

TREND OF WAGES IN INDIA (1873-1900)

D. BHATTACHARYA*

1.1 The purpose of this paper is to show the trend of money-wages and real-wages in India during the last quarter of the nineteenth century. The bulk of the data used here are those obtained in the official series of prices and wages in India issued from 1861.¹ Wage rates for three undermentioned categories of workers are available systematically from 1873 onward.

- (1) carpenter, blacksmith, and mason, representing skilled worker,
- (2) syce or horse keeper, representing domestic servant, and
- (3) agricultural labourer representing unskilled worker.

1.2 Commenting on the method of collection of the above-mentioned official statistics, Shri K. L. Dutta² said, "The official district return of wages dates from 1873. In that year, the Government of India directed that District officers should submit half-yearly returns 'showing the average wages per month of unskilled and skilled labour — an able bodied agricultural labourer, and a syce or horse keeper as representative of a domestic servant being taken as type of the former and a common mason, carpenter or blacksmith being taken as a type of the latter. Information collected by tahsildars, mamladars, or, as in Bengal, by police officers in charge of thanas, forms the basis of the returns submitted by Collectors, and these after examination in the office of the Director of Agriculture or as in Madras, by the Board of Revenue, are published in the provincial Gazette. From these half-yearly returns, a series of comparative figures for selected (but not typical) districts in each province have been published annually in the "Prices and Wages" since 1884 together with the rates in the initial year 1873". The limitations of the series under reference will be discussed later on.

2. *The all-India wage rate*

2.1 Table 1 below gives the average all-India wage rate from 1873 to 1900 for three categories of workers mentioned in para 1.1 and 1.2. Columns (3), (5), (7) show their money-wages at current prices.

* The author is indebted to some of his colleagues for assistance and advice in processing and interpreting the data at all stages.

¹ India, Prices and wages in India, 1861-1911.

² Dutta, K. L., Report on an enquiry into the rise of prices, Chapter III. Calcutta, 1914.

TREND OF WAGES IN INDIA (1873-1900)

These all-India averages were obtained as simple averages of provincial figures for the half-year ending 31 December. Columns (4), (6) and (8) give the corresponding real-wage figures obtained by deflating the money wage series by the price index in column (2). Column (9) shows the weighed averages of columns (3), (5) and (7). The weights are the respective all-India population supported by these occupations in 1891 as per census. For syce, we have taken the population under "grooms, coachmen, dog boys and C. _____" (suborder 14, No. 75 in the census classification of 1891). Column (10) is obtained from column (9) by deflation, using column (2). The price-index used was the all-India index prepared by the Indian

Table 1 : AVERAGE RATES OF MONEY WAGE AND REAL WAGE IN INDIA* :
1873-1900 (Rs. per month)

Year	Price index	Carpenter‡		Syce		Agr. labourer		Pooled	
		Money wage	Real wage	Money wage	Real wage	Money wage	Real wage	Money wage	Real wage
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1873	1.00	13.21	13.21	5.88	5.88	5.30	5.30	6.83	6.83
1874	1.00	13.07	13.07	5.87	5.87	5.31	5.31	6.82	6.82
1875	0.91	13.65	15.00	5.99	6.58	5.37	5.90	6.98	7.67
1876	0.97	13.46	13.88	5.93	6.11	5.52	5.69	7.06	7.28
1877	1.44	13.18	9.15	6.00	4.17	5.51	3.83	7.00	4.86
1878	1.74	13.38	7.69	5.98	3.44	5.44	3.13	6.98	3.44
1879	1.60	13.98	8.74	6.05	3.78	5.61	3.51	7.23	4.52
1880	1.18	14.36	12.17	6.08	5.15	5.55	4.70	7.26	6.15
1881	0.96	13.93	14.51	6.13	6.39	5.41	5.64	7.06	7.35
1882	0.95	14.39	15.15	6.12	6.44	5.58	5.87	7.29	7.67
1883	0.95	13.67	14.39	6.10	6.42	5.50	5.79	7.09	7.46
1884	0.99	14.62	14.77	6.16	6.22	5.54	5.60	7.30	7.37
1885	1.00	14.89	14.89	6.12	6.12	5.50	5.50	7.32	7.32
1886	1.05	14.94	14.23	6.09	5.80	5.52	5.26	7.35	7.00
1887	1.17	15.38	13.15	6.14	5.25	5.51	4.71	7.42	6.34
1888	1.23	15.41	12.53	6.18	5.02	5.66	4.60	7.55	6.14
1889	1.19	15.77	13.25	6.25	5.25	5.68	4.77	7.64	6.42
1890	1.21	15.97	13.20	6.24	5.16	5.79	4.79	7.76	6.41
1891	1.37	16.31	11.91	6.24	4.55	5.79	4.23	7.83	5.72
1892	1.48	16.22	10.96	6.37	4.30	5.90	3.99	7.90	5.34
1893	1.29	16.52	12.81	6.48	5.02	5.87	4.55	7.93	6.15
1894	1.14	16.36	14.35	6.39	5.61	6.03	5.29	8.03	7.04
1895	1.20	16.41	13.67	6.66	5.55	5.93	4.94	7.96	5.63
1896	1.55	16.14	10.41	6.73	4.34	6.03	3.89	7.99	5.15
1897	2.09	16.06	7.68	6.52	3.12	6.18	2.96	8.09	3.87
1898	1.39	16.51	11.88	6.69	4.81	6.22	4.47	8.21	5.91
1899	1.37	16.01	11.69	6.65	4.85	6.10	4.45	8.02	5.85
1900	1.92	16.58	8.64	6.90	3.59	6.33	3.30	8.32	4.33

* Vide para 2-1 for explanation

‡ Includes mason and blacksmith

D. BHATTACHARYA

Department of Statistics, being the unweighed price index of food grains with 1873=100. These indices were compiled from "Index Number of Indian Prices, 1861-1918" issued by the Department of Statistics, India.

3. *The trend in wage rate*

3.1 Almost a slow and steady rising tendency in money wage rate was noted in the combined series in the previous table, a tendency which is also, more or less, with little deviation here and there, may be noticed in the wage rate of individual categories of workers. This, however, is not true of the trend of real wages. For the sake of convenience, the real wage figures of table 1 are presented as indices (1873=100) in Table 2.

Table 2 : INDEX OF ALL-INDIA REAL WAGE RATE
(1873 = 100)

<i>Year</i>	<i>Carpenter*</i>	<i>Sycc</i>	<i>Agr. labour</i>	<i>Pooled</i>
(1)	(2)	(3)	(4)	(5)
1873	100	100	100	100
1874	99	100	100	100
1875	114	112	111	112
1876	105	104	107	107
1877	69	71	72	71
1878	58	59	59	50
1879	66	64	66	66
1880	92	88	89	90
1881	110	109	106	108
1882	115	110	111	112
1883	109	109	109	109
1884	112	106	106	108
1885	113	104	104	107
1886	108	99	99	102
1887	100	89	89	93
1888	95	85	87	90
1889	100	89	90	94
1890	100	88	90	94
1891	90	77	80	84
1892	83	73	75	78
1893	97	85	86	90
1894	109	95	100	103
1895	103	94	93	97
1896	79	74	73	75
1897	58	53	56	57
1898	90	82	84	87
1899	88	85	84	86
1900	65	61	62	63

* Includes mason and blacksmith

TREND OF WAGES IN INDIA (1873-1900)

3.2 It is evident that the real wage rate fluctuated violently over the period and it is not possible to assert definitely about any trend in the series. If, however, the years (1877-79) of the severe famine are excluded, one may speak of marked declining trend from 1886 onward. A fluctuation involves a considerable hardship. During the entire period (1873-1900), real wages many times fell below 25% of the average rate of the period as may be seen below.

Table 3 :

<i>Categories of workers</i>	<i>Average real wage (Rs. per month)</i>	<i>No. of years when real wage was below 25% of average</i>
(1)	(2)	(3)
Carpenter, etc.	12.39	5
Sycc. etc.	5.17	4
Agricultural labourer	4.71	4
Combined	6.18	4

3.3 An observation of the series of real wage rate tends to show that (1) real wages of all the three categories moved in the same direction over the period, and it appears quite likely, because, real wage moves in the opposite direction of prices, (2) wages of the skilled labour remained relatively higher, (3) wages of the agricultural labour and syce remained lower in course of movement compared to that of skilled workers.

3.4 It is evident that real wages went far below the average quite frequently in spite of a wellknown expansion of employment-potential economic activities in the sphere of railway construction, public works, plantation, industries like jute and cotton textiles, and other manufactures. These new employment opportunities were therefore not quite significant : firstly, the number employed in these activities was a very small fraction of the total labour force and secondly, due to a decline in traditional crafts, the pressure in the agricultural labour market, forming bulk of unskilled labour force, was high. But these alone probably do not explain the sharp decline over years.

4. *Regional movement in wages and prices*

4.1 Shri K. L. Dutta rejected bulk of the data compiled in the "Prices and Wages in India" as unreliable not only on the ground that it is difficult to count the remuneration of agricultural labourers who are paid in kind and otherwise as well as on the ground of faulty method

D. BHATTACHARYA

of compilation, but also he quoted, in support of his view, a number of officials who went to say that *the decline recorded in the real wages was unreal.*

4.2 We are going to quote a few evidences to elaborate the situation. Writing in 1887,³ Mr. F. A. Nicholson said on Coimbatore, "The position of labourer is very precarious, his ranks are increased not merely by multiplication from within, but by additions from ryot class above, and from those artisan castes or classes whose trade has been ruined by external competition (weavers) or who find insufficient work in their own calling; hence they include the rapidly increasing surplus population of the ryot and artisan castes as well as the ordinary labourer classes. Omitting artisans and ryots, these classes numbered 774,369 in 1871 and 665,468 in 1881; the decrease of 118,901 is more than the total decrease for the district, showing that famine fell almost entirely on these classes". Wage rate given by Nicholson is similar to those obtained in the present series. Quoting Buchanan and Grant, he said, wage rate of agricultural labourers did not differ much from that at the beginning of the century, although, the post-famine years marked a rise in wages owing to a scarcity of labourers. 4.3 In Orissa district⁴ "the cost of the necessaries of life has increased even more than the rate of wages, and the figures [below] will show how enormously the price of rice, the staple food of the people, has risen during the last century in Orissa".

Table 4 :

Prices of rice in seers per rupee	
Year	Rice in srs.
1837—1851	49·8
1852—1866	42·7
1867—1881	24·8
1882—1896	19·8
1896—1905	17·7

4.4 "It will be seen that the greatest increase took place after 1866, and it is indeed common saying that the high prices which commenced during the famine have never left the land". The author mentioned the effect of public works and railway construction on prices and said that prices were no longer dependent on local conditions only.

³ Nicholson, F.A., *Manual of the Coimbatore District in the Presidency of Madras*, Madras, 1887, pp. 270-272.

⁴ *Bengal District Gazetteer*, Puri, Calcutta, 1908, p. 175.

TREND OF WAGES IN INDIA (1873-1900)

4.5 In the district of Shahabad,⁵ "on the whole, there has been a rise in prices of labour during the last 30 years, which is probably due to a great extent to such special causes as the construction of canals and more recently, of the Mughalsarai-Gaya line of railway. Before the opening of the canal works, masons, carpenters and blacksmiths received three to four annas a day; but the demand for labour created by this scheme resulted in a considerable rise of wages". The author is, however, of the view that during this period rural wage rate remained stationary.

4.6 In a non-rice eating area in Western India like Bhopal,⁶ both prices of cereals and wages fluctuated very sharply.

4.7 Orissa famine of 1866 had its impact felt in the Northern and Eastern India. In the district of Tipperah,⁷ rice sold at Rs. 0.50 per maund in 1850, but the price rose to Rs. 5 in 1866 due to Orissa famine and subsequently reached a price of one rupee for thirteen seers. In the same district, a blacksmith or carpenter received a wage @ Rs. 0.50 per day, i.e. at a double rate of 1850, but rice sold Rs. 0.50 per maund in 1850 and Rs. 1.50 in 1870, i.e. prices increased three times while wages doubled. At Chandpur, there had been a considerable rise in wages, but it was less than that of the prices of food.

5. All-India trend of wages

5.1 There occur well thought-out passages about the trend of wages under review in Buchanan.⁸ "Wages in general rose markedly, especially in certain areas, about the time of the first establishment of factories, that is, just after the middle of the century. One authority states that, in the neighbourhood of railways, the wage of coolies (representing unskilled labour) and of carpenters (representing skilled labour) doubled between 1830 and 1860.⁹ The increase appears, however, to be local and temporary¹⁰ depending upon such conditions as the establishment of tea and coffee plantations, the building of railways, the starting of factories and the opening of mines, besides numerous activities undertaken by the Government after the Mutiny and the subsequent extension of its rule".

5.2 "In 1875, the government began to collect wage data, although for a somewhat heterogeneous group of workers, and with a wholly

⁵ Bengal, *Bengal District Gazetteer*, Shahabad, Calcutta, 1906, p. 85.

⁶ Central India, *Bhopal State Gazetteer*, Vol. III, Calcutta, 1908, pp. 156-157.

⁷ Bengal, *Eastern Bengal District Gazetteer*, Tipperah, by J. E. Welester, I.C.S. Allahabad, 1910.

⁸ Buchanan, D. H., *The development of capitalistic enterprise in India*.

⁹ Sir Bartle Frere, quoted by N. A. Moos, *Parl. papers*, 1892 XXXVI, Pt. V.cd. 6796-XI, p. 134.

¹⁰ Dadabhai Naoroji, *The Poverty of India*, London, 1901, p. 62.

D. BHATTACHARYA

inadequate organisation. These show that wages for both agricultural and skilled labour *remained remarkably stable* during the eighteen years, 1873-1891".

5.3 "Such statistics as are available for the period and up until 1895 indicate that there was a slight rise in factory wages, although other wages, such as those paid by the British Indian Steam Navigation Company to sailors, and those by the government to its factory hands, remained in the majority cases almost unchanged".

5.4 Buchanan's observation confirms generally the trend obtained from the money wage series presented earlier. In making a further comment on the trend, he said, according to government figures, wages for the coolies and carpenters, just referred to as having doubled between 1830 and 1860, were slightly less in 1892 than in 1860, whereas wages in cotton and jute mills remained at about the same level since 1860".

5.5 Indian Currency Committee, 1893,¹¹ stated that, "down to a comparatively late date, it was generally believed that, notwithstanding a fall in the gold value of silver, prices in India had been practically unaltered, but the evidence before us points to the conclusion that during recent years the silver price of Indian produce has risen. If *as experience shows*, wages respond more slowly to the alternation of the value of the standard, this rise in the price of produce must have been prejudicial to the wage earning classes".

5.6 From the evidence presented above, it appears that money wage increased during the period under review to an appreciable extent. The trend of real wage is a function of price level with the assumption that the relative weight of food articles in the family budget of the workers under consideration remained constant during the period under review. It is well known that food articles alone is a good indicator of the overall consumers' price index.

5.7 From the series of micro-regional evidence presented in section 4, we have noted that expanding economic activities resulted in a demand for labour in selected sectors e.g. railway and canal construction, plantation, textiles, etc. But the extent of demand was not perhaps quite significant.

5.8 Famines account partly for the fluctuation in prices. "The period 1877-80 included the great famine of 1877-79 in Western and Southern India. In 1892 again there was prolonged drought in several districts of Madras as well as in some other parts of India. . . . It will be observed that the rise of prices is never confined to the tracts comprising the actually distressed area. In most cases drought extends to an area of varying width beyond the tracts most intensely affected,

¹¹ Great Britain, Indian Currency Committee, Report of the Committee, London, 1893, p. 13.

TREND OF WAGES IN INDIA (1873-1900)

and supplies for that area, as well as for the tracts suffering from complete failure of crops and actual famine, are required on a large scale from still more distant regions which have supplies to spare. Practically, experience shows that occurrence of a great famine over a considerable area has the effect of raising the level of prices more or less all over the continent".¹² This perhaps explains at least partly the violent fluctuations in prices as well as in real wages over the period.

5.9 There occurred a general fall in the value of money. Interpreting the data presented in the "Statistical Atlas of British India", its compilers said, "until about 1885 it may be said that the general normal level of prices taking the average of prices 1871-75 as that level, had not on the whole moved up. Since then, however, there had been a very marked upward movement, and during the last decade (1891-1900-D.B.) prices generally ranged far above the datum level of 1871-75, the increase being represented for rice from 40 to 60 per cent, for wheat as much the same rate, and for jowar and bajra at from 20 to 40 per cent. It is not the case, therefore, that the rupee has maintained its purchasing power, on the contrary, its purchasing power has largely declined".¹³

5.10 The same document simultaneously asserts that "it is reasonable to draw the inference that the general condition of the people has greatly improved that they are able to live and thrive under a range of prices which in former years would have indicated that the point of destitution and starvation had been reached. This inference is confirmed by the range of wages which have increased on the whole in at least as great a proportion as prices".

5.11 The views expressed above are, however, not entirely corroborated by facts and observations of contemporary Indian writers. Writing on famines and poverty of India, Romesh Dutta said, "amidst signs of progress and prosperity from all points of the Empire, India alone presented a scene of poverty and distress. A famine, the most intense and most widely extended yet known, desolated the country in 1897... The famine was not over till 1898. There was a pause in 1899. A fresh famine broke-out in 1900 over a large area... the famines, though terrible in their death rate, are only an indication of a greater evil — the permanent poverty of the Indian population in ordinary years. The food supply of India, as a whole, has never failed. Enough food was grown in India, even in 1897 and 1900, to feed the entire population. But the people are so resourceless, so absolutely without any savings, that when crops fail within any area, they are unable to buy food from neighbouring provinces rich in harvests. The

¹² Great Britain, *Statistical Atlas of British India*, 1895, 1897, p. 42.

¹³ *Ibid.*

failure of rain destroys crops in particular areas, it is the poverty of people which brings on severe famines".¹⁴

5.12 Dadabhai Naoroji also attributed the rise in prices to scarcity and bad season and said "such rise will not be regarded by anybody as a sign of prosperity, . . ." With regard to wage trend, Naoroji quoted official data to show that wages of unskilled labour in Bengal remained at the same level in 1830-31 and 1866-67.¹⁵

5.13 Another indicator of a rise in prices was the fall in the value of rupee. A fall in the value of rupee might have been beneficial to export trade, but it is agreed that a resultant rise in prices tells adversely on the wage earning class. European officials actually were to a some extent compensated, but the Indians were not.

5.14 Certain disturbing factors were noted by the Superintendents of Census Operations. Mr. E. A. Gait, writing on the trend of population in 1911, wrote that "there seems to be no doubt that the number of persons who live by cultivation is increasing at a relatively rapid rate. On the one hand, the rise of the prices of foodgrains has made agriculture more profitable, while, on the other, the profit of various artisan classes have diminished, owing to the growing competition of machine-made goods, both locally manufactured and imported, with the result that these classes show a growing tendency to abandon their traditional occupation in favour of cultivation".¹⁶

6. *Limitations of the series*

6.1 Data presented on wages and prices suffer from more than one shortcomings. It had been pointed out that in a large number of cases, wages were paid in kind at least partly and it is unlikely that such wage elements always entered into the returns compiled by the collectors. Mr. K. L. Dutta is justified in his criticism of the series on many counts.

6.2 An examination of the mean deviation of regional indices tends to show that between regions, disparities in wage rate shows a clear increase for common mason, carpenter or blacksmith presumably due to a rise in prices of skilled labour in certain areas, an increase at the end of period for syce or horsekeeper, and practically no trend but only oscillations in agricultural labourer's wage involving a fluctuation which, is, presumably in turn dependent on a cycle of good and bad seasons, famine and scarcity.

6.3 The following table shows the mean deviation (round 100) of region-wise indices of wages. The all-region average was taken as

¹⁴ Dutt, Ramesh, *The Economic History of India*, Vol. II, New Delhi, 1960, pp. V-VI.

¹⁵ Naoroji, Dadabhai, *Poverty in India*, London, 1880, pp. 70, 72.

¹⁶ *Census of India*, 1901, Vol. I, Report, p. 413.

TREND OF WAGES IN INDIA (1873-1900)

100, and the averages of different regions were expressed as percentages. The mean deviation of such percentages from 100 has been shown in the table. This measures the disparity between regional averages in a relative sense, relative to overall average. Rise in wages were generally local and probably, therefore, is not reflected in provincial or all-India series.

Table 8 : MEAN DEVIATION (ROUND 100) OF REGION-WISE INDICES OF WAGE WITH ALL-INDIA AVERAGE = 100

Year	Mean deviation by categories		
	Common mason, carpenter or blacksmith	Sycc or horse-keeper	Able-bodied agricultural labourer.
(1)	(2)	(3)	(4)
1873	22.33	14.33	20.17
1874	20.50	15.00	19.50
1875	24.00	14.83	23.17
1876	21.50	15.17	20.17
1877	21.83	14.50	23.50
1878	20.67	15.00	23.50
1879	23.67	16.33	26.33
1880	24.17	16.33	27.00
1881	23.17	15.00	25.67
1882	26.17	15.33	27.50
1883	33.50	15.67	26.00
1884	25.83	17.00	26.67
1885	27.50	16.83	24.67
1886	25.50	15.00	26.17
1887	24.83	15.00	26.17
1888	25.17	14.50	22.50
1889	25.83	16.50	23.67
1890	28.50	16.50	24.17
1891	26.33	17.67	25.67
1892	25.50	13.83	21.67
1893	24.50	15.00	21.33
1894	23.50	14.17	22.33
1895	26.83	17.83	25.00
1896	27.67	18.00	28.17
1897	26.00	18.00	30.67
1898	31.00	19.17	30.17
1899	28.67	18.00	25.00
1900	23.00	19.33	24.50

Summary

The Government of India in 1873 directed the District Officers to submit half yearly returns of wages of an agricultural labourer and syce or horsekeeper representing unskilled labour and of a common mason, carpenter or blacksmith as representative of skilled labour. This series, together with similar data obtained in district gazetteers, parliamentary papers, have been used to obtain the trend of money and real wages in India. Characterised by a sharp fluctuation, real wages tend to fall in the last two decades of the nineteenth century in spite of an expansion of economic activities.

सारांश

भारत में मजदूरी की उपनति: (१८७३-१९००)

डॉ. भट्टाचार्य

अकुशल श्रमिकों के रूप में खेतीहर मजदूरों और साईंसों, तथा कुशल श्रमिकों के रूप में राजगीरों, बढइयों और लुहारों की मजदूरी की दरों के अर्द्धवार्षिक विवरण भेजनेका आदेश १८७३ में हिंदुस्तान सरकार ने जिला अधिकारियों को दिया था. इन विवरणों के आंकडे, जिला मज्दोथर, संसदीय कागजात आदि से संकलित न्यास को हिंदुस्तान में प्रचलित नकद और वास्तविक मजदूरी^१ की उपनति से परिचय पाने के लिए प्रयुक्त किया गया. आर्थिक गतिविधियों के विस्तार के बावजूद, १९ वीं शताब्दी के अंतिम दो देशकों में वास्तविक मजदूरी में तीव्र विचरण^२ रहा और मजदूरी घटनेकी प्रवृत्ति रही.

१. उपनति - trend
२. वास्तविक मजदूरी - real wages
३. विचरण - fluctuation