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Vol XLIII
No. 1

ISSN 0019-5014

JANUARY-
MARCH
1988

INDIAN JOURNAL OF AGRICULTURAL ECONOMICS



INDIAN SOCIETY OF
AGRICULTURAL ECONOMICS,
BOMBAY

POVERTY OF AGRICULTURAL LABOUR HOUSEHOLDS IN INDIA: A STATE LEVEL ANALYSIS

S. Mahendra Dev*

I

INTRODUCTION

It is well known that agricultural labour households are among the poorest segments of the rural society. Obviously, a great deal of attention has been drawn to this problem in the research studies as well as in the official Plan documents. The present paper has the following twin objectives with reference to the agricultural labour households:

(a) To document the dimensions of inter-State variations in the incidence of poverty of agricultural labour households.

(b) To show that, by itself, ensuring full employment at the prevailing wages, important as it will be in raising living standards, will yet be inadequate in lifting the landless poor agricultural labour households above the poverty line.

The present study is undertaken with the following background:

In a vast country like India, the dimensions of poverty for agricultural labour households and their importance in all poverty households differ from State to State. An understanding of these magnitudes is important for designing appropriate policies in different States. For instance, as will be shown later, agricultural labour households dominate the poor in West Bengal while in Rajasthan, the self-employed in agriculture form the single largest segment of all the rural poor households. In view of this, we examine the dimensions of poverty among agricultural labour households along with those of other types of households at the level of States.

The higher incidence of poverty for agricultural labour households indicates that the earnings of the majority of these households whose principal source of livelihood is wage employment, are too low to reach the poverty line. The annual earnings of these households can be improved by (a) raising wages; (b) increase in the days of employment; (c) improving the productivity of the existing assets; and (d) creation of new assets. The anti-poverty programmes like Integrated Rural Development Programme (IRDP), National Rural Employment Programme (NREP), etc., which are aimed at benefiting the target groups are no doubt important but as shown by Dandekar (1986) "the size of the problem is simply too large as compared to the size of the anti-poverty programmes." It suggests that the annual earnings of the majority of the agricultural labour households can be raised by increasing wages and/or days of employment. Five Year Plans in India, however, focused mainly on creating full employment (in terms of labour days), apart from the recent target group programmes, for eliminating or reduction of poverty. In this paper, by presenting our estimates on the gaps between actual annual earnings and required annual income (to reach the poverty line) which will be elaborated later, we argue that increase in employment *per se* will not be sufficient to lift the landless poor above the poverty line in the majority of the States.

This paper is organised as follows: In Section II, in order to have an overall view, we first present changes in the poverty incidence of agricultural labour households at the all-India level. This section also discusses the disparities across States.

*Department of Economics, Delhi School of Economics, Delhi-7.

The author is grateful to Dr. K. Sundaram, Professors S.K. Ray and S.D. Tendulkar for suggestions on an earlier draft. Usual caveat applies.

Inter-State disparities in the gap between actual/potential income and required income of the landless agricultural labour households are analysed in Section III. The last section provides concluding observations.

II

CHANGES AT THE ALL-INDIA LEVEL

Many earlier studies have shown increase in the share of agricultural labour households in all rural households. The numbers presented in Table I also reveal similar trends. Between 1963-64 and 1983, the number of rural households increased by 49 per cent while that of agricultural labour households increased by more than 100 per cent. The percentage of agricultural labour households in the total rural households increased steadily from around 21 per cent in 1963-64 to 31 per cent in 1983.

TABLE I. NUMBER OF RURAL AND AGRICULTURAL LABOUR HOUSEHOLDS: ALL-INDIA
(million)

Household category (1)	1963-64 (2)	1977-78 (3)	1983 (4)
All rural households	67.6	95.7	100.5
Agricultural labour households	14.1 (20.9)	28.6 (29.9)	30.9 (30.7)

Sources: (1) Rural Labour Enquiry, Final Report (1963-65), Ministry of Labour, Government of India.

(2) "32nd Round of NSS on Employment and Unemployment", *Sarvekshana*, Vol.V, Nos.1 & 2, July-October, 1981.

(3) 38th Round of NSS, Report on the Third Quinquennial Survey on Employment and Unemployment, NSS Report No.341, National Sample Survey Organisation, Ministry of Planning, Cabinet Secretariat, Government of India, New Delhi.

Note:- Figures in parenthesis refer to the percentages of agricultural labour households in total rural households.

For estimating the incidence of poverty among agricultural labour households, the size distribution of consumer expenditure per capita is available only for the above three time points, viz., 1963-64, 1977-78 and 1983. The usual practice of measuring poverty by head count ratio is used here.'

Table II provides our estimates of the incidence of poverty for agricultural labour households at the all-India level. The estimates reveal that the incidence of poverty which was around 52 per cent in 1963-64 increased to 56 per cent in 1977-78 but declined to around 46 per cent in 1983. The fall in the poverty incidence should not lead to complacency since agriculture in years of good weather creates more work and more income. In a year like 1987-88, the poverty of agricultural labour households may increase again.

The 38th Round of the NSS on employment and unemployment also gives the percentage of persons by household monthly per capita expenditure class for each household type. Our estimate of the incidence of poverty for the persons belonging to agricultural labour households comes to around 51 per cent.² Thus even in 1983 more than half of the persons in the agricultural labour households were below the poverty line. This estimate agrees with that of the assessment made by Kurien (1987) on agricultural labourers, marginal and small farmers. On the basis of increase in the share of agricultural labourers, marginalisation of land holdings and increasing casual nature of wage labourers, he concludes that "at least 50 per cent of the numbers of the workforce and their families, and thus of the total population, must be considered to be in a situation where the level of living can only be abysmally low

and the mode of living highly insecure and precarious." Analysing the changes in living conditions of rural wage labour, Vaidyanathan (1986) also concludes that the incidence of poverty may have increased over time.

TABLE II: INCIDENCE OF POVERTY FOR AGRICULTURAL LABOUR HOUSEHOLDS: ALL-INDIA

Year (1)	Agricultural labour households (2)	Persons belonging to agricultural labour households (3)
1963-64	52.0	N.A.
1977-78	56.0	N.A.
1983	45.8	50.8

Sources: Same as in Table I.

Note:- Poverty lines are derived by adjusting the norm of Rs. 15 per capita per month (at 1960-61 prices) with the consumer price index for agricultural labourers for the respective years. The poverty lines thus obtained for the years 1963-64, 1977-78 and 1983 were Rs. 17.70, Rs. 48.45 and Rs. 76.60 respectively.

N.A.= Not available.

Characteristics of Rural Poverty Households: Major States

The poverty problem of agricultural labour households comes into sharper focus when we analyse the incidence of poverty by broad categories of households differentiated by reference to the principal means of livelihood. This analysis for each of the major States is based on the NSS 32nd Round (1977-78) data on employment and unemployment. The survey distinguishes, by reference to means of livelihood, the following household types: agricultural labourers, self-employed in agricultural occupations, self-employed in non-agricultural occupations, other labourers, and other rural households. We have estimated the incidence of poverty (head count ratio) in each of these household types at the State level for the year 1977-78, and also their respective shares in the total poverty households.

As expected, the incidence of poverty turns out to be the highest among the agricultural labour households in all the States (Table III). Also, agricultural labour households turn out to be the single largest segment of the poverty households in almost all the States except Assam, Madhya Pradesh, Rajasthan and Uttar Pradesh (Table IV). Excepting in these four States, the second largest segment of the poverty households is formed by households self-employed in agricultural occupations. However, in all the States the incidence of poverty among agricultural labour households turns out to be higher than that among self-employed in agriculture (Table III). Agricultural labour households not only report the highest incidence of poverty but also record sharp variations in it across the States (Table III). It was above 50 per cent in two-thirds of the States while States like Punjab and Haryana reported minimal levels. The problem appears to be particularly severe for the agricultural labour households in West Bengal, Orissa and Bihar with the incidence of poverty being above 70 per cent.

Size of Land Holding and Rural Poverty

The 32nd Round of the NSS on employment and unemployment also provides a cross classification of "Rural Households with Principal Industry-Agriculture" by both size class of per capita total expenditure and by size class of per capita land possessed. It roughly corresponds to the total of self-employed in agricultural occupations and agricultural labour households. Using this information, we have estimated the percentage distribution of poverty households for each size class of land possessed.³

The estimates show that the rural poverty households with less than one acre of land

constitute more than 90 per cent of the total in States like Tamil Nadu, Bihar, Uttar Pradesh and West Bengal (see Table V). It is evident that a sizable proportion of these households must be working as agricultural labourers for their sustenance.

TABLE III. INCIDENCE OF POVERTY BY HOUSEHOLD TYPE: 1977-78

States	Agricultural labour households	Self- employed in agri- culture	Self- employed in non- agriculture	Other labour households	Other rural households	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh	36.91	20.86	24.51	23.71	20.05	28.10
Assam	55.54	27.23	26.31	53.29	23.70	35.16
Bihar	72.08	37.76	52.24	50.80	41.47	52.51
Gujarat	45.87	22.92	18.38	22.19	9.15	28.89
Haryana	33.39	10.49	26.53	3.74	1.37	24.72
Karnataka	54.54	26.86	35.48	37.52	22.16	38.69
Kerala	54.79	23.10	35.59	18.51	2.63	36.52
Madhya Pradesh	63.41	42.47	47.28	48.73	22.39	47.94
Maharashtra	64.12	36.05	43.51	45.42	25.06	47.46
Orissa	77.10	45.55	54.28	61.62	35.88	58.12
Punjab	19.15	3.78	12.14	16.51	7.87	9.93
Rajasthan	38.95	20.22	22.83	25.78	11.40	22.14
Tamil Nadu	58.02	33.22	39.43	33.41	24.53	43.23
Uttar Pradesh	53.77	28.88	40.49	37.13	24.86	34.93
West Bengal	81.13	45.96	57.84	53.34	41.90	60.26
All-India	55.90	28.00	35.71	36.34	22.00	37.33

Source: Basic data compiled from NSS 32nd Round on Employment and Unemployment, *op.cit.*

Note:- Poverty line for each State is obtained by applying State specific consumer price index numbers of agricultural labourers (1977-78) to the State specific poverty lines of 1960-61, provided in Bardhan (1973).

TABLE IV. PERCENTAGE SHARES OF HOUSEHOLD TYPES IN ALL RURAL HOUSEHOLDS BELOW THE POVERTY LINE: 1977-78

States	Agricultural labour households	Self- employed in agri- culture	Rest of the households	Total house- holds
(1)	(2)	(3)	(4)	(5)
Andhra Pradesh	54.44	24.72	20.84	100.0
Assam	26.85	44.13	29.02	100.0
Bihar	49.52	31.04	19.44	100.0
Gujarat	49.36	39.54	11.10	100.0
Haryana	32.49	30.52	36.99	100.0
Karnataka	53.47	28.27	18.26	100.0
Kerala	40.52	17.96	41.52	100.0
Madhya Pradesh	39.91	52.11	7.98	100.0
Maharashtra	52.21	30.25	17.54	100.0
Orissa	49.23	33.10	17.67	100.0
Punjab	46.41	16.92	36.67	100.0
Rajasthan	17.60	61.39	21.01	100.0
Tamil Nadu	52.81	23.29	23.90	100.0
Uttar Pradesh	27.88	48.57	23.55	100.0
West Bengal	48.18	26.93	24.89	100.0
All-India	44.74	34.58	20.68	100.0

Source: Same as in Table III.

TABLE V. PERCENTAGE DISTRIBUTION OF EACH SIZE CLASS OF PER CAPITA LAND POSSESSED FOR RURAL POVERTY HOUSEHOLDS (PRINCIPAL INDUSTRY: AGRICULTURE) IN 1977-78

States (1)	Size class of land (acres)					Total (7)
	0.01 to 0.10 (2)	0.11 to 0.50 (3)	0.51 to 1.0 (4)	1.1 to 2.50 (5)	2.51 and above (6)	
Andhra Pradesh	49.8	24.0	13.9	9.9	2.4	100.0
Assam	29.0	37.2	28.1	5.6	0.1	100.0
Bihar	45.5	33.2	14.8	5.9	0.6	100.0
Gujarat	34.3	28.1	21.3	14.6	1.7	100.0
Haryana	49.7	13.6	12.3	21.3	3.1	100.0
Karnataka	38.8	27.0	16.4	13.1	4.7	100.0
Kerala	68.8	28.7	2.1	0.4	Nil	100.0
Madhya Pradesh	24.2	19.8	24.4	24.9	6.7	100.0
Maharashtra	39.8	20.6	15.4	18.3	5.9	100.0
Orissa	35.2	35.8	19.3	8.5	1.0	100.0
Punjab	74.8	8.3	11.1	5.2	0.6	100.0
Rajasthan	9.5	27.9	29.4	24.3	8.9	100.0
Tamil Nadu	53.9	30.5	10.7	4.3	0.6	100.0
Uttar Pradesh	25.0	46.8	19.6	7.5	1.1	100.0
West Bengal	51.5	34.0	11.7	2.7	0.1	100.0
All-India	39.7	31.0	16.6	10.3	2.4	100.0

Sources: NSS 32nd Round (1977-78), Statewise Reports (No. 298) on the Second Quinquennial Survey on Employment and Unemployment, National Sample Survey Organisation, Ministry of Planning, Cabinet Secretariat, Government of India, New Delhi, 1981.

Thus it appears that rural poor in India are mostly coming from the wage dependent households (the landless and the near landless agricultural labourers) and that too from a few States. To make any significant dent on the problem of poverty in rural India, it is therefore necessary to give special attention to this section of rural households in the identified States.

III

INTER-STATE DISPARITIES IN REQUIRED AND ACTUAL/POTENTIAL EARNINGS OF LANDLESS AGRICULTURAL LABOUR HOUSEHOLDS

It is obvious from the above discussion that rural households who are dependent on wage employment form the single largest segment of the poor. As indicated earlier, it suggests that their actual earnings are lower than the required income which is needed to reach the poverty line. Low wages (mainly due to low labour productivity) and/or unemployment in terms of labour time disposition (under-employment) are the major factors underlying their low annual earnings as compared to workers in other sectors.⁴ However, the annual earnings of agricultural workers and the underlying factors for the gap between required and actual income differ from State to State. In order to examine this, we estimated the required and actual/potential annual income of the landless agricultural labour households on the basis of information derived from Rural Labour Enquiry, 1974-75. Actual annual earnings for each major State are estimated by using the data on days of employment, the average number of earners in each household and average daily earnings.⁵ The estimated annual earnings or income at the all-India level came to around Rs.1,145 (col.3 of Table VI). But, the required income needed for the landless agricultural labour households to reach the poverty line was around Rs.2,900, *i.e.*, one and half times higher than the actual income.⁶ One way of increasing income of these households is to raise the number of working days in a year by providing employment through yield-augmenting and land-augmenting technology. The number of days actually worked by men in 1974-75 was 215 while they were unemployed for 73 days due to want of work (see Table VII). Assuming that men, women and children are provided full employment at their prevailing wages, the estimated potential income would be around Rs.1,665.⁷ However, the required income at the all-India level was still above 70 per cent over the potential income and above 50 per cent over the maximum potential income, *i.e.*, including the number of days not worked due to other reasons. It shows that, by itself, ensuring full employment at the prevailing wages, important as it will be in raising their living standards, will yet be inadequate in lifting them above the poverty level.

At the State level, the required income to reach the poverty line was more than three times that of actual income in three States, namely, Bihar, Orissa and Tamil Nadu, while it was less than double in Assam, Punjab and Rajasthan (see Table VI). Even after assuming full employment at the prevailing wages, the required income would be more than 50 per cent over the potential income in all except four States, namely, Assam, Rajasthan, Kerala and Punjab where the daily earnings are relatively higher than the rest of the States.⁸ In the case of Kerala, there is a big gap between income actually earned by the labour households and the potential income since unemployed days are the highest in this State as compared to the rest of the States. This indicates that poverty among landless agricultural labour households in Kerala mainly arises due to high rate of unemployment days rather than low wages (see Table VII).

TABLE VI. REQUIRED AND ACTUAL/POTENTIAL INCOME OF LANDLESS AGRICULTURAL LABOUR HOUSEHOLDS: 1974-75

(1)	Required ¹ income (Rs.)	Actual and potential income (Rs.)			Ratios		
		Actual income ²	Potential income ³	Maximum potential income ⁴	Required	Required	Required
					Actual	Potential	Maximum potential
(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Andhra Pradesh	2,365.70	917.70	1,320.40	1,520.80	2.58	1.79	1.56
Assam	2,950.30	1,906.80	2,198.00	2,218.70	1.55	1.34	1.33
Bihar	3,263.00	952.60	1,657.90	1,794.80	3.43	1.97	1.82
Gujarat	3,170.40	1,448.20	2,084.50	2,250.40	2.19	1.52	1.41
Haryana	3,671.30	1,702.40	2,376.20	2,665.90	2.16	1.55	1.38
Karnataka	2,859.00	1,163.50	1,524.60	1,794.00	2.46	1.88	1.59
Kerala	3,588.60	1,533.00	3,091.70	3,630.00	2.34	1.16	0.99
Madhya Pradesh	3,012.60	1,092.20	1,716.00	1,886.80	2.76	1.76	1.60
Maharashtra	3,312.70	1,196.50	1,561.70	1,750.90	2.77	2.12	1.89
Orissa	2,742.60	707.50	1,200.50	1,310.80	3.88	2.28	2.09
Punjab	3,581.30	2,662.80	3,410.10	3,744.30	1.34	1.05	0.96
Rajasthan	2,837.80	1,722.60	2,163.40	2,357.70	1.65	1.31	1.20
Tamil Nadu	3,124.40	926.40	1,556.80	1,732.50	3.37	2.01	1.80
Uttar Pradesh	2,854.50	1,173.10	1,547.80	1,712.40	2.43	1.84	1.77
West Bengal	3,494.60	1,240.60	1,815.90	1,957.50	2.82	1.92	1.79
All-India	2,901.30	1,145.30	1,664.90	1,843.80	2.53	1.74	1.57

1. The income required for the agricultural labour households to reach the poverty line.

2. Income from the number of days actually worked.

3. Income at full employment, *i.e.*, actual income + income after the removal of unemployment days.

4. Income at full employment + the potential income if worked without illness, etc.

TABLE VII. AVERAGE ANNUAL NUMBER OF DAYS AND AVERAGE DAILY EARNINGS OF MEN IN AGRICULTURAL OCCUPATIONS : LANDLESS AGRICULTURAL LABOUR HOUSEHOLDS, 1974-75

States	Average number of days			Wages (Average daily earnings) (Rs.)
	Number of days worked	Number of days not worked due to want of work	Number of days not worked due to other reasons (illness, etc.)	
(1)	(2)	(3)	(4)	(5)
Andhra Pradesh	207	62	29	2.65
Assam	313	39	3	4.04
Bihar	179	94	19	3.22
Gujarat	226	70	18	3.24
Haryana	222	84	30	4.85
Karnataka	234	58	40	2.85
Kerala	161	133	39	6.02
Madhya Pradesh	224	65	21	2.46
Maharashtra	247	59	26	2.63
Orissa	186	95	20	2.64
Punjab	251	65	31	6.42
Rajasthan	286	45	19	3.64
Tamil Nadu	159	83	23	3.64
Uttar Pradesh	240	59	29	3.19
West Bengal	227	89	17	3.49
All-India	215	73	24	3.24

Source: Rural Labour Enquiry, 1974-75, Ministry of Labour, Government of India, Chandigarh, 1978.

Notes:- 1. Number of days worked also include those of self-employed days in agricultural occupations but their proportion is very small.

2. We have also made use of the above type of information on women and children. For want of space, these are not presented here.

3. Since there is no significant difference in the average daily earnings between agricultural and all occupations, we have preferred the former in our study.

If we further include the number of days not worked due to other reasons to the potential days of employment (actual working days + unemployed days), the maximum potential income would be more than/equal to the required income only in two States, viz., Punjab and Kerala. In other words, the potential income of agricultural labour households in these two States would be more than sufficient to reach the poverty line. In the rest of the States (except in Assam, Haryana, Gujarat and Rajasthan), the

required annual earnings would be above 50 per cent of the maximum potential income. Clearly a rise in the real wages is an essential condition for reducing the incidence of poverty among the agricultural labour households in many of these States.

Rising real wages or earnings would require increase in labour productivity in agriculture. Parthasarathy (1987) showed that regions with low growth rates in labour productivity were characterised by higher incidence of rural poverty, higher unemployment and low wages. We have also examined the relationship between the growth rate of labour productivity and the incidence of rural poverty for agricultural labour households by estimating a cross-section regression (in linear form) as shown below:

$$\text{ALPOVT} = 66.30 - 10.07 * \text{GLBPR} \quad R^2 = 0.74$$

(8.23) N = 15

* significant at 1 per cent level.

where ALPOVT = incidence of poverty for agricultural labour households in 1977-78 (see col.2 of Table III).

GLBPR = growth rate of labour productivity between the triennia ending 1964-65 and 1977-78. Labour productivity to the workers engaged in crop production.'

The above equation reveals a strong negative relationship between the growth of labour productivity and the incidence of poverty among agricultural labour households.

Our analysis so far thus indicates that improving the lot of the rural poor particularly those dependent on wage labour in agriculture is possible only by increasing the real wages through sustained rise in labour productivity at least in half of the Indian States.

IV

CONCLUSIONS

The main findings of the paper are the following:

1. Even in 1983, more than 50 per cent of the persons belonging to agricultural labour households at the all-India level were poverty stricken.

2. Agricultural labour households report the highest incidence of poverty as compared to other types of households in all the States. Excepting in four States (Assam, Himachal Pradesh, Rajasthan and Uttar Pradesh), these households form the single largest segment of the rural poor.

3. Our analysis on the gap between actual/potential earnings and the required income reveals that even after assuming full employment at the prevailing wages, the required income would be more than 50 per cent over the potential income in all except four States, namely, Assam, Rajasthan, Kerala and Punjab, where the daily earnings are relatively higher than the rest of the States.

A rise in the real wage through increase in labour productivity in agriculture seems to be an essential condition for poverty reduction among the agricultural labour households in many States till the target group programmes make a significant dent on the majority of the rural poor or till the unorganised poor organise and demand for the redistribution of assets.

NOTES

1. It is well known that the fixation of an appropriate norm for measuring poverty in India is not free from arbitrariness.

2. If we consider the composition of the agricultural workers, casual workers are among the poorest segments of the total workforce in agriculture. For a discussion on the composition of rural workers, see Dantawala (1987). Our estimates of the incidence of poverty for the three types of workers presented in the table below indicates that around 58 per cent of the casual workers were below the poverty line whereas self-employed in agriculture reported only 32 per cent poverty incidence.

Incidence of Poverty for Worker-Types in Agriculture
(Usual Status): 1977-78

Self-employed	31.7
Regular wage/salary workers	49.3
Casual workers	58.2

Source: 32nd Round of NSS on Employment and Unemployment, *op.cit.*

Note:- See notes to Table II for the poverty line of 1977-78.

3. The inverse relationship between the size of holding and the incidence of poverty is well documented in the literature. For example, see Visaria (1981). Our estimates based on 32nd Round NSS data also reveal similar relationship at the all-India level as shown below:

Size of Land and Incidence of Poverty in 1977-78: All-India

Size class of land (acres)	Incidence of poverty
0.01-0.10	56.4
0.1-0.50	44.8
0.5-1.0	31.1
1.0-2.5	22.9
2.51-5.00	15.2
5.0 and above	7.7
Total	39.1

4. The earnings of agricultural workers are generally too low as compared to those of workers in the non-agricultural sector. Between 1958-59 and 1978-79, the growth of real per capita earnings (in 1970-71 prices) of workers in the non-agricultural organised sector was more than two per cent a year while that of the landless agricultural workers was less than one per cent per annum as shown below:

Growth of Real Per Capita Earnings (between 1958-59 and 1978-79):
All-India

Classification of workers	Per cent per annum
1. Agricultural workers	0.76
2. Non-agricultural organised sector workers	2.20
3. Non-agricultural unorganised sector workers	1.73

Source: Raj Krishna (1984), p. 14.

5. Actual annual earnings are the sum of annual earnings of men, women and children.

Annual earnings of men = Average number of men x number of days worked by men as wage paid and self-employed x average daily earnings of men in agricultural occupations.

Similarly, annual earnings of women and children are estimated.

We have also included self-employed days since some agricultural labourers devote some days for self-employment but this proportion is very small. However, we have assumed that agricultural labourers would get the same earnings for self-employed days as in the case of wage employed days.

Here, we have not included the earnings from non-land assets of the agricultural labourers. However, as shown by Sundaram and Tendulkar (1983), the majority of the non-cultivating households do not report ownership of any of the non-land assets like milch cattle, poultry, etc.

6. Required annual income = poverty line of 1974-75 x household size of landless agricultural labour households x 12.

Poverty line for each State is obtained by applying State specific consumer price index numbers of agricultural labourers (1974-75) to the State specific poverty lines of 1960-61, provided in Bardhan (1973).

7. Here, full employment refers to elimination of unemployed days in a year as perceived by the respondents in the landless agricultural labour households.

8. In terms of wages, the case of Kerala can be distinguished from the rest. In this State, labour productivity in agriculture may not reflect the daily wages or earnings since high wage rates appear to be mainly due to unionisation.

9. For want of space, the estimates of labour productivity are not presented here.

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