WAGE RATE INDEX NUMBERS FOR THE YEAR 2014

INTRODUCTION

1

The Central Technical Advisory Council on Statistics in its meeting held in December, 1961, recommended that the State Statistical Agencies should explore the possibility of bringing out up-to-date data on wage rates, as thrown up by Occupational Wage Survey conducted by Labour Bureau and construct Wage Rate Indices at annual intervals in respect of industries covered under the Survey. The Occupational Wage Surveys aim at providing bench mark data on employment, wage rates and earnings in selected manufacturing, mining and plantation industries. The progress review conducted in 1967 revealed that none of the states, except West Bengal, made any progress in this regard. The National Commission on Labour (1969) also stressed the need for similar indices. Keeping in view the need for serial data on Wage Rate Indices, the work relating to the construction of Wage Rate Indices was entrusted to Labour Bureau. Based on the results of second round of Occupational Wage Surveys, conducted in 1963-65, the Bureau took up the compilation of Wage Rate Index Numbers, to begin with, for workers in twelve manufacturing industries with effect from 1969. Nine more industries (viz. three plantations, four mining and two manufacturing) were added to the list of industries for the compilation of these index numbers with effect from 1976. At present the Wage Rate Indices are being compiled and disseminated for 21 industries (14 manufacturing industries, 4 mining industries and 3 plantation industries) on base 1963-65=100. The fourteen employments selected in the manufacturing sector accounted for 67 per cent of the total employment in the manufacturing sector, four mining industries taken together accounted for nearly 95 per cent of the total employment in the mining sector and the three plantations taken together accounted for almost the entire employment in the plantation sector. Further, in each of these selected industries, the selected occupations taken together accounted for 75 per cent or more of the total employment in the industry. Thus, index numbers of wage rates depict movement of relative change in the wage rates over a period of time. Over the years same set of units/establishments do not submit the requisite wage rate data that go into the compilation of wage rate indices, which cause variation in the wage rate indices.

2. THE CONCEPT OF WAGE RATE

Wage Rate is generally defined as the price payable for working energy spent by a worker either during specified period of time or for a specified measure of performance. Wage Rate, therefore, includes only those components of earnings, which can be considered as reliable indicators of this price of working energy spent by a worker. In organised industrial sector in India, basic wage and dearness allowance, which is paid to compensate the loss in real wage due to inflation, are the two components of earnings, which reflect the Wage Rate. The other allowances such as house rent, medical allowances, shift allowance, bonus, gratuity, social security expenses, etc. are excluded from the definition of Wage Rate.

3 METHODOLOGY FOR CONSTRUCTION OF WAGE RATE INDEX NUMBERS

- 3.1 For the purpose of construction of wage rate index numbers, wage rate has been taken as the sum of basic wage and dearness allowance in respect of workers who receive both these components, while for other workers, the actual consolidated amount of earnings represent this wage rate.
- 3.2 The wage rate data are collected from the sample units in each of the 21 selected industries through mail questionnaire method. The reference period is the month of January of each year. The data is collected for adult workers. In case the data is not received in time, the nonresponding units are contacted by the field duty staff of the Bureau and the requisite data is collected.
- 3.3 The Bureau constructs the wage rate index numbers on the basis of the mean of the minimum and maximum wage rates in each occupation for each of the selected industries. For time rated workers with definite scale of pay, minimum wage rate means the sum of minimum point of the scale and the dearness allowance payable on that point, while maximum wage rate means the sum of maximum point of the scale and dearness allowance payable on that point. For all other workers, minimum and maximum wage rate represents the actual minimum and maximum consolidated amounts/earnings in an occupation. To derive per day wage rates, the monthly, fortnightly and weekly wage rates are divided by 26, 12 and 6, respectively.
- 3.4 The weights adopted for the construction of wage rate index numbers are the employment data in the respective occupation in each of the selected industries in the base period. The employment and wage rates for the base period have been derived from the results of the Second Occupational Wage Survey (1963-65).
- 3.5 The Wage Rate Indices are generated by using the Laspeyre's formula. The formula adopted for the construction of Wage Rate Index Numbers is given below:-

where,

Wage Rate Index for a stratum/industry.

 N_{i}^{o} Estimated employment of the jth occupation in the strata/industry as a whole during the base period.

Mean wage rate (i.e. mean of the minimum and maximum) of the jth R^{o}_{i}

occupation in the strata/industry in the base year.

 R^{1}_{i} Mean wage rate of the jth occupation in the strata/industry in the current

period in the sample establishments.

The industry level Wage Rate Index is obtained as the weighted average of indices at the Stratum level, weights being the base year employment in corresponding Stratum of the industry. Similarly, the General Index at all India level is derived as the weighted average of industry level indices, weights being the base period employment in corresponding industries.

4. MAIN OBSERVATIONS IN WAGE RATE INDICES, AVERAGE DAILY ABSOLUTE WAGE RATES AND AVERAGE DAILY REAL WAGE RATES AT 1960 PRICES.

4.1 Wage Rate Index Numbers

- 4.1.1 Index Numbers of Wage Rates for the year 2014 in respect of 21 industries comprising 14 Manufacturing, 4 Mining and 3 Plantation industries are presented in Table-1. To facilitate comparison, the Indices for the years 1969, 1976 and 2011 to 2014 are also given in the table.
- 4.1.2 It may be seen from Table I that All India Index Number of Wage Rates appreciated by 6.35 per cent.
- 4.1.3 Among the three sectors covered, the highest percentage rise was observed in Manufacturing Sector (7.87 per cent) in 2014 over 2013 followed by Plantation Sector (5.01 per cent). The Mining Sector has recorded the lowest per cent increase (4.49 per cent) in 2014 over 2013.

INTRA-SECTOR VARIATIONS

- 4.1.4 Among 14 Manufacturing Industries, the highest Wage Rate Index (17363.5) during 2014 was recorded in Railway Workshops followed by Cigarette Factories (10382.5). The lowest Index in this group was recorded in Silk Textiles (4566.1). The highest percentage increase in 2014 over 2013 was also registered in Woollen Textiles (25.80 per cent) followed by Jute Textiles (12.38 per cent).
- 4.1.5 Among four Mining Industries, the highest Wage Rate Index was recorded in Manganese Mines i.e., 18993.4 points, followed by Coal Mines 9283.2 points. When compared with the indices of 2013, the highest percentage increase in Wage Rate Index in this sector during 2014 was recorded in Manganese Mines (12.60 per cent) followed by Mica Mines (8.41 per cent). The lowest increase in Wage Rate Index was recorded in Iron Ore Mines (1.74 per cent).
- 4.1.6 In Plantation Sector, the Wage Rate Index during 2014 was recorded at 4670.4 When compared with 2013, the highest percentage increase during 2014 was recorded in Coffee Plantations (9.02 per cent) followed by Rubber Plantations (6.60 per cent)
- 4.1.7 Out of total 21 industries covered for compilation of indices, the Wage Rate Indices of only six Manufacturing industries viz. Cotton Textiles, Hydrogenated Oils, Match Factories, Smelting & Refining, Silk Textiles, Woollen Textiles and one industry each from Mining and Plantation i.e Mica Mines and Tea Plantations were lower as compared to Wage Rate Index of all industries combined i.e. 6835.4
- 4.1.8 Graphical presentation of the trend in Wage Rate Indices by Sectors is given in Exhibit I.

4.2 Average Daily Absolute Wage Rates

- 4.2.1 Average Daily Absolute Wage Rate is defined as the weighted average of the current years' wage rates, weights being the corresponding employment in base year in an occupation/Stratum/Industry. As the Wage Rate Index Number measures the relative changes in wage rates over a period of time, high or low Wage Rate Index in an industry does not necessarily indicate high or low wage rate in that industry as compared to other industries. To overcome this problem, statistics of Industry/ Stratum-wise Average Daily Absolute Wage Rates for the period 1963-65, 1969, 1976 and 2011 to 2014 are presented in Table II.
- 4.2.2 Among three sectors covered during 2014, the highest Average Daily Absolute Wage Rate was recorded in Mining Sector (Rs.398.82) followed by Manufacturing Sector (Rs.347.30) whereas the lowest Average Daily Absolute Wage Rate was in Plantation Sector (Rs.102.13).
- 4.2.3 During 2014, all India Average Daily Absolute Wage Rate stood at Rs.272.19. Out of 21 industries, Average Daily Absolute Wage Rate in five Manufacturing Industries viz. Cotton, Hydrogenated Oils, Match, Silk and Woollen, one Mining Industry i.e., Mica and all the three Plantation industries were lower than all India Average Absolute Wage Rate.
- 4.2.4 Among Manufacturing industries, the highest Average Daily Absolute Wage Rate was recorded in Railway Workshops (Rs.954.57), followed by Cigarette (Rs.509.19). The lowest Average Daily Absolute Wage Rate in this sector was reported at Rs.172.89 in Match Factories.
- 4.2.5 Among Mining industries, the highest Average Daily Absolute Wage Rate was reported in Coal Mines (Rs.416.74) whereas the lowest was in Mica Mines (Rs.123.25).
- 4.2.6 In Plantation Sector, the Average Daily Absolute Wage Rate varied between Rs. 95.00 in Tea Plantations and Rs. 229.45 in Rubber Plantations.
- 4.2.7 Graphical presentation of the trend in Average Daily Absolute Wage Rates by Sectors is given in Exhibit II.

4.3 Average Daily Real Wage Rates at 1960 Prices

4.3.1 Absolute Wage Rate indicates the overall wage, which a worker is getting for his services at the current price. However, it may not be a true indicator of living conditions of workers over a period of time, as it does not take into account the inflation rate. For obtaining the real value of wage, Absolute Wage Rate needs to discount the inflation rate. The Average Daily Real Wage Rates at 1960 prices for the year 'y' are calculated as follows:-

$$RW^{y} = \frac{{}^{1960=100}CPI^{1960}}{{}^{-----}} x AW^{y}$$

where,

RW^y = Real Wage Rate for the year 'y' at 1960 prices.

 AW^y = Absolute Wage Rate for the year 'y'.

 $_{1960=100}\text{CPI}^{1960} = \text{CPI Number for the year } 1960 \text{ with base } 1960=100.$

 $_{1960=100}$ CPI^y = CPI Number for the year 'y' with base 1960=100.

Average Daily Real Wage Rates at 1960 prices for the years 1963-65, 1969, 1976 and 2011 to 2014 are given in Table III.

- 4.3.2 During 2014, all India Average Daily Absolute Wage Rate at current prices was Rs.272.19, yet its real value at 1960 prices was only Rs. 4.83
- 4.3.3 Among three sectors covered, the highest Average Daily Real Wage Rate at 1960 prices was reported in Mining Sector (Rs. 7.07) followed by Manufacturing Sector (Rs. 6.16). In Plantation Sector, the Average Daily Real Wage Rate was reported as low as Rs. 1.81.
- 4.3.4 While comparing Average Daily Real Wage Rates over the years, it is observed that for all industries combined, the Real Wage Rate increased by 0.55 per cent per annum in 2014 over 1976 (i.e. last 38 years)
- 4.3.5 The Average Daily Real Wage Rate of all industries combined during 2014 depicts no change over the previous year.
- 4.3.6 Graphical presentation of the trend in Average Daily Real Wage Rates by Sectors is given in Exhibit III.

TABLE I
Wage Rate Index: 1969 - 2014(As in January) (Base: 1963-65 = 100)

sl. No.	Industry/Stratum							% Variation in 2014 over 2013
Α.	General Index (1-12)	150.5	324.5	6164.2	6534.5	6954.2	7496.7	7.80
	General Index (1-14)	-	320.6	6011.4	6373.4	6778.3	7312.0	
1.	General Index (1-14) Cotton Textiles	145.8	283.5	4225.6	4430.8	4688.7	4923.9	
	a. Howrah & Calcutta	162.4	366.2	4013.9	4165.1	4322.4		
	b. Coimbatorec. Bangalored. Ahmedabad	140.3	319.4	4292.0	4459.4	4900.2	5501.9	12.28
	c. Bangalore	129.4	283.7	4478.6	4649.0	4814.5	5520.2	14.66
	d. Ahmedabad	142.4	256.4	3529.0	3685.8	3801.6	3963.6	4.26
	a Milmhai & Silhilikh	1501	284.8	4252.8	4420.5	4595.4	4777.5	3.96
	f. Nagpur g. Indore h. Kanpur i. Residual Cement	140.4	305.5	3586.1	3728.1	3876.0	4030.2	3.98
	g. Indore	143.4	287.4	2946.8	3035.2	3126.3	3220.0	3.00
	h. Kanpur	134.5	290.5	3114.9	3209.1	3306.1		
	i. Residual	146.4	312.2	4553.2	4851.0	5234.1		
2.	Cement	160.7	410.1	6695.0	6776.7	7153.4	7520.5	
3.	Cigarette Factories	170.7	381.8	7493.7			10382.5	
4.	Hydrogenated Oils	136.5		4599.8		4978.2	5179.6	
5.	Jute Textiles	156.4		6755.5				
	Jute Textiles a. West Bengal b. Residual	155.6		6805.6				
	b. Residual	167.9	270 6	6094.2		6931.1		
6.	Electrical Machinery Match Factories Paper/Paper Products Railway Workshops Smelting & Refining Soap Factories Sugar a. Bihar	144.4	366.8	6108.1			6868.9	
7	Match Factories	148 3	259 4	4456.1			5045.4	
8	Paper/Paper Products	163 4	358 1	6416.4			8274.9	
9	Railway Workshops	149 0	314 4		14275.9			
10	Smelting & Refining	163 9	357 4		5314.6		5681.5	
11	Soan Factories	159.5	337.1		6386.8			
12	Sugar	150.5	376 6		8870.6		10069.1	
12.	a Rihar	163 5	411 1		10584.7			
	h IIttar Dradech	161 5	344.1		7653.3			
	a Pagidual	152.5	2/7 /		10409.1			
12	a. Bihar b. Uttar Pradesh c. Residual Silk Textiles a. Surat b. Amritsar c. Bhiwandi d. Bangalore e. Mumbai & Suburb f Residual	132.3	268.8				4566.1	
13.	2 Curat	_	200.0	4366.0		4884.7		
	a. Surat	_	272.7	3652.1			3990.8	
	D. Allificat	_	2/2.2	3329.7		3674.0	3638.5	3.00
	d Dangalore	_	226.3			5745.5	5886.4	2.45
	a. Mumbai Cubumb	_	20.5		3258.7			
	f. Residual	_	222.2		5153.9			
	Woollen Textiles	_	200.1		3666.0			
		-	201.2	3489.3	8939.1	30/0.4	40/0.9	25.80 4.49
	Mining Sector							
	Coal Mines	_			8674.3			
	Iron Ore Mines	_						1.74
	Manganese Mines	_			14025.8			
	Mica Mines	_						8.41
	Plantation Sector							5.01
	Coffee Plantations	-			7028.3			
	Rubber Plantations							6.60
21.	Tea Plantations				3572.2			
	a. North East India							
	b. South India				5804.2	6573.3	6569.9	-0.05
	 ll Industries				6016.1	6427.0	6835.4	6.35

Note: Industries from Sl. No. 13 to 21 were added in 1976.

TABLE II

Average Daily Wage Rates (Absolute) during 1963-65 to 2014 (Rs.)

Sl. Industry/Stratum	1963-65	1969	1976	2011	2012	2013	2014
A. Manufacturing Ind.(1-12)		7.28	15.58	294.10	310.96	330.70	356.26
Manufacturing Ind.(1-14)		-	15.39	286.56	303.03	322.07	347.30
1. Cotton Textiles	5.46	7.96	15.43	228.65	239.44	252.78	265.41
a. Howrah & Calcutta	3.76	6.11	13.65	150.95	156.63	162.55	168.70
b. Coimbatore	5.66	7.94	18.10	243.25	252.74	277.72	311.62
c. Bangalore	4.63	5.99	13.47	207.30	215.18	222.84	255.51
d. Ahmedabad	6.81	9.70	17.41	239.40	250.03	257.89	268.78
e. Mumbai & Suburb	6.27	9.41	17.85	266.78	277.30	288.26	299.69
f. Nagpur	5.30	7.44	16.18	189.94	197.45	205.29	213.46
g. Indore	5.12	7.43	14.72	150.84	155.37	160.03	164.83
h. Kanpur	5.12	6.89	14.73	158.31	163.09	168.02	173.06
i. Residual	4.51	6.60	14.05	204.86	218.26	235.50	245.73
2. Cement	4.50	7.23	18.47	301.52	305.20	322.16	338.69
3. Cigarette Factories	4.90	8.36	18.72	367.51	397.92	463.35	509.19
4. Hydrogenated Oils	5.11	6.98	13.25	235.04	244.51	254.38	264.67
5. Jute Textiles	3.68	5.76	14.18	248.77	269.47	282.50	317.59
a. West Bengal	3.71	5.77	14.61	251.95	272.94	286.08	322.98
b. Residual	3.39	5.69	12.58	206.77	223.63	235.17	246.40
6. Electrical Machinery	5.07	7.32	18.60	309.82	320.57	333.90	348.43
7. Match Factories	3.43	5.09	8.72	152.70	159.73	166.57	172.89
8. Paper/Paper Products	3.72	6.08	13.30	238.59	265.09	296.06	307.70
9. Railway Workshops	5.50	8.20	18.55	742.31	784.83	850.17	954.57
10. Smelting & Refining	5.17	8.47	18.47	261.11	274.61	283.92	293.57
11. Soap Factories	5.13	8.18	17.01	313.60	327.58	361.69	377.76
12. Sugar	3.33	5.30	12.56	276.79	299.14	322.58	339.64
a. Bihar	3.23	5.28	13.27	320.91	341.94	376.60	406.24
b. Uttar Pradesh	3.19	5.15	10.98	230.24	245.02	256.19	268.45
c. Residual	3.71	5.29	12.88	347.84	386.57	428.97	448.79
13. Silk Textiles	4.61	-	12.49	179.60	191.20	199.41	206.45
a. Surat	4.46	_	13.08	194.93	206.34	218.09	225.52
b. Amritsar	4.44	_	12.10	162.34	167.21	172.22	177.39
c. Bhiwandi	4.92	_	12.56	163.76	168.67	173.73	178.94
d. Bangalore	2.65	_	6.00	143.14	150.26	157.01	160.86
e. Mumbai & Suburb	5.59	_	16.56	175.84	182.09	188.30	193.79
f. Residual	3.99	_	9.47	183.38	205.60	214.77	224.75
14. Woollen Textiles	5.06		13.00	175.11	184.08	194.86	246.69
B. Mining Industries	4.18	_	16.57	354.87	367.86	383.59	398.82
15. Coal Mines	4.49	_	18.13	376.46	389.40	402.82	416.74
16. Iron Ore Mines	3.06					271.91	276.65
17. Manganese Mines	2.04	_	6.42	276.77	287.07	345.24	389.87
18. Mica Mines	2.23	_	6.30	98.97	105.46	113.68	
C. Plantation Industries	2.32	_	4.47	87.98	89.20	97.32	102.13
19. Coffee Plantations						125.32	
20. Rubber Plantations							
	2.42						
a. North East India							
	2.06	_	6.89	95.73	119.34	135.16	
All Industries	3.87	7.28	11.85	230.25	240.91	255.65	

Note: Industries from Sl. No. 13 to 21 were added in 1976.

TABLE III

Average Daily Real Wage Rates at 1960 Price during 1963-65 to 2014 (Rs.)

Sl. Industry/Stratum	1963-65	1969	1976	2011	2012	2013	2014
A. Manufacturing Ind.(1-12)		4.16	5.26	6.71	6.55	6.25	6.32
Manufacturing Ind.(1-14)	3.92	_	5.20	6.54	6.38	6.08	6.16
1. Cotton Textiles	4.40	4.55	5.21	5.22	5.04	4.77	4.71
a. Howrah & Calcutta	3.03	3.49	4.61	3.44	3.30	3.07	2.99
b. Coimbatore	4.56	4.54	6.11	5.55	5.32	5.24	5.53
c. Bangalore	3.73	3.42	4.55	4.73	4.53	4.21	4.53
d. Ahmedabad	5.49	5.54	5.88	5.46	5.27	4.87	4.77
e. Mumbai & Suburb	5.06	5.38	6.03	6.09	5.84	5.44	5.32
f. Nagpur	4.27	4.25	5.47	4.33	4.16	3.88	3.79
g. Indore	4.13	4.25	4.97	3.44	3.27	3.02	2.92
h. Kanpur	4.13	3.94	4.98	3.61	3.43	3.17	3.07
i. Residual	3.64	3.77	4.75	4.67	4.60	4.45	4.36
2. Cement	3.63	4.13	6.24	6.88	6.43	6.08	6.01
 Cigarette Factories 	3.95	4.78	6.32	8.38	8.38	8.75	9.03
4. Hydrogenated Oils	4.12	3.99	4.48	5.36	5.15	4.80	4.69
5. Jute Textiles	2.97	3.29	4.79	5.68	5.68	5.34	5.63
a. West Bengal	2.99	3.30	4.94	5.75	5.75	5.40	5.73
b. Residual	2.73	3.25	4.25	4.72	4.71	4.44	4.37
6. Electrical Machinery	4.09	4.18	6.28	7.07	6.75	6.31	6.18
7. Match Factories	2.77	2.91	2.95	3.48	3.36	3.15	3.07
8. Paper/Paper Products	3.00	3.47	4.49	5.44	5.58	5.59	5.46
9. Railway Workshops	4.44	4.69	6.27	16.94	16.53	16.06	16.93
10. Smelting & Refining	4.17	4.84	6.24	5.96	5.78	5.36	5.21
11. Soap Factories	4.14	4.67	5.75	7.15	6.90	6.83	6.70
12. Sugar	2.69	3.03	4.24	6.32	6.30	6.09	6.02
a. Bihar	2.60	3.02	4.48	7.32	7.20	7.11	7.21
b. Uttar Pradesh	2.57	2.94	3.71	5.25	5.16	4.84	4.76
c. Residual	2.99	3.02	4.35	7.94	8.14	8.10	7.96
13. Silk Textiles	3.72	_	4.22	4.10	4.03	3.77	3.66
a. Surat	3.60	_	4.42	4.45	4.35	4.12	4.00
b. Amritsar	3.58	_	4.09	3.70	3.52	3.25	3.15
c. Bhiwandi	3.97	_	4.24	3.74	3.55	3.28	3.17
d. Bangalore	2.14	_	2.03	3.27	3.16	2.97	2.85
e. Mumbai & Suburb	4.51	_	5.59	4.01	3.84	3.56	3.44
f. Residual	3.22	_		4.18			3.99
14. Woollen Textiles	4.08	_		4.00		3.68	
B. Mining Industries	3.37		5.60	8.10	7.75	7.24	
15. Coal Mines		_		8.59		7.61	
16. Iron Ore Mines	2.47			5.66			
17. Manganese Mines	1.65		2 17	6.31	6.05	6.52	
18. Mica Mines	1 80	_		2.26			
C. Plantation Industries		_		2.01			
19. Coffee Plantations		_		2.47		2.37	
20. Rubber Plantations				3.79		4.07	
	1.95			1.91		1.72	
a. North East India						1.53	
b. South India	1.66	_	2.33	2.18	2.51	2.55	2.40
All Industries	3.12	4.16	4.00	5.25	5.07	4.83	4.83

Note: Industries from Sl. No. 13 to 21 were added in 1976.





