the context of resource utilisation, and that of eliminating poverty & inequality. In this paper we explore these issues in India.

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 of NSSO 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. Some of them are mentioned below. 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 lowering real wage 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. They have also found that there has been a substantial increase in both real wages and gender gap in wages in rural areas. Considerable gender inequality in wages has also been observed by Rastogi (2005). Duraiswamy &

Duraiswamy (2005) analysed returns to education in terms of wage premia and concluded that lowest wage premia per year of education is available for Primary education and higher for Secondary education.

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.

**Table 1a**  
**Total and Wage Employment in India – 1993-99 by States (in Millions)**

State	Total Employment			Wage Employment			Share of Wage Employment (%)		
	1993	1999	2004	1993	1999	2004	1993	1999	2004
Andhra pr	29.54	32.76	33.70	14.83	16.70	16.40	50.2	51.0	48.7
Arunachal Pr	0.30	0.27	0.36	0.06	0.05	0.07	21.0	18.4	19.4
Assam	6.65	7.21	8.74	2.83	2.98	2.79	42.6	41.3	31.9
Bihar	22.49	28.82	29.61	10.37	12.17	10.20	46.1	42.2	34.4
Goa	0.32	0.39	0.34	0.19	0.26	0.22	61.2	66.9	64.7
Gujarat	15.95	18.78	21.27	8.22	8.99	9.88	51.5	47.9	46.5
Haryana	5.68	6.17	8.14	2.11	2.24	2.83	37.1	36.3	34.8
Himachal Pr	2.43	2.51	2.86	0.47	0.58	0.79	19.2	23.1	27.6
J&K	0.88	2.59	2.38	0.24	0.60	0.68	27.0	23.3	28.6
Karnataka	18.12	20.97	22.67	8.49	10.22	11.77	46.9	48.7	51.9
Kerala	8.23	9.12	10.65	4.59	5.33	5.76	55.8	58.4	54.1
Madhya Pr	25.77	29.60	23.34	9.80	11.45	12.29	38.0	38.7	52.7
Maharashtra	30.05	36.03	39.46	15.72	19.70	19.55	52.3	54.7	49.5
Manipur	0.55	0.57	0.75	0.19	0.14	0.14	35.5	24.0	18.7
Meghalaya	0.76	0.75	1.02	0.18	0.19	0.23	23.9	25.3	22.5
Mizoram	0.22	0.24	0.33	0.06	0.05	0.06	29.2	22.5	18.2
Nagaland	0.16	0.27	0.35	0.05	0.08	0.06	31.0	28.9	17.1
Orissa	11.84	12.61	13.66	4.93	5.76	5.39	41.6	45.6	39.5
Punjab	6.81	8.16	9.61	2.68	3.04	3.86	39.3	37.3	40.2
Rajasthan	16.76	17.50	21.92	4.08	4.29	5.84	24.3	24.5	26.6
Sikkim	0.13	0.17	0.21	0.05	0.07	0.07	41.6	39.9	33.3
Tamil Nadu	25.29	25.45	26.08	14.65	15.57	14.81	57.9	61.2	56.8
Tripura	0.81	0.82	1.02	0.42	0.42	0.48	51.1	51.6	47.1
Uttar Pr	44.58	50.38	57.98	11.55	13.20	13.95	25.9	26.2	24.1
West Bengal	22.31	23.48	28.24	10.68	10.58	12.43	47.9	45.1	44.0
Andamans	0.11	0.11	0.11	0.06	0.05	0.06	56.3	48.2	54.5
Chandigarh	0.22	0.31	0.30	0.17	0.20	0.20	76.5	64.9	66.7
Dadra & NH	0.06	0.07	0.09	0.03	0.03	0.05	57.1	47.9	55.6
Daman	0.03	0.05	0.05	0.02	0.03	0.03	55.0	59.7	60.0
Delhi	2.87	3.93	3.85	1.66	2.10	2.52	58.0	53.4	65.5
Lakshadwip	0.01	0.01	0.02	0.01	0.01	0.01	66.9	58.4	50.0
Pondichery	0.23	0.28	0.30	0.15	0.20	0.20	65.4	70.9	66.7
<b>LIG States<sup>a</sup></b>	<b>183.07</b>	<b>207.64</b>	<b>218.02</b>	<b>70.16</b>	<b>78.60</b>	<b>107.710</b>	<b>38.3</b>	<b>37.9</b>	<b>49.4</b>
<b>HIG States<sup>a</sup></b>	<b>117.11</b>	<b>132.73</b>	<b>151.34</b>	<b>59.41</b>	<b>68.66</b>	<b>45.908</b>	<b>50.7</b>	<b>51.7</b>	<b>30.3</b>
<b>All India</b>	<b>300.18</b>	<b>340.37</b>	<b>378.57</b>	<b>129.57</b>	<b>147.26</b>	<b>153.62</b>	<b>43.2</b>	<b>43.3</b>	<b>40.6</b>

Note: a - Low Income and High Income states are as defined in text.

Source: Author's calculations based on NSSO (1995), NSSO (2001), and NSSO (2006).

### 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 1a & 1b). 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 has 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 though higher than population growth rate, still lagged behind growth in labour force and employment rate has further declined to 95.7 per cent in 2004.

**Table 1b**  
**Growth in Total and Wage Employment in India – 1993-2004 by States**

States	1993-99		1999-04		States	1993-99		1999-04	
	Total	Wage	Total	Wage		Total	Wage	Total	Wage
Andhra pr	1.7	2.0	0.6	-0.4	Nagaland	9.1	8.2	5.3	-5.6
Arunachal Pr	-1.7	-4.1	5.9	7.0	Orissa	1.1	2.6	1.6	-1.3
Assam	1.4	0.9	3.9	-1.3	Punjab	3.1	2.1	3.3	4.9
Bihar	4.2	2.7	0.5	-3.5	Rajasthan	0.7	0.8	4.6	6.4
Goa	3.4	5.2	-2.7	-3.3	Sikkim	4.6	3.1	4.3	0.0
Gujarat	2.8	1.5	2.5	1.9	Tamil Nadu	0.1	1.0	0.5	-1.0
Haryana	1.4	1.0	5.7	4.8	Tripura	0.2	0.2	4.5	2.7
Himachal Pr	0.5	3.7	2.6	6.4	Uttar Pr	2.1	2.3	2.8	1.1
J&K	19.7	16.7	-1.7	2.5	West Bengal	0.9	-0.2	3.8	3.3
Karnataka	2.5	3.1	1.6	2.9	Andamans	0.0	-2.3	0.0	3.7
Kerala	1.7	2.5	3.2	1.6	Chandigarh	5.9	2.9	-0.7	0.0
Madhya Pr	2.3	2.6	-4.6	1.4	Dadra & NH	2.6	0.1	5.2	10.8
Maharashtra	3.1	3.8	1.8	-0.2	Daman	8.9	7.3	0.0	0.0
Manipur	0.6	-5.8	5.6	0.0	Delhi	5.4	3.9	-0.4	3.7
Meghalaya	-0.2	0.8	6.3	3.9	Lakshadwip	0.0	1.2	14.9	0.0
Mizoram	1.5	-3.0	6.6	3.7	Pondichery	3.3	4.4	1.4	0.0
<b>LIG States<sup>a</sup></b>	2.1	1.9	1.0	6.5	<b>All India</b>	2.1	2.2	2.2	0.9
<b>HIG States<sup>a</sup></b>	2.1	2.4	2.7	-7.7					

*Note:* a - Low Income and High Income states are as defined in text.

*Source:* Author's calculations based on NSSO (1995), NSSO (2001), and NSSO (2006).

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 and again declined to 40.6 per cent during 2000-04. Actually, during the whole period and especially in the second quinquenna, self-employment is on the rise. This trend however is not uniform across all occupations (Table 2a and 2b). The general rising proportions of

self-employment is evident among Technical, Clerical, Hospitality & service, and Transport sector workers, perhaps due to the recent surge of outsourcing of these jobs. People taking up such work on subcontract basis are outside the employment coverage of the institutions they serve and identify themselves as self-employed. This group, it must be remembered, are unorganised and without any social security. Rising self-employment among farming occupation is mostly due to predominance of marginal and small holdings where farmers cultivate their own land. Contrary to this general trend proportion of wageworkers is increasing among Professionals and Administrators-albeit for two different reasons. While total employment has declined for professionals with less than proportional decrease in wageworkers among them, for the administrators both are rising with wageworkers increasing faster. This probably is due to the recent rise in Managerial and Executive jobs in government and corporate sector in the fast growing Indian economy. It also appears that more and more Professionals, especially the self-employed among them are taking up wage employment mainly in Administrative and Executive positions. Another important feature regarding the compositional change that the occupational structure is undergoing is that casual employment is on the rise for the hitherto regular employment dominated clerical jobs – it seems that gone are the days of secure, salaried clerical jobs.

**Table 2a**  
**Total and Wage Employment in India – 1993-2004 by Occupation (in Millions)**

State	Total Employment			Wage Employment			Share of Wage Employment (%)		
	1993	1999	2004	1993	1999	2004	1993	1999	2004
<b>Professionals</b>	9.57	16.89	5.21	3.81	5.69	3.01	39.8	33.7	57.8
<b>Technical</b>	7.22	8.60	10.47	5.45	6.36	6.58	75.5	73.9	62.8
<b>Administrative</b>	5.92	9.95	15.01	1.22	1.47	3.20	20.7	14.8	21.3
<b>Clerical</b>	9.13	10.48	12.08	8.65	9.92	9.63	94.8	94.7	79.7
<b>Sales</b>	21.17	23.12	30.45	2.95	3.81	6.02	13.9	16.5	19.8
<b>Service</b>	10.46	13.62	15.02	6.70	8.13	8.44	64.0	59.7	56.2
<b>Farmers etc.</b>	182.68	192.35	208.55	67.51	71.88	71.55	37.0	37.4	34.3
<b>Production etc.</b>	17.17	17.97	16.97	8.07	7.06	7.77	47.0	39.3	45.8
<b>Transport</b>	12.31	13.94	17.05	6.72	8.12	8.14	54.6	58.3	47.7
<b>Labourers nec</b>	24.54	33.45	47.77	18.48	24.81	29.29	75.3	74.2	61.3
<b>All Occupations</b>	300.18	340.37	378.57	129.57	147.26	153.62	43.2	43.3	40.6

*Note:* Occupational Classes are as in One-digit codes of National Classification of Occupations 1968.

*Source:* Author's calculations based on NSSO (1995), NSSO (2001), and NSSO (2006).

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 is significantly higher in the High Income Group (HIG) states compared to the Low Income Group (LIG) states, and the gap between them has widened during 1993-99 period.<sup>1</sup> 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.

Concentrating on wageworkers alone, 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.

**Table 2b**  
**Growth in Total and Wage Employment in India – 1993-2004 by Occupation**

States	1993-99		1999-04		States	1993-99		1999-04	
	Total	Wage	Total	Wage		Total	Wage	Total	Wage
<b>Professionals</b>	9.9	6.9	-21.0	-12.0	<b>Farmers etc.</b>	0.9	1.1	1.6	-0.1
<b>Technical</b>	3.0	2.6	4.0	0.7	<b>Production etc.</b>	0.8	-2.2	-1.1	1.9
<b>Administrative</b>	9.0	3.1	8.6	16.8	<b>Transport</b>	2.1	3.2	4.1	0.0
<b>Clerical</b>	2.3	2.3	2.9	-0.6	<b>Labourers nec</b>	5.3	5.0	7.4	3.4
<b>Sales</b>	1.5	4.4	5.7	9.6	<b>All Occupations</b>	2.1	2.2	2.2	0.9
<b>Service</b>	4.5	3.3	2.0	0.8					

*Note:* Occupational Classes are as in One-digit codes of National Classification of Occupations 1968.

*Source:* Author's calculations based on NSSO (1995), NSSO (2001), and NSSO (2006).

This growth in wage employment again is not uniform – number of wage workers declining in Arunachal Pradesh, Manipur, Mizoram, West Bengal, and the Andamans among the states, and in Production related jobs among NOC groups during 1993-99.<sup>2</sup> During 1999-04 too, Wage employment declined in Andhra Pradesh, Assam, Bihar, Goa, Maharashtra, Nagaland, Orissa, and Tamil Nadu among the states, and in Professionals, Clerical, and Farming occupations. 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 1.6 per cent pa and casual employment is declining at the rate of 0.3 per cent pa (Table 3).<sup>3</sup> Regular employment is predominant in occupations like Technical, Clerical, and Administrative jobs; and naturally very low in Farming occupations. Due to these structural differences, the smaller states and UTs with predominant Tertiary sector have high share of regular workers. The share of regular workers is found to be increasing in almost all occupations except the Farming and Professionals segments where it is decreasing marginally during 1993-99 period. However, during 1999-04 share of regular employment is declining for

Technical, Administrative, Clerical, Sales, and Transport sectors. The rise in incidence of regular employment and thus the fall in the incidence of casual employment are most striking for the Production related sectors during 1993-99 and Professionals during 1999-04 period, when total wage employment in both the sectors are declining. While for the former only casual employment is declining in absolute terms, for the latter both casual and regular employments are declining, with casual employment declining at a higher rate. Thus, in both these cases, the impact of shrinkage is felt mainly by the casual wage-workers. This supports the view that the brunt of shrinkage of a sector is borne by the casual workers.

Table 3  
Regular and Casual Employment in India by Occupation (in Millions)

Occupation Group	Regular Employment			Casual Employment			Growth in Employment (% per annum)			
	1993	1999	2004	1993	1999	2004	1993-99		1999-04	
							Regular	Casual	Regular	Casual
<b>Professionals</b>	2.39 (62.7)	3.49 (61.3)	2.73 (90.7)	1.48 (38.7)	2.21 (38.7)	0.28 (9.3)	6.5	-4.8	6.9	-33.8
<b>Technical</b>	5.32 (97.5)	6.24 (98.1)	6.33 (96.2)	0.19 (3.4)	0.12 (1.9)	0.25 (3.8)	2.7	0.3	-6.9	15.8
<b>Administrative</b>	1.08 (88.3)	1.42 (96.5)	2.8 (87.5)	0.15 (12.3)	0.05 (3.5)	0.4 (12.5)	4.7	14.5	-16.5	51.6
<b>Clerical</b>	8.47 (97.8)	9.60 (96.8)	9.14 (94.9)	0.24 (2.8)	0.32 (3.2)	0.49 (5.1)	2.1	-1.0	5.0	8.9
<b>Sales</b>	2.11 (71.7)	3.05 (80.0)	4.39 (73)	0.84 (28.6)	0.76 (20.0)	1.62 (27)	6.3	7.6	-1.7	16.3
<b>Service</b>	5.00 (74.6)	6.10 (75.0)	6.53 (77.4)	1.74 (26.0)	2.03 (25.0)	1.91 (22.6)	3.4	1.4	2.6	-1.2
<b>Farmers</b>	3.09 (4.6)	3.08 (4.3)	6.57 (9.2)	64.45 (95.5)	68.80 (95.7)	64.98 (90.8)	-0.1	16.4	1.1	-1.1
<b>Production</b>	3.75 (46.5)	4.10 (58.1)	4.58 (58.9)	4.34 (53.8)	2.96 (41.9)	3.19 (41.1)	1.5	2.2	-6.2	1.5
<b>Transport</b>	4.24 (63.1)	5.40 (66.5)	5.31 (65.2)	2.50 (37.2)	2.72 (33.5)	2.83 (34.8)	4.1	-0.3	1.4	0.8
<b>Labourers nec</b>	5.27 (28.5)	6.79 (27.4)	8.52 (29.1)	13.28 (71.9)	18.02 (72.6)	20.77 (70.9)	4.3	4.6	5.2	2.9
<b>All Occupations</b>	40.71 (31.4)	49.28 (33.5)	56.9 (37)	89.21 (68.8)	97.98 (66.5)	96.72 (63)	3.2	2.9	1.6	-0.3

Note: Figures in parenthesis are shares in total employment

Source: Author's calculations.

There is also a marked shift in the occupational distribution of wageworkers from directly productive activities (DPA-farming and production workers) to Tertiary sector activities during 1993-99, wherein share of both farming and non-farming productive activities are declining. During 1999-04 period however, share of farming sector is declining while that of non-farm productive sector is increasing; though taken together the share of DPA is declining. The share of tertiary sector in wage employment has almost stagnated during this period. This indicates that the pace of such shift has decelerated in the last quinquenna. It seems that at the start of the SAP

there occurred an immediate and substantial release of workers from the overburdened productive sectors to the tertiary sector that saw unprecedented opportunities in the new economy. But over time, the surplus labour has dried up and the attraction of Tertiary sector has also lost its shine.

## 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 Wage*. 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.

Table 4  
Average Wage per Manday by States (in Rs )

	All			Regular			Casual		
	1993	1999	2004	1993	1999	2004	1993	1999	2004
Andhra Pr	36	60	59	85	115	107	22	37	35
Arunachal Pr	79	181	170	90	244	215	49	65	66
Assam	55	83	89	87	119	138	34	48	50
Bihar	39	59	66	116	169	178	25	36	39
Goa	87	130	126	112	159	145	48	80	78
Gujarat	52	81	80	103	158	127	29	45	42
Haryana	73	120	123	106	167	158	44	62	59
Himachal Pr	94	136	141	135	181	187	50	67	74
J&K	100	151	136	124	186	166	49	83	79
Karnataka	49	70	75	118	143	152	25	39	39
Kerala	63	108	114	103	137	131	47	91	98
Madhya Pr	43	54	59	96	129	115	24	30	32
Maharashtra	61	88	93	117	156	152	24	37	34
Manipur	95	148	173	129	196	203	67	57	75
Meghalaya	77	106	127	128	182	193	38	53	51
Mizoram	87	198	236	134	240	253	52	84	106
Nagaland	133	181	217	143	185	226	69	95	83
Orissa	38	54	62	95	139	135	21	29	32
Punjab	79	104	114	104	132	151	59	67	61
Rajasthan	71	97	89	114	146	130	41	54	52
Sikkim	85	133	151	112	158	168	40	50	72
Tamil Nadu	43	79	82	86	119	120	25	51	45
Tripura	66	79	74	114	142	118	45	49	53
Uttar Pr	56	81	86	107	131	128	30	42	45
West Bengal	59	81	76	104	146	126	31	44	40
Andamans	103	137	160	124	169	212	49	72	73
Chandigarh	114	154	210	130	162	217	64	67	76
Dadra & NH	39	97	79	87	135	103	26	63	43
Daman	91	115	102	98	129	145	83	59	60
Delhi	117	235	196	127	246	204	78	76	65
Lakshadwip	104	170	156	120	188	200	64	119	107
Pondichery	56	87	93	82	117	122	28	58	57
LIG States <sup>a</sup>	48	69	74	101	136	129	27	38	40
HIG States <sup>a</sup>	57	91	104	108	152	153	30	48	49
All India	52	79	83	104	144	138	28	42	42

Note: a - Low Income and High Income states are as defined in text.

Source: Author's calculations.

Wage rates, or average wage per manday, which was 52 rupees in 1993, increased to Rs. 79 in 1999, and to Rs. 83 in 2004. Wage rates for the regular workers, on an average, are more than three times that of the casual workers. There are substantial 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. Administrative and Professional workers are highest paid, whereas wages in the Farming and Production related jobs are the lowest (Table 4 & 5).

While Wage Rate increased at 7.2 percent pa during 1993-99, it increased by only 1.0 percent pa during 1999-04 period. This growing trend also is not uniform, and during 1993-99 real wage rate declined for casual workers engaged in Administrative jobs and in the states of Delhi, Daman and Manipur. During 1999-04 period real wage rate declined for Administrative, Service, and Non-farm Production related activities even for the regular workers. For the casual workers, real wage rate declined for all the occupational groups except the Professionals, Farming, and Transport related jobs. Perhaps the wage trend in the farming sector, where vast majority of casual workers are concentrated is determining the overall trend in real wage for the casual workers (both are stagnating) during the second quinquenna. On the other hand, decline in real wage rate for the Administrative, Service, Production, and Transport related occupational groups, where regular employment comprises a overwhelming majority, is leading to overall decline in real wage rate for the regular workers. At the regional level, during this period, major states of Gujarat, Andhra Pradesh, Rajasthan, Tamil Nadu, West Bengal, and Delhi suffered a decline in real wage rate.

Table 5  
**Average Wage per Manday by Occupation (in Rs)**

Occupation Group	All			Regular			Casual		
	1993	1999	2004	1993	1999	2004	1993	1999	2004
<b>Professionals</b>	115	174	250	168	241	267	27	44	48
<b>Technical</b>	139	196	220	141	198	225	61	79	46
<b>Administrative</b>	239	360	296	261	370	325	69	52	44
<b>Clerical</b>	125	173	175	126	175	180	50	107	52
<b>Sales</b>	57	75	73	61	80	82	46	54	43
<b>Service</b>	60	88	86	70	102	95	29	42	48
<b>Farmers etc.</b>	25	37	39	40	59	59	24	36	36
<b>Production etc.</b>	52	74	71	74	89	84	32	52	48
<b>Transport</b>	80	103	104	101	121	120	44	63	66
<b>Labourers nec</b>	52	72	65	82	108	87	41	57	54
<b>All Occupations</b>	52	79	83	104	144	138	28	42	42

*Note:* Occupational Classes are One-digit codes of National Classification of Occupations 1968.

*Source:* Author's calculations based on NSSO (1995) and NSSO (2001).

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. For the regular workers however, wage rates have declined in the LIG states and marginally increased in the HIG states. For casual workers, though the pace of growth in wage rate has decelerated, they are rising in both HIG and LIG states.

Table 6  
**Average Wage per Week by States (in Rs per worker)**

	All			Regular			Casual		
	1993	1999	2004	1993	1999	2004	1993	1999	2004
<b>Andhra Pr</b>	251	353	340	592	765	739	156	207	183
<b>Arunachal Pr</b>	555	1164	1180	632	1590	1503	343	411	446
<b>Assam</b>	384	515	560	606	763	954	238	291	292
<b>Bihar</b>	271	343	390	815	1144	1199	172	205	218
<b>Goa</b>	607	775	812	784	953	969	338	467	463
<b>Gujarat</b>	363	465	486	723	1000	883	201	246	234
<b>Haryana</b>	510	735	807	740	1040	1100	308	370	350
<b>Himachal Pr</b>	661	890	931	943	1250	1311	348	408	452
<b>J&amp;K</b>	703	982	914	870	1277	1160	343	492	497
<b>Karnataka</b>	346	424	434	825	965	1054	177	225	209
<b>Kerala</b>	441	569	626	720	813	901	331	447	460
<b>Madhya Pr</b>	304	334	355	670	851	783	171	178	183
<b>Maharashtra</b>	425	502	561	819	944	1045	165	203	184
<b>Manipur</b>	665	949	1186	906	1303	1421	471	345	480
<b>Meghalaya</b>	537	696	838	896	1239	1349	265	337	315
<b>Mizoram</b>	611	1241	1523	939	1597	1680	364	452	565
<b>Nagaland</b>	934	1196	1469	1004	1231	1539	484	552	509
<b>Orissa</b>	264	313	375	665	936	941	150	163	186
<b>Punjab</b>	552	672	723	725	874	1045	412	421	342
<b>Rajasthan</b>	497	642	576	796	1001	907	287	347	317
<b>Sikkim</b>	594	877	1032	782	1094	1176	279	286	442
<b>Tamil Nadu</b>	303	423	452	600	720	828	176	252	211
<b>Tripura</b>	461	522	481	800	972	817	312	318	333
<b>Uttar Pr</b>	390	496	529	746	886	870	212	240	249
<b>West Bengal</b>	410	479	445	727	973	869	214	244	212
<b>Andamans</b>	719	936	1076	868	1167	1472	342	485	465
<b>Chandigarh</b>	799	968	1467	912	1014	1522	450	432	499
<b>Dadra &amp; NH</b>	272	571	538	612	832	719	185	360	284
<b>Daman</b>	638	698	712	688	794	1013	580	340	421
<b>Delhi</b>	821	1405	1336	892	1469	1407	545	446	388
<b>Lakshadwip</b>	727	1002	951	837	1122	1368	446	687	581
<b>Pondichery</b>	394	446	515	575	664	797	194	273	263
<b>LIG States<sup>a</sup></b>	334	418	438	707	908	895	188	218	216
<b>HIG States<sup>a</sup></b>	401	523	636	753	939	1053	209	260	263
<b>All India</b>	365	467	497	730	925	955	197	236	228

Note: a - Low Income and High Income states are as defined in text.

Source: Author's calculations.

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 & 7). 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 during 1993-99 & 1999-04 respectively. Compared with 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.

Table 7  
Average Wage per Week by Occupation (in Rs per worker)

Occupation	All			Regular			Casual		
	1993	1999	2004	1993	1999	2004	1993	1999	2004
<b>Professionals</b>	807	1045	1709	1176	1557	1858	188	235	270
<b>Technical</b>	975	1254	1513	990	1270	1563	425	434	255
<b>Administrative</b>	1672	2288	2005	1830	2359	2255	483	305	240
<b>Clerical</b>	873	1114	1198	884	1129	1247	351	650	288
<b>Sales</b>	399	482	482	428	523	570	323	319	241
<b>Service</b>	418	569	573	492	671	660	200	262	274
<b>Farmers etc.</b>	175	203	213	281	348	410	170	197	193
<b>Production etc.</b>	361	458	450	521	562	575	222	315	271
<b>Transport</b>	560	643	669	707	777	829	307	375	368
<b>Labourers nec</b>	367	437	390	573	698	601	285	338	304
<b>All Occupations</b>	365	467	497	730	925	955	197	236	228

*Note:* Occupational Classes are One-digit codes of National Classification of Occupations 1968.

*Source:* Author's calculations.

#### IV. EMPLOYMENT-WAGE LINKAGE

While both employment and average wage 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 51 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. Among the occupational classes, Farming sector workers are mostly in the bottom wage classes (more than 80

per cent of them earning below Rs 50 per day). Among others, employment is skewed among the top wage classes for the Administrative workers and recently for the Professionals towards middle wage classes for the Technical, Clerical, and Transport workers; and towards the bottom wage classes for the Production and Service workers though the bias is shifting from bottom towards middle wage level jobs.

Table 8  
**Wage Workers distributed in Wage Classes**

Wage Classes	All			Regular			Casual		
	1993	1999	2004	1993	1999	2004	1993	1999	2004
<b>20 and below</b>	30.9	11.9	9.8	8.9	4.7	6.2	41.0	15.5	11.9
<b>21 – 50</b>	41.4	49.4	48.3	23.1	20.6	23.4	49.8	63.9	62.9
<b>51 – 100</b>	13.5	19.9	23.9	24.9	24.4	27.3	8.2	17.6	21.9
<b>101 – 249</b>	12.5	13.4	12.3	37.7	34.2	27.8	0.9	3.0	3.2
<b>250 – 499</b>	1.6	4.6	4.8	5.0	13.5	12.8	0.0	0.1	0.0
<b>500 and above</b>	0.1	0.9	0.9	0.3	2.7	2.6	0.0	0.0	0.0
<b>Bottom</b>	72.4	61.3	58.1	32.0	25.2	29.5	90.8	79.4	74.9
<b>Middle</b>	25.9	33.3	36.2	62.7	58.6	55.1	9.1	20.5	25.1
<b>Top</b>	1.7	5.5	5.7	5.3	16.2	15.4	0.1	0.1	0.1

*Note:* Bottom, Middle, and Top Wage Classes are Lowest two, Middle two, and Highest two wage classes respectively.

*Source:* Author's calculations.

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 and higher level jobs indicates that Wage Employment expansion during this period is not absolutely as distress a phenomenon as often apprehended. This trend 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. 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 workers in the bottom level jobs and a decline in the middle and top-level jobs. This perhaps is because of the distress expansion of regular employment in the LIG states along with declining real wage rates.

The structure of workforce within the wage classes is also changing. Share of casual workers for the middle level jobs has increased from 24 per cent to 41 per cent (Table 9) during 1993-99 period and to 47 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 different trends exhibited by the incidence of regular employment in the two groups of states.

Table 9  
**Share of Regular and Casual Workers in Different Wage Classes**

Daily Wage Class (in Rs)	1993		1999		2004	
	<i>Regular</i>	<i>Casual</i>	<i>Regular</i>	<i>Casual</i>	<i>Regular</i>	<i>Casual</i>
<b>20 and below</b>	9.0	91.0	13.1	86.9	23.4	76.6
<b>21 – 50</b>	17.6	82.4	13.9	86.1	17.9	82.1
<b>51 – 100</b>	58.1	41.9	41.2	58.8	42.3	57.7
<b>101 – 249</b>	95.1	4.9	85.3	14.7	83.8	16.2
<b>250 – 499</b>	98.1	1.9	99.1	0.9	99.5	0.5
<b>500 and above</b>	96.7	3.3	98.6	1.4	99.7	0.3
<b>Bottom</b>	13.9	86.1	13.8	86.2	18.8	81.2
<b>Middle</b>	75.9	24.1	58.9	41.1	56.4	43.6
<b>Top</b>	98.0	2.0	99.0	1.0	99.6	0.4
<b>All Wage Class</b>	31.4	68.6	33.5	66.5	37.0	63.0

**Wage Inequality  
(Gini Coefficient)**

*Note:* Bottom, Middle, and Top Wage Classes are Lowest two, Middle two, and Highest two wage classes respectively.

*Source:* Author's calculations. Gini Coefficients are estimated using World Bank's free poverty software POVCAL, available from <http://www.worldbank.org/lsmstools/povcal/index.htm>

Thus, the wage employment scenario that we perceive in the post-reform period 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. 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-employeds. 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 due to distress expansion of regular employment in the LIG states with falling real wage rate on one hand and decline of regular workers accompanied by a higher decline in casual jobs in the HIG states on the other. Thus while the flabs are being shred at the middle level (where regular middle level jobs are shifted to casual middle level jobs) and lower level (where lower wage level casual jobs are being outsourced to self employeds), more and more top honchos are being hired.

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

The wage employment scenario in the post-reform period is therefore marked by a substantial increase in wage employment, especially regular wage employment. Casual employment is found to be rising during 1993-99 and declining in absolute terms during 1999-04 period. However, incidence of casualisation has increased in the middle level jobs along with a gradual decline in mandays of work available for the casual workers. 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 1999-04 period however regular wage employment is declining in the HIG states along with a rise in both real wage rate and mandays of job available. In these states casual employment also is declining recently along with a rise in 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 marginally increasing wage rate. Since wage rates have already quite low in these states, especially for the casual workers, the employment expansion is no doubt a distress phenomenon. The transformation process evident in HIG states is also not observed here. 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.

### *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 both 1993 and 1999 are Assam, Bihar, Jammu & Kashmir, Madhya Pradesh, Manipur, Meghalaya, Orissa, Rajasthan, Tripura, and Uttar Pradesh. HIG states in both the years have been Andaman & Nicobar, Chandigarh, Delhi, Goa, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Maharashtra, Mizoram, Pondicherry, Punjab, Tamil Nadu. Andhra Pradesh, Sikkim, and West Bengal were in LIG in 1993 but came up to HIG in 1999. On the other hand, Arunachal Pradesh and Nagaland were in HIG in 1993 but went down to LIG in 1999.
- <sup>2</sup> Occupational Classifications are according to the One-digit codes of National Classification of Occupations (1968). The Ten classes are Professionals; Technical & related workers; Administrative workers; Executive & Managerial workers; Clerical & related workers; Sales workers; Service workers; Farmers, Fishers, Hunters & Loggers; Production & related workers; Transport Equipment operators; and, Labourers not elsewhere classified.
- <sup>3</sup> Subsequent sections deal with 1993 and 1999 data only as detailed data for 2004 are yet not available from NSSO.

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