

Wages of Agricultural Labourers in Uttar Pradesh

A Note

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It has been argued that between 1956-57 and 1970-71 real wages of agricultural workers rose in all states, with the exception of West Bengal. This rise has been attributed to the impact of the so-called Green Revolution.

The data presented in this note shows, however, that in one of the main Green Revolution regions, viz, western UP, real wages showed no tendency to rise over the period 1959-60 to 1973-74. What is more, after 1970-71, real wages declined steadily.

In a recent article,¹ Deepak Lal has argued that, between 1956-57 and 1970-71, real wages of agricultural labourers rose in all states of India, with the exception of West Bengal, for which adequate data were not available. In his analysis, Uttar Pradesh is one of the few states where real wages increased substantially, particularly between 1964-65 and 1970-71. He attributes this increase largely to the impact of the so-called Green Revolution. In this paper we shall argue that other evidence available from Uttar Pradesh refutes his hypothesis.

Deepak Lal's findings are based on the data collected by the National Sample Survey Organisation (NSS) for the years 1956-57, 1964-65 and 1970-71. It is contended that the NSS data are superior to the data compiled by the Ministry of Agriculture and published every year in *Agricultural Wages in India*² (AWI), which have been used in earlier studies on rural wages.³ It is true that the AWI data are not very reliable as the coverage is inadequate. In Uttar Pradesh, for instance, statistics are collected from only two villages in each divisional headquarter making a total of about 22 villages in the entire state. The NSS data, on the other hand, are based on 624 sample villages for Uttar Pradesh.⁴ However, the major limitation of the NSS data is that it is available only for three years, and, given the yearly variations in wage-rates, an estimation of trends on the basis of NSS figures alone is far from accurate.

For Uttar Pradesh there is another source, the *Quarterly Bulletin of Statistics*, published by the Directorate of Economics and Statistics, Government of Uttar Pradesh, which, in our view, is the most reliable, both in terms of

coverage and the time horizon over which data are available. Until 1966-67, the coverage was relatively small; information was collected from only two villages in each of the 54 districts. But in 1966-67 the sample was enlarged. A new series was introduced with data on wage-rates from one village in every community development block, within a radius of eight kilometres from the block headquarters. Given that in 1966, Uttar Pradesh had 678 development blocks,⁵ the coverage is about the same as under the NSS series. Moreover, in the Government of Uttar Pradesh publication, annual wage-data are available from 1955-56 to 1973-74.

Table 1 sets out the money wage-rates, consumer price indices and real wage-rates of agricultural labourers in Uttar Pradesh between 1955-56 and 1973-74. Money wage-rates are based on the new series started in 1966-67. As wage data are available under both the old and new series for 1966-67, by splicing we have converted the old series in terms of the new one.

Between 1959-60 and 1973-74, while money wages increased by 8.5 per cent per annum, real wages increased by only 1.2 per cent, which was statistically significant at 5 per cent level of probability. However, from these trends one should not hasten to the conclusion that the Green Revolution has had a favourable impact on real wages *via* the demand effect. In fact, a close examination of Table 1 reveals that after 1970-71, real wages declined steadily. Let us further examine this aspect of the problem.

Table 2 presents a region-wise breakdown of money wage-rates, consumer price indices and real wage-

rates. As is well known Western Uttar Pradesh has been the heartland of the Green Revolution, apart from Punjab and Haryana, where wheat output has increased at a phenomenal rate since the late 1960s. Eastern and Central Uttar Pradesh have remained relatively backward. Between 1959-60 and 1973-74 the compound rates of growth of real wages were 0.9 per cent per annum for Western Uttar Pradesh and -0.6 per cent for Central Uttar Pradesh, but neither of these growth rates were statistically signifi-

TABLE 1: AVERAGE DAILY MONEY WAGE-RATES, CONSUMER PRICE INDICES AND REAL WAGE-RATES OF AGRICULTURAL LABOURERS, IN UTTAR PRADESH BETWEEN 1955-56 AND 1973-74

Year	Money Wage-Rates (Rs. per day)	Agricultural Labour Consumer Price Index 1957-58 = 100	Real Wage-Rates (Rupees)
1955-56	0.79		
1956-57	1.03		
1957-58	0.95	100.0	0.95
1958-59	1.00	na	na
1959-60	0.99	106.5	0.93
1960-61	1.03	108.8	0.95
1961-62	0.98	109.3	0.90
1962-63	1.07	111.3	0.96
1963-64	1.09	129.3	0.84
1964-65	1.49	176.6	0.84
1965-66	1.75	182.2	0.96
1966-67	2.08	233.9	0.89
1967-68	2.38	256.1	0.93
1968-69	2.35	204.8	1.15
1969-70	2.44	222.6	1.10
1970-71	2.45	212.6	1.15
1972-73	2.98	267.0	1.12
1973-74	3.32	348.2	0.95

Note : Data for 1971-72 are not available.

Source : Government of Uttar Pradesh, Directorate of Economics and Statistics, *Quarterly Bulletin of Statistics*.

TABLE 2: AVERAGE DAILY MONEY WAGE-RATES, CONSUMER PRICE INDICES AND REAL WAGE-RATES OF AGRICULTURAL LABOURERS IN UP FROM 1955-56 TO 1973-74: A REGIONWISE BREAKDOWN

Year	Western UP			Central UP			Eastern UP		
	Money Wage-Rates (Rupees)	Consumer Price Indices	Real Wage-Rates (Rupees)	Money Wage-Rates (Rupees)	Consumer Price Indices	Real Wage-Rates (Rupees)	Money Wage-Rates (Rupees)	Consumer Price Indices	Real Wage-Rates (Rupees)
1955-56	1.19			0.88			0.58		
1956-57	1.31			1.05			0.78		
1957-58	1.28	100	1.28	1.02	100	1.02	0.72	100	0.72
1958-59	1.51	na	na	1.09	na	na	0.73	na	na
1959-60	1.46	110.2	1.32	1.12	109.1	1.03	0.70	102.9	0.68
1960-61	1.54	115.3	1.34	1.33	113.2	1.17	0.69	103.2	0.67
1961-62	1.57	116.8	1.34	1.14	109.2	1.04	0.66	105.3	0.63
1962-63	1.60	119.8	1.34	1.18	113.1	1.04	0.75	105.5	0.71
1963-64	1.62	135.3	1.19	1.22	135.2	0.90	0.78	123.6	0.63
1964-65	2.17	177.8	1.22	1.47	182.2	0.81	1.19	177.1	0.67
1965-66	2.26	178.0	1.27	1.58	188.8	0.84	1.41	186.9	0.75
1966-67	2.75	229.3	1.20	1.87	245.0	0.76	1.80	232.4	0.77
1967-68	3.31	257.7	1.28	2.25	268.5	0.84	2.05	254.4	0.81
1968-69	3.26	215.1	1.51	2.19	213.6	1.03	1.92	197.2	0.97
1969-70	3.37	227.8	1.48	2.46	233.0	1.06	1.97	217.1	0.91
1970-71	3.47	214.6	1.62	2.40	216.8	1.11	1.96	212.1	0.92
1972-73	4.02	273.0	1.47	2.73	280.0	0.98	2.30	261.0	0.88
1973-74	4.60	351.8	1.31	3.12	363.9	0.86	2.85	346.5	0.82

Note: Data for 1971-72 was not obtainable.
na - not available.

Source: Government of UP, Directorate of Economics and Statistics, *Quarterly Bulletin of Statistics*.

cent. On the other hand, in Eastern Uttar Pradesh real wages increased at an average rate of 2.3 per cent per annum, which was significant at 1 per cent level of probability. It should be stressed that, even in Eastern Uttar Pradesh, the increase in real wages took place before 1970-71, which would refute any suggestions that large-scale rural migration took place from the Eastern region to the Green Revolution areas, pushing up real wages. Even if there was some rural-rural migration, it was not reflected in the trends of real wage-rates. What is most significant is that real wage-rates of agricultural labourers declined steadily in all regions of Uttar Pradesh, including the Green Revolution area, after 1970-71.

The above evidence refutes some of the major points raised by Deepak Lal. In his critique of Bardhan's study, Lal points out that as Bardhan's analysis ends in 1967-68, it is not conclusive on the impact of the Green Revolution on rural wage-rates, because the Green Revolution took roots only in 1968-69. He further contends that as

"the Green Revolution had only taken root by 1968-69 it is not possible to make a definite evaluation of its effects on real wages on the basis of only one year's data (1970-

71). For the new technology could have various effects on the labour market which take time to work through. Nevertheless, if real agricultural wages are determined within a supply and demand framework, then there is a presumption that *ceteris paribus* the higher rate of agricultural growth would lead to rise in rural real wages."

Our data, which takes the analysis up to 1973-74, shows that in one of the main Green Revolution regions of India, viz. Western Uttar Pradesh, real wages showed no tendency to rise over the period 1959-60 to 1973-74. What is more, after 1970-71, real wage-rates declined steadily.

Therefore, it is clear that there is no simple causal relationship between the introduction of the new high-yielding varieties technology, which leads to increased agricultural output, and trends in real wages. A complex of factors in the realm of political economy — the bargaining power of agricultural labourers, the power of the landowners, the nature of contractual relations between the two, the availability of alternative employment and the pattern of land ownership — would also influence rural wage-rates. It would be simplistic to believe that real wage-rates in rural India are determined by the forces of supply and demand in the labour market.

Notes

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Deepak Lal, "Agricultural Growth, Real Wages and the Rural Poor in India", *Economic and Political Weekly*, June, 1976.

Agricultural Wages in India has been published only up to 1967-68. Thereafter data obtained from the Directorate of Economics and Statistics, Ministry of Agriculture, which is not accessible to all researchers.

3 See, (i) A V Jose, "Trends in Real Wages of Agricultural Labourers", *Economic and Political Weekly*, March 1974.

(ii) Pranab Bardhan, "Green Revolution and Agricultural Labourers", *Economic and Political Weekly*, June 1973.

4 Government of India, Ministry of Labour and Employment, "Agricultural Labour in India, Report of the Second Inquiry, 1956-57" Vol XII, Uttar Pradesh, Simla 1962.

5 Government of Uttar Pradesh State Planning Institute, "Statistical Abstract, Uttar Pradesh 1969-71", Lucknow.