
CHAPTER FOUR: TRENDS IN SIZE PATTERN OF LAND HOLDINGS
DURING PLANNING PERIOD: ALL INDIA

The changes in size patterns of operational holdings at all India level can be studied in two parts, viz. (i) 1950-51 to 1961-62 and (ii) 1970-71 to 1980-81, since the official statistics available in this context is not full comparable on account of change in classification of land holdings done in the Agricultural census of 1970-71 and followed in subsequent censuses.

4.1 FROM 1950-51 TO 1961-62

4.1.1 Agricultural Labour Enquiry Commission Report, 1954:

The All-India Agricultural Labour Enquiry was conducted by trained investigators during the year 1950-51 in three stages through three different schedules : (1) a general family survey schedule and (3) intensive family survey schedule. The second of these three surveys collected information on size of holding along with details on family composition and occupation structure from 812 villages. The report on this survey is entitled " Rural Manpower and Occupation Structure."

4.1.1.1. Average size of holdings.

According to the findings of this part of the survey report, the average size of the holdings in the sample villages of the Indian Union was 7.5 acres. The average size naturally showed considerable variations

from census zone to census zone and between the states in each zone, as will be seen from the Table 4.1 showing the Zonal averages and All India averages.

Table 4.1

Average size of holdings per family according to different categories of families in the different zones.

(Holdings in acres)

Zones	Categories of families				
	Agricul- -tural owners	Agricul- -tural tenants.	Agricul- -tural workers	Non Agri- -culturists	All - fami- -lies
North India	10.7	5.2	1.5	3.2	5.3
East India	7.2	5.4	1.8	2.2	4.5
South India	7.7	7.7	2.3	1.9	4.5
West India	14.0	12.8	5.0	7.1	12.3
Central India	16.9	13.0	6.7	5.7	12.2
North West India.	13.7	13.1	5.8	5.4	12.6
All India	11.4	7.7	2.9	3.1	7.5

Source: Government of India, Ministry of Labour, Agricultural Labour Enquiry Committee, 1954, Report on "Man Power and Occupational Structure", P.22.

Average size of the holding was the lowest in the southern and Eastern zones being in each case 4.5 acres. These are mostly rice growing areas with a comparatively high percentage of irrigated and double sown land. The average size of holding was the lowest in Travancore-Cochin being 2.4 acres. The density per square mile was the highest in this state amongst the major states. The average size in Madras was very near the

zonal average for South India being 4.46 acres and it was the highest in Mysore State being 7.22 acres. It may be observed that in Mysore State the major crop was not rice but bajara and the extent of irrigated land and double sown land was also comparatively smaller.

In East India which was rice zone the average size varied from 5.3 acres in Assam to 4.1 acres in Bihar and 4.7 acres in West Bengal. In the Northern Zone comprising Uttar Pradesh which was both a rice and wheat growing tract, the average size was slightly higher being 5.3 acres. In all the other three zones, that is, the North West, West and Central, the average size was uniformity high being a little above 12 acres.

The numerical size of the holding alone hardly conveys an idea of the relative importance of holdings. In Punjab and Pepsu which were mainly wheat growing areas, the average size was about 12 and 15 acres respectively. Almost all the remaining tracts including Rajasthan, Madhya Pradesh, Madhya Bharat, Hyderabad, etc, which were comparatively less fertile, mostly un irrigated and grew millets, the average size was high at 16.9 acres in Rajasthan, 13.9 acres in Madhya Pradesh 14.1 acres in Hyderabad.

The average size of 12.3 acres in Western Zone was made up of an average of 9.6 acres in Bombay, and 29.6

acres in Saurashtra where land is of very poor quality.

4.1.1.2. Area owned and rented.

Of the average size of holding of 7.5 acres per family, 4.3 acres or 56.8 percent were owned, 3.1 acres or 41.3 percent were taken on rent and 0.1 acre or 1.9 percent were held free of rent. In most of the major states, the bulk of the average area of holding was owned but in Bihar, Madhya Pradesh, Uttar Pradesh, West Bengal and Rajasthan the area held on lease was greater. The percentage of area owned to total area of holdings was 89 percent in Orissa and 85 percent in Mysore. It varied between 70 and 80 percent in Madhya Pradesh, Pepsu, Bombay, Madras, Assam and Hyderabad and between 60 and 70 in Travancore-Cochin and Punjab. In Rajasthan it was 43 percent. In Bihar it was as low as 11 percent and varied between 20 and 30 percent in Uttar Pradesh, West Bengal and Madhya Pradesh.

4.1.1.3. Distribution of holdings according to size.

Table 4.2

Percentage distribution of cultivators' holdings according to size groups.

Sr. No.	Holding Size	Number	Area
1.	Upto 1 acre.	16.8	1.0
2.	1.1. acre to 2.5 acres.	21.3	4.6
3.	2.6 acres to 5.0 acres.	21.0	9.9
4.	5.1 acres to 10.0 acres.	19.1	17.6
5.	10.1 acres to 25.0 acres.	16.2	32.5
6.	Above 25 acres.	5.6	34.4

Source: Ibid, Pp. 522-23

On perusal of Table 4.2 the inequality of cultivators' holdings was found to be considerable in India. While the average size of the holdings was about 7.5 acres, about 70 percent of the holdings were below this average. Holdings below one acre formed about 17 percent those between one and $2\frac{1}{2}$ acres about 21 percent and those between $2\frac{1}{2}$ and 5 acres another 21 percent. These accounted respectively for 1.0, 4.6 and 9.9 percent of the total area. At the other end of the scale, 16 percent were in the group 10 to 25 acres accounting for 32.5 percent of the area and another 5.6 percent above 25 acres covering about 34 percent of the area.

The overall average size of holdings was 5.3 acres in North (Uttar Pradesh) but the number of holdings upto 2.5 acres in size formed about 40 percent of the total number of holdings and covered 9.7 percent of the total area. The largest concentration of holdings, that is, 25 percent, was in the group 2.5 to 5 acres covering 16.7 percent of the total area; 20.6 percent were in the group 5 to 10 acres and covered 26.4 percent of the area, while 11.4 percent were in the group 10 to 25 acres covering 30.6 percent of the area.

In East India zone, the overall average size was 4.5 acres. Here also, the largest concentration of holdings namely, 26.4 percent covering 20.8 percent of the total area was in the group 2.5 to 5 acres. However, 45.8 percent were

below 2.5 acres and covered 11.2 percent of the area. The rest were above 5 acres.

In south zone, as much as 55 percent of the holdings covering 12.2 percent of the area were below 2.5 acres, the overall average size being 4.5 acres. About 21 percent of the holdings occupying 16.3 percent of the area were in the size group 2.5 to 5 acres while the rest were above 5 acres.

In West Zone, the overall average size was high, namely 12.3 acres, but 61 percent of the holdings were below 10 acres and occupied 18.6 percent of the area. A little above 25 percent of the holdings covering 32.6 percent of the area were in the group 10 to 25 acres while 13.5 percent covering 48.8 percent of the area were above 25 acres.

The overall average size of holdings in Central Zone was 12.2 acres but 58 percent of the holdings covering 18 percent of the total area were below 10 acres. About 28 percent were in the size group 10 to 25 acres and accounted for 34 percent of the area, while 13.4 percent occupying 48 percent of the area were above 25 acres in size. The average size of holdings was the highest, viz., 12.6 acres, in North-West Zone. However, 59 percent of the holdings occupying 20.7 percent of the area were below 10 acres. About 31 percent of the holdings were in the size group 10 to 25 acres and occupied 39.3 percent of the area, while 9.8 percent covering 40 percent of the area were above 25 acres.

All the above details are clubbed together in Table 4.3.

Table 4.3

Zonal distribution of cultivators' holdings according to size groups.

Census Zones.	Under one acre		1 to 2.5 acres.		2.5 to 5 acres		5 to 10 acres		10 to 25 acres		Above 25 acres		Average size of holdings (acres)
	No.	Area	No.	Area	No.	Area	No.	Area	No.	Area	No.	Area	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
North India	14.8	1.4	26.2	8.3	25.1	16.7	20.6	26.4	11.4	30.6	1.9	16.6	5.3
East India	21.4	2.1	24.4	9.1	26.4	20.8	18.4	27.6	8.0	25.1	1.4	15.3	4.5
South India	28.0	2.7	27.1	9.5	20.9	16.3	14.0	21.1	7.9	25.4	2.1	25.0	4.5
West India	11.2	0.5	15.6	2.1	13.9	4.1	20.4	11.9	25.4	32.6	13.5	48.8	12.3
Central India	7.4	0.3	12.3	1.5	16.4	4.5	22.1	12.0	28.4	33.7	13.4	48.0	12.2
North West India	5.4	0.2	14.4	2.0	16.9	5.1	22.5	13.4	31.0	39.3	9.8	40.0	12.6

Source: Ibid, P.26

4.1.2 The National Sample Survey, Eighth Round:
July 1954 - April 1955 Number 74, Report
On Land Holdings (5), Rural Sector.

The design of the survey conformed to a stratified two stage sampling procedure with villages as the first stage units and households the second stage sampling units. A sample of 4,456 villages was taken up for investigation. About one third (1,424) sample villages constituted the central sample; the rest, the state sample. The staff of the Directorate of NSS Government of India surveyed the villages of the Central sample in all the states except in West Bengal, where field work was carried out by the Indian Statistical Institute (ISI). Actually, 4,431 sample villages were surveyed. The data were collected from the sample household by the method of interview and the particulars of ownership and operation of land were verified from the land records, wherever available.

4.1.2.1. Operational holdings.

The total number of operational holdings in rural India was estimated at about 62 million together commanding an area of about 336 million acres with an average size of 5.43 acres. The average size, however, showed considerable zonal variation from 3 to 4 acres in North, East and South Zones to about 9 to 10 acres in West Central and North-West Zones.

About 5 percent of the holdings in rural India were jointly operated and the percentage area under the joint operation was about 9. Individually operated holdings accounted for the

bulk of the total number of holdings in all the zones; in south zone these accounted for 98 percent of the number of holdings in the zone.

One fifth of the land operated in rural India was taken on lease by the management of operational holdings under various forms of tenancy with different modes of paying the rent. Roughly one tenth of the land operated in North Zone was taken on lease whereas the proportion of leased-in area to total operated area in the North-West zone was one fourth.

About 72 percent of the holdings in rural India was agricultural, i.e., was used either fully or partially for agricultural purposes. The agricultural holdings in rural India were found to be of an average size of 7.53 acres, varying from 4.31 acres in East India to 13.44 acres in Central India.

On an average the operational holding in rural India was constituted by 5 fragments (a fragment being a distinct and exclusive piece of land separated from any other piece of land covered by the operational holding). An operational holding in North and East Zones had an average 7 fragments while that in south had only 3.

4.1.2.2. Household operational holding.

The distribution of the area operated by household was uneven. A little over one tenth of rural households (estimated at 63.5 million) operated land less than 0.005 acre. About 56 percent of the rural households operated land

less than 2.50 acres and the operated area was only 6 percent of the total area operated by rural households in India. On the other hand, about 9 percent of the households, each operating is 15 acres or more, accounted for more than half (52 percent) of the total area operated. Similar uneven distribution of area operated was observed in all the zones. The average size of the household operational holdings in rural India was 5.28 acres, but in the different population zones it raised from 3 to 4 acres in North, East and South India to 8 to 9 acres in west, central and North West India.

4.1.2.3. Number of operational holdings and area operated.

The zonal estimates of the number and area of operational holdings are summarised in Table 4.4. It is seen that out of 62 million operational holdings in rural sector of India, having 336 million acres, East Zone (with 16 million holdings) accounted for the maximum number of holdings and central zone (with 88 million acres) held the maximum area of land. It is also observed from the table that East and North Zones, comparatively, possessed for less proportions of very small holdings (of size less than 0.005 acres)

Table 4.4

Estimated number of operational holdings and area operated
(1953-54)

Population zones	No. of Sample		Total No. of hold-ings (000)	Percentage of holdings of size		Total area operated ('000 acres)
	vill-ages	house holds		less than 0.005 acre	0.005 acres or more	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. North India.	611	10481	11052	5.29	94.71	41171
2. East India.	1027	19270	16185	3.31	96.69	54307
3. South India.	726	13906	13030	12.44	87.56	43192
4. West India.	540	8811	5789	22.58	77.42	49884
5. Central India.	768	12303	9662	16.03	83.97	88287
6. North-West India.	759	10949	6062	19.30	80.70	58870
7. All India.	4431	75720	61780	10.96	89.04	335711

Source: N S S, Eighth Round; July 1954 - April 1955, No.74, Report on land holdings (5) Rural Sector, P.5.

4.1.2.4. Average size of operational holding.

Table 4.5 gives the zonal average sizes of operational holdings. The average size of holdings in the zones North, East and South ranged from 3 to 4 acres but that in the west, central and North-West zones was 9 to 10 acres. The average holding size in the North, East and South zones was again

found to be much less than that in the remaining zones, when the holdings of size less than 0.005 acres were ignored.

About 73 percent of holdings in rural India commanding 17 percent of total area under holdings were of size below the average holdings. In North and East Zones, two thirds of the holdings were of size less than their respective averages while in south zone, 72 percent of holdings were of a size below the average.

Table 4.5

Average size of operational holdings - Major Crop Season 1953-54

Population Zones.	All holdings			Holding excluding those of size less than 0.0005 acres.		
	Average size (acres)	Percentage of holdings of size below the average	Percentage of area under holdings of size below the average	Size (acres)	Percentage of holdings of size below the average	Percentage of area under holdings of size below the average
1. North India.	3.73	66.15	19.48	3.93	65.95	21.13
2. East India.	3.36	66.37	16.83	3.47	66.09	17.69
3. South India.	3.31	72.11	13.71	3.79	71.00	16.36
4. West India.	8.62	70.03	15.61	11.13	68.12	21.63
5. Central India.	9.14	70.40	15.28	10.88	69.41	19.42
6. North West India.	9.71	70.42	18.76	12.03	69.40	24.20
7. All India	5.43	72.72	17.06	6.10	72.03	19.55

Source: Ibid, P.6.

Table 4.6

Percentage of operational holdings below specified size of operational holdings and cumulative percentage of area operated by them, major crop season 1953.54

holding size (acres)	North India			East India			South India			West India			Central India			North-West India			all India		
	: hold- : ings	: area : ope- : rated	:	: hold- : ings	: area : ope- : rated	:	: hold- : ings	: area : ope- : rated	:	: hold- : ings	: area : ope- : rated	:	: hold- : ings	: area : ope- : rated	:	: hold- : ings	: area : ope- : rated	:	: hold- : ings	: area : ope- : rated	
0.00	5.29	-		3.31	-		12.44	-		22.58	-		16.03	-		19.30	-		10.96	-	
1.00	36.37	2.13		43.55	2.87		52.30	2.28		37.90	0.34		41.02	0.34		32.16	0.28		42.08	1.20	
2.50	56.22	11.19		59.79	11.08		67.89	10.01		47.81	2.33		48.10	1.66		41.72	1.99		56.15	5.58	
5.00	76.30	30.60		78.84	31.66		80.83	23.90		59.09	7.09		57.46	5.38		54.37	6.82		71.23	15.60	
7.50	36.65	47.56		88.14	48.54		88.11	37.12		67.21	12.98		65.72	11.02		63.43	12.57		79.99	25.48	
10.00	91.64	59.12		92.66	60.23		92.31	48.05		73.46	19.36		72.83	17.73		71.32	19.70		85.42	34.16	
15.00	96.05	73.70		96.68	74.58		95.66	60.22		81.60	30.96		81.18	28.91		81.09	31.94		90.99	46.64	
20.00	97.92	82.37		98.28	82.73		97.26	68.58		86.99	42.00		86.91	39.73		87.42	43.17		94.11	56.55	
25.00	98.71	87.08		99.00	87.49		98.17	74.72		90.55	51.16		90.18	47.66		90.52	50.26		95.78	63.38	
30.00	99.25	91.01		99.43	90.93		98.72	79.32		92.88	58.60		92.70	55.23		92.66	56.31		96.93	69.17	
50.00	99.83	96.63		99.82	95.36		99.55	88.53		97.58	79.47		97.29	74.37		97.04	73.54		98.90	82.92	
Above 50.00	100.00	100.00		100.00	100.00		100.00	100.00		100.00	100.00		100.00	100.00		100.00	100.00		100.00	100.00	
Estimated number of operational holdings (000)	11052			16185			13030			5789			9662			6062			61780		
Estimated area operated	41171			54307			43192			49884			88287			58870			335711		

Table 4.6 shows the cumulative percentages of holdings below specified sizes of holding and percentage area covered below that size. Zonal variation can be noticed in the pattern of operation of land. Considering the percentage of holdings of size less than an acre to the corresponding total holdings in each zone, it is observed that in South Zone it was maximum (52 percent) whereas it was the minimum in North-West Zone (32 percent). 76 percent of holdings in North and 79 percent of holdings in East zone were below 5 acres each and they held 31 to 32 percent of the total area in respective zones. 81 percent of holdings in south India were of size below 5 acres having only 24 percent of total area operated in the zone. In the remaining zones, comparatively smaller percentages of holdings were below 5 acres in size. At the other extreme, if we consider holding of size above 50 acres, 3 percent of holdings in North-West India held over 26 percent of the land operated. Central India also revealed the same feature. In south India, only half a percent of holdings were above 50 acres and they had over 11 percent of area in the zone.

Table 4.7

Percentage Distribution of Estimated number of operational holding and area operated by size of operational holding.
(Reference period: July 1953 - June 1954; Major Crop Season)
All India.

holding size (acres)	Central & State samples combined	
	No. of holdings	Area operated
(1)	(2)	(3)
1. 0.000 ¹	10.96	-
2. 0.01 - 0.04	14.90	0.05
3. 0.05 - 0.09	3.38	0.04
4. 0.10 - 0.49	6.95	0.33
5. 0.50 - 0.99	5.89	0.78
6. 1.00 - 1.49	5.34	1.20
7. 1.50 - 2.49	8.73	3.18
8. 2.50 - 4.99	15.08	10.02
9. 5.00 - 7.49	8.76	9.88
10. 7.50 - 9.99	5.43	8.68
11. 10.00 -14.99	5.57	12.48
12. 15.00 -19.99	3.12	9.91
13. 20.00 -24.99	1.67	6.83
14. 25.00 -29.99	1.15	5.79
15. 30.00 -39.99	1.28	8.08
16. 40.00 -49.99	0.69	5.67
17. 50.00 and above.	1.10	17.08
18. estimated number of operational holdings. (000)		61,780.00
19. estimated area operated (000 acres)		3,35,711
20. Number of sample villages.		4,431
21. Number of sample households.		75,720

¹ includes operational holdings of size less than 0.005 acres.

Source: Ibid, P.97.

Table 4.7 presents the percentage distribution of estimated number of operational holdings and area operated by size of operational holdings. The extremities and skewness in distribution is conspicuous. Holdings upto 5 acres numbered 71 percent and covered only 16 percent of the area. At the other extreme, holdings beyond 50 acres numbered just 1.10 percent but commanded 17 percent of the agricultural land. In between these two extremes lay the group of holdings between 5 and 10 acres the number of which shared 14 percent of the holdings and covered 18 percent of the acreage. Cumulatively, 85 percent of the holdings were below 10 acres but they encompassed merely 34 percent of the land area.

4.1.2.6 Land taken on lease:

In rural India, of the 336 million acres of operated land, one fifth was taken on lease, the rest being owned by the management of operational holdings.

Areas taken on lease and areas owned expressed as percentages to total area operated for different size classes have been given in Table 4.8. It appears that 80 percent of the area was owned and the remaining 20 percent was leased in. Furthermore, the proportion of leased-in area declined with increase in the size of the holding. Importantly, in case of the small farmers having land below 5 acres, had more than one-fourth of their total holding leased-in.

Table 4.8

Percentage of area owned and area leased into total area operated for each size class of operational holding. (1953, 54)

	Holding size (acres)	Area Operated (000 acres)	Percentage area	
			Owned	leased in
	(1)	(2)	(3)	(4)
1.	0.01 - 0.99	4038	71.55	28.45
2.	1.00 - 2.49	14686	73.36	26.64
3.	2.50 - 4.99	33678	74.95	25.05
4.	5.00 - 7.49	33158	78.01	21.99
5.	7.50 - 9.99	29136	79.71	20.29
6.	10.00 - 14.99	41921	81.53	18.47
7.	15.00 - 19.99	33283	79.70	20.30
8.	20.00 - 24.99	22924	81.84	18.16
9.	25.00 - 29.99	19428	82.67	17.33
10.	30.00 - 49.99	46151	79.78	20.22
11.	50.00 and above	57308	82.16	17.84
12.	Total.	335711	79.66	20.34

Source: Ibid, p.18

4.1.3. NATIONAL SAMPLE SURVEY ; 16TH ROUND JULY 1960 - JUNE 1961

In order to participate in the programme of World Agricultural Census (1960) put forward by the World Food and Agricultural Organisation (FAO) for securing internationally comparable agricultural statistics from different countries, the Government of India sponsored an extensive survey on land holdings which was carried out by the N.S.S. in its 16th round (July 1960) to June 1961). The survey was extended to the whole of India excluding Andoman and Nicobar Islands, Laccadive and Amindivi Islands Ladakh district of Jammu & Kashmir and the North East Frontier Agency. The reference period for the collection of data pertaining to the operational holdings related to the agricultural year July 1959 to June 1960. Altogether 3,798 villages were planned to be surveyed, actually 3,755 villages could be surveyed, the rest of the villages being casualties.

The survey reveals that there were 169.9 millions of rural households in India of which 72 percent possessed operational holdings and the remaining 28 percent did not report any operational holdings. There were 49.2 million operational holdings possessing an area of 326.2 million acres of land in rural India, the average size of holding being 6.65 acres. Each operational holding on an average was constituted by 5.82 fragments and average size of each fragment was only 1.14 acres.

Table 4.9

Percentage distribution of number of operational holdings and of area operated by size class of operational holding.

Size class of operational holding (acres)	Operational holdings(%)	Area operated (%)
(1)	(2)	(3)
1. upto 0.49	10.92	0.39
2. 0.50 - 0.99	8.50	0.93
3. 1.00 - 2.49	21.28	5.39
4. 2.50 - 4.99	22.26	12.17
5. 5.00 - 7.49	11.85	10.88
6. 7.50 - 9.99	7.00	9.07
7. 10.00 -12.49	4.76	7.97
8. 12.50 -14.99	2.86	5.88
9. 15.00 -19.99	3.66	9.42
10. 20.00 -24.99	2.17	7.20
11. 25.00 -49.99	1.35	5.53
12. 30.00 -49.99	2.32	12.99
13. 50.00 and above	1.07	12.18
All sizes	100.00	100.00

Source : NSS, 16th Round, 1960-61, P.21

The distribution of holdings and area over different scales of holding sizes reveals that about 20 percent of holdings were of size below an acre contributing to only a little over 1 percent of the total operated area (see table 4.9). As large as 75 percent of the holdings of size less than 7.50 acres each held only 30 percent of the total area operated. On the other hand a little less than 5 percent of holdings of size 25 acres or more commanded as large as 31 percent of the total area operated. This indicates that the distribution of operated land over holding sizes was extremely uneven in the sense that though there were numerous small-sized holdings having very little share of area to their credit, a few large holdings had the control over the major share of operated area.

Regarding land owned and land leased in, 73 percent were entirely owned holdings, only 5 percent were the mixed type of holdings of the total operated area about 887 was owned and a little over 12% was rented in by the management of the holdings.

4.1.4. NATIONAL SAMPLE SURVEY : SEVENTEENTH ROUND :
SEPTEMBER 1961 - JULY 1962.

The survey on landholdings in the 17th round (September 1961 - July 1962) of the National Sample Survey (NSS) was an extension of a similar survey in the sixteenth round having the same concepts, definitions, sampling designs as also the same items of enquiry.

Table 4.10

Percentage distribution of number of operational holdings and area operated by size class of operational holdings.

Size class of operational holdings (acres)	Operational holdings	area operated
1. upto 0.49	8.55	0.32
2. 0.50- 0.99	8.58	0.95
3. 1.00- 2.49	21.94	5.59
4. 2.50- 4.99	22.62	12.32
5. 5.00- 7.49	12.84	11.73
6. 7.50- 9.99	6.96	8.97
7. 10.00- 12.49	5.05	8.25
8. 12.50- 14.99	2.90	5.95
9. 15.00- 19.99	3.75	9.58
10. 20.00- 24.99	2.29	7.39
11. 25.00- 29.99	1.31	5.30
12. 30.00- 49.99	2.18	12.05
13. 50.00 & above	1.03	11.60
14. All sizes.	100.00	100.00

Source: NSS. 17th Round, 1961-62, Land Holdings Enquiry (Rural), P.15

An estimated 50.7 million of operational holdings in rural India commanding an area of 329.6 million acres was seen to be having uneven distribution when arranged according to size as 17 percent of holdings were below one acre each having in all only 1 percent of total area, 45 percent of holdings were between 1 acre and 5 acres, contributing only 24 percent of total area, whereas 3 percent of holdings of size 30 acres or more claimed the same share of area. The unevenness of the distribution of holdings is highlighted by the fact that only 1 percent of holdings of size 50 acres or more accounted for 12 percent of total area operated. (See Table 4.10).

The average size of an operational holding was 6.49 acres and the holding was on an average constituted by 5.66 fragments, the average size of each parcel being 1.15 acres. The average area per parcel was less than an acre for holding of size up to 7.50 acres. This average size increased with the increase in holding size to 8 acres for holdings of size 50 acres or more.

An operational holding was constituted by plots either owned or leased in by the management of the operational holding. 89 percent of the operated area was owned by the holdings and the remaining, i.e., 11 percent was taken on lease. Some of the holdings were of the mixed types i.e. were constituted by plots some of which were owned while others taken on lease. The percentage of such holdings was 19. Obviously therefore, 76 percent of the holdings were entirely owned while 5 percent entirely leased in.

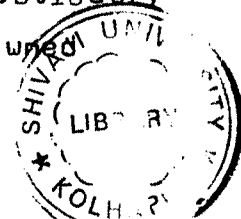


Table 4.11

Percentage distribution of number of agricultural holdings and area operated by them by size class of holdings (all India) 8th, 16th & 17th Rounds of N.S.S.

Holding Size (Acres)	Agricultural holdings											
	8th Round		16th Round		17th Round		16th & 17th Round (mean)					
	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area
upto 0.49	36.19	0.42	10.92	0.39	8.55	0.32	9.73	0.35				
0.50-0.99	5.89	0.78	8.50	0.93	8.58	0.95	8.54	0.94				
1.00-2.49	14.07	4.38	21.28	5.39	21.94	5.59	21.61	5.40				
2.50-4.99	15.08	10.02	22.26	12.17	22.69	12.32	22.44	12.24				
5.00-7.49	8.76	9.88	11.85	10.88	12.84	11.73	12.34	11.30				
7.50-9.99	5.43	8.68	7.00	9.07	6.96	8.97	6.98	9.02				
10.00-12.49	5.57	12.48	4.76	7.97	5.05	8.25	4.90	8.11				
12.50-14.99	3.12	9.91	2.86	5.88	2.90	5.95	2.88	5.91				
15.00-19.99	1.67	6.83	3.66	9.42	3.75	9.58	3.70	9.50				
20.00-24.99	1.15	5.79	2.17	7.20	2.29	7.39	2.23	7.29				
25.00-29.99	1.97	13.75	1.35	5.53	1.31	5.30	1.33	5.41				
30.00-49.99	1.10	17.08	2.32	12.99	2.18	12.05	2.25	12.52				
50.00 and above	1.10	17.08	1.07	12.18	1.03	11.60	1.05	11.89				
all sizes	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00				
Average size of operational holding (acres)		6.10		6.65		6.49						
Estimated No. of holdings (000)	44,354		49,184		50,765		49,824					
Estimated area operated ('000 acres)	3,33,993		3,26,161		50,765		3,27,277					
No. of sample villages	4,431		3,755		3,486		7,241					
No. of sample household	75,720		44,377		53,138		97,515					

17th Round - July 1961-June 1962

Source : Worked out from Government of India, National Sample Survey, Numbers 74, 133, 144, Eighth, Sixteenth & Seventeenth Rounds, Civil lines, Delhi.

4.1.5. TREND OVER 1953-61.

It will be observed that the percentage of holdings of size less than half an acre has decreased in the period 1959-61 when compared to 1953-54 figures. The percentage of holdings between 2.50 and 5.00 acres have increased substantially during the period. The area claimed by 1.53 percent of holdings of size 50 acres or more was as much as 17 percent of total area in 1953-54 while the corresponding percentages for the 1959-61 period were 1 percent holdings and 12 percent of total area. This difference of 5 percent area belonging to uppermost classes between the two periods under study seems to have been distributed over other size classes of holdings. This indicates that although there have been some attempts at removing the unevenness of the distribution, the results have been far from satisfactory - the overall picture has not changed to an appreciable extent.

A survey on land holdings was carried out in the 8th round of NSS. The distribution of agricultural holdings (operational holdings) as was obtained from that round has been compared in Table 4.11 with the distribution obtained by pooling the total samples of the 16th and 17th round surveys.

It may be noted that the average size of holding according to the 8th round of N.S.S(1954-55) was 6.10 acres. It will be seen that 36.19 percent holdings upto 0.49 acre had only 0.42 percent of the total operated area; 35.04 percent holdings between 0.50 - 4.99 acres had only 15.18 percent

of the operated area; 10.36 percent holdings between 10.00 and 24.99 acres had 29.21 percent of the total operated area. Large holdings above 25 acres accounted only for 3.92 percent holdings and had 36.62 percent of the total operated area.

The average size of holding, according to the 16th round of N.S.S. (1960-61) was 6.65 acres. 10.92 percent holdings up to 0.49 acre had only 0.39 percent of the total operated area; 52 percent holdings between 0.50 - 4.99 acres had only 18.49 percent of the operated area and 13.45 percent holdings between 10 and 24.99 acres had 30.47 percent of the total operated area. Large holdings above 25 acres accounted barely for 4.74 percent and had 30.70 percent of the total operated area.

The average size of holding according to the 17th round of N.S.S. (1961-62) was 6.49 acres. 8.55 percent holdings up to 0.49 acre had 0.32 percent holdings between 0.50 - 4.99 acres had only 19.18 percent of the total operated area; 14 percent holdings between 10-00 and 24.99 acres had 31.17 percent of the operated area, and large holdings above 25 acres accounted only for 4.52 percent and had 29 percent of the total operated area.

The percentage of number of holdings up to 0.49 acre had declined substantially from 36.19 in 1954-55 to 8.55 in 1961-62. In 1961-62, 62 percent holdings between 0.50 - 499 acres had only 19.18 percent of the operated area, whereas in 1954-55 it was only 35 percent holdings and 15.18 percent of the operated area. It can be seen from all these three rounds

that the large holdings accounted only for 3.92 percent in 1954-55, 4.74 percent in 1960-61 and 4.52 percent in 1961-62 in number of holdings but had a declining trend in operated area as can be seen from 36.62 percent in 1954-55, 30.70 percent in 1960-61 and 29 percent in 1961-62.

4.2. FROM 1970-71 to 1980-81.

This section deals with the trends in size pattern of holdings under Agricultural censuses 1970-71, 1976-77 and 1980-81. Agricultural Census is a large scale operation involving collection and derivation of quantitative information about the nation's agriculture. The basic unit of enumeration in the Agricultural Census is the 'operational holding' as distinct from the ownership holding. An operational holding was defined as " all land which is used wholly or partly for agricultural production and is operated as one technical unit by one person alone or with others without regard to the title, legal form, size or location. " It would be seen from this definition that the emphasis was on the actual cultivator and not the owner. It is the operational holding which is fundamental unit of decision-making in programme of agricultural development.

India's first ever comprehensive agricultural census was carried out with the agricultural year 1970-71 as the reference year. This was one of the biggest ventures in agricultural statistics ever launched in India. Over one lakh village level functionaries were involved in the collection of data on various characteristics of 70.5 million

operational holdings in the country. This covered all the states and Union Territories in the country except Mizoram. The data are presented at All-India level and for all states and Union Territories in 12 size classes. These size classes have been grouped into the following categories.

Marginal	upto 1.0 ha.
Small	1.0 ha. and upto 2.0 ha.
Semi-Medium	2.0 ha. and upto 4.0 ha.
Medium	4.0 ha. and upto 10.0 ha.
Large	10.0 ha. and above.

The Second Agricultural Census was conducted in 1976-77 in all states and Union Territories except Punjab and the third in 1980-81.

4.2.1. AGRICULTURAL CENSUS : 1970-71 AND 1976-77.

4.2.1.1. Number of holdings and distribution by size group.

The All-India Report on the first comprehensive Agricultural Census 1970-71 placed the total number of operational holdings in the country at 70.5 million. This did not include about 0.5 million holdings with less than 0.04 hectare area in Kerala as data on other characteristics had not been collected for those holdings. Hence the number of holdings in 1970-71 might be reckoned at 71 million.

As against this, the number of holdings at the time of the Second Agricultural Census, 1976-77 was estimated at 81.6 million. Thus the number of holdings had increased by 10.6 million, or by 15 percent, during the 6 year interval between the first and the second agricultural census.

Table 4.12

Size distribution of number of operational holdings in 1970-71 and 1976-77 and percentage variation in 1976-77 over 1970-71.

Category of holdings and size group.	1970-71		1976-77		% change in 1976-77 over 1970-71
	No. ('000)	Percentage	No. ('000)	Percentage	
Marginal (less than 1 ha.)	36,200	51.0	44,523	54.6	23.0
Small (1.0 to 2.0 ha.)	13,432	18.9	14,728	18.1	9.6
Semi-Medium (2.0 to 4.0 ha.)	10,681	15.0	11,666	14.3	9.2
Medium (4.0 to 10.0 ha.)	7,932	11.2	8,212	10.0	3.5
Large (10.0 ha. & above)	2,766	3.9	2,440	3.0	- 11.8
All Categories.	71,011	100.0	81,569	100.0	14.9

Source: Government of India, All India Report on Agricultural Census - 1976-77, Ministry of Agriculture, New Delhi 1981, p.16.

It will be seen from Table 4.12 that the number of holdings in the lowest size group, namely, the Marginal holdings having less than 1 hectare accounted for more than half the total number of holdings which accounted for 51 percent of all holdings in 1970-71 had gone up to 55 percent in 1976-77. The number of holdings in this category had increased from 36.2 million in 1970-71 to 44.5 million in 1976-77, i.e., an increase of 8.3 million which would mean that this category alone accounted for about 80 percent of the increase in the

number of holdings between 1970-71 and 1976-77. In fact, the number of marginal holdings had increased by 23 percent as against the overall increase of 15 percent, of all the holdings.

The small holdings between 1 to 2 hectares, being the second largest category of holdings, accounted for 18 percent of the total number of holdings. Though the absolute number of small holdings increased from 13.4 million in 1970-71 to 14.7 million in 1976-77 i.e., as increase of about 10 percent but the percentage of small holdings to the total number of holdings declined from 19 percent in 1970-71 to 18 percent in 1976-77. The number of Semi-medium (2 to 4 hectare) and medium (4 to 10 hectare) holdings also increased between 1970-71 and 1976-77 but their proportions to the total number of holdings declined.

On the contrary the number of large holdings (10 hectare and above) decreased from 2.8 million in 1970-71 to 2.4 million in 1976-77. The proportion of large holdings to the overall number of holdings declined from 4 percent to 3 percent during the same period. This is perhaps an indication that the number of large holdings is coming down either due to reasons of fragmentation or legal measures.

4.2.1.2. Area operated.

The total area operated by all the holdings in 1976-77 was 163 million hectares, which was 49.7 percent of the geographical area of the country. The operated area in 1976-77 was hardly one million hectare more than that in

1970-71. While the operated area had practically remained at the same level from 1970-71 to 1976-77. While the operated area had practically remained at the same level from 1970-71 to 1976-77, the number of holdings had increased by 15 per cent during the same period and that too mostly in lower size classes. It would thus mean that there had been decline in the average area per operational holding.

Table 4.13

Distribution of operated area in 1970-71 and 1976-77 and percentage variation in 1976-77 over 1970-71.

Category of holdings & size group.	1970-71		1976-77		Percentage change in 1976-77 over 1970-71
	Area ('000 ha.)	%	Area ('000 ha.)	%	
Marginal (less than 1 ha.)	14,559	9.0	17,509	10.7	20.3
Small (1.0 ha. to 2.0 ha.)	19,282	11.9	20,905	12.8	8.4
Semi-medium (2.0 to 4.0 ha)	29,999	18.5	32,428	19.9	8.1
Medium (4.0 to 10.0 ha.)	48,234	29.7	49,628	30.4	2.9
Large (10.0 ha. and above)	50,064	30.9	42,873	26.2	-14.4
All categories.	1,62,138	100.0	1,63,343	100.0	0.7

Source: Ibid; P.17

As per Table 4.13, the area of the operational holdings and its share in the total operated area in the country increased during 1970-71 to 1976-77. But the marginal holdings, which accounted for more than half the number of holdings in the country, had a share of hardly one-tenth of the total area operated. On the contrary, the share of the large holdings, which accounted for only 3 to 4 percent of the total number of holdings, was as much as 31 percent of the total operated area in 1970-71 which, of course, declined to 26 percent by 1976-77. The decline in the area of the large holdings had perhaps resulted in corresponding increases in other categories. Overall, a shift in the operated area from large holdings to smaller holdings was noticed from 1970-71 to 1976-77.

4.2.1.3. Average size.

The average size of a holding is an indicator of the agricultural economy in the sense that it provides the basis for judging whether a holding is viable enough not merely from the point of view of cultivation but also as to some extent whether the produce therefrom would be adequate for the subsistence of the operational holder. The average size of an operational holding in 1976-77 was 2.0 hectares as against 2.3 hectares in 1970-71. The net area under cultivation of this average operational holding was 1.8 hectare in 1976-77 as against 2.1 hectare in 1970-71. Since the total operated area remained more or less the same but

the number of holdings increased in the country naturally the average size of holding in 1976-77 was smaller than that in 1970-71. Thus, on an average, the area available for cultivation to each operational holder had become lesser over time. This is reflected in all the five major categories of holdings. (See Table 4.14).

Table 4.14

Average size of operational holding by major size groups : 1970-71 and 1976-77.

Category of holdings and size group	Average size (hectares)		Percentage change in 1976-77 over 1970-71.
	1970-71	1976-77	
Marginal (below 1.0 ha.)	0.40	0.39	- 2.5
Small (1.0 to 2.0 ha.)	1.44	1.42	- 1.4
Semi-medium (2.0 to 4.0 ha.)	2.81	2.78	- 1.1
Medium (4.0 to 10.0 ha.)	6.08	6.04	- 0.7
Large (10.0 ha. and above)	18.10	17.57	- 2.9
All categories.	2.28	2.00	- 12.3

Source : Ibid, P.18.

4.2.2. AGRICULTURAL CENSUS, 1980-81.

The third Agricultural Census was carried out as a central scheme during Sixth Five Year Plan period. The third census comprised of two parts, viz, (a) Agricultural Census

with Agricultural year 1980-81 as the reference period and
(b) Input Survey with 1981-82 as the reference period.

4.2.2.1. Number of operational holdings.

According to 1980-81 Agricultural Census, the total number of holdings in the country was 89.4 millions. (Table 4.15)

Table 4.15

Number of Operational holdings by major size groups.

Size group	No. in Million	Percentage.
Marginal (below 1 ha.)	50.58	56.6
Small (between 1 to 2 ha.)	16.10	18.0
Semi-medium (between 2 to 4 ha.)	12.48	14.0
Medium (between 4 to 10 ha.)	8.08	9.0
Large (10 ha. and above)	2.15	2.4
T o t a l :	89.39	100.0

Source: Government of India, Directorate of Economics and Statistics, Department of Agriculture and Co-Operation, Ministry of Agriculture and Rural Development, 'Agricultural situation in India', August 1985.

Marginal holdings with less than one hectare of land accounted for 56.6 percent of the total holdings. Small holdings between one to two hectares formed 18 percent of the total number of holdings. Large holdings with 10 hectares and above accounted for only a little over two

percent of total number of holdings.

The distribution of the number of holdings by major size groups in 1976-77 and 1980-81 and the percentage variation thereof is shown in Table 4.16.

Table 4.16

Distribution of the number of holdings by major size groups and percentage variation in 1980-81 over 1976-77.

Size group	No. of operational holdings (in million).		Percentage variation in 1980-81 over 1976-77
	1976.77	1980.81	
Marginal	44.52	50.58	13.6
Small	14.73	16.10	9.3
Semi-medium	11.67	12.48	6.9
Medium	8.21	8.08	- 1.6
Large.	2.44	2.15	- 11.6
Total.	81.57	89.39	9.6

Source : Ibid; P.404

The above results indicate that the total number of holdings has gone up by nearly 10 percent in 1980-81 over 1976-77. The corresponding increase in the case of marginal holdings was nearly 14 percent and in the case of small holdings 9 percent. The increase recorded by semi-medium holdings was about 7 percent. On the other hand, the number

of medium and large holdings decreased by nearly 2 and 12 percent respectively.

Inter-se percentage distribution of the number of holdings by Major Size groups for two census is given in Table 4.17.

Table 4.17:

Inter-se Percentage distribution of the number of holdings.

Size group	Inter-se Percentage of holdings.	
	1976-77	1980-81
Marginal	54.6	56.6
Small	18.1	18.0
Semi-medium	14.3	14.0
Medium	10.0	9.0
Large	3.0	2.4
Total	100.0	100.0

Source : Ibid; P. 404

The above results indicate that the share of marginal holdings has gone up from 54.6 percent to 56.6 percent. The share of all the remaining size groups of holdings correspondingly decreased, mainly in the medium and large holdings.

4.2.2.2 Operated area.

According to 1980-81 Agricultural Census, the total operated area in the country was 162.8 million hectares.

Its distribution by major size groups is given in the Table 4.18.

Distribution of total operated area by size groups of holdings.

Table 4.18

Size group	Area in million hectares	Inter-se Percentage
Marginal	19.7	12.1
Small	23.01	14.2
Semi-medium	34.53	21.2
Medium	48.32	29.7
Large	37.17	22.8
Total	162.76	100.0

Source: Ibid;R404

About 26 percent of the total area was operated by marginal and small farmers together, though they accounted for about 75 percent of the total number of holdings. On the other hand, nearly 23 percent area was operated by large holdings which accounted for a little over two percent of the total number of holdings. The distribution of operated area by Major size group of holdings in 1976-77 and 1980-81 and the percentage variation thereof is given in Table 4.19.

Table 4.19.

Distribution of area operated by Major Size groups of holdings and percentage variation in 1980-81 over 1976-77.

Size group	Operated area (million hectares)		Percentage variation in 1980-81 over 1976-77
	1976-77	1980-81	
Marginal	17.51	19.73	12.7
Small	20.90	23.01	10.1
Semi-medium	32.43	34.53	6.5
Medium	49.63	48.32	- 2.6
Large	42.87	37.17	- 13.3
Total.	163.34	162.76	- 0.4

Source: Ibid, P.405

The above results indicate that the total operated area has slightly declined i.e., 0.4 percent. The total operated area declined in the last two size groups of holdings, the decline varying from 13 percent in large holdings to nearly 3 percent in medium holdings.

4.2.2.3. Average size.

The average size of a holding for the country was 2.0 hectares in 1976-77. It has decreased to 1.8 hectares in 1980-81. Average size, as per the two censuses, and the percentage change in 1980-81 for major size groups of holdings

is given in Table 4.20.

Table 4.20

Average size and the percentage decrease in 1980-81 over 1976-77.

Size Group	Average size (in ha.)		Percentage variation in 1980-81 over 1976-77
	1976-77	1980-81	
Marginal	0.39	0.39	-
Small	1.42	1.43	+ 0.7
Semi-medium	2.78	2.77	- 0.4
Medium	6.04	5.98	- 1.0
Large	17.58	17.24	- 1.9
Total.	2.00	1.82	- 9.0

Source: Ibid; P.406.

At the aggregate, the decrease in average size was 9 percent. The highest fall in average size has occurred in large holdings (1.9 percent) followed by medium holdings (1.0 percent) and semi-medium holdings (0.4 percent). The average size remained the same over the period in the case of marginal holdings but it has increased by 0.7 percent in case of small holdings.

4.2.2.4 Linkage of number of holdings and area.Table 4.21

No. of operational holdings and area operated by major size groups of holdings, 1980-81.

Size group	Holdings		Area	
	No. (in Million)	%	Million hectares	%
Marginal (below 1 ha.)	50.58	56.6	19.73	12.1
Small (between 1-2 ha.)	16.10	18.0	23.01	14.2
Semi-medium (between 2-4 ha.)	12.48	14.0	34.53	21.2
Medium (between 4 to 10 ha.)	8.08	9.0	48.32	29.7
Large (10 ha. & above)	2.15	2.4	37.17	22.8
Total.	89.39	100.0	162.76	100.0

Source: Ibid; P.406

If the number of holdings and area under each size group are put in juxtaposition as in Table 4.21, the 1980-81 Agricultural census reveals that small and marginal holdings together totalled three-fourth of the holdings but covered just a little over one-fourth of the operational holdings. On the other hand, large holdings accounting for only 2.4 percent of the total number of operational holdings had a share of 22.8 percent of the total area operated in the country. Semi-medium and medium holdings together had 23 percent share in the number of operational holdings but half the share in the area cultivated.

4.2.3 TREND DURING 1970-81

In the final analysis the data of all the three agricultural censuses are presented in Table 4.22 to locate the trend in the pattern of land holding evolved over the nineteen seventies.

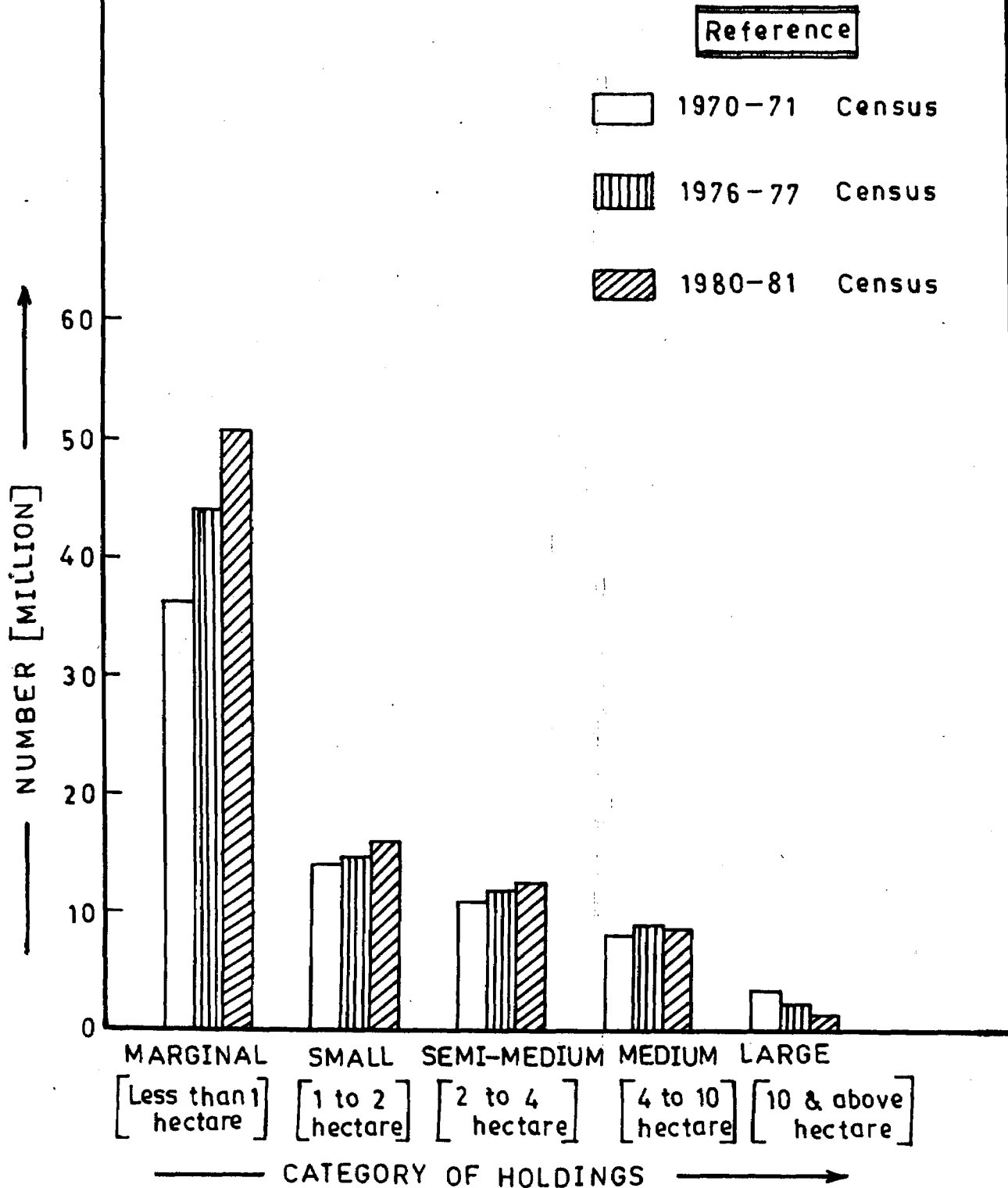
Table 4.22.

Percentage distribution of the number of agricultural holdings and area as per agricultural census of 1970-71, 1976-77 and 1980-81.

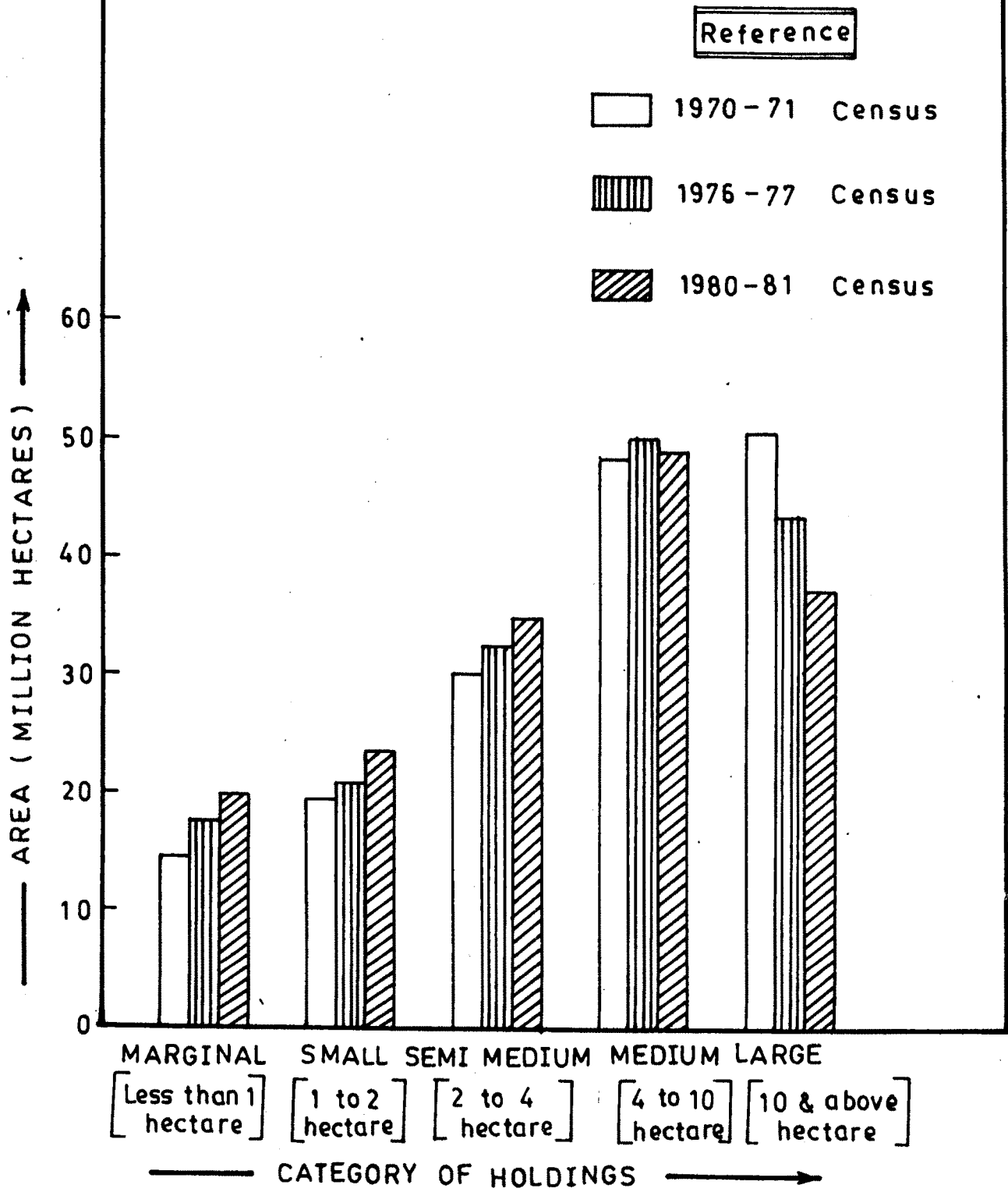
Size group	1970-71 Census		1976-77 Census		1980-81 Census	
	No.	Area.	No.	Area.	No.	Area.
Marginal (below 1 ha.)	50.6	9.0	54.6	10.7	56.6	12.1
Small (between 1 to 2 ha.)	19.0	11.9	18.1	12.8	18.1	14.2
Semi-medium (between 2 to 4 ha.)	15.2	18.15	14.3	19.9	14.3	21.2
Medium (between 4 to 10 ha.)	11.3	29.7	10.0	30.4	10.0	29.7
Large (10 ha. and above)	3.9	30.9	3.0	26.2	3.0	22.8
All categories	100.0	100.0	100.0	100.0	100.0	100.0

Source: Worked out from Government of India, All India Report on Agricultural Censuses of 1970-71, 1976-77 and 1980-81, Ministry of Agriculture, New Delhi.

ALL INDIA DISTRIBUTION OF THE NUMBER OF OPERATIONAL HOLDINGS AS PER AGRICULTURAL CENSUSES .



ALL INDIA DISTRIBUTION OF AREA OPERATED AS PER AGRICULTURAL CENSUSES .



It will be seen from Table 4.22 that the number of holdings in the lowest size group, namely, the marginal holding less than 1 hectare accounted for more than half of the total number of holdings, which accounted for 51 percent of all holdings in 1970-71 had gone up to 55 percent in 1976-77 and 57 percent in 1980-81.

The small holdings between 1 to 2 hectares, accounted for 19 percent of all holdings in 1970-71 had declined to 18 percent in 1976-77 and in 1980-81. The semi-medium holdings between 2 to 4 hectares accounted for 15 percent of all holdings in 1970-71 had declined to 14 percent in 1976-77 and in 1980-81. The medium size holdings between 4 to 10 hectares for 11 percent of all holdings in 1970-71 had declined to 10 percent in 1976-77 and in 1980-81. The large size holdings above 10 hectares accounted for 4 percent of all holdings in 1970-71, had declined to 3 percent in 1976-77 and in 1980-81.

The area of operational holdings under marginal holdings increased from 9 percent in 1970-71 to 11 percent in 1976-77 and 12 percent in 1980-81. The area of small holdings increased from 12 percent in 1970-71 to 13 percent in 1976-77 and 14 percent in 1980-81. The area of semi-medium holdings also increased from 18 percent in 1970-71 to 20 percent in 1976-77 and 22 percent in 1980-81. The area of medium holdings remained same from 1970-71 to 1980-81 and the area of large holdings decreased from 40 percent in 1970-71 to 26 percent in 1976-77 and 23 percent in

1980-81. Overall, a shift in the operated area from large holdings to smaller holdings was noticed from 1970-71 to 1980-81.