

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
http://ageconsearch.umn.edu
aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

Magnitude, Structure and Determinants of Tenancy in Rural India-A State Level Analysis

H.R. Sharma*

I

INTRODUCTION

The institution of tenancy has remained one of the most debated rural institutions since the days of Adam Smith. The classical economists debated the relative efficiency of different tenurial systems, namely, fixed rent tenancy and share tenancy (metayage as it was called in French following a 50-50 sharing). The proposition that share tenancy is an inferior contractual arrangement is clearly stated in Alfred Marshal's Principles (1920); it is quite often referred to as Marshallian inefficiency or tax equivalent approach to share tenancy. In more recent times, the theoretical debate has branched into two schools. While one school supports the Marshallian inefficiency proposition, the other has sought to demonstrate that resource allocation must be efficient regardless of tenurial contracts (Cheung, 1969; Otsuka and Hayami, 1988 and Otsuka et al., 1992). In a somewhat related debate, marxists consider tenancy in general, and share tenancy in particular, as a source of exploitation and surplus appropriation, whereas the neo-classicals explain its emergence and persistence in terms of imperfect rural markets characterised by moral hazards, information asymmetry, high transaction costs, etc. (Stiglitz, 1989; Braverman and Stiglitz, 1982; Ray, 1998; Pearce, 1983; Bharadwaj and Das, 1975; Prasad, 1973; Bhadhuri, 1973).

In the Indian context, a number of empirical studies, based on sample surveys, have looked into various aspects of tenancy relations like magnitude, type, relative efficiency of different land tenure systems, and so on. The studies pertaining to eastern Indian states, especially of the earlier vintage, have, *inter alia*, shown that tenancy, in particular share tenancy, in conjunction with the exploitative interlinkages in credit and labour markets act as a formidable barrier in the introduction of new agricultural technology (Bhadhuri, 1973; Prasad, 1973; Bharadwaj and Das, 1975). More recent studies for these states have, however, reported qualitative changes in diverse aspects of tenancy relations (Chadha and Bhaumik, 1992; Swain, 1999; Jha, 2004; Chattopadhyay and Sengupta, 2001; Sharma *et al.*, 1995). In a similar vein, studies in other states, especially in agriculturally developed states like

^{*}Division of Food Resources and Environmental Economics, College of Natural Sciences, Konkuk University, Korea.

Punjab, Haryana and Western Uttar Pradesh, have brought out increasing incidence of self-cultivation, emergence of fixed rent tenancy, participation of medium and large households in the lease market as lessees, and so on (Singh, 1989; Srivastava, 1989; Siddiqui, 1999).

П

TENANCY LEGISLATIONS AND REVIEW OF MICRO EVIDENCE

Land issues have attracted attention of both the scholars and policy makers in the wake of ongoing process of liberalisation and privatisation. It is being increasingly argued that since changing land ceiling levels is politically more sensitive and difficult to implement, the easiest way to reform agrarian structure and activate land market lies in legalising leasing-in and leasing-out agricultural land which is not permitted under the existing tenancy laws. Insofar as the current status of provisions in tenancy legislations across states is concerned, all states can be divided into five broad categories. First, Kerala and Jammu and Kashmir have legally banned leasingout of agricultural land without any exceptions whatsoever. Second, Telangana region of Andhra Pradesh, Gujarat, Karnataka, Himachal Pradesh, Madhya Pradesh, Orissa and Uttar Pradesh have legally prohibited leasing out of agricultural land excepting by certain disabled categories like widows, minors, armed personnel, etc. Third, the states of Punjab, Haryana, Maharashtra and Assam have not banned leasing. While in Punjab and Haryana tenants acquire rights to purchase land after six years of continuous possession, in Maharashtra they are entitled to purchase leased-in land within one year of the commencement of tenancy. In Assam an ordinary tenant acquires the right of occupancy after three years of continuous possession and an occupancy tenant has a right to purchase leased-in land after three years. Fourth, in Andhra region of Andhra Pradesh, Rajasthan, Tamil Nadu and West Bengal there are no restrictions on leasing of land although in West Bengal only share cropping leases are permitted. Finally, in scheduled tribe areas of Andhra Pradesh, Orissa, Madhya Pradesh and Maharashtra transfer of tribal land to nontribals even on lease basis, can be permitted by competent authority.

The above-mentioned legislative provisions notwithstanding, the lease markets are fairly active in the countryside. A review of micro studies from different regions of rural India throws up a number of interesting features about the actual functioning of lease market. Some of these are summarised below. First, the proportion of leased-in land is significantly higher than reported by NSS data; in some cases, it is as high as 20-25 per cent of gross cultivated area. Further, the incidence of tenancy is higher in agriculturally developed regions compared to backward regions and all classes of households participate in the lease market both as lessors and lessees. Among crops, the proportion of leased-in land is very high in case of non-foodgrain crops compared to food crops. Tenancy contracts are oral, and most of them are for a short period. Second, while in agriculturally backward regions, the traditional pattern

of tenancy is followed wherein the small and marginal farmers dominate lease market as lessees and large and medium farmers as lessors is more common, in developed region the lease market is in a state of transition and the trend towards reverse tenancy has become more pronounced. Third, more recent studies show that small and marginal farmers have started leasing-out agricultural land consequent to increase in the cost of production, growing scarcity of water, falling returns and increasing uncertainty due to erratic weather conditions. Fourth, there is anecdotal evidence to suggest that many farmers, including small and marginal ones, are leaving their land fallow in view of the restrictive tenancy laws. This tendency is particularly more pronounced in states where tenancy is legally prohibited. Fifth, share tenancy with input cost sharing continues to be an important mode of leasing-in land, particularly for small and marginal farmers. Though output sharing ratios vary from region to region, most of the studies report 50:50 sharing. In agriculturally backward regions, share tenancy with input cost sharing is more common compared to agriculturally developed regions where fixed rent tenancy is more popular. The micro studies seem to suggest that small and marginal farmers prefer to lease-in land under share tenancy with input cost sharing, perhaps because of two reasons; one, lack of resources to pay cash rent in advance under fixed money and second, their inability to bear the entire risk of crop failure which has increased in recent times. Further, almost all studies show that the area leased-in for growing non-foodgrain crops is under fixed money. Sixth, studies examining the effect of tenancy on the inputs use and agricultural productivity have thrown up mixed results. While some find use of low amount of inputs and low level of yields on the leased-in plots compared to owned plots, the findings of others are just contrary to these. An exhaustive survey of literature, however, suggests that there is no conclusive evidence to support the hypothesis that yields under share tenancy are lower than under owner farming or fixed rent leasehold tenancy. Likewise, there is also no conclusive evidence to suggest that yield levels for households involved in interlocking of factor markets are lower than their counterparts not involved in such arrangements. Seventh, the findings of micro studies broadly support the hypothesis that households of different size categories participate in the lease market to utilise their indivisible and non-tradable inputs and capital resources like family labour, bullock labour and machinery more optimally. However, more recent studies also report a variety of other important factors like absenteeism of land owners, inferior quality of land, land not suitably located, escalation in the cost of production, growing uncertainty in crop production, etc. that oblige landowners to lease-out land.

Against the above background, it would be interesting to see how the different aspects of tenancy like magnitude, type, direction and duration have changed in recent times at the macro level across seventeen major states of the country. It is also important to know the factors that influence the extent and type of tenancy and find out whether the factors reported by micro studies hold true at the state level. The present paper examines these issues using NSS data thrown up by the 37th Round

(1981-82), 47th Round (1991-92) and 59th Round (2002-03). It is important to mention here that though NSS data are gross underestimates of the extent of tenancy; they do serve an important purpose in providing information about the different aspects of tenancy relations at the state level inasmuch as the findings of micro studies cannot be generalised for the whole state because of their limited coverage.¹

Ш

MAGNITUDE OF TENANCY

The changes in the incidence of tenancy have been measured in two ways: (i) proportion of holdings leased-in which are further sub-divided into entirely owned (EOH), mixed holdings (MH) and entirely leased-in holdings (ELIH) and (ii) the proportion of operated area leased-in. Nevertheless among the two measures, the proportion of operated area leased-in is a better indicator of incidence of tenancy inasmuch as holdings may increase because of sub-division. Since the proportion of entirely owned holdings at the all-India level is more than 80 per cent, the incidence of tenancy measured by the proportion of mixed holdings and entirely leased-in holdings may decrease even without the decrease in proportion of area leased-in. Table 1 provides information on the changes in the incidence of tenancy measured in terms of different types of holdings and the proportion of operated area leased-in. The following features emanating from the table need to be highlighted. First, during the eighties, at the all-India level, the proportion of entirely owned self-cultivated holdings (EOH) increased marginally, by one and a half percentage points. Across states, it increased in eight states (Bihar, Haryana, Jammu and Kashmir, Maharashtra, Punjab, Tamil Nadu, Uttar Pradesh and West Bengal). Among the remaining states, while the proportion of such holdings declined in Andhra Pradesh, Assam, Gujarat, Himachal Pradesh, Karnataka, Madhya Pradesh and Orissa, it remained practically unchanged in Kerala and Rajasthan. In comparison, during the nineties, the proportion of entirely owned holdings at the all-India level increased significantly from around 82 per cent to around 89 per cent. The proportion of such holdings also increased by varying degree practically in all major states except Bihar where it remained nearly unchanged. Second, the proportion of mixed holdings (MH) decreased by varying degree both at the all-India level and in almost all the states during the eighties. The pattern was, however, mixed during the nineties. At the all-India level, the proportion of such holdings decreased, albeit marginally. And among states, while the proportion of mixed holdings decreased further in Andhra Pradesh, Haryana, Jammu and Kashmir, Karnataka, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal, not much change was noticed in the remaining states except Bihar where it increased significantly. Third, the proportion of entirely leasedin holdings (ELIH) at the all-India level increased marginally. The pattern was, however, mixed across states; the proportion of such holdings increased by varying degree in Andhra Pradesh, Assam, Bihar, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Madhya Pradesh and Uttar Pradesh and either decreased or remained practically unchanged in the remaining states. In comparison, during the nineties, the proportion of such holdings decreased at the all-India level and also in most of the states with the notable exceptions of Andhra Pradesh, Orissa and Punjab where it increased. Fourth, incidence of tenancy in terms of proportion of operated area leased-in (LIA) during the eighties increased marginally from 7.18 per cent to 8.28 per cent. In states, it increased by varying degree during the eighties in ten states (Andhra Pradesh, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Madhya Pradesh, Punjab, Rajasthan and Uttar Pradesh) and declined in others. On the other hand, during the nineties, the proportion of operated area leased-in decreased at all all-India level and also in most of the states. The notable exceptions to this broad trend were Gujarat, Kerala, Bihar and Orissa where the proportion of operated area leased-in rose and Andhra Pradesh where it remained nearly unchanged.²

TABLE 1. INCIDENCE OF TENANCY IN RURAL AREAS, 1981-82 TO 2002-03: MAJOR STATES

							(per	cent)
State	Year	EOH	MH	ELIH	NONLIH	OWA	LIA	NONLIA
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Andhra Pradesh	1981-82	83.45	15.27	1.04	0.23	92.98	6.23	0.79
	1991-92	79.69	13.32	2.43	4.56	88.49	9.57	1.94
	2002-03	85.1	7.85	5.18	1.85	89.17	9.97	0.85
Assam	1981-82	83.93	10.77	3.5	1.80	90.99	6.35	2.66
	1991-92	79.88	5.07	7.35	7.70	85.84	8.87	5.29
	2002-03	87.84	5.05	3.05	4.05	93.14	5.06	1.80
Bihar	1981-82	78.03	20.04	1.01	0.56	88.68	10.27	1.05
	1991-92	86.02	1.90	5.56	6.52	92.81	3.91	3.28
	2002-03	86.88	8.86	3.93	0.32	90.97	8.90	0.13
Gujarat	1981-82	94.61	3.80	1.34	0.25	97.80	1.95	0.25
	1991-92	92.83	2.36	2.35	2.46	92.70	3.34	3.96
	2002-03	94.29	3.16	1.81	0.75	94.39	5.08	0.53
Haryana	1981-82	72.29	25.51	2.20	-	80.31	18.22	1.65
	1991-92	78.96	12.41	4.83	3.80	66.07	33.74	0.19
	2002-03	88.15	9.95	0.95	0	84.97	14.38	0.65
Himachal Pradesh	1981-82	87.24	12.27	0.49	-	94.60	3.20	2.20
	1991-92	84.08	3.80	5.01	0.71	92.18	4.83	2.99
	2002-03	93.24	4.05	2.30	0.4	96.20	2.87	0.92
Jammu and Kashmir	1981-82	88.16	11.73	0.11	-	95.19	2.37	2.44
	1991-92	91.2	5.35	0.52	2.93	94.44	3.73	1.83
	2002-03	97.88	1.35	0.60	0.17	99.27	0.32	0.41
Karnataka	1981-82	83.14	14.57	1.78	0.51	92.12	6.04	1.84
	1991-92	80.35	6.14	3.73	9.78	84.53	7.43	8.04
	2002-03	94.33	3.01	2.20	0.46	95.61	3.68	0.71
Kerala	1981-82	90.89	4.87	2.92	1.32	95.52	2.05	2.43
	1991-92	90.99	2.54	3.21	3.26	95.37	2.88	1.75
	2002-03	93.96	3.35	1.24	1.45	94.95	4.18	0.87
Madhya Pradesh	1981-82	81.91	14.19	1.13	2.77	92.65	3.56	3.79
	1991-92	80.21	5.06	6.48	8.25	86.53	6.30	7.17
	2002-03	90.91	5.71	1.54	1.84	95.05	3.42	1.53

(Contd.,)

TABLE 1 (CONCLD.)

State	Year	EOH	MH	ELIH	NONLIH	OWA	LIA	NONLIA
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Maharashtra	1981-82	87.15	9.29	2.69	0.87	94.21	5.20	0.59
	1991-92	89.22	5.53	2.40	2.85	90.50	5.48	4.02
	2002-03	90.71	4.71	2.30	2.28	94.10	4.59	1.31
Orissa	1981-82	74.27	24.06	1.49	0.18	83.97	9.92	6.12
	1991-92	70.46	17.69	1.70	10.15	84.41	9.48	6.11
	2002-03	77.60	12.00	8.40	2.00	83.78	13.15	3.07
Punjab	1981-82	76.19	21.71	1.64	0.46	82.21	16.07	1.72
	1991-92	80.27	15.60	1.43	2.7	80.82	18.83	0.35
	2002-03	86.50	10.3	2.4	0.8	82.12	17.84	0.04
Rajasthan	1981-82	89.53	8.51	1.52	0.44	94.47	4.31	1.22
	1991-92	90.32	6.22	1.55	1.91	92.41	5.19	2.40
	2002-03	96.75	2.11	0.81	0.35	96.47	2.81	0.21
Tamil Nadu	1981-82	70.45	19.7	8.56	1.29	87.37	10.92	1.71
	1991-92	74.56	11.02	5.82	8.60	84.91	10.89	4.20
	2002-03	89.41	5.78	3.71	1.10	93.26	6.10	0.63
Uttar Pradesh	1981-82	78.53	20.61	0.82	0.04	88.05	10.24	1.70
	1991-92	80.84	14.47	2.64	2.05	88.45	10.49	1.06
	2002-03	87.51	9.42	2.58	0.48	89.95	9.60	0.44
West Bengal	1981-82	71.58	19.37	7.02	2.03	86.18	12.34	1.48
	1991-92	75.40	12.00	5.27	7.33	85.74	10.40	3.86
	2002-03	83.59	9.00	5.10	2.31	89.78	9.42	0.79
All-India	1981-82	80.58	16.24	2.37	0.81	91.08	7.18	1.74
	1991-92	81.98	8.87	3.85	5.30	87.91	8.28	3.81
	2002-03	88.60	6.99	3.06	1.35	92.57	6.60	0.84

Sources: (i) Report on Landholdings (2); 37th Round 1982, NSS Report No.331.

(ii) Report on Some Aspects of Operational Holdings; 48th Round 1991-92, Report No.407.

(iii) Report on Some Aspects of Operational Holdings, 2002-03, 59th Round, NSS Report No.492.

Notes: EOH = Entirely Owned Holdings; MH = Mixed Holdings; ELIH = Entirely Leased-in Holdings; NONLIH = Neither Owned Nor Leased-in Holdings; OWA = Owned Area; LIA = Leased-in Area; NONLIA = Neither Owned Nor Leased-in Area.

The changes in the proportion of households not operating land, who comprise households owning but not operating land and neither owning nor operating land, also provide some insights about the changing incidence of tenancy. For example, the households who own but do not operate land comprise, among others, lessors of various categories which, *inter alia*, is an indicator of the magnitude of tenancy in a particular state. Likewise, those who neither own nor operate any land are landless households many of whom have no access to lease market may be because of onerous terms of tenancy and the participation of medium and large farmers in the lease market. This also gives an insight into the important aspects of the functioning of lease market like terms of tenancy and prevalence of reverse tenancy. Table 2 gives information on the changes in all the three categories of households. It may be seen from the table that during the eighties, the proportion of households not operating

TABLE 2. CHANGING PROPORTIONS OF HOUSEHOLDS NOT OPERATING LAND, OWNING BUT NOT OPERATING AND NEITHER OWNING NOR OPERATING LAND IN RURAL AREAS, 1981-82 TO 2002-03, MAJOR STATES

State 1981-82 1991-92 2002-03 1981-82 1991-92 2002-03 (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) Andhra Pradesh 40.47 37.49 57.06 37.22 31.84 43.93 3.25 5.65 13.13 Assam 13.27 14.01 18.08 11.15 7.89 14.97 2.12 (6) (7) Assam 13.27 14.01 18.08 11.15 7.89 14.97 2.12 6.12 3.11 Bihar 18.17 18.62 28.74 15.38 10.95 2.25.7 2.79 7.63 6.12 Humchal Pradesh 17.61 12.22 20.90 16.53 7.83 7.14 1.08 3.28 1.37 3.28 3.28 3.28 3.28 3.28 3.28 3.28 3.28 3.28 3.28 3.28 3.28 3.28 3.28 3.28 3.28 3.28 3		House	Households not operating land	ing land	Ownii	Owning but not operating	ting	Neither	Neither owning nor operating	rating
(2) (3) (4) (5) (6) (7) (8) (9) 40,47 37.49 57.06 37.22 31.84 43.93 3.25 5.65 40,47 37.49 57.06 37.22 31.84 43.93 3.25 5.65 18.17 18.62 28.74 15.38 10.99 22.57 2.79 7.63 36.14 25.11 38.22 25.22 15.31 26.06 10.92 9.80 36.14 25.11 38.24 29.64 16.83 7.14 1.08 4.39 17.61 12.22 20.90 16.53 7.83 7.14 1.08 4.39 11.77 6.39 7.65 5.03 5.24 4.82 6.74 1.15 27.02 19.04 38.56 14.30 13.71 25.06 12.72 5.33 27.02 19.04 38.56 14.80 11.46 16.58 9.26 10.42 27.02 21.88 <th>State</th> <th>1981-82</th> <th>1991-92</th> <th>2002-03</th> <th>1981-82</th> <th>1991-92</th> <th>2002-03</th> <th>1981-82</th> <th>1991-92</th> <th>2002-03</th>	State	1981-82	1991-92	2002-03	1981-82	1991-92	2002-03	1981-82	1991-92	2002-03
40.47 37.49 57.06 37.22 31.84 43.93 3.25 5.65 13.27 14.01 18.08 11.15 7.89 14.97 2.12 6.12 18.17 18.62 28.74 15.38 10.99 22.57 2.79 7.63 36.14 25.11 38.22 25.22 15.31 26.06 10.92 9.80 36.14 25.11 38.22 25.22 15.31 4.53 2.87 36.14 25.11 38.24 29.64 16.18 23.1 4.53 2.87 17.74 16.39 16.53 7.83 7.4 4.82 6.74 1.15 27.02 19.04 38.56 14.30 13.71 25.06 12.72 5.33 27.02 19.04 38.56 14.30 11.46 16.58 9.26 10.42 27.02 21.88 27.26 14.80 11.46 16.58 9.26 10.42 27.78 27.20	(1)	(2)	(3)	(4)	(5)	(9)	(7)	(8)	(6)	(10)
13.27 14.01 18.08 11.15 7.89 14.97 2.12 6.12 18.17 18.62 28.74 15.38 10.99 22.57 2.79 7.63 36.14 25.11 38.22 25.22 15.31 26.06 10.92 9.80 36.14 25.11 38.22 25.22 15.31 26.06 10.92 9.80 34.57 19.05 32.34 29.64 16.18 2.31 4.53 2.87 17.71 6.39 7.65 5.03 5.24 4.82 6.74 1.15 27.02 19.04 38.56 14.30 13.71 25.06 12.72 5.33 24.06 21.88 27.26 14.80 11.46 16.58 9.26 10.42 27.78 27.00 43.68 29.86 22.51 27.78 11.39 9.49 27.78 27.20 33.69 24.60 21.34 25.04 3.08 3.89 22.56	Andhra Pradesh	40.47	37.49	57.06	37.22	31.84	43.93	3.25	5.65	13.13
18.17 18.62 28.74 15.38 10.99 22.57 2.79 7.63 36.14 25.11 38.22 25.22 15.31 26.06 10.92 9.80 34.57 19.05 32.34 29.64 16.18 23.1 4.53 2.87 17.61 19.05 32.34 29.64 16.18 2.31 4.53 2.87 11.77 6.39 7.65 5.03 5.24 4.82 6.74 1.15 27.02 19.04 38.56 14.30 13.71 25.06 12.72 5.33 11.70 6.39 7.28 9.09 3.7 34.1 3.9 2.85 24.06 21.88 27.26 14.80 11.46 16.58 9.26 10.42 24.06 21.88 27.60 22.51 27.78 11.39 9.49 27.78 27.00 33.69 24.60 21.34 3.08 3.89 27.78 12.57 27.34	Assam	13.27	14.01	18.08	11.15	7.89	14.97	2.12	6.12	3.11
36.14 25.11 38.22 25.22 15.31 26.06 10.92 9.80 34.57 19.05 32.34 29.64 16.18 23.1 4.53 2.87 17.61 12.22 20.90 16.53 7.83 7.14 1.08 4.39 11.77 6.39 7.65 5.03 5.24 4.82 6.74 1.15 27.02 19.04 38.56 14.30 13.71 25.06 12.72 5.33 27.02 19.04 38.56 14.30 13.71 25.06 12.72 5.33 27.02 21.88 27.26 11.46 16.58 9.26 10.42 24.06 21.88 27.26 11.46 16.58 9.26 10.42 27.78 27.20 33.69 24.60 21.97 26.75 3.18 5.23 27.78 12.54 17.74 7.21 9.98 12.57 5.08 2.56 27.78 12.54 17.74 7.21 9.98 12.57 5.08 2.56 27.78 12.54 17.77 9.98 12.57 5.08 2.56 20.00 11.75 17.42 9.98 12.57 24.41 1	Bihar	18.17	18.62	28.74	15.38	10.99	22.57	2.79	7.63	6.17
34.57 19.05 32.34 29.64 16.18 23.1 4.53 2.87 17.61 12.22 20.90 16.53 7.83 7.14 1.08 4.39 11.77 6.39 7.65 5.03 5.24 4.82 6.74 1.15 27.02 19.04 38.56 14.30 13.71 25.06 12.72 5.33 12.99 6.55 37.28 9.09 3.7 34.1 3.9 2.85 24.06 21.88 27.26 11.46 16.58 9.26 10.42 24.06 21.88 27.26 11.46 16.58 9.26 10.42 27.78 27.20 33.69 24.60 21.97 26.75 3.18 5.23 27.78 27.20 31.42 19.48 21.73 27.94 3.08 3.89 27.76 36.66 59.23 33.80 27.92 44.13 3.46 8.74 20.00 11.75 17.42 17.67 9.27 14.13 3.46 8.74 20.01 11.75 17.71 8.68 27.86 4.43 6.63 20.02 21.84 33.97 21.18 15.68 27.30 4.88<	Gujarat	36.14	25.11	38.22	25.22	15.31	26.06	10.92	08.6	12.16
17.61 12.22 20.90 16.53 7.83 7.14 1.08 4.39 11.77 6.39 7.65 5.03 5.24 4.82 6.74 1.15 27.02 19.04 38.56 14.30 13.71 25.06 12.72 5.33 12.99 6.55 37.28 9.09 3.7 34.1 3.9 2.85 24.06 21.88 27.26 14.80 11.46 16.58 9.26 10.42 24.06 21.88 27.26 12.51 27.78 11.39 9.49 41.25 32.00 43.68 29.86 22.51 27.78 11.39 9.49 27.78 27.20 33.69 24.60 21.73 26.75 3.18 5.23 22.56 12.54 7.21 9.98 12.57 5.08 2.56 37.66 59.23 33.80 27.92 44.13 3.46 8.74 20.00 11.75 17.47 17.71 8	Haryana	34.57	19.05	32.34	29.64	16.18	23.1	4.53	2.87	9.24
11.77 6.39 7.65 5.03 5.24 4.82 6.74 1.15 27.02 19.04 38.56 14.30 13.71 25.06 12.72 5.33 1 27.02 19.04 38.56 14.30 13.71 25.06 12.72 5.33 1 24.06 21.88 27.26 14.80 11.46 16.58 9.26 10.42 2.85 41.25 32.00 43.68 29.86 22.51 27.78 11.39 9.49 27.78 27.20 31.42 19.48 21.73 26.75 3.18 5.23 22.56 12.54 17.74 7.21 9.98 12.57 5.08 2.56 37.6 59.23 33.80 27.92 44.13 3.46 8.74 1 20.00 11.75 17.42 17.71 8.68 27.86 4.43 6.63 20.14 15.31 32.97 21.18 15.68 25.30 4.88 6.1	Himachal Pradesh	17.61	12.22	20.90	16.53	7.83	7.14	1.08	4.39	13.76
27.02 19.04 38.56 14.30 13.71 25.06 12.72 5.33 1 12.99 6.55 37.28 9.09 3.7 34.1 3.9 2.85 24.06 21.88 27.26 14.80 11.46 16.58 9.26 10.42 41.25 32.00 43.68 29.86 22.51 27.78 11.39 9.49 27.78 27.20 33.69 24.60 21.97 26.75 3.18 5.23 22.56 25.62 31.42 19.48 21.73 27.94 3.08 3.89 12.29 12.54 17.74 7.21 9.98 12.57 5.08 2.56 37.26 36.66 59.23 33.80 27.92 44.13 3.46 8.74 20.0 11.75 17.42 17.71 8.68 27.86 44.3 6.63 20.6 21.84 33.97 21.18 15.68 25.30 4.88 6.16	Jammu and Kashmir	11.77	6:36	7.65	5.03	5.24	4.82	6.74	1.15	2.83
12.99 6.55 37.28 9.09 3.7 34.1 3.9 2.85 24.06 21.88 27.26 14.80 11.46 16.58 9.26 10.42 41.25 32.00 43.68 29.86 22.51 27.78 11.39 9.49 27.78 27.20 33.69 24.60 21.97 26.75 3.18 5.23 22.56 25.62 31.42 19.48 21.73 27.94 3.08 3.89 12.29 12.54 17.74 7.21 9.98 12.57 5.08 2.56 37.66 59.23 33.80 27.92 44.13 3.46 8.74 1 20.00 11.75 17.42 17.71 8.68 27.86 44.3 6.63 22.14 15.31 32.04 17.71 8.68 27.86 44.8 6.16 26.06 21.84 33.97 21.18 15.68 25.30 4.88 6.16	Karnataka	27.02	19.04	38.56	14.30	13.71	25.06	12.72	5.33	13.5
24.06 21.88 27.26 14.80 11.46 16.58 9.26 10.42 41.25 32.00 43.68 29.86 22.51 27.78 11.39 9.49 27.78 27.20 33.69 24.60 21.97 26.75 3.18 5.23 22.56 31.42 19.48 21.73 27.94 3.08 3.89 12.29 12.54 17.74 7.21 9.98 12.57 5.08 2.56 37.26 36.66 59.23 33.80 27.92 44.13 3.46 8.74 1 20.00 11.75 17.42 17.71 8.68 27.86 44.33 6.63 25.04 21.84 33.97 21.18 15.68 25.30 4.88 6.16	Kerala	12.99	6.55	37.28	60.6	3.7	34.1	3.9	2.85	3.18
41.25 32.00 43.68 29.86 22.51 27.78 11.39 9.49 27.78 27.20 33.69 24.60 21.97 26.75 3.18 5.23 22.56 25.62 31.42 19.48 21.73 27.94 3.08 3.89 12.29 12.54 17.74 7.21 9.98 12.57 5.08 2.56 37.26 36.66 59.23 33.80 27.92 44.13 3.46 8.74 1 20.00 11.75 17.42 17.71 8.68 27.86 4.43 6.63 20.06 21.84 33.97 21.18 15.68 25.30 4.88 6.16	Madhya Pradesh	24.06	21.88	27.26	14.80	11.46	16.58	9.26	10.42	10.68
27.78 27.20 33.69 24.60 21.97 26.75 3.18 5.23 22.56 25.62 31.42 19.48 21.73 27.94 3.08 3.89 12.29 12.54 17.74 7.21 9.98 12.57 5.08 2.56 37.26 36.66 59.23 33.80 27.92 44.13 3.46 8.74 1 20.00 11.75 17.42 17.67 9.27 14.13 2.33 2.48 22.14 15.31 32.04 17.71 8.68 27.86 4.43 6.63 26.06 21.84 33.97 21.18 15.68 25.30 4.88 6.16	Maharashtra	41.25	32.00	43.68	29.86	22.51	27.78	11.39	9.49	15.90
22.56 25.62 31.42 19.48 21.73 27.94 3.08 3.89 12.29 12.54 17.74 7.21 9.98 12.57 5.08 2.56 37.26 36.66 59.23 33.80 27.92 44.13 3.46 8.74 1 20.00 11.75 17.42 17.67 9.27 14.13 2.33 2.48 22.14 15.31 32.04 17.71 8.68 27.86 4.43 6.63 26.06 21.84 33.97 21.18 15.68 25.30 4.88 6.16	Orissa	27.78	27.20	33.69	24.60	21.97	26.75	3.18	5.23	6.94
12.29 12.54 17.74 7.21 9.98 12.57 5.08 2.56 37.26 36.66 59.23 33.80 27.92 44.13 3.46 8.74 1 20.00 11.75 17.42 17.67 9.27 14.13 2.33 2.48 22.14 15.31 32.04 17.71 8.68 27.86 4.43 6.63 26.06 21.84 33.97 21.18 15.68 25.30 4.88 6.16	Punjab	22.56	25.62	31.42	19.48	21.73	27.94	3.08	3.89	3.48
37.26 36.66 59.23 33.80 27.92 44.13 3.46 8.74 1 20.00 11.75 17.42 17.67 9.27 14.13 2.33 2.48 22.14 15.31 32.04 17.71 8.68 27.86 4.43 6.63 26.06 21.84 33.97 21.18 15.68 25.30 4.88 6.16	Rajasthan	12.29	12.54	17.74	7.21	86.6	12.57	5.08	2.56	5.17
20.00 11.75 17.42 17.67 9.27 14.13 2.33 2.48 22.14 15.31 32.04 17.71 8.68 27.86 4.43 6.63 26.06 21.84 33.97 21.18 15.68 25.30 4.88 6.16	Tamil Nadu	37.26	36.66	59.23	33.80	27.92	44.13	3.46	8.74	15.10
22.14 15.31 32.04 17.71 8.68 27.86 4.43 6.63 26.06 21.84 33.97 21.18 15.68 25.30 4.88 6.16	Uttar Pradesh	20.00	11.75	17.42	17.67	9.27	14.13	2.33	2.48	3.29
26.06 21.84 33.97 21.18 15.68 25.30 4.88 6.16	West Bengal	22.14	15.31	32.04	17.71	8.68	27.86	4.43	6.63	4.18
	All-India	26.06	21.84	33.97	21.18	15.68	25.30	4.88	6.16	8.67

Sources: (i) Report on Landholdings (1); 37th Round 1982, NSS Report No.330.
(ii) Report on Landholdings (2); 37th Round 1982, NSS Report No.331.
(iii) Report on Landholdings; 37th Round 1982, NSS Report No.338.
(iv) Report on Some Aspects of Ownership Holdings; 48th Round 1991-92, Report No.399.
(v) Report on Livestock and Implements in Household Operational Holdings; 48th Round 1991-92, Report No.492.
(iv) Report on Some Aspects of Operational Holdings, 2002-03, 59th Round, NSS Report No.492.

land decreased at the all-India level and in a majority of the states. In comparison, during the nineties the proportion of such households rose hugely at the all-India level and also in almost all the states. In fact, in some states, most notably, Andhra Pradesh, Bihar, Gujarat, Haryana, Karnataka, Kerala, Maharashtra, Tamil Nadu, Uttar Pradesh and West Bengal, the increase in the proportion of such households was truly mind boggling. It may also be seen from the table that increase in households not operating land at the all-India level and in as many as eleven states (Assam, Bihar, Gujarat, Jammu and Kashmir, Kerala, Madhya Pradesh, Orissa, Punjab, Rajasthan, Uttar Pradesh and West Bengal) was largely contributed by those who owned but did not operate land. In the remaining six states (Andhra Pradesh, Haryana, Himachal Pradesh, Karnataka, Maharashtra and Tamil Nadu), there was also a significant increase in the proportion of households who neither owned nor operated any land.

IΛ

TERMS OF TENANCY

The terms of tenancy have been clubbed into four types, namely, fixed money (FM), fixed produce (FP), share tenancy (ST) and other terms (OT).³ The changes in these terms of tenancy over the period have been studied in terms of per cent distribution of leased-in holdings and area leased-in under them. The requisite data is provided in Table 3. The following important points emanating from the table need to be mentioned. First, the proportion of holdings and area leased-in accounted for by fixed rent tenancy, including fixed money and fixed produce, increased continuously both during the eighties and the nineties at the all-India level and also in as many as thirteen major states of the country (Andhra Pradesh, Bihar, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Madhya Pradesh, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal). In the remaining states, while the proportion of holdings and area leased-in accounted for by fixed rent tenancy decreased during both the periods in Assam and Jammu and Kashmir, no neat pattern was discernible in Maharashtra and Orissa. Second, the per cent of holdings and operated area leased-in accounted for by share tenancy decreased markedly at the all-India level during the eighties but increased substantially thereafter during the nineties. Across states, the pattern was mixed. For example, while the proportion of holdings and operated area leased-in accounted for by share tenancy increased continuously in Andhra Pradesh, Gujarat and Rajasthan and decreased in Haryana and West Bengal, in five others (Assam, Bihar, Himachal Pradesh, Kerala and Uttar Pradesh), their per cent share decreased during the eighties but increased during the nineties. No neat pattern was evident in the remaining states. Third, the importance of 'other terms' in terms of per cent of holdings and area leased-in accounted for by them decreased by varying degree at the all-India level and also in a majority of the states both during the eighties and the nineties.

TABLE 3. DISTRIBUTION OF OPERATIONAL HOLDINGS LEASED-IN AND OPERATED AREA LEASED-IN BY TERMS OF TENANCY IN RURAL AREAS, 1981-82 TO 2002-03: MAJOR STATES

			Hol	dings				<i>(per cent)</i> rea	
			1101	unigs			А	ica	
State (1)	Year (2)	FM (3)	FP (4)	ST (5)	OT (6)	FM (7)	FP (8)	ST (9)	OT (10)
Andhra Pradesh	1981-82	13.00	11.07	8.83	67.10	13.00	11.10	8.8	67.1
	1991-92	26.7	27.65	29.81	15.84	25.9	26.8	28.9	18.4
	2002-03	30.68	37.23	16.80	15.29	27.88	33.57	33.51	5.04
Assam	1981-82	15.43	8.35	35.35	40.87	15.4	8.4	35.3	40.9
	1991-92	19.40	4.57	31.17	44.86	17.00	4.00	27.8	51.2
	2002-03	9.92	3.09	58.2	28.79	10.73	2.26	33.33	53.68
Bihar	1981-82	6.53	3.59	73.32	16.56	6.5	3.6	73.3	16.6
	1991-92	10.02	13.35	46.05	30.58	9.5	12.8	43.5	34.2
	2002-03	16.67	20.72	57.15	5.46	12.85	18.52	64.85	3.78
Gujarat	1981-82	5.15	0.59	9.7	84.56	5.10	0.50	9.70	84.60
	1991-92	44.46	1.79	26.52	27.23	39.9	1.6	23.7	34.8
	2002-03	45.73	6.53	31.66	16.08	9.4	47.65	36.68	6.27
Haryana	1981-82	24.1	10.76	41.13	24.01	24.2	10.8	41.2	23.8
	1991-92	67.26	5.7	21.17	5.33	61.4	5.2	19.9	13.5
	2002-03	69.48	9.98	13.89	6.65	73.52	8.61	15.00	2.87
Himachal Pradesh	1981-82	7.43	16.21	33.11	43.25	7.28	16.5	33.01	43.21
	1991-92	14.99	9.91	11.94	63.16	13.64	8.98	10.87	66.51
	2002-03	36.88	15.6	30.5	17.02	20.00	13.33	26.67	40.00
Jammu and Kashmir	1981-82	2.31	12.14	66.47	19.08	2.17	11.96	66.85	19.02
	1991-92	9.75	31.05	12.27	46.93	9.37	30.21	11.81	48.61
	2002-03	40.00	0	20.00	40.00	7.62	6.09	64.55	21.74
Karnataka	1981-82	3.61	4.46	29.98	62.65	3.6	4.7	29.3	62.4
	1991-92	23.15	16.58	32.42	27.85	20.4	14.7	28.6	36.3
	2002-03	36.89	36.58	22.65	3.88	33.53	41.18	23.53	1.76
Kerala	1981-82	3.37	-	13.19	83.44	3.4	-	13.2	84.9
	1991-92	19.02	-	2.48	78.5	15.9	-	2.1	82.00
	2002-03	37.72	10.18	10.78	41.32	40.39	7.57	15.56	36.48
Madhya Pradesh	1981-82	1.71	1.10	27.78	69.41	1.7	1.1	27.8	69.4
	1991-92	17.21	24.17	28.05	30.57	15.3	21.4	24.9	38.4
	2002-03	24.79	36.34	29.86	9.01	19.85	30.64	36.76	12.75
Maharashtra	1981-82	10.94	2.31	48.56	38.19	11.00	2.30	48.5	38.2
	1991-92	39.59	7.07	22.94	30.4	36.20	6.50	20.90	36.40
	2002-03	31.44	8.68	40.12	19.76	28.72	9.22	40.04	22.01
Orissa	1981-82	5.15	8.06	41.96	44.83	5.10	8.10	42.00	44.80
	1991-92	20.58	5.83	53.29	20.3	19.70	4.70	50.90	24.70
	2002-03	11.88	9.98	68.52	9.62	10.97	9.19	71.61	7.81
Punjab	1981-82	42.13	4.60	39.87	13.4	42.10	4.60	39.90	13.40
	1991-92	52.56	19.50	12.07	15.87	49.20	18.20	11.30	21.30
	2002-03	81.73	3.25	8.51	6.5	80.43	1.52	14.43	3.62

(Contd.)

TABLE 3 (CONCLD.)

			Holo	lings			A	rea	
State (1)	Year (2)	FM (3)	FP (4)	ST (5)	OT (6)	FM (7)	FP (8)	ST (9)	OT (10)
Rajasthan	1981-82	3.46	1.40	21.51	73.63	3.5	1.4	21.6	73.5
	1991-92	15.78	20.18	24.31	39.73	15.2	19.4	23.4	42.00
	2002-03	34.82	12.50	41.96	10.71	36.94	18.47	36.94	7.65
Tamil Nadu	1981-82	19.3	19.86	36.5	24.34	19.2	19.9	36.50	24.40
	1991-92	33.52	21.13	16.67	28.68	32.4	20.5	16.10	31.00
	2002-03	42.67	28.22	15.00	14.11	32.68	29.53	22.44	15.35
Uttar Pradesh	1981-82	8.60	4.88	50.10	36.42	8.6	4.90	50.10	36.40
	1991-92	9.86	16.21	49.48	24.45	9.20	15.20	46.50	29.10
	2002-03	20.37	14.37	59.85	5.41	24.25	14.12	54.61	7.02
West Bengal	1981-82	2.84	11.92	55.55	29.69	2.8	11.9	55.6	29.7
	1991-92	9.61	13.02	51.77	25.6	8.6	11.7	46.5	33.2
	2002-03	26.71	29.96	35.39	7.94	24.92	29.26	33.59	12.23
All-India	1981-82	10.88	6.28	41.84	41.00	10.90	6.30	41.90	40.90
	1991-92	20.32	15.62	36.89	27.17	19.00	14.50	34.40	32.10
	2002-03	26.57	19.80	43.96	9.67	30.19	19.88	40.60	9.33

Sources: Computed from the following NSS Reports:

- (i) Report on Landholdings (2); 37th Round 1982, NSS Report No.331.
- (ii) Report on Some Aspects of Operational Holdings; 48th Round 1991-92, Report No.407.
- (iii) Report on Some Aspects of Operational Holdings, 2002-03, 59th Round, NSS Report No.492.

Note: FM = Fixed money; FP = Fixed produce; ST = Share tenancy; OT = Other terms.

V

REVERSE TENANCY

The extent of reverse tenancy has been studied in terms of changes in the amount of land leased-in and leased-out by the small and marginal households and their per cent share in the total land transacted in the lease market. Table 4 provides the desired information. The table shows that at the all-India level, the proportion of leased-in land accounted for by landless, marginal and small households remained constant at around 71 per cent. Among the states, the proportion of leased-in land accounted for by landless, marginal and small households increased between 1971-72 and 1991-92 in as many as ten states (Andhra Pradesh, Assam, Gujarat, Jammu and Kashmir, Madhya Pradesh, Maharashtra, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal) but decreased during the subsequent period from 1991-92 to 2002-03. More importantly, however, in all these states except Madhya Pradesh, Maharashtra and West Bengal, the extent of decrease in the per cent share in leased-in land of these households was truly significant. The pattern was mixed in the remaining states. For example, while in Bihar and Orissa, the proportion of leased-in land accounted for by landless, marginal and small households increased during both the periods, in four others (Haryana, Karnataka, Kerala and Punjab) it decreased between 1971-72 and 1991-92 but increased thereafter. Insofar as the share of small and

TABLE 4. REVERSE TENANCY: THE EXTENT OF PARTICIPATION OF LANDLESS, MARGINAL AND SMALL HOUSEHOLDS IN THE LEASE MARKET AS LESSEES AND LESSORS IN RURAL AREAS, MAJOR STATES, 1971-72 TO 2002-03

State (1)	Year (2)	Land leased-in (00 ha) (3)	Land leased-out (00 ha) (4)	Per cent share in leased-in land (5)	Per cent share in leased-out land (6)
Andhra Pradesh	1971-72	5831	2857	42.93	30.92
	1991-92	6969	2396	82.52	64.17
	2002-03	6128	1607	71.74	70.57
Assam	1971-72	6172	750	95.26	44.67
	1991-92	1804	402	95.04	58.69
	2002-03	1094	35	82.97	53.50
Bihar	1971-72	10393	2190	88.06	44.23
	1991-92	3118	981	95.03	41.50
	2002-03	5967	771	97.38	65.09
Gujarat	1971-72	2286	507	64.94	26.23
•	1991-92	2571	940	90.31	38.68
	2002-03	2426	833	70.74	61.93
Haryana	1971-72	3418	230	63.21	14.79
•	1991-92	4074	4234	28.76	64.06
	2002-03	1845	692	40.50	37.58
Himachal Pradesh	1991-92	-	-	97.57	65.15
	2002-03	194	126	94.78	91.58
Jammu and Kashmir	1971-72	396	129	66.00	75.88
	1991-92	166	-	96.51	70.71
	2002-03	23	1.52	73.08	93.55
Karnataka	1971-72	10998	2130	65.74	30.33
	1991-92	4187	1459	58.47	19.49
	2002-03	1588	743	66.53	22.53
Kerala	1971-72	884	212	90.11	65.63
	1991-92	262	-	82.13	-
	2002-03	428	57	98.74	63.97
Madhya Pradesh	1971-72	8227	1004	58.81	19.20
·	1991-92	9084	1783	75.86	28.94
	2002-03	4350	1055	70.60	36.85
Maharashtra	1971-72	5563	1067	28.55	16.10
	1991-92	4734	1638	59.56	24.49
	2002-03	3301	1050	55.74	37.62
Orissa	1971-72	4731	1845	82.29	59.07
	1991-92	4484	1736	91.77	75.02
	2002-03	4560	1383	97.62	62.89
Punjab	1971-72	5228	693	64.41	16.56
J	1991-92	1767	810	42.41	32.36
	2002-03	2337	604	48.02	25.89

(Contd.)

TABLE 4. ((CONCLD.)	

State (1)	Year (2)	Land leased-in (00 ha) (3)	Land leased-out (00 ha) (4)	Per cent share in leased-in land (5)	Per cent share in leased-out land (6)
Rajasthan	1971-72	4324	428	59.16	7.81
	1991-92	5147	709	57.37	10.99
	2002-03	1609	471	32.33	23.16
Tamil Nadu	1971-72	5494	3032	91.31	25.15
	1991-92	3900	1745	86.91	64.57
	2002-03	1819	773	66.94	76.15
Uttar Pradesh	1971-72	19351	4358	88.34	46.83
	1991-92	16767	4158	91.37	49.30
	2002-03	11890	4583	81.24	58.12
West Bengal	1971-72	11691	1787	94.58	51.57
	1991-92	5029	1145	97.20	60.45
	2002-03	3517	643	94.40	63.97
All-India	1971-72	9874	2521	67.03	34.55
	1991-92	74772	19497	71.27	32.44
	2002-03	53638	15637	71.00	47.73

Sources: (i) Report on Some Aspects of Landholdings: 26th Round, 1971-72, NSS Report No. 215.

marginal households in the total land supplied in the lease market was concerned, there was a huge increase in the proportion of leased-out land accounted for by them at the all-India level. Among states, two distinct patterns were discernible. First, in nine states (Andhra Pradesh, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal), the per cent contribution of small and marginal households towards total land supplied in the lease market increased continuously in both the periods whereas in Bihar and Jammu and Kashmir it increased between 1991-92 and 2002-03. Second, in four states (Assam, Haryana, Orissa and Punjab), the per cent share of small and marginal households in the leased-out land increased during the first period but decreased subsequently.

VI

DURATION OF TENANCY CONTRACTS

Duration of tenancy contracts has important implications towards agricultural productivity. As is well known, long term tenancy contracts, *ceteris paribus*, offer more incentives for undertaking productivity enhancement measures. As mentioned above, micro studies from different regions of the country report that most of the tenancy contracts are for a short period. The landowners, apprehending losing leased-out land to tenants, reportedly lease-out for one to two crop seasons and rotate from one plot to others. In these reports on landholdings, the data on the duration of

⁽ii) Report on Some Aspects of Household Ownership Holdings; (1) 48th Round 1991-92, Report No.399.

⁽iii) Report on Household Ownership Holdings in India: 59th Round, 2003, NSS Report No.491.

tenancy contracts has been given in terms of the distribution of leased-in area by duration of tenancy contracts. In NSS reports, tenancy contracts have been classified into six main categories, viz., contracts for less than one agricultural season, one agricultural season but less than one agricultural year, one to two agricultural years, two to less than five years, five to less than twelve years and contracts for more than twelve years. The evidence from NSS data on the distribution of leased-in area under different contracts, presented in Table 5, lend credence to these findings of micro studies. The data show that at the all-India level more than half of the leased-in land was under contracts which were of less than two years duration. Likewise, in ten major states (Assam, Bihar, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan and Uttar Pradesh) contracts for less than two years duration also accounted for more than fifty per cent of the leased-in land. In the remaining states (Andhra Pradesh, Gujarat, Himachal Pradesh, Jammu and Kashmir, Kerala, Tamil Nadu and West Bengal) more than fifty per cent of the leased-in land was under those contracts which extended beyond two years. Further, during the nineties, the duration of the tenancy contracts decreased in a majority of the states. It was evident from the fact that the per cent of area leased-in accounted for by contracts for less than two years increased at the all-India level and also in as many as twelve states like Assam, Bihar, Himachal Pradesh, Jammu and Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Punjab, Rajasthan, Uttar Pradesh and West Bengal.

VII

DETERMINANTS OF TENANCY

Several factors influence a household's decision to lease-in land. For example, while households who own land may enter lease market to utilise their indivisible and non-tradable inputs like bullocks and farm machinery more optimally, landless labour households and marginal and sub-marginal households may do so to earn livelihood in the absence of alternative employment opportunities. Some households may also lease-in land to increase the size of their holdings to benefit from the application of new agricultural technology. Likewise, as postulated by neo-classical economists, different households choose tenancy contracts according to their risk bearing ability. While those who are risk takers may opt for fixed rent tenancy, others may choose share tenancy (Hallangan, 1978, Ray, 1998). In empirical literature, factors such as indivisible and non-tradable inputs, nature of crops grown, area under irrigation, and so on have been reported as important determinants of tenancy and its types (Bliss and Stern, 1982; Bardhan, 1976; Laxminarayan and Tyagi, 1977a,b). In broad terms, different factors affecting tenancy and its type can be classified into three categories. First, set of factors indicative of poor economic conditions (PEC) of rural households obliging them to lease-in land, more often on share tenancy, like incidence of poverty, unemployment and landlessness. Second, the possession of indivisible and

TABLE 5. DISTRIBUTION OF LEASED-IN AREA BY PERIOD OF LEASE IN RURAL AREAS, 1991-92 TO 2002-03, MAJOR STATES

		Less than one	One agricultural season but less	One to less than two	Two to less	Five to less	Twelve and		
		agricultural	than one	agricultural	than five	than twelve	more than		
State	Year	season	agricultural year	years	years	years	twelve years	Not recorded	Total
Andhra Pradesh	1991-92	2.31	25.50	17.27	28.80	8.42	10.04	7.66	100
	2002-03	6.01	13.05	23.76	22.27	29.81	5.04	0.05	100
Assam	1991-92	0.84	29.05	15.26	14.49	1.93	6.33	32.01	100
	2002-03	5.97	19.79	23.24	15.93	9.70	5.44	19.93	100
Bihar	1991-92	3.64	9.30	34.26	17.82	7.76	7.55	19.40	100
	2002-03	2.13	16.51	45.78	19.78	9.27	5.09	1.44	100
Gujarat	1991-92	3.54	20.33	20.26	15.29	1.17	15.23	24.17	100
	2002-03	1.25	9.11	10.56	30.75	0.01	48.32	0.00	100
Haryana	1991-92	10.24	15.43	59.51	0.77	0.04	0.72	13.29	100
	2002-03	6.38	16.42	49.24	24.27	3.27	0.42	0.00	100
Himachal Pradesh	1991-92	1.18	5.60	6.47	12.25	13.14	48.32	13.03	100
	2002-03	2.02	10.71	8.38	22.22	24.28	32.38	0.00	100
Jammu and Kashmir	1991-92	69.7	0.00	9.16	13.86	4.98	48.58	15.72	100
	2002-03	3.31	25.32	16.17	50.00	0.24	4.98	0.00	100
Karnataka	1991-92	9.72	25.88	8.92	16.11	5.22	4.45	29.69	100
	2002-03	7.21	13.32	35.47	32.94	10.60	0.47	0.00	100
Kerala	1991-92	6.34	10.75	2.90	16.50	24.26	20.84	18.41	100
	2002-03	1.85	9.70	15.84	34.14	24.25	14.22	0.00	100
Madhya Pradesh	1991-92	0.95	14.81	25.09	8.77	7.03	20.56	22.78	100
	2002-03	10.04	23.85	29.48	14.45	11.52	9.01	1.65	100
								(Contd.)	

TABLE 5 (CONCLD.)

one season but less than two roto less Five to less season agricultural than five than twelve season agricultural sears agricultural season agricultural sears agricultural season agricultural season agricultural season (3) (4) (5) (6) (7) (7) (6) (7) (7) (7) (7) (7) (7) (7) (7) (7) (7			Less than	One agricultural	One to less					
Year agricultural season than one agricultural year than five than twelve season than twelve season agricultural year years years years			one	season but less	than two	Two to less	Five to less	Twelve and		
Year season agricultural year years years (2) (3) (4) (5) (6) (7) rashtra 1991-92 9.75 11.12 25.17 19.63 10.90 a 1991-92 4.35 29.61 21.49 13.54 19.21 a 1991-92 1.49 30.88 26.31 14.37 11.32 b 1991-92 6.96 12.12 41.53 11.25 12.92 b 1991-92 6.96 12.12 48.84 9.52 19.80 than 1991-92 3.16 13.65 48.84 9.52 19.80 than 1991-92 3.45 6.76 17.30 23.33 9.34 Nadu 1991-92 3.45 6.76 17.30 23.33 9.34 Pradesh 1991-92 2.64 15.08 38.83 11.81 10.48 Bengal 1991-92 3.25 8.45 10.67 18.58 <th></th> <th></th> <th>agricultural</th> <th>than one</th> <th>agricultural</th> <th>than five</th> <th>than twelve</th> <th>more than</th> <th></th> <th></th>			agricultural	than one	agricultural	than five	than twelve	more than		
htra 1991-92 9.75 11.12 25.17 19.63 10.90 shtra 1991-92 9.75 11.12 25.17 19.63 10.90 2002-03 4.35 29.61 21.49 13.54 19.21 2002-03 1.58 19.69 33.68 27.39 8.24 1991-92 6.96 12.12 41.53 11.25 12.92 an 1991-92 3.16 15.00 29.25 26.94 10.22 adesh 1991-92 3.45 6.76 17.30 23.33 9.34 adesh 1991-92 2.64 15.08 38.83 11.81 10.48 adesh 1991-92 3.50 23.65 36.76 17.57 7.55 an 1991-92 4.82 16.44 30.67 14.64 7.81 a 1991-92 4.82 16.44 30.67 14.64 7.81	State	Year	season	agricultural year	years	years	years	twelve years	Not recorded	Total
shtra 1991-92 9.75 11.12 25.17 19.63 10.90 shtra 2002-03 4.35 29.61 21.49 13.54 19.21 1991-92 1.49 30.88 26.31 14.37 11.32 2002-03 1.58 19.69 33.68 27.39 8.24 1991-92 6.96 12.12 41.53 11.25 12.92 an 1991-92 3.16 15.00 29.25 26.94 10.22 adesh 1991-92 3.45 6.76 17.30 23.33 9.34 adesh 1991-92 2.64 15.08 38.83 11.81 10.48 adesh 1991-92 3.52 23.65 36.76 17.57 7.55 an 1991-92 4.82 15.48 16.12 13.53 a 1991-92 4.82 16.44 30.67 14.64 7.81 a 1991-92 4.82 16.44 30.67 14.64 7.81	(1)	(2)	(3)	(4)	(5)	(9)	(7)	8)	(6)	(10)
an 1991-92 1.49 30.88 26.31 13.54 19.21 1.32 2002-03 1.58 19.69 33.68 26.31 14.37 11.32 11.32 1991-92 6.96 12.12 41.53 11.25 12.92 19.90 an 1991-92 3.16 12.00 29.25 26.94 10.22 19.80 and 1991-92 3.45 6.76 17.30 23.33 9.34 adesh 1991-92 2.64 15.08 38.83 11.81 10.48 adesh 1991-92 3.52 2.64 15.08 38.83 11.81 10.48 adesh 1991-92 3.25 8.45 10.67 18.58 12.67 angal 1991-92 4.82 15.48 30.67 14.64 7.81 and 1991-92 4.82 15.48 24.14 16.12 13.53 a 1991-92 4.82 15.48 20.05 17.56 17.	Maharashtra	1991-92	9.75	11.12	25.17	19.63	10.90	10.34	13.10	100
an 1991-92 1.49 30.88 26.31 14.37 11.32 2002-03 1.58 19.69 33.68 27.39 8.24 1991-92 6.96 12.12 41.53 11.25 12.92 8.24 adesh 1991-92 3.45 6.76 17.30 23.33 9.34 adesh 1991-92 2.64 15.08 38.83 11.81 10.48 adesh 1991-92 2.64 15.08 38.83 11.81 10.48 adesh 1991-92 3.25 2.36 3.47 18.43 2.238 25.74 adesh 1991-92 2.64 15.08 38.83 11.81 10.48 adesh 1991-92 3.25 8.45 10.67 18.58 12.67 a 1991-92 4.82 15.58 24.14 16.12 13.53 a 1991-92 4.82 16.44 30.67 14.64 7.81 and adesh 1991-92 4.82 16.44 20.67 14.64 7.81		2002-03	4.35	29.61	21.49	13.54	19.21	11.44	0.35	100
ant 1991-92 6.96 12.12 41.53 11.25 12.92 an 1991-92 6.96 12.12 41.53 11.25 12.92 an 1991-92 3.16 15.00 29.25 26.94 10.22 adesh 1991-92 3.45 6.76 17.30 23.33 9.34 adesh 1991-92 2.64 15.08 38.83 11.81 10.48 adesh 1991-92 3.52 23.65 36.76 17.57 7.55 angal 1991-92 4.82 15.58 24.14 16.12 13.53 a 1991-92 4.82 16.44 30.67 14.64 7.81	Orissa	1991-92	1.49	30.88	26.31	14.37	11.32	4.79	10.33	100
an 1991-92 6.96 12.12 41.53 11.25 12.92 an 1991-92 3.16 15.00 29.25 26.94 10.22 addu 1991-92 3.45 6.76 17.30 23.33 9.34 adesh 1991-92 2.64 15.08 38.83 11.81 10.48 adesh 1991-92 3.52 23.65 36.76 17.57 7.55 angal 1991-92 4.82 16.44 30.67 14.64 7.81 a 1991-92 4.82 16.44 30.67 14.64 7.81		2002-03	1.58	19.69	33.68	27.39	8.24	8.61	0.82	100
2002-03 4.60 13.65 48.84 9.52 19.80 1991-92 3.16 15.00 29.25 26.94 10.22 2002-03 2.82 13.63 40.01 37.59 3.44 1991-92 3.45 6.76 17.30 23.33 9.34 2002-03 3.50 3.47 18.43 22.38 25.74 1991-92 2.64 15.08 38.83 11.81 10.48 2002-03 3.52 23.65 36.76 17.57 7.55 1991-92 3.22 8.45 10.67 18.58 12.67 2002-03 6.85 15.58 24.14 16.12 13.53 1991-92 4.82 16.44 30.67 14.64 7.81	Punjab	1991-92	96.9	12.12	41.53	11.25	12.92	4.62	10.60	100
1991-92 3.16 15.00 29.25 26.94 10.22 2002-03 2.82 13.63 40.01 37.59 3.44 1991-92 3.45 6.76 17.30 23.33 9.34 1 1991-92 2.64 15.08 38.83 11.81 10.48 2002-03 3.52 23.65 36.76 17.57 7.55 1991-92 3.22 8.45 10.67 18.58 12.67 2002-03 6.85 15.58 24.14 16.12 13.53 1991-92 4.82 16.44 30.67 14.64 7.81		2002-03	4.60	13.65	48.84	9.52	19.80	3.59	0.00	100
2002-03 2.82 13.63 40.01 37.59 3.44 1991-92 3.45 6.76 17.30 23.33 9.34 2002-03 3.50 3.47 18.43 22.38 25.74 1 991-92 2.64 15.08 38.83 11.81 10.48 2002-03 3.52 23.65 36.76 17.57 7.55 1991-92 3.22 8.45 10.67 18.58 12.67 2002-03 6.85 15.58 24.14 16.12 13.53 1991-92 4.82 16.44 30.67 14.64 7.81	Rajasthan	1991-92	3.16	15.00	29.25	26.94	10.22	9.29	6.15	100
1991-92 3.45 6.76 17.30 23.33 9.34 2002-03 3.50 3.47 18.43 22.38 25.74 1 1991-92 2.64 15.08 38.83 11.81 10.48 2002-03 3.52 23.65 36.76 17.57 7.55 1991-92 3.22 8.45 10.67 18.58 12.67 2002-03 6.85 15.58 24.14 16.12 13.53 1991-92 4.82 16.44 30.67 14.64 7.81 2002-03 4.62 17.66 32.91 20.67 12.82		2002-03	2.82	13.63	40.01	37.59	3.44	2.50	0.00	100
2002-03 3.50 3.47 18.43 22.38 25.74 1991-92 2.64 15.08 38.83 11.81 10.48 2002-03 3.52 23.65 36.76 17.57 7.55 1991-92 3.22 8.45 10.67 18.58 12.67 2002-03 6.85 15.58 24.14 16.12 13.53 1991-92 4.82 16.44 30.67 14.64 7.81 2002-03 4.62 17.66 32.91 20.67 12.82	Tamil Nadu	1991-92	3.45	92.9	17.30	23.33	9.34	21.56	18.36	100
1991-92 2.64 15.08 38.83 11.81 10.48 2002-03 3.52 23.65 36.76 17.57 7.55 1991-92 3.22 8.45 10.67 18.58 12.67 2002-03 6.85 15.58 24.14 16.12 13.53 1991-92 4.82 16.44 30.67 14.64 7.81 2002-03 4.62 17.05 32.91 20.67 17.82		2002-03	3.50	3.47	18.43	22.38	25.74	26.48	0.00	100
2002-03 3.52 23.65 36.76 17.57 7.55 1991-92 3.22 8.45 10.67 18.58 12.67 3 2002-03 6.85 15.58 24.14 16.12 13.53 2 1991-92 4.82 16.44 30.67 14.64 7.81 1 2002-03 4.62 17.96 32.91 20.67 12.82	Uttar Pradesh	1991-92	2.64	15.08	38.83	11.81	10.48	9.43	11.80	100
1991-92 3.22 8.45 10.67 18.58 12.67 2002-03 6.85 15.58 24.14 16.12 13.53 1991-92 4.82 16.44 30.67 14.64 7.81 2002-03 4.62 17.66 32.01 20.67 12.82		2002-03	3.52	23.65	36.76	17.57	7.55	7.66	3.29	100
2002-03 6.85 15.58 24.14 16.12 13.53 1991-92 4.82 16.44 30.67 14.64 7.81 2002-03 4.63 17.96 32.91 20.67 12.82	West Bengal	1991-92	3.22	8.45	10.67	18.58	12.67	35.81	10.60	100
1991-92 4.82 16.44 30.67 14.64 7.81 2002-03 4.63 17.06 32.01 20.67 12.82		2002-03	6.85	15.58	24.14	16.12	13.53	20.58	3.21	100
3 4 63 17 06 32 91 20 67 17 82	All-India	1991-92	4.82	16.44	30.67	14.64	7.81	10.87	14.72	100
20:21		2002-03	4.62	17.96	32.91	20.67	12.82	9.52	1.49	100

Sources: (i) Report on Some Aspects of Operational Holdings; 48th Round 1991-92, Report No.407. (ii) Report Some Aspects of Operational Holdings, 2002-03, 59th Round, NSS Report No.492.

non-tradable inputs (IND & NTIP) encourages the owners of these inputs to lease-in land either under fixed rent tenancy or share tenancy depending upon their economic vulnerability to utilise them more optimally. Thirdly, application of new agricultural technology (TECHN) like use of fertilisers and proportion of gross cropped area under irrigation also motivates farmer households to enlarge the size of their operational holdings to maximise profits. Further, as mentioned above the findings of recent micro studies from different regions of the country reveal that most of the land leased-in for growing non-foodgrain crops was under fixed rent tenancy. It was, therefore, hypothesised that higher the proportion of area under non-foodgrain crops (ANFGC), smaller will be the proportion of leased-in area under share tenancy. In mathematical form, the functional relationships between the extent of tenancy and share tenancy and these variables can be stated as follows:

Tenancy = f (PEC, IND & NTIP, TECHN) Share tenancy = f ((PEC, IND & NTIP, TECHN, ANFGC)

The dependent variables were defined as the proportion of operated area leasedin, proportion of operated area leased-in under share tenancy and proportion of operated area leased-in accounted for by share tenancy. The independent variables, as mentioned above, were grouped into three categories, namely, (i) variables indicative of poor economic conditions, (ii) possession of indivisible and non-traded inputs and (iii) adoption of new agricultural technology. To capture the effect of these factors, few proxy variables were tried. The variables like proportion of poor, per cent of unemployment and per cent of landless households in different states were used to proxy poor economic conditions of rural households. Likewise, the variables like household size, number of cattle/bullocks and machinery were considered to capture the effect of indivisible and non-tradable inputs. The effect of new agricultural technology was surrogated by fertiliser consumption per hectare and proportion of gross cropped irrigated area. Linear regression model was applied by pooling cross section data for 1981-82, 1991-92 and 2002-03 for fourteen major states. Different combinations of independent variables were tried to arrive at the best fit equations. The results of regression analysis are presented in Table 6. The results support the hypotheses stated above. For example, poverty and unemployment affected the incidence of tenancy positively and significantly; not only the regression coefficients had expected signs, these were statistically significant as well. Similarly, the ownership of lumpy inputs also had positive effect on the proportion of operated area leased-in, though the regression coefficient was statistically significant only in case of machinery. The adoption of new agricultural technology, surrogated by fertiliser consumption and proportion of gross cropped area irrigated, also impacted positively on the extent of tenancy, though the regression coefficient was statistically significant for irrigation only. Insofar as the factors affecting share tenancy were concerned, the results show that variables like unemployment, poverty, household size, cattle/bulls and fertiliser use had positive and statistically significant effect both on the proportion of leased-in area under share tenancy and proportion of leased-in area accounted for by share tenancy. The ownership of machinery like tractors had, however, negative and significant effect. The area under non-foodgrain also had negative effect on share tenancy, lending credence to the findings of micro studies, though regression coefficient was statistically insignificant.

TABLE 6. DETERMINANTS OF TENANCY AND SHARE TENANCY: RESULTS OF REGRESSION ANALYSIS

		Dependent variables	
Explanatory variables	Proportion of operated area leased-in	Proportion of leased-in area under share tenancy	Proportion of leased-in area accounted for by share tenancy
(1)	(2)	(3)	(4)
Constant	-5.89	-11.77	63.76
Un-employment	0.049**	0.03**	0.11
	(1.95)	(2.18)	(1.28)
Poverty	0.097**	0.06**	0.58*
•	(2.03)	(2.23)	(2.97)
Cattle/bulls	0.011	0.01***	0.17*
	(0.71)	(1.72)	(2.99)
Household size	=	1.94**	12.71**
		(2.35)	(2.44)
Machinery	0.047*	-0.01	-0.15**
(Tractors and Threshers)	(3.23)	(1.12)	(2.43)
Irrigation	0.167*	-	-
	(3.75)		
Fertilisers	0.011	0.02*	0.12**
	(0.57)	(2.95)	(2.12)
Area under non-	-	-0.02	-0.17
foodgrain crops		(-0.95)	(0.92)
R-square	0.67	0.45	0.58
Adjusted R-square	0.61	0.34	0.49
F statistics	11.63	4.01	6.70
No. of observations	42	42	42

Notes: (i) Figures in parentheses are 't' values.

(ii) *,** and *** denote levels of significance at 1, 5 and 10 per cent, respectively.

VIII

CONCLUSIONS AND POLICY OPTIONS

The evidence from NSS data at the state level shows that the incidence of tenancy in terms of different types of holdings and proportion of operated area leased-in declined in most of the states with the notable exceptions of Bihar, Gujarat, Kerala and Orissa where the proportion of leased-in area increased during the nineties. The proportion of households not operating land, increased hugely during the nineties practically in all the states; the increase was truly large in nine states (Andhra Pradesh, Bihar, Gujarat, Karnataka, Kerala, Maharashtra, Tamil Nadu, Uttar Pradesh

and West Bengal). There was a mixed pattern in so far as the changes in terms of tenancy across states were concerned. In more than half of the states, fixed rent tenancy became more important. Likewise, the incidence of share tenancy increased in Bihar, Gujarat, Kerala, Maharashtra, Orissa and Uttar Pradesh but decreased in Haryana, Jammu and Kashmir, Punjab, Tamil Nadu and West Bengal. The data also show that during the nineties duration of tenancy, in terms of proportion of leased-in area accounted for by contracts for less than two years, had decreased at the all-India level and also in a majority of the states. The state level evidence further shows that the proportion of total leased-in land accounted for by landless, marginal and small households decreased during the nineties in more than half of the states (Andhra Pradesh, Assam, Gujarat, Jammu and Kashmir, Madhya Pradesh, Maharashtra, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal). In comparison, the per cent contribution of marginal and small households towards total land supplied in the lease market increased in as many as eleven states (Andhra Pradesh, Bihar, Gujarat, Jammu and Kashmir, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal). The regression analysis further shows that factors like poverty, unemployment, bulls/cattle, machinery, per hectare consumption of fertilisers and proportion of gross cropped area under irrigation were important determinants of the magnitude of tenancy and share tenancy. The proportion of area under non-foodgrain crops also had positive, albeit statistically non-significant effect on share tenancy.

Thus, despite radical tenancy legislations in many states, the proportion of leased-in area is fairly high, even though the estimates thrown up by NSS data are considered underestimates. Against this background, regulation of lease market in the interest of landless, sub-marginal and marginal households has always remained an important theme of discussion and debate. The recording of tenants on the pattern of "Operation Barga" (OB) in West Bengal is suggested as a solution to protect the interests of the poor tenants. Further the entry to lease market should be restricted to petty peasants and medium and large farmers should be banned from leasing-in land. We would, however, argue that even if it is possible to ban tenancy completely by implementing existing legislations, this may not be a desirable option in the existing socio-economic milieu. In a growing agrarian economy like India factors like increase in population coupled with lack of alternative employment opportunities will always create strong demand for land, especially from the land-poor households. In such an economy, there will always be a continuous increase in the proportion of population who would switch over to non-farm activities, migrate to urban areas. Such households would be willing to lease-out land because of their inability to cultivate it themselves. Therefore, a complete ban on tenancy would push it underground and households in such situations would either prefer to keep their land fallow or lease-out to their kith and kin. This would hardly serve the land-poor households and would also have deleterious effect on agricultural productivity. Likewise, in agriculturally developed regions, there would always be a demand for leased-in land from medium and large farmers to expand their scale of production and utilise their lumpy capital inputs optimally.

In view of above, there is a strong case to legalise tenancy and allow leasing-in and leasing-out with adequate safeguards to protect the interests of the small and marginal farmers. The legalisation of tenancy does not mean abrogation of existing tenancy legislations. In today's context, it means suitably amending these laws allowing leasing-in and leasing-out land incorporating some provisions like fixing the tenure of lease, recording of lease and allowing landowners to resume land for selfcultivation after the expiry of lease. In fact, the need of the hour is to separate the ownership rights from the use rights. While ownership rights should be protected and made secure and non-alienable, the use rights should be allowed to be traded freely in the lease market. The legalisation of tenancy shall allow all sections of rural population to participate in the lease market depending upon their resource For instance, in agriculturally developed states like Punjab and Haryana, the small and marginal farmers may be encouraged to lease-out and medium and large farmers to lease-in land. In other states like Bihar and Orissa, the small and marginal farmers shall be in a position to enlarge their holding size and thus afford a reasonable level of living. The medium and large farmers in these states are likely to migrate to urban areas to take non-farm employment opportunities without any risk of losing their land. The legalisation of tenancy shall also give rise to long term tenancy contracts which have important implications towards improving agricultural productivity. In sum, well functioning lease markets can contribute towards broad based rural development in several ways like facilitating land from less productive to more productive uses, encouraging rural households to take up non-farm jobs without the risk of losing their land and increasing investment incentives in that those who make such investment can enjoy the benefits even if they are not in a position to use the land personally. Legislation to tenancy is a better option not only to the Market-Friendly Land Reforms promoted by the World Bank (Deininger, 2003) but also to Confiscatory Land Reforms advocated by the so-called neo-populist school (Griffin et al., 2002).

Received July 2007. Revision accepted December 2009.

NOTES

- 1. The quality of data on tenancy thrown up by two main sources viz. NSS reports on landholdings and agricultural census has been discussed and commented upon in the literature on tenancy studies. There is a near unanimity among scholars that the data from the former source is more reliable compared to the latter source. Likewise, the design and concepts underlying data on tenancy emanating from NSS reports on landholdings of various rounds and their temporal comparability have been widely discussed and commented upon. For details, see Chadha and Sharma, 1991; Sharma, 1992, 1995 and Chadha *et al.*, 2004, Chapter 3.
- 2. According to NSS reports, neither owned nor leased-in holdings (NONLIH) are all public and institutional holdings possessed by the households without title of ownership or occupancy rights. The possession in such cases is without the consent of the owner. Private holdings possessed by a household

without title of ownership and occupancy rights are not included in such holdings. Likewise, neither owned nor leased-in area (non-LIA) is understood to mean all public or institutional land possessed by a household without a title of ownership or occupancy rights. Private land possessed by a household without title of ownership and occupancy rights are not included in such land.

3. The clubbing of different tenancy contracts into four broad groups and their implications have been explained in Chadha and Sharma, 1991; Sharma, 1995 and Chadha *et al.*, 2004, Chapter 3.

REFERENCES

- Bardhan, Pranab K. (1976), "Variations in Extent and Forms of Agricultural Tenancy: Analysis of Indian Data Across Regions and Overtime", *Economic and Political Weekly*, Vol.11, Nos.37-38, September 4-10 and 11-17.
- Bhadhuri, Amit (1973), "A Study of Agricultural Backwardness Under Semi-Fedualism", *The Economic Journal*, Vol.83, No.329, March.
- Bhardwaj, Krishna and P.K. Das (1975), "Tenurial Conditions and Mode of Exploitation: A Study in Some Villages in Orissa", *Economic and Political Weekly*, Vol.10, Nos.25-26, June 21-28.
- Bliss, C.T. and N.H. Stern (1982), *Palampur: The Economy of an Indian Village*, Clarendon Press, London, U.K.
- Braverman, A. and Joseph, E. Stiglitz (1982), "Share Cropping and Interlinking of Agrarian Markets", *American Economic Review*, Vol.72, No.4.
- Chadha, G.K. and H.R. Sharma (1991), "Understanding Agrarian Relations in India: Some Comments on the Quality of Data", in G.V.S.N. Murty and G.K. Kadekodi (Eds.) (1991), *Poverty in India: Data Base Issues*, Vikas Publishers, New Delhi.
- Chadha, G.K. and S.K. Bhaumik (1992), "Changing Tenancy Relations in West Bengal: Popular Notions, Grass Root Realities, *Economic and Political Weekly*, Vol.27, Nos. 19 and 20, May 9.
- Chadha, G.K., Sucharita Sen and H.R. Sharma (2004), *State of the Indian Farmer: A Millennium Study: Land Resources*, Academic Foundation, New Delhi.
- Chattopadhyay, Manabendu and Atanu Sengupta (2001), "Tenancy Inefficiency: A Study Based on West Bengal Agriculture", *Economic and Political Weekly*, Vol. 36, Nos. 5 and 6, February 3-9 and 10-16
- Cheung, S.N.S. (1969), The Theory of Share Tenancy, Chicago University Press, Chicago.
- Deininger, Klaus (2003), Land Policies for Growth and Poverty Reduction, Oxford University Press, New Delhi.
- Griffin, Keith, Azizur Rahaman Khan and Amy Ickowitz (2002), "Poverty and Distribution of Land", *Journal of Agrarian Change*, Vol.2, No.3.
- Jha, Parveen (2004), "Continuity and Change: Some Observations on the Landscape of Agricultural Labourers in North Bihar, India", *Journal of Agrarian Change*, Vol.4, No.4.
- Hallagan, William (1978), "Self Selection by Contractual Choice and Theory of Sharecropping", *Bell Journal of Economics*, Vol.9, Autumn.
- Laxminarayan, L. and S.S. Tyagi (1977a), "Tenancy: Extent and Interstate Variations", *Economic and Political Weekly*, Vol.12, No.22, May 28.
- Laxminarayan, L. and S.S. Tyagi (1977b), "Inter Variations in Types of Tenancy", *Economic and Political Weekly*, Vol.12, No.39, September 24.
- Marshal, Alfred (1920), Principles of Economics, Macmillan, London, U.K.
- Otsuka, Keijiro and Yujiro Hayami (1988), "Theories of Share Tenancy: A Critical Survey", *Economic Development and Cultural Change*, Vol.37, No.1, October, pp.31-68.
- Otsuka, Keijiro, Hiroyuki Chuma and Yujiro Hayami (1992), "Land and Labour Contracts in Agrarian Economies", *Journal of Economic Literature*, Vol.30, December.
- Pearce, R. (1983), "Sharecropping: Towards a Marxist View", *The Journal of Peasant Studies*, Vol.10, Nos.2-3.
- Prasad, Pardhan H. (1973), "Production Relations: Achilles' Heel of Indian Planning", *Economic and Political Weekly*, Vol.8, No.19, May 12.

- Ray, Debraj (1998), Development Economics, Oxford University Press, New Delhi.
- Sharma, H.R. (1992), "Agrarian Relations in India Since Independence", *Journal of Indian School of Political Economy*, Vol.4, No.2, April-June, pp.201-262.
- Sharma, H.R. (1995), Agrarian Relations in India: Patterns and Implications, Har-Anand Publications, New Delhi.
- Sharma, H.R., Prakash Mehta and Khetmohan Mohapatra (1995), "Tenancy Relations and Productive/Allocative Efficiency: A Study in Orissa Agriculture", *Indian Journal of Agricultural Economics*, Vol.50, No.4, October-December.
- Siddiqui, Kalim (1999), "New Technology and Process of Differentiation: Two Sugarcane Cultivating Villages in UP", *Economic and Political Weekly*, Vol.34, No.52, December 25-31.
- Singh, Iqbal (1989), "Reverse Tenancy in Punjab Agriculture: Impact of Technological Change", *Economic and Political Weekly*, Vol.24, No.25, July 24-30.
- Srivastva, Ravi (1989), "Tenancy Transactions During Transition: A Study Based on Field Work in Uttar Pradesh (India)", *The Journal of Peasant Studies*, Vol.16, No.3.
- Stiglitz, Joseph J. (1989), "Rational Peasants, Efficient Institutions and a Theory of Rural Organization: Methodological Remarks for Development Economics" in Pranab Bardhan (Ed.)(1989), *The Theory of Agrarian Institutions*, Oxford University Press, New Delhi.
- Swain, Mamta (1999), "Agricultural Tenancy and Interlinked Transactions-I: Neo-classical and Marxist Approaches", *Economic and Political Weekly*, Vol.34, Nos. 37 and 38, September 11-17 and 18-24.