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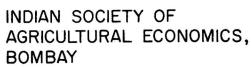
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## On the Concept and Reality of the Landless in Rural India

G.K. Chadha\*

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### THE CONCEPT

The rural society in India typically consists of two broad sections: the landless and the land owning households. The landlessness has increased in recent years, and has become a source of great public concern. The paper looks at the changing level of landlessness in different parts of rural India, both conceptually and empirically.

Landlessness can be visualised in three different ways, in terms of (1) the number of rural households owning no arable land, (2) the number of households operating no land and (3) the number of agricultural labour households. Under (2), two sub-categories can be visualised: households owning but not cultivating land and those which neither own nor cultivate.

A number of factors can be imagined to cause a rise in one or the other form of land-lessness. The unrelenting demographic pressure on land inducing some petty landowners to lease out or sell their land and join the ranks of rural labour (Myrdal, 1968, p. 1051), indebtedness among petty land owning households to non-institutional agencies ultimately leading to land alienation (Parthasarathy, 1994, pp. 31-32), the arrival of new production technology inducing many landowners to resume land for self-cultivation, ejection of tenants to evade the provisions of tenancy acts, the sheer expansion of educational facilities prompting many a rural youngman to go in for non-agricultural jobs leaving farming to tenant cultivators, the process of economic modernisation entailing a gradual decay of many a rural craft adding to the army of agricultural labour households, are well known explanations. For paucity of space, we do not probe into such explanations. Our limited objective is to look at the changing incidence of landlessness, from the three angles set out earlier.

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### THE REALITY

To build a temporal profile of landlessness, from the view-points of area owned and area operated, we draw upon National Sample Survey (NSS) data over various rounds. As we see later, certain adjustments have to be done to ensure inter-temporal comparability. For looking into the changing numerical strength of agricultural labour households, the Rural Labour Enquiry Committee reports are our major source of data. These reports too have data problems but as indicative of broad trends, they serve us well. In what follows, we look at the broad temporal changes from each of the three angles.

### 1. Landlessness from Area Ownership Perspective

Firstly, from the stand-point of land ownership, the number of households owning 'zero

<sup>\*</sup> Professor of Economics, Centre for the Study of Regional Development, School of Social Sciences, Jawaharlal Nehru University, New Delhi.

acre' land directly captures the incidence of landlessness. To put the record straight, in subsequent NSS Rounds those households who owned land upto 0.01 acre were also included in 'zero acre' category. But then, to a fairly sizeable proportion of households in the next higher ownership category (0.01-0.49 acre), land ownership is not a means of earning livelihood. Perhaps, their ownership does not go beyond homestead area. Variously, the expression 'near landlessness' relates to such households. It is thus important to somehow decompose the ownership category 0.01-0.49 acre into two parts: households which really have no arable land and the rest which have some. The former clubbed with the lowest ('zero acre') category gives a truer index of landlessness (Chadha and Sharma, 1992, p. 138).

In Table I we try to show how the incidence of landlessness gets grossly underplayed with the changing definition of 'ownership holding' unless the truly 'landless' component from the category '0.01-0.49 acre' is chipped off and added to 'zero acre' category. Although some decline in the percentage of the landless households was natural to occur between 1953-54 and 1961-62, the steep decline recorded in a large number of states (columns 2 to 5) is otherwise difficult to digest. It is quite possible that a shift from the rigorous definition of 'ownership holding' in the 8th Round to a relaxed one during the 17th Round and thereafter might have led many 'landless' households to earn the *de jure* status of 'land owning' households. Such households are located very largely in the new higher '0.01-0.49 acre' category. Hence, the need to decompose the '0.01-0.49' ownership group.

For effecting the needed adjustments, the following procedure was adopted (Chadha and Sharma, 1992, pp. 138-140).

- (i) First of all, we had to work out the number of households in the '0.01-0.49 acre' ownership category which did not operate any land. This information is not available in NSS reports on land holdings. Luckily, the needed proportion for 1981-82 could be worked out from another NSS Report (based on 38th Round) on Employment and Unemployment for 1983. For 1971-72 and 1961-62, the Reserve Bank of India Reports on All-India Debt and Investment Survey proved handy for computing the desired proportions in the '0.01-0.49 acre' category.
- (ii) Falling back upon the NSS reports on land holdings (17th, 26th and 37th Rounds), the number of households leasing out land in the ownership category '0.01-0.49 acre' could be computed.
- (iii) Subtracting (ii) from (i) gives us the number of households in the '0.01-0.49 acre' category which possesses no arable land.
- (iv) Finally, the number computed in (iii) added to the 'zero acre' ownership category gives the total and truer picture about landlessness. The outcome of our exercise is set out in columns 6 to 8 in Table I. It is evident that the revised position is drastically different from the one revealed by columns 3 to 5.

Table I throws up two striking features. Firstly, during the total span of three decades since 1953-54, in most of the states, the proportion of rural households owning no arable land has increased. The increase has been fairly sizeable in Bihar (from 16.56 per cent in 1953-54 to 29.97 per cent in 1982), Karnataka (from 22.84 per cent in 1953-54 to 32.59 per cent in 1982), Maharashtra (from 26.56 to 37.10 per cent), Orissa (from 12.29 to 27.30 per cent), Tamil Nadu (from 33.56 to 52.57 per cent), Uttar Pradesh (from 9.36 to 22.90 per cent) and West Bengal (from 20.54 to 45.69 per cent). The proportion has declined only in

TABLE I. CHANGING INCIDENCE OF LANDLESSNESS IN RURAL INDIA FROM THE STAND-POINT OF LAND OWNERSHIP

	Percentage of landless households to total number of rural households								
State	1953-54 (2)	Unadjusted			Adjusted				
(1)		1961-62 (3)	1971-72 (4)	1982 (5)	1961-62 (6)	1971-72 (7)	1982 (8)		
Andhra Pradesh	30.33 (27.7)	6.84	6.95	11.93	34.17 (41.5)	30.11 (40.6)	37.63 (37.4)		
Assam	41.58 (12.2)	26.46	24.99	7.53	33.62 (20.8)	31.81 (21.1)	24.38 (34.2)		
Bihar	16.56 (34.7)	8.63	4.34	4.10	19.37 (42.5)	18.25 (48.6)	29.97 (50.8)		
Gujarat	30.48 (12.3)	14.74	13.44	16.83	32.57 (23.0)	32.64 (25.8)	35.06 (24.0)		
Jammu and Kashmir	17.31 (17.7)	10.93	0.96	6.84	15.07 (19.5)	4.82 (21.0)	16.14 (28.9)		
Kamataka	22.84 (17.9)	18.64	12.46	13.70	26.04 (16.9)	25.77 (23.6)	32.59 (26.0)		
Kerala	36.27 (35.6)	30.90	15.74	12.76	31.10 (41.5)	16.06 (56.5)	20.98 (63.5)		
Madhya Pradesh	29.82 (9.6)	9.14	9.58	14.39	19.40 (19.9)	19.07 (19.2)	29.06 (20.2)		
Maharashtra	26.56 (14.3)	16.83	15.85	21.24	34.65 (23.9)	29.76 (20.2)	37.10 (21.5)		
Orissa	12.29 (31.4)	7.84	10.57	7.66	25.00 (36.6)	24.15 (34.3)	27.30 (32.4)		
Punjab and Haryana	36.86 (13.9)	12.00	8.94	6.30	45.30 (40.9)	47.28 (48.6)	35.97 (46.2)		
Rajasthan	24.85 (6.0)	10.95	2.91	8.13	19.37 (13.8)	9.45 (12.4)	16.67		
Famil Nadu	33.56 (29.7)	24.28	17.01	19.13	46.50 (37.5)	43.00 (43.5)	52.57 (47.9)		
Uttar Pradesh	9.36 (30.3)	2.77	4.55	4.85	17.41 (33.9)	20.25	22.90 (38.7)		
West Bengal	20.54 (36.3)	12.56	9.78	17.21	30.65	30.82	45.69 (47.0)		
All-India	23.09	11.69	9.64	11.33	(38.6)	(46.7) -	(47.0)		

Sources: (a) National Sample Survey Organisation (NSSO) (1961 and 1962), The National Sample Survey: Eighth Round 1953-54 Report on Land Holdings (3) and (4), NSS Report Nos. 36 and 66, Cabinet Secretariat, Government

(c) NSSO (1986), National Sample Survey: 37th Round 1982 - Report on Land Holdings (1), NSS Report No. 330,

Ministry of Planning, Government of India, New Delhi.

(d) NSSO (1988), National Sample Survey: 38th Round 1983 - Report on the Third Quinquennial Survey on Employment and Unemployment, NSS Report No. 341, Ministry of Planning, Government of India, New Delhi.

(e) Reserve Bank of India (1965, 1976 and 1987), Reports on All-India Rural Debt and Investment Survey, 1961-62, 1971-72, and 1981-82, Bombay

(f) Chadha and Sharma, 1991, p. 68.

Note: Figures in parentheses are the percentages of sub-marginal land owning households.

three states: Assam, Kerala and Rajasthan. In net terms, during the 1980s, we see a fairly big proportion of rural households owning no land in many states. Their proportion is as high as 52.57 per cent in Tamil Nadu, 45.69 per cent in West Bengal, ranging between 35 and 40 per cent in Andhra Pradesh, Maharashtra, Punjab-Haryana, Gujarat and more than 25 per cent in most other states. Thus the incidence of landlessness has continued to hold

<sup>(</sup>b) NSSO (1968 and 1976), National Sample Survey: 17th Round 1961-62 - Report on Some Aspects of Land Holdings, NSS Report No. 144, and 26th Round 1971-72, NSS Report No. 215, Ministry of Planning, Government of India, New Delhi.

its sway on rural class differentiation, and to a large extent, could be responsible for perpetuating poverty among many a rural household.

Secondly, there seems no evidence to support the view that many of the landless households could switch-over to land owning status under the impact of land reforms, either during the fifties or during the seventies. On the contrary, in the post-reform years, especially during the fifties, the proportion of the landless households increased in a number of states. In contrast, during the sixties when the post-reform euphoria had worn off and the spurt in land sale-purchase transactions had not yet acquired a brisk pace (as in the seventies), the proportion of the landless households changed only marginally in most of the states. During the next decade of the seventies, the incidence of landlessness started looking up. There is thus some indication, although neither very strong nor conclusive, that some households owning tiny pieces of land sold them off and joined the ranks of the pure landless households.

### 2. Landlessness from Operational Area Perspective

From the stand-point of operated area, ideas on landlessness can be fixed through the number of households not operating any land, perhaps better, through their two components: households owning but not operating land and households neither owning nor operating any land. The NSS data from 17th and 26th Rounds provide estimates of such types of households, whereas in the 37th Round, the estimates of the households not operating any land alone are available. We have, however, derived the 37th Round estimates of the two components in the following manner (Sharma, 1991, pp. 274-278):

- (i) The estimates of households not operating any land were derived after clubbing the number of households given under the nil and zero farm size-groups of household operational holdings in the Report on Land Holdings-3: Estimates of Livestock and Agricultural Implements classified by Household Operational Holding (Table 1, NSS Report No. 338).
- (ii) The estimates of entirely leased-in holdings were derived from the Report on Land Holdings-2: Some Aspects of Operational Holdings (Table 5, NSS Report No. 331).
- (iii) After obtaining these estimates the number of entirely leased-in holdings was subtracted from the number of landless households to arrive at the estimates of households who neither owned nor operated any land.
- (iv) Finally, subtracting the number of households who neither owned nor operated any land from those not operating any land, we got the estimates of households who owned but did not operate any land.

The above estimates should however be interpreted keeping in view the fact that while the estimates of the landless households pertained to the date of survey in the calendar year of 1982, the estimates of households operating no land pertained to the major agricultural seasons of the agricultural year 1981-82. Besides, it was also assumed that:

(i) The incidence of multiple and joint holdings was negligible. The assumption is not unrealistic since, according to the 16th Round, the incidence of such holdings was only about 2 per cent. Furthermore, due to certain important changes in Indian agriculture

since the onset of green revolution, rising commercialisation and intersectoral linkages, etc., the incidence of such holdings, we believe, had further declined and might have become almost nil by 1982.

(ii) Since the incidence of multiple and joint holdings was assumed to be negligible in the overall structure of holdings, these holdings would still be less in the case of the entirely leased-in holdings which mainly belong to the lower rung of operational holdings.

Table II sets out the changing incidence of landlessness from the view-point of operated area. It invites a few comments. In rural India, about one-sixth of the households own but do not cultivate land - the rentier class. By its very nature, this group could be a disparate

TABLE II. CHANGING PERCENTAGE OF HOUSEHOLDS NOT OPERATING LAND, OWNING BUT NOT OPERATING AND NEITHER OWNING NOR OPERATING LAND

State	Percentage of households not operating any land			Percentage of households own- ing but not operating land			Percentage of households nei- ther owning nor operating land		
(1)	1961-62 (2)	1971-72 (3)	1982 (4)	1961-62 (5)	1971-72 (6)	1982 (7)	1961-62 (8)	1971 <i>-</i> 72 (9)	1982 (10)
Andhra Pradesh	37.95 (15.9)	36.05 (20.8)	40.47 (22.0)	32.03	29.68	29.58	5.92	6.37	10.89
Assam	36.22 (14.1)	28.39 (19.7)	13.27	15.27	13.76	8.56	20.95	14.63	4.71
Bihar	21.71 (29.6)	20.65	18.17 (42.3)	15.28	17.52	15.09	6.43	3.13	3.08
Gujarat	25.41 (6.2)	33.75 (8.9)	36.14 (14.0)	11.78	25.47	20.06	13.63	8.28	16.08
Jammu and Kashmir	11.09	6.64	11.77 (26.3)	5.30	6.07	4.94	5.79	0.57	6.83
Karnataka	24.11 (6.6)	29.77	27.02 (18.8)	10.51	20.28	14.95	13.60	9.49	12.07
Kerala	23.76 (57.1)	11.69 (67.8)	12.99 (72.1)	8.91	1.44	3.06	14.85	10.25	9.93
Madhya Pradesh	18.45 (7.5)	16.95 (11.6)	24.06 (14.4)	10. <del>69</del>	12.09	10.74	7.76	4.86	13.32
Maharashtra	26.29 (8.5)	30.97	41.25 (16.7)	12.41	21.09	21.31	13.88	9.88	19.94
Orissa	32.59 (14.9)	25.13 (22.2)	27.78 (21.7)	26.22	17.30	21.73	6.37	7.83	6.05
Punjab and Haryana	39.09 (12.1)	48.03 (40.4)	27.74 (42.0)	30.51	41.82	23.06	8.58	6.21	4.68
Rajasthan	11.84 (4.0)	7.83 (20.8)	12.29 (13.1)	9.64	5.52	5.42	2.20	2.31	6.87
Tamil Nadu	39.98 (20.2)	41.95 (24.3)	37.26 (47.8)	18.10	27.86	25.77	21.88	14.09	11.49
Uttar Pradesh	20.76 (18.0)	24.26 (20.4)	20.00 (32.2)	11.09	20.42	15.97	9.67	3.84	4.03
West Bengal	33.88 (19.2)	30.94 (28.7)	22.14 (49.4)	22.77	23.09	11.66	11.11	7.85	10.48
All-India	26.86 (17.1)	27.42 (21.3)	26.06 (32.2)	17.45	20.51	16.89	9.41	6.90	9.17

Sources: (a) National Sample Survey: 17th Round 1961-62, NSS Report No. 144, op.cit., Table 8. (b) National Sample Survey: 26th Round 1971-72, NSS Report No. 215, op.cit., Table 5.

<sup>(</sup>c) National Sample Survey: 37th Round 1982, NSS Report No. 330, op.cit., Table Nos. 1 and 3.2. (d) Chadha and Sharma, 1991, p. 100.

Note: Figures in parentheses are the percentages of sub-marginal operational holdings.

gathering of households owning as small as 0.5 or 1.0 acre and as big as 25 acres or more. Surely, a sizeable proportion belongs to the lower strata of the land owning hierarchy. There are studies to show that many marginal owners lease out their land and work as labourers, inside or outside agriculture or both. In relative terms, the application of new production technology is not viable on the tiny piece of land owned by them especially under situations in which leasing in of some additional land is not an easy affair (Bhalla, 1983; Chadha, 1986). In any case, it is important to note that the proportion of the 'pure-rentier' class of households varies sharply among the states. For example, in 1961-62, it was more than 30 per cent in Andhra Pradesh and Punjab-Haryana, between 20 and 30 per cent in Orissa and West Bengal and less than 10 per cent in Kerala, Rajasthan, Jammu and Kashmir, and so on. After 20 years, in 1982, the proportion remained high in Andhra Pradesh (29.58 per cent), Tamil Nadu (25.77 per cent) and Punjab-Haryana (23.06 per cent) and low in Kerala (3.06 per cent), Rajasthan (5.42 per cent), Jammu and Kashmir (4.94 per cent), and so on. It is nevertheless important to note that in a majority of the states, the proportion declined between 1961-62 and 1982. Only in three states (Gujarat, Maharashtra and Tamil Nadu), there was a sizeable increase in their proportion. At the national level, there was hardly any decline.

In sheer contrast, the other component (households neither owning nor operating any land) shows a more striking change between 1961-62 and 1982. For example, their relative strength declined quite drastically in Assam, Tamil Nadu and Uttar Pradesh, by moderate proportions in Bihar, Kerala and Punjab-Haryana, remained practically unchanged in Jammu and Kashmir, Karnataka, Orissa and West Bengal and finally, registered an increase in other states. At the national level, the position remained practically unchanged.

### 3. Counting Agricultural Labour Households

Finally, Table III gives the statewise profile of agricultural labour households (with and without land) for the period 1964-65 to 1983, based on Reports of Rural Labour Enquiry. Except for Kerala where a preponderant majority of agricultural labour households are with land, in most other states, such households are fairly evenly divided between those with and without land. In some states, e.g., Gujarat, Haryana, Punjab and Tamil Nadu, the relative numerical strength of those without land is far higher than their counterparts with land. It is particularly significant to see that in the two green revolution states of Punjab and Haryana, agricultural labour households are almost exclusively without any land base. In general, it is clear that the proportion of agricultural labour households (total of those with as well as those without land) has tended to increase over time practically in each state (also see Singh, 1994, p. 73). This may have happened partly because of natural growth of population among such households and partly because of sliding-down operation in the land ownership hierarchy. In any case, the total numerical strength of these households, especially in states characterised by low or negligible agricultural growth, has a lot to say about the incidence of rural poverty.

	With land				Without land			
State	1964-65	1974-75	1977-78	1983	1964-65	1974-75	1977-78 (8)	1983 (9)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(0)	(3)
Andhra Pradesh	10.87	14.00	17.06	16.38	20.55	21.78	24.39	25.17
Assam	2.81	7.27	7.93	8.41	2.09	5.78	9.08	11.04
Bihar	17.46	19.36	21.66	17.79	10.05	13.91	14.42	19.32
Gujarat	4.26	7.70	12.58	8.12	12.42	14.60	18.58	22.57
Haryana	-	1.53	1.39	0.92	-	7.58	16.80	19.32
Jammu and Kashmir	0.53	1.07	2.21	4.19	0.35	0.76	0.90	2.16
Kamataka	9.56	14.38	17.30	16.75	17.67	16.40	20.62	19.84
Kerala	19.76	23.75	23.61	26.02	8.40	3.65	3.30	5.68
Madhya Pradesh	9.40	11.49	13.85	14.82	10.93	10.30	14.05	15.33
Maharashtra	9.81	15.03	16.30	16.15	21.27	16.93	22.26	22.40
Orissa	13.52	18.86	19.82	20.33	11.20	11.26	17.27	16.08
Punjab	1.77	1.76	1.71	1.20	12.57	19.12	22.39	24.06
Rajasthan	2.69	1.84	6.06	5.95	2.78	2.12	3.50	5.15
Tamil Nadu	8.83	13.70	13.20	11.99	19.23	24.28	26.10	30.25
Uttar Pradesh	7.48	8.98	11.03	9.66	6.41	6.83	7.08	8.35
West Bengal	10.65	14.16	19.15	18.09	14.78	16.78	22.79	20.41
All-India	9.54	12.43	14.53	13.53	12.18	12.84	15.35	17.17

TABLE III. PROPORTION OF AGRICULTURAL LABOUR HOUSEHOLDS WITH AND WITHOUT LAND TO THE RURAL HOUSEHOLDS

Sources: The table has been prepared from the following sources:
(a) Government of India (1975), Rural Labour Enquiry Report, 1963-64, Labour Bureau, Ministry of Labour and Rehabilitation, Chandigarh, Tables 2-1 and 2-2, pp. 3 and 5.

(b) Government of India (1980), Rural Labour Enquiry Report: Final Report on Wages and Earnings, 1974-75, Labour Bureau, Ministry of Labour, Chandigarh, Tables 2-1 and 2-2, pp. 18 and 19.

(c) Government of India (1989), Rural Labour Enquiry Report: Final Report on Wages and Earnings, 1977-78, Labour Bureau, Ministry of Labour, Chandigarh, Tables 2-1 and 2-2 (a)1, pp. 23 and 27.

(d) Government of India (1990), Rural Labour Enquiry Report: Report on Consumption Expenditure, 1983, Labour Bureau, Ministry of Labour, Chandigarh, Tables 2-1 and 2-2(a), pp. 40 and 44.

### THE FINAL WORD

It comes up clearly that the incidence of landlessness has increased in recent years, practically in each state, whether looked from (1) land ownership angle, (2) operated area angle or (3) the numerical strength of agricultural labour households. Which of the three versions is a more reliable indicator of landlessness need not be debated; in fact, all the three move in unison with one another (e.g., for 1982, highly significant rank correlation coefficients among (1), (2) and (3), i.e.,  $r_{12} = 0.81$ ,  $r_{13} = 0.95$  and  $r_{23} = 0.90$ , testify this assertion). Any one of the three can broadly serve the purpose.

Again, in recent years, the number of households owning but not operating any land has declined in a large number of states while the opposite is true for those which neither own nor cultivate, again for many states. The former implies, inter alia, an increasing tendency towards self-cultivation which, in turn, implies a diminishing access to land-lease market, especially to the big army of land seekers at the bottom of the agrarian hierarchy. The magnitude of land hunger becomes more apparent if sub-marginal (and marginal) land owning and/or operating households are added to the expanding number of the landless (see Tables I and II). Tenancy reform is clearly an urgent need. Politically, it is much less sensitive compared with land redistribution. Then, the increasing (or constant) number of 'neither owning nor cultivating' households signals that wage employment must expand in a big way because expanding self-employment in agriculture through land re-transfers indeed has a bleak prospect. Further, since expansion in agricultural wage employment is becoming increasingly difficult (Bhalla, 1994, pp. 128-132), non-farm wage employment will have to play a decisive role in the years to come (Chadha, 1993, pp. 78-80).

### REFERENCES

- Bhalla, Sheila (1983), "Tenancy Today: New Factors in the Determination of Mode and Level of Rent Payments for Agricultural Land", Economic and Political Weekly, Vol. 18, Nos. 19, 20 and 21, Annual Number.
- Bhalla, Sheila (1994), "Globalization, Growth and Employment", in G.S. Bhalla and Manmohan Agarwal (Eds.) (1994), World Economy in Transition: An Indian Perspective, Har-Anand Publications, New Delhi.
- Chadha, G.K. (1984), "The Landless Poor in the Green Revolution Region of India", Agricultural Situation in India, Vol. 39, No. 5, August.
- Chadha, G.K. (1986), The State and Rural Economic Transformation: The Case of Punjab, Sage Publications, New Delhi.
- Chadha, G.K. (1993), Nonfarm Sector in India's Rural Economy: Policy, Performance and Growth Prospects, VRF Series No. 220, Institute of Developing Economies, Tokyo.
- Chadha, G.K. and H.R. Sharma (1991), Agrarian Relations and Poverty, Report of Government of India Project, New Delhi.
- Chadha, G.K. and H.R. Sharma (1992), "Understanding Agrarian Relations in India: Comments on Quality of Available Data", in C.V.S. Murthy and G.K. Kadekodi (Eds.) (1992), Poverty in India: Data Base Issues, Indian Society of Econometrics.
- Government of India (1975), Rural Labour Enquiry Report, 1963-64, Labour Bureau, Ministry of Labour and Rehabilitation, Chandigarh.
- Government of India (1980), Rural Labour Enquiry Report: Final Report on Wages and Earnings, 1974-75, Labour Bureau, Ministry of Labour, Chandigarh.
- Government of India (1989), Rural Labour Enquiry Report: Report on Wages and Earnings, 1977-78, Labour Bureau, Ministry of Labour, Chandigarh.
- Government of India (1990), Rural Labour Enquiry Report: Report on Consumption Expenditure, 1983, Labour Bureau, Ministry of Labour, Chandigarh.
- Myrdal, Gunnar (1968), Asian Drama: An Inquiry into the Poverty of Nations, Vol. II, Pantheon, New York.
- National Sample Survey Organisation (NSSO) (1961 and 1962), The National Sample Survey: Eighth Round 1953-54
   Report on Land Holdings (3) and (4), NSS Report Nos. 36 and 66, Department of Statistics, Cabinet Secretariat,
  Ministry of Planning, Government of India, New Delhi.
- NSSO (1968 and 1976), National Sample Survey: 17th Round 1961-62 Report on Some Aspects of Land Holdings, NSS Report No. 144, and 26th Round 1971-72, NSS Report No. 215, Ministry of Planning, Government of India, New Delhi.
- NSSO (1986), National Sample Survey: 37th Round Report on Land Holdings (1), NSS Report No. 330, Ministry of Planning, Government of India, New Delhi.
- NSSO (1988), National Sample Survey: 38th Round 1983 Report on the Third Quinquennial Survey on Employment and Unemployment, NSS Report No. 341, Ministry of Planning, Government of India, New Delhi.
- Parthasarathy, G. (1994), "Rural Credit for the Assetless and the Poor: Some Policy Challenges", in G.K. Chadha (Ed.) (1994), Sectoral Issues in the Indian Economy: Policy and Perspectives, Har-Anand Publications, New Delhi.
- Reserve Bank of India (1965, 1976 and 1987), Reports on All-India Debt and Investment Survey for 1961-62, 1971-72 and 1981-82, Bombay.
- Sharma, H.R. (1991), The Changing Agrarian Relations in India: A Statewise Analysis, Ph.D. Thesis, School of Social Sciences, Jawaharlal Nehru University, New Delhi (Unpublished).
- Singh, Iqbal (1994), "Emerging Patterns of Tenancy and Labour Contracts in India", in G.K. Chadha (Ed.) (1994), Sectoral Issues in the Indian Economy: Policy and Perspectives, Har-Anand Publications, New Delhi.

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