

BUREAU OF ECONOMICS AND STATISTICS

KERALA STATE



NATIONAL SAMPLE SURVEY

(16th Round—July 1960 to June, 1961)

N. S. S. Report No. 10

REPORT

ON

THE OPERATIONAL HOLDINGS IN KERALA  
(Rural)

TRIVANDRUM

1968

PREVIOUS REPORTS:—

1. N. S. S. Report No. 1 : Report on employment and unemployment in urban areas based on the data collected in the 14th round of National Sample Survey (July 1958—June 1959)  
(1963)
2. N. S. S. Report No. 2 : Report on fertility and mortality rates in rural areas in Kerala based on the 14th round data (July 1958—June 1959)  
(1963)
3. N. S. S. Report No. 3 : Vital rates in Rural areas based on the 15th round data (July 1959 to June 1960)  
(1964)
4. N. S. S. Report No. 4 : Unemployment and labour force participation in urban areas in Kerala (July 1960—June 1961)  
(1965)
5. N. S. S. Report No. 5 : Report on employment and unemployment in rural areas (July 1958 to June 1959)  
(1966)
6. N. S. S. Report No. 6 : Report on the Survey to estimate the area under improved agricultural practices in Community Development areas—Kharif 1963-64  
(1966)
7. N. S. S. Report No. 7 : Report on Consumer Expenditure in Kerala based on the 14th, 15th and 16th rounds of National Sample Survey  
(1967)
8. N. S. S. Report No. 8 : Report on the Consumer Expenditure in Kerala based on the 17th round of N. S. S. (September 1961 to July 1962)  
(1968)
9. N. S. S. Report No. 9 : Report on the Survey to estimate the area under Improved Agricultural practices in Community Development areas—Rabi—1963-64  
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1. N.S.S.Report No.1  
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2. N.S.S.Report No.2(1963)

Report on fertility and mortality rates in rural areas in Kerala based on the 14th round data(July 1958 to June 1959)

3. N.S.S.Report No.3(1964)

Vital rates in rural areas based on the 15th round data(July 1959-June 1960)

4. N.S.S.Report No.4(1965)

Unemployment and labour force participation in urban areas in Kerala (July 1960 - June 1961)

5. N.S.S.Report No.5(1966)

Report on employment and unemployment in rural areas (July 1958 to June 1959)

6. N.S.S.Report No.6(1966)

Report on the survey to estimate the area under improved agricultural practices in Community Development areas - Kharif 1963-64)

7. N.S.S.Report No.7(1967)

Report on Consumer expenditure in Kerala based on the 14th, 15th and 16th rounds of National Sample Survey

8. N.S.S.Report No.8(1968)

Report on Consumer expenditure in Kerala based on the 17th round of N.S.S. (September 1961 to July 1962)

9. N.S.S.Report No.9(1968).

Report on the survey to estimate the area under Improved Agricultural practices in C.D.areas - Rabi-1963-64.

## C O N T E N T S

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SECTION II. Introduction:

1.1 The Directorate of National Sample Survey, Government of India conducted a land holdings survey in all the States in India as a part of the programme of the 16th round of the National Sample Survey in the year July 1960 to June 1961. Information on the ownership of land and the details of structure, distribution, utilisation and other allied aspects of operational holdings were collected during the survey. This report deals with the results of the Survey. The survey was conducted in the rural areas of the State only, the concept of rural area being as that was followed in the 1951 decennial population census.

1.2 The estimates presented in the report have been obtained by combining the estimates derived by independent analysis of the data collected from the State and Central samples. For each of the State and Central sample 144 villages were surveyed for the enquiry. The field work in the Central sample was carried out by the Directorate of National Sample Survey, Government of India and that in State sample was conducted by the State Department of Statistics. The data were collected by the Interview method.

SECTION IISampling Design

2.1 A stratified two-stage sampling procedure was adopted for the survey with villages as the first stage sampling units and households as the second stage units. For the purpose of stratification, contiguous districts in the State having similar crop pattern and population densities were first grouped together to form regions. Two such regions were formed in the State, one the northern region consisting of the Districts of Palghat, Kozhikode and Cannanore; and the other the southern region consisting of the remaining districts of the State. Within each region contiguous tehsils fairly homogeneous with respect to population densities were grouped together to form compact strata, such that the rural populations of the strata were approximately equal. Altogether 8 strata were formed for the State. Within each stratum two independent sub-samples of 9 villages were selected systematically with independent random starts after arranging the tehsils in the order of their geographical nearness. Thus from each stratum 18 villages making a total of 144 were selected for the survey. The total number of households to be surveyed for land-holding enquiry in each sub-sample was fixed as 135 and this total sample size was distributed among the 9 villages of each sub-sample in proportion to their population.

The actual number of households surveyed in the State sector was 1964. All the households in the village were grouped into three second stage strata after arranging them in specified land possessed size classes; and samples were drawn separately for each stratum. All the households possessing less than 1 acre of land constituted the second stage stratum I. All the other households were divided into two strata of equal number of households for the second stage, Strata II and III. The number of households to be sampled from each of these second stage strata was arrived at by allocating the specified number of

households given in the sample list. The formation of strata, allocation and selection of sample villages for the survey were done by the Indian Statistical Institute, Calcutta.

2.2 Two schedules were designed for the enquiry, one schedule for the collection of data on ownership of land and other particulars, and the other schedule for collecting particulars of operational holdings. Copies of the schedules are appended to the report.

### SECTION III

#### Concepts and Definitions

The important concepts and definitions followed in the enquiry are given below:

3.1 Household: A household is a group of people who usually live together and take their meals from a common kitchen. Any person who satisfies the criterion and is considered by the head of the family to be a member of the household may be included in the household. Persons like domestic servants, private tutors, paying guests etc. were not treated as members of the household whereas temporary absentees who are considered by the head of the household to be the members of the household were included in the household.

#### 3.2 Working person:

A person shall be considered as working, if he or she is engaged either as employer, employee, single worker or household worker in gainful activities.

Employer: is one who hires one or more persons in his work.

Employee is one who does work for others in lieu of wages or salary either in cash or in kind.

Single worker is one who does his work without employing others except casually and without the help of other members of his family except casually.

Household worker is one who does his work in his own family without wages and salaries either in cash or in kind.

3.3 Permanent or attached workers are those who are more or less in continuous employment and are under some sort of contract with employers during the period of employment.

#### 3.4 Persons not working: This category will include

(a) full-time student or child attending school and doing no other work such as making articles at home for sale, nor even help on a part-time basis in his own family cultivation, industry, trade or business.

(b) persons engaged in unpaid home duties (like house wife) who do no other work.

(c) dependent infant or child not attending school, and persons permanently disabled from work because of illness or old age.

(d) retired persons, rentier and receiver of royalty, dividend etc. who has other means of livelihood than work.

(e) beggar, vagrant etc.

(f) persons not employed, but seeking employment.

3.5 Ownership: A person would be considered to own a plot of land, if he has the right of permanent heritable possession with or without right to transfer the title. A plot of land may be leased out to another person by the owner of the plot without losing the right of permanent heritable possession.

Land owned or held in owner-like possession will include.

(a) Lands hold directly from Government under a grant, lease or assignment:

(i) with right of permanent, heritable and transferable possession

(ii) with right of permanent and heritable possession but without the right of transfer.

(b) Lands hold from persons other than Government

(i) with right of permanent heritable and transferable possession; and

(ii) with right of permanent and heritable possession but without the right of transfer.

3.6 Area rented means area leased in by a tenant (other than the tenant who is treated as an owner).

Area rented includes:

(a) area rented for a fixed amount of money

(b) area rented for a fixed amount of produce

(c) area rented for a share of the produce

(d) area rented for partly in one and partly in any other form of rent mentioned above

(e) area held on condition of rendering services either to the village community or to Government or to an individual. This also includes cases where labourers on plantation are given some land for cultivation without permanent rights.

(f) area held free of rent.

3.7(a) Operational holding:- A holding is all land within the same state which is used wholly or partly for agricultural production and is operated by a person alone or with the assistance of others without regard to the title or size or location. The holding may consist of one or more parcels of land and these as a whole form part of the same technical unit. By technical unit

what is meant in agricultural operations is a unit with more or less independent technical resources covering items like land, implements livestock etc. Thus an operational holding is considered as one operated by a 'person' and constituting one technical unit. A person for the purpose of the survey would be either (a) a single household, (b) more than one household operating jointly. Hence in the determination of operational holdings the importance of identifying the 'person' who operates the technical unit or units under each such person is to be noted. In cases where more than one 'person' operating land use more or less the same technical resources the number of operational holdings may be taken to be the same as the number of such persons though the technical units constituting the operational holdings are more or less identical. Similarly under the same 'person' when there are more than one technical unit the number of technical units will be taken as the basis for determining the number of operational holdings.

A holding consisting of the following would be excluded from the scope of the survey, (a) land put to non-agricultural use only, (b) pasture land and (c) land which is exclusively used for livestock raising, production of livestock products and pisciculture.

(b) Individual holding and joint holding.

An operational holding is said to be an individual holding if it is managed by the members of the same household. If it is managed jointly by members belonging to different households, it is to be taken as a joint holding. The number of operational holdings in a household is equal to the number of distinct technical units managed by the household individually or jointly.

(c) Household operational holding:

The household operational holding is constituted by lands coming under the purview of the different operational holdings possessed by the household. If the household has individual operational holdings only, the sum of the areas of the individual holdings constitutes the household operational holding. When the household possesses only joint operational holdings, household operation holding is derived by taking the sum of the household share of area from each of the joint holdings, the share being determined on the assumption that each co-partner household has equal amount of area. In case a household has both individual and joint holdings the sum of the areas of all the individual holdings together with the households share of area from each of the joint operational holdings constitute the household operational holding.

3.8 Agricultural production includes the growing of field crops, fruits, grapes, nuts, seeds, tree nurseries (except those of forest trees) bulbs, vegetables and flowers, production of coffee, tea, cocoa, rubber, the forest production in parcels of land which form part of the enumeration holding, and the production of livestock and livestock products, poultry and poultry products, honey, rabbits, furbearing animals, silk worm, cocoons etc. on land forming part of enumeration holding.



3.9 Land possessed will consist of all lands owned plus lands leased in minus lands leased out by the household. Lands given for share-cropping will be treated as lands leased out. Consequently lands operated by share-croppers will be treated as lands leased in by the share-cropping household. In the case of lands under joint possession the share of the household only will be considered for that household.

3.10 Parcels: A parcel is all land entirely surrounded by land of other holdings or by land not forming part of any holding. It may consist of one or more cadastral units, plots or fields.

3.11 Irrigation: For purposes of this survey irrigation may be considered to denote the practice providing land with water other than rain, by artificial means for crop production. Net irrigated area represents the area irrigated from different sources, counting area irrigated more than once in the same year, only once.

3.12 Drainage: The removal of excess water from the surface of the land and from the surface soil for the purpose of making non-producing wet lands productive and producing wet lands more productive.

### 3.13 Land Utilisation (area by utilisation)

The area of land has been classified into 9 groups

- viz.
- (i) net area sown,
  - (ii) miscellaneous tree crops, groves etc.
  - (iii) pastures and grazing land
  - (iv) current fallows
  - (v) other fallows
  - (vi) culturable waste.
  - (vii) land put to non-agricultural use
  - (viii) barren and uncultivable land and
  - (ix) forests. These concepts are explained below:

(i) Net area sown: This consists of net area sown with crops and orchards counting area sown more than once in the same year, only once.

(ii) Miscellaneous tree crops, groves etc. Under this class is included all culturable land which is not included under 'net area sown' but is put to some agricultural use. Lands under casurina trees, thatching grasses, bamboo bushes and other groves for fuel etc. which are not included under orchards shall be classed under this category.

(iii) Pastures and grazing land: These cover all grazing lands irrespective of whether they are permanent pastures and meadows or not. Grazing lands within forest area shall be included under this land.

(iv) Current fallows: This class comprises of cropped areas which are kept fallow during the agricultural year 1959-60. For example, if any seedling area is not cropped again in the same year, it may be treated as current fallow.

(v) Other fallows: All lands which were taken up for cultivation but are temporarily out of cultivation for a period of not less than one year and not more than five years are classed under this category.

(vi) Culturable wastes: These include lands available for cultivation whether or not taken up for cultivation or abandoned after a few years for one reason or the other. Such lands may be either fallow or covered with shrubs and jungles which are not put to any use. These may be assessed or unassessed and may lie in isolated blocks or within cultivated holdings. Lands once cultivated but not cultivated for five years in succession shall also be included in this category.

(vii) Land put to non-agricultural uses: This stands for all lands occupied by buildings, paths etc. or under water (eg. tanks, canals etc.) and lands put to uses other than agricultural production.

(viii) Barren and unculturable land: Land which cannot be brought under cultivation unless at a high cost shall be classed as unculturable whether such land is in isolated blocks or within cultivated holdings.

(ix) Forests: These include all actually forested area on the lands classed or administered as forests under any legal enactment dealing with forests, whether State owned or private. If any portion of such land is not actually wooded but put to some agricultural use, that portion shall be excluded.

## SECTION IV

### Summary of Results

4.1 The estimates obtained by pooling the results of Central and State samples are presented in this section. The schedules were canvassed in 2528 households spread over 288 villages. The details of the different aspects of operational holdings collected from these households and the estimates obtained for Rural areas of the State are presented in the subsequent paragraphs. The estimates given here relate to the agricultural year 1959-60.

#### 4.2 Proportion of households possessing operational holding:

It is estimated that there were 22.5 lakhs rural households in the State. When compared with the 1961 census figures of 29 lakhs households in the State this is a gross under estimate.

About 82% of the households possessed operational holdings and the remaining 18% of households did not have any operational holding. The corresponding figures for all India\* are 72% and 28% respectively. When compared to all India the operational holdings in Kerala are more distributed among the households.

#### 4.3 Total area under operational holding:

There were about 18 lakhs operational holdings possessing an area of 33 lakhs acres of land in rural Kerala. The average size of an operational holding obtained from the survey was 1.81 Acres as against 6.65 acres for all India.

4.4 The distribution of households according to the different scales of household operational holding sizes is given in table 4.1. More than two thirds of the households had their household

\* N.S.S. Report No.113 of Government of India - 16th round July 1960 - June 1961. 'Table with notes on Agricultural holdings in Rural India' issued by the Cabinet Secretariat, Government of India.



operational holding less than one acre and the area under them was about one eighth of the total area operated. As large as 94% of the household holdings were of size less than 5 acres covering about 48% of the total area. The number of holdings with area 25 acres and above formed only less than half percent of the total number of holdings but they covered about 17% of the total area operated.

In the case of All India 42.31% of the households had their household operational holding less than one acre contributing to only 1.33% of the total operated area. In all India as large as three fourth of the households had their operational holding less than 5 acres covering nearly 20% of the total area operated. On the other hand, slightly more than 3% of the households have their operational holdings of size 25 acres and above accounting for nearly 30% of the total operated area.

In Kerala the number of households with operational holdings was clustered in the lowest class namely area below 0.50 acres where as in the case of All India, it was more widely distributed in the higher scales of holding sizes. In other words it can be said that while in Kerala small-sized holdings accounted for the bulk of the operated area, the All India position was that only a small portion of the area was covered under small-sized holdings.

Table - 4.1: Distribution of households according to the size class of household operational holding.

No. of sample villages: 288 - No. of sample households: 1267

Sl. No.	Size class of household operational holding (Acres)	Households		Area operated	
		Percentage	Cumulative percentage	Percentage	Cumulative percentage
1	No operational holding	18.22	18.22	5.68	5.68
2	Upto 0.49	38.67	56.89	5.71	11.39
3	0.50 to 0.99	12.71	69.60	17.12	28.51
4	1.00 to 2.49	16.04	85.64	19.70	48.21
5	2.50 to 4.99	8.31	93.95	11.57	59.78
6	5.00 to 7.49	2.80	96.75	6.19	65.97
7	7.50 to 9.99	1.07	97.82	5.68	71.65
8	10.00 to 12.49	0.76	98.58	3.19	74.84
9	12.50 to 14.99	0.31	98.89	4.28	79.12
10	15.00 to 19.99	0.35	99.24	3.64	82.76
11	20.00 to 24.99	0.13	99.37	1.73	84.49
12	25.00 to 29.99	0.27	99.64	6.22	90.71
13	30.00 to 49.99	0.09	99.73	9.29	99.99
14	50.00 and above	0.09	100.00	100.00	100.00
15	All sizes	100.00	..	100.00	..

#### 4.5 Extent of joint operation:

An operational holding was considered to be an individual holding if it was managed by the members of the same household. If it was managed jointly by the members belonging to different households it was taken to be a joint holding. The survey results revealed that 77.7% of the households had individual operational holdings and 4.1% of the households possessed joint opera-

tional holdings. 18.2% of the households did not have any operational holding. The percentage distribution of individual and joint households according to size class of operational holdings is presented in the subjoined table.

**Table - 4.2:** Percentage distribution of each type of households according to size class of operational holding size.

No. of sample villages: 288 - No. of sample households: 1267

Sl. No. of hh.	Size class of operational holding	No. of households(000)			Percentage figures		
		With individual operational holdings	Others	All	With individual operational holdings	Others	All
1	Upto 0.49*	808	472	1280	63.12	36.88	100.00
2	0.50 to 0.99	280	6	286	97.91	2.09	100.00
3	1.00 to 2.49	353	8	361	97.78	2.22	100.00
4	2.50 to 4.99	182	5	187	97.33	2.67	100.00
5	5.00 to 7.49	59	4	63	93.65	6.35	100.00
6	7.50 to 9.99	23	1	24	95.83	4.17	100.00
7	10.00 to 12.49	14	3	17	82.35	17.65	100.00
8	12.50 to 14.99	7	..	7	100.00	..	100.00
9	15.00 to 19.99	7	1	8	87.50	12.50	100.00
10	20.00 to 24.99	5	1	6	83.33	16.67	100.00
11	25.00 to 29.99	2	1	3	66.67	33.33	100.00
12	30.00 to 49.99	6	..	6	100.00	..	100.00
13	50.00 and above	2	..	2	100.00	..	100.00
14	All sizes	1748	502	2250	77.68	22.32	100.00

Relatively larger percentage of joint household operational holdings were seen in the holding sizes 25.00 - 29.99 acres, followed by the holding size of 10.00 - 12.49 acres the percentages being 33.33 and 16.67 respectively.

#### 4.6 Extent of fragmentation of holding:

(i) The number of parcels of land (or fragments) contained in the various size classes of household operational holdings and the average area of the fragments in each size class are presented in table 4.3 below. A parcel is defined as all land entirely surrounded by the land of other holdings or by land not forming part of any other holding.

It can be seen from the table that each operational holding in the State was on an average constituted by 2.03 fragments and the average size of each fragment was only 0.90 acres. The average size of a fragment for all India\*\* was 1.14 acres.

The average number of parcels per operational holding was the largest (9.99) in the size class of operational holding of 50.00 acres and above; and it was the smallest (1.12) in the lowest size class of 0 - 0.49 acres.

\* Households with no operational holding are included.

\*\* Ibid on page 10.



The average size of a parcel was the largest in the highest size class of operational holding of 50 acres and above; and it was the smallest in the lowest size class of 0 - 0.49 acres. The average area of a parcel in the size class of 0.49 acres was as small as 0.20 acres.

Table - 4.3. Average number of parcels and the average area of a parcel (in each size class of operational holding).

No. of sample villages: 288 - No. of sample households: 1267

Sl. No.	Size class of household operational holding	No. of operational holding (000)	Number of parcels	Average no. of parcels per holding	Average area of a parcel (in acres)
1	0 - 0.49	840	938741	1.12	0.20
2	0.50 - 0.99	286	466975	1.63	0.40
3	1.00 - 2.49	361	792163	2.19	0.71
4	2.50 - 4.99	187	650618	3.48	1.00
5	5.00 - 7.49	63	333632	5.30	1.14
6	7.50 - 9.99	24	161067	6.71	1.27
7	10.00 - 12.49	17	95077	5.59	1.96
8	12.50 - 14.99	7	62025	8.86	1.68
9	15.00 - 19.99	8	45559	5.69	3.10
10	20.00 - 24.99	6	42076	7.01	2.85
11	25.00 - 29.99	3	14729	4.91	3.87
12	30.00 - 49.99	6	44021	7.34	4.66
13	50.00 and above	2	19987	9.99	15.31
14	All sizes	1810	3666670	2.03	0.90

(ii) Table 4.4 shows the percentage distribution of the number of parcels according to the size group of household operational holdings.

Table - 4.4: Number of sample villages - 288  
Number of sample households - 1267

Sl. No.	Size class of household operational holding (Acres)	Percentage No. of parcels	Cumulative percentage
1	Up to 0.49	25.60	25.60
2	0.50 - 0.99	12.74	38.44
3	1.00 - 2.49	21.60	59.94
4	2.50 - 4.99	17.75	77.69
5	5.00 - 7.49	9.10	86.79
6	7.50 - 9.99	4.39	91.18
7	10.00 - 12.49	2.59	93.77
8	12.50 - 19.99	1.24	96.70
9	20.00 - 24.99	1.15	97.85
10	25.00 - 29.99	0.40	98.25
11	30.00 - 49.99	1.20	99.45
12	50.00 and above	0.55	100.00
13	All size	100.00	..

Fragmentation of holdings was found to be intensive in the operational holdings of area less than 2.50 acres as these holdings contained as much as 60% of the parcels present in the total operational holdings. Fragmentation was the highest in operational holdings with area less than half an acre containing more than one-fourth of the parcels or fragments. Next to this, fragmentation was found to be high-reaching in the size class of 1.00 - 2.49 acres containing more than one-fifth of the parcels in the total operational holding.

4.7 Irrigation facilities available in the operational holdings:

The survey has revealed that only 16% of the holdings accounting for 11.2% of the area under the holdings or 14.6% of the net area sown had irrigation facilities. The following table gives the percentage number of holdings having irrigation facilities and percentage area under each size class of operational holding.

Table - 4.5: No. of sample villages - 288 No. of sample households 1267

Sl. No.	Size group of operational holding	Total number of holding (000)	No. of holdings having irrigation facilities (000)	Percentage of holding having irrigation facilities	Total area	Area having irrigation facilities	Percentage area having irrigation facilities	Average area with irrigation facilities per reporting holding.
1	Less than 0.49	840	45	5.36	185	12	6.50	0.27
2	0.50 - 0.99	286	57	19.93	191	20	10.47	0.35
3	1.00 - 2.49	361	77	21.33	558	55	9.85	0.71
4	2.50 - 4.99	187	60	32.08	650	87	13.39	1.45
5	5.00 - 7.49	63	22	34.92	387	51	13.18	2.38
6	7.50 - 9.99	24	11	45.83	218	36	16.51	3.27
7	10.00 - 12.49	17	4	23.53	177	16	9.05	4.00
8	12.50 - 14.99	7	4	57.14	104	29	27.88	7.25
9	15.00 - 19.99	8	3	37.50	138	9	6.52	3.00
10	20.00 - 24.99	6	2	33.33	120	13	10.90	6.50
11	25.00 - 29.99	3	1	33.33	49	7	14.49	7.00
12	30.00 - 49.99	6	3	50.00	208	30	14.42	10.00
13	50 and above	2	1	50.00	306	5	1.63	5.00
14	All size	1810	290	16.02	3291	370	11.24	1.28

It is seen that 16% of the total number of holdings were having irrigation facilities. Considering the number of holdings in each size class, one holding out of 20 was having irrigation facilities in the size group of holding below 0.50 acres. In the next higher size group viz. between half and one acre, one holding out of 5 was having irrigation facilities. The percentage of holdings having irrigation facilities gradually increased with the increase in area of the holdings. In the case of holdings with area 10.00 to 12.50 acres and 15 to 30 acres there was a drop in the percentage of irrigated holdings.

In terms of the percentage area slightly more than 11% of the operated area under the holding were reported as having

contd.....



irrigation facilities. It was found that as much as 27.88% of the area under the size class holding 12.50 - 14.99 acres was receiving irrigation facilities. In terms of area, irrigation facilities was least in the largest size holding of 50.00 acres and above.

4.8 Fertilizers used in the operational holdings:

The survey revealed that chemical fertilizers were used for cultivation at least in a portion of the area under the holdings only in 7.72% of the total number of holdings. The number of holdings belonging to this category was relatively large in the size class of 12.50 - 14.99 acres recording about 56.02% of the holdings under chemical fertilisers. The lowest percentage belonging to this category was observed in the lowest size class of 0 - 0.49 acres reporting only 0.87% of the holdings receiving chemical fertilizers. The percentage figures for the various size classes are given below in table 4.6.

Table - 4.6: Percentage of operational holdings reporting use of chemical fertilizers:

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Number of sample villages - 288

Sl.No.	Size class of operational holding (Acres)	No. of operational holdings	Percentage of holdings reporting area under chemical fertilizers.
1	Upto 0.49	840	0.87
2	0.50 - 0.99	286	2.57
3	1.00 - 2.49	361	14.17
4	2.50 - 4.99	187	16.97
5	5.00 - 7.49	63	21.31
6	7.50 - 9.99	24	35.27
7	10.00 - 12.49	17	40.65
8	12.50 - 14.99	7	56.02
9	15.00 - 19.99	8	43.14
10	20.00 - 24.99	6	36.82
11	25.00 - 29.99	3	20.50
12	30.00 - 49.99	6	50.00
13	50.00 and above	2	14.80
14	All size	1810	7.72

4.9 Utilization particulars of the holdings:

The table 4.7 gives the percentage of area operated under different utilisation. It is seen that nearly 77% of the total area under operational holdings was sown with crops and orchards and the remaining 23% was distributed over other land uses.

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Table - 4.7: No. of sample villages: 288  
No. of sample households: 1267

Sl. No.	Category	Percentage area operated
1	Total operated area	100.00
2	Net area sown	76.66
3	Miscellaneous tree crops	6.90
4	Pastures and grazing land	0.67
5	Current fallow	1.22
6	Other fallows	3.22
7	Cultivable waste	4.56
8	Non-agricultural waste	4.07
9	Barren and cultivable waste	2.61
10	Forest	0.09

4.10 The percentage of area operated under different utilizations for each size class of operational holdings are presented in Table 4.8. If the size groups in the range above one acre and below 15 acres are considered it is seen that nearly 85% of the total area was under net area sown. This percentage was least (24.9%) in the size group 50 acres and above.

Table - 4.8: Percentage of area operated under different utilizations for each class of operational holding.

No. of sample villages: 288 No. of sample households: 1267

Sl. No.	Size class of operational holdings (Acres)	Percentage of area operated under									
		Estimated area operated (000 acres)	Net area sown	Miscellaneous tree crops	Pastures and grazing land	Current fallows	Other fallows	Cultivable waste	Non-agricultural waste	Barren and cultivable land	Fore st.
1	2	3	4	5	6	7	8	9	10	11	12
1	Upto 0.49	185	72.43	5.41	0.54	0.54	1.08	3.24	16.22	0.54	..
2	0.50 - 0.99	192	81.26	6.77	..	0.52	1.56	1.04	7.29	1.04	0.52
3	1.00 - 2.49	559	84.80	5.72	0.18	0.54	1.07	1.79	4.83	1.07	..
4	2.50 - 4.99	650	83.69	6.78	0.31	1.23	1.38	2.31	3.24	0.92	0.15
5	5.00 - 7.49	387	85.53	5.94	0.52	0.52	1.03	1.81	2.84	1.81	..
6	7.50 - 9.99	218	84.40	5.50	0.92	1.38	0.92	2.75	2.75	1.38	..
7	10.00 - 12.49	177	83.05	7.35	0.56	1.13	1.13	2.82	2.82	1.13	..
8	12.50 - 14.99	104	85.58	5.77	0.96	1.82	0.96	1.82	1.82	0.96	..
9	15.00 - 19.99	137	78.10	6.57	3.65	1.46	..	5.11	2.19	2.92	..
10	20.00 - 24.99	118	81.36	9.32	..	0.85	0.85	2.54	3.39	1.69	..
11	25.00 - 29.99	50	66.00	24.00	2.00	..	..	6.00	2.00	..	..
12	30.00 - 49.99	209	72.73	13.40	2.87	0.96	1.44	2.87	2.39	2.87	0.48
13	50.00 & above	305	24.93	4.59	..	4.26	23.93	25.57	1.64	15.08	..
14	All size	3291	76.66	6.90	0.67	1.22	3.22	4.56	4.07	2.61	0.09

4.11 In table 4.9 the percentage distribution of area operated under different utilisation by size class of operational holding is given. It is significant to note that major portion of the area under current fallows, other fallows and cultivable waste were contained in the operational holdings of large size, namely 50 acres and above.



4.12 - Average household size and percentage distribution of persons by size class of household operational holding -

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The average household size obtained from the survey was 5.36. According to 1961 census 5.92 was the average household size for rural areas of the State. The following table gives the average household size with break-downs for adult and child members by size class of operational holding.

Table - 4.10: Estimated household size with break-downs for Adult and child members by size class of household operational holding: -----

No. of sample villages: 288 No. of sample households: 1267

Sl. No.	Size class of household operational holding (Acres)	No. of households	Average household size				Index of household size	
			Male	Female	Children	Total	Kerala	India*
1	Upto 0.49	1280	1.39	1.49	1.95	4.83	90	76
2	0.50 - 0.99	286	1.47	1.49	2.28	5.24	98	93
3	2.50 - 4.99	361	1.57	1.74	2.59	5.90	110	97
4	2.50 - 4.99	187	1.92	1.85	2.84	6.61	123	108
5	5.00 - 7.49	63	1.94	2.02	2.89	6.85	128	120
6	7.50 - 9.99	24	2.35	2.21	3.43	7.99	149	128
7	10.00 - 12.49	17	2.58	2.59	3.72	8.89	166	132
8	12.50 - 14.99	7	2.51	2.10	3.03	7.64	143	138
9	15.00 - 19.99	8	2.38	2.43	3.65	8.46	158	137
10	20.00 - 24.99	6	1.81	1.71	3.27	6.79	127	139
11	25.00 - 29.99	3	1.48	1.57	2.36	5.41	101	145
12	30.00 - 49.99	6	2.08	1.74	3.31	7.13	133	149
13	50.00 and above	2	3.39	3.07	5.33	11.79	220	165
14	All	2250	1.52	1.60	2.24	5.36	100	100

\* This index has been calculated as follows:

=  $\frac{\text{Household size under each size class of household operational holding} \times 100}{\text{Overall household size}}$

\* Ibid on page 106

The average household size obtained for All India Rural was 5.05 as against 5.36 for Kerala. The household size of Kerala was very much higher than All India in all the size groups of operational holdings except in the three groups of 20.00 to 24.99 acres, 25.00 to 29.99 acres and 30.00 to 49.99 acres. For Kerala as well as India the average household size was the smallest in the case of households operating less than 0.50 acres and it was the largest in the case of households operating large holdings of size 50 acres and above. The variation of the household size in the households belonging to different classes of operational holdings is more clearly distinguishable through the index of household size given in the last columns of table 4.10. The index is the ratio of the average households size in each class operational holding to the overall household size multiplied by 100. Looking at the index it can be said that the average household size gradually increased with the increase in the size of operational holdings except in the three classes already mentioned. The same trend was noticed in the case of All India also.

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4.13 - The average household size of 5.36 consisted of 1.52 males, 1.60 females and 2.24 children. The following table gives the percentage distribution of persons according to the size class of operational holding. It is seen that 51.25% of persons belonged to the households with less than half an acre operational holdings. More than 90% of the persons were accounted by households possessing less than 5 acres of operational holding-

Table - 4.11. percentage distribution of persons by size class of operational holding.

No.of sample villages: 288 No.of sample households: 1267

Size of household operational holding(Acres)	Percentage of persons
Upto 0.49	51.25
0.50 - 0.99	12.43
1.00 - 2.49	17.64
2.50 - 4.99	10.23
5.00 - 7.49	3.58
7.50 - 9.99	1.59
10.00 - 12.49	1.25
12.50 - 14.99	0.44
15.00 - 19.99	0.56
20.00 - 24.99	0.34
25.00 - 29.99	0.13
30.00 - 49.99	0.36
50.00 and above	0.20
All sizes	100.00

4.14 - Distribution of the number of persons as working and non-working according to size groups of holdings:

A person was considered as working if he or she was engaged either as an employer, employee, single worker or household worker. Students, housewives retired persons, etc. would fall under the category 'non-working'. The working members were broadly classified into two groups, cultivators and others. Information on this aspect was ascertained taking the reference period as one year prior to the date of enquiry. The principal activity of a person was taken as that activity in which the person usually spent the maximum time in the reference period. Table 4.12 shows the percentage number of persons with break-downs for working and non-working members.

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Table - 4.12: Percentage distribution of workers and non-workers by size class of operational holdings.

Sl. No.	Size group (Acres)	Working members			Non-working members	Grand Total
		Cultivators	Others	Total		
1	*Upto .49	1.17	19.08	20.25	31.00	51.25
2	0.50 - 0.99	0.78	3.27	4.05	8.38	12.43
3	1.00 - 2.49	2.26	3.42	5.68	11.96	17.64
4	2.50 - 4.99	1.79	1.36	3.15	7.08	10.23
5	5.00 - 7.49	0.82	0.30	1.12	2.46	3.58
6	7.50 - 9.99	0.33	0.11	0.44	1.15	1.59
7	10.00 - 12.49	0.27	0.06	0.33	0.92	1.25
8	12.50 - 14.99	0.07	0.04	0.11	0.33	0.44
9	15.00 - 19.99	0.13	0.04	0.17	0.39	0.56
10	20.00 - 24.99	0.09	0.01	0.10	0.24	0.34
11	25.00 - 29.99	0.02	0.01	0.03	0.10	0.13
12	30.00 - 49.99	0.08	0.01	0.09	0.27	0.36
13	50.00 & above	0.04	0.01	0.05	0.15	0.20
14	All sizes	7.85	27.72	35.57	64.43	100.00

\* Households with no operational holding are also included in the size group of 0.00 - 0.49 acres.

It is found from the survey that 35.57% of the persons were working while 64.43% were non-working. Of the total population estimated, 7.85% were cultivators. The cultivators were concentrated in the holdings of size of 1.00 to 2.49 acres. This class of holding kept nearly one-third of the cultivators. Working members other than the cultivators were seen to be the largest (19.08%) in the size group of holding of less than half an acre. Non-working members were also the largest (31%) in this category.

4.15 : Estimated household size with break-downs for working and non-working members. \_\_\_\_\_

The average household size obtained from the survey is 5.36. Out of this 1.91 were working members and 3.45 were non-working members. Among the working members 0.42 were cultivators. In other words nearly one fifth of the working members were cultivators. Considering the distribution of working and non-working members in the different size classes of household operational holdings it is seen that the ratio of working members to non-working members gradually increased with the increase in the area of the household holding. In the lowest class namely households operating less than 0.50 acres nearly 40% of the members were working members. In the highest class namely households operating 50 acres and above the corresponding percentage was only 24%. This shows that the proportion of members working was greater in the lower classes. Among the working members the proportion of persons reported as cultivators was greater in the higher classes. This is clearly brought out by the following table.

Table - 4.13: Estimated household size with break-downs for working and non-working members by size class of household holding.

No. of sample villages: 288 No. of sample households: 1267.

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Sl. No.	Size class of household operational holding	No. of households	Working members			Non-working members	Total
			Cultivators	Others	Total		
1	Upto 0.49	1280	0.11	1.80	1.91	2.92	4.83
2	0.50 - 0.99	286	0.33	1.38	1.71	3.53	5.24
3	1.00 - 2.49	361	0.76	1.14	1.90	4.00	5.90
4	2.50 - 4.99	187	1.15	0.88	2.03	4.58	6.61
5	5.00 - 7.49	63	1.56	0.57	2.13	4.72	6.85
6	7.50 - 9.99	24	1.66	0.56	2.22	5.77	7.99
7	10.00 - 12.49	17	1.92	0.45	2.37	6.52	8.89
8	12.50 - 14.99	7	1.29	0.58	1.87	5.77	7.64
9	15.00 - 19.99	8	2.02	0.56	2.58	5.88	8.46
10	20.00 - 24.99	6	1.83	0.15	1.98	4.81	6.79
11	25.00 - 29.99	3	0.99	0.31	1.30	4.11	5.41
12	30.00 - 49.99	6	1.67	0.11	1.78	5.35	7.13
13	50.00 & above	2	2.16	0.69	2.85	8.94	11.79
14	All sizes	2250	0.42	1.49	1.91	3.45	5.36

#### 4.16 - No. of cattle owned by households:

Table 4.14 gives the estimated number of cattle owned per 100 households by size class of household operational holdings.

Table - 4.14:

No. of sample villages : 288, No. of sample households : 1267.

Sl. No.	Size class of household operational holdings (Acres)	Kerala		India	
		No. of cattle owned per 100 households		No. of cattle owned per 100 households	
		Working males over 3 years	Total	Working males over 3 years	Total
1	Upto - 0.49	194	31	8.28	51.68
2	0.50 - 0.99	12	87	43.43	121.73
3	1.00 - 2.49	20	120	86.45	191.54
4	2.50 - 4.99	44	182	136.34	304.70
5	5.00 - 7.49	88	299	160.02	376.35
6	7.50 - 9.99	123	398	202.44	472.45
7	10.00 - 12.49	88	353	251.24	565.38
8	12.50 - 14.99	183	520	272.47	656.82
9	15.00 - 19.99	135	560	305.54	691.11
10	20.00 - 24.99	266	856	282.87	683.72
11	25.00 - 29.99	98	441	296.23	742.06
12	30.00 - 49.99	254	885	358.85	870.38
13	50.00 & above	546	1657	523.28	1361.35
14	All sizes	17	89	102.65	250.11

The cattle owned by the agricultural household was very much less in Kerala compared to all India. Only 89 cattles are owned by 100 Agricultural households in Kerala as against 250.11 in the case of All India. This difference in the two figures was observed in the case of households operating less than 20 acres. In the subsequent classes a reverse position was observed. The number of working males over 3 years owned by the Agricultural households was also smaller in the case of Kerala than All India. There were 17 working male cattle over 3 years per hundred households in Kerala. The corresponding figures reported for all-India was 6 times large.

4.17 - No. of buffaloes owned by households:

As in the case of cattle population a wide difference was observed in the number of buffaloes owned by the Agricultural households in Kerala and by those in all India. While there were only 14.69 buffaloes per 100 Agricultural households in Kerala there were 71.16 buffaloes per 100 households in All India. The following table gives the number of buffaloes owned by 100 households in Kerala as well as India in the various size class of household operational holdings.

Table - 4.15:

No. of sample villages: 288 No. of sample households: 1267

Sl. No.	Size class of operational household holding	Kerala		India	
		No. of buffaloes owned per 100 households		No. of buffaloes owned per 100 households	
		Working males over 3 years	Total	Working males over 3 years	Total
1	Upto - 0.49	0.08	1.41	1.61	15.84
2	0.50 - 0.99	0.21	15.99	5.49	33.89
3	1.00 - 2.49	5.76	13.03	12.57	53.04
4	2.50 - 4.99	21.20	40.98	13.89	71.95
5	5.00 - 7.49	45.41	59.36	21.45	109.29
6	7.50 - 9.99	83.07	98.58	24.82	125.50
7	10.00 - 12.49	82.57	202.06	29.93	179.70
8	12.50 - 14.99	141.88	155.85	30.56	198.64
9	15.00 - 19.99	91.55	140.42	25.00	222.88
10	20.00 - 24.99	91.44	119.98	22.77	202.66
11	25.00 - 29.99	33.80	54.46	28.07	239.99
12	30.00 - 49.99	122.85	156.97	25.55	271.65
13	50.00 & above	202.75	256.75	43.65	394.67
14	All sizes	7.15	14.69	11.73	71.16

4.18: - No. of agricultural machinery and implements owned by households

The average number of agricultural machinery and implements owned per 100 households by size class of household operational holdings is presented in table No.4.16. No tractor was reported by any of the households in the State. In all India the number of tractors owned per 100 households was 0.05. The number of sickle and harrow, plough and cart used by households was also much less in Kerala when compared to the corresponding figures for All India. In the case of pump sets the number owned by the households in the State was nearly twice the corresponding figures recorded for all India. In the case of water boats also the households in the State recorded higher figures than in all India.

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4.19 In order to assess the reliability of the estimates discussed in the preceding paragraphs the estimates of the characteristics derived from the State samples and the central samples are given separately in the tables appended.

### SECTION - V

#### ESTIMATION PROCEDURE

The values of the characteristics given in the report have been estimated using the formula:

$$\hat{T} = \sum_{s=1}^K \frac{N_s}{D_{si}} \sum_{r=1}^3 \frac{H_{si}^{(r)}}{h_{si}^{(r)}} \sum_{j=1}^{h_{si}^{(r)}} X_{sij}$$

Where sub-script (r) denotes the rth second stage stratum. It may be noted that in the case of operational holdings  $X_{sij}$  = sum of the values of the characteristic over the different operational holdings of the household. If an operational holding is held jointly by the household the value of the characteristic for that holding will be divided by the number of participating households before taking into account in this sum.

#### Notation:

- s = subscript for s<sup>th</sup> stratum.
- i = subscript for ith sample village/block/selected part of village or block.
- j = subscript for jth sample household.
- k = number of strata
- N = Total number of villages/ blocks
- n = number of sample villages/blocks surveyed in the sub-sample (including uninhabited village, if any) in the round/ sub-round.
- D = Number of hamlet groups/divisions/sub-blocks formed in a village/block (D = 1 if no such division was made)
- M = total number of households in the frame
- h = number of households surveyed
- x = value of the characteristic
- T = Estimate of the total of any characteristic from a particular subsample.

### SECTION VI - APPENDIX

#### List of Tables

The following tables are appended to the Report

- Table 1 Number of sample households, estimated number of households and area operated by size class of household operational holdings.
- Table 2 Estimated number of households by household category and by size class of household operational holding (in 000).
- Table 3 Estimated number of holdings by size class of operational holdings.

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- Table: 4 Estimated number of parcels by size class of operational holdings.
- Table: 5 Estimated number of Males, Females and Children by size class of operational holdings.
- Table: 6 Estimated number of persons with break-up for working and non-working members by size class of household operational holdings.
- Table: 7 Estimated No. of operational holdings reporting irrigation facilities and estimated area with irrigation facilities by size class of operational holdings.
- Table: 8 Estimated No. of cattle owned with break down for age, sex and use by size class of operational holdings.
- Table: 9 Estimated No. of buffaloes owned with break downs for age, sex and use by size class of operational holdings.
- Table: 10 Estimated number of agricultural machinery and implements owned by size class of operational holdings.
- Table: 11 Estimated operated area under different utilisations by size class of operational holdings.

TABLE: 1

Number of Sample Households, estimated number of households and Area operated by size class of household operational holding

(Central, Stage and Combined)

No. of sample villages:

Central Sample:  
State Sample :

Size class of household operational holding.	No. of sample households (actual)			Estimated No. ('000) of households.			Estimated area (000 acres) operated		
	Central	State	Combined	Central	State	Combined	Central	State	Combined
1	2	3	4	5	6	7	8	9	10
1 0.00	..	104	104	517	302	410	..	..	..
2 Upto 0.49	138	308	446	1534	1026	1280	228	146	187
3 0.50 - 0.99	49	71	120	323	249	286	215	161	188
4 1.00 - 2.49	215	509	724	373	349	361	566	561	563
5 2.50 - 4.99	203	458	661	181	193	187	625	672	649
6 5.00 - 7.49	88	181	269	60	66	63	362	400	381
7 7.50 - 9.99	40	61	101	29	19	24	253	156	204
8 10.00 -12.49	28	43	71	21	13	17	231	142	186
9 12.50 -14.99	19	21	40	10	5	7	137	72	104
10 15.00 -19.99	21	17	38	13	4	8	217	65	141
11 20.00 -24.99	9	12	21	7	4	6	151	88	120
12 25.00 -29.99	7	3	10	4	1	3	96	18	57
13 30.00 -49.99	11	8	19	9	3	6	323	87	205
14 50.00 & above	6	2	8	3	1	2	509	102	306
15 All sizes	834	1694	2528	2567	1933	2250	3913	2669	3291

contd.....

TABLE: 1 contd.....

No. of sample households, estimated number of households and area operated by size class of household operational holding.

No. of sample villages: Sub-sample - 1  
 Sub-sample - 2

Sl.No.	Size class of household operational holding (acres)	Number of sample households.		Estimated No. (in '000) of household.		Estimated area (in '000 acres) operated.	
		Sub-sample I	Sub-sample II	Sub-sample I	Sub-sample II	Sub-sample I	Sub-sample II
1	2	3	4	5	6	7	8
1	Upyo 0.49	103	205	854	1199	130	164
2	0.50 - 0.99	44	27	359	139	230	91
3	1.00 - 2.49	265	244	384	314	596	528
4	2.50 - 4.99	229	229	150	237	513	832
5	5.00 - 7.49	88	93	48	85	284	517
6	7.50 - 9.99	31	30	21	16	173	136
7	10.00 - 12.49	28	15	16	11	173	111
8	12.50 - 14.99	9	12	4	6	60	83
9	15.00 - 19.99	14	3	7	1	119	10
10	20.00 - 24.99	5	7	3	5	58	118
11	25.00 - 29.99	2	1	1	..	28	7
12	30.00 - 49.99	4	4	3	2	107	66
13	50.00 and above	2	..	1	..	204	..
14	All sizes	824	870	1851	2015	2675	2663



TABLE 2

Estimated No. of households by household category and by size class of household operational holding.  
(in '000)

Size class of household operational holding.	Central		State		Combined		
	With one individual operational holding.	With Others	With one individual operational holding.	With Others	With one individual operational holding.	With Others	
1 Upto 0.49	893	641	1534	1026	959	321	1280
2 0.50 - 0.99	310	13	323	249	280	6	286
3 1.00 - 2.49	363	10	373	342	353	8	361
4 2.50 - 4.99	173	8	181	190	182	5	187
5 5.00 - 7.49	55	5	60	64	59	4	63
6 7.50 - 9.99	27	2	29	19	23	1	24
7 10.00 - 12.49	17	4	21	12	14	3	17
8 12.50 - 14.99	9	1	10	5	7	..	7
9 15.00 - 19.99	12	1	13	3	7	1	8
10 20.00 - 24.99	7	..	7	3	5	1	6
11 25.00 - 29.99	3	1	4	1	2	1	3
12 30.00 - 49.99	8	1	9	3	6	..	6
13 50.00 and above	3	..	3	1	2	..	2
all	1880	687	2567	1918	1899	351	2250

TABLE: 3

Estimated number and area of operational holdings by size class of operational holdings.

Size class of operational holding (acres)	Central sample		State sample		Combined	
	Estimated No. of holdings.	Estimated area (acres)	Estimated No. of holdings.	Estimated area (acres)	Estimated No. of holdings	Estimated area (acres)
Upto 0.49	957	223	724	146	840	185
0.50 - 0.99	328	221	249	161	289	191
1.00 - 2.49	370	556	349	561	360	558
2.50 - 4.99	184	629	193	672	188	650
5.00 - 7.49	62	374	66	400	64	387
7.50 - 9.99	32	281	19	155	25	218
10.00 - 12.49	19	212	13	142	16	177
12.50 - 14.99	10	136	5	72	8	104
15.00 - 19.99	12	210	4	65	8	138
20.00 - 24.99	7	152	4	88	5	120
25.00 - 29.99	3	80	1	18	2	49
30.00 - 49.99	9	330	3	87	6	208
50.00 and above	3	509	1	102	2	306
All sizes	1996	3913	1631	2669	1813	3291

TABLE 4

Estimated number of parcels by size class of operational holdings.

Size class	Number of parcels			
	Central	State	Combined	Sub-sample I Sub-sample II
1 0.49	1070255	807227	938741	698160 916293
2 0.50 - 0.99	595499	338450	466975	501267 175632
3 1.00 - 2.49	836612	747714	792163	749463 745965
4 2.50 - 4.99	611061	690174	650618	480377 899971
5 5.00 - 7.49	314823	352441	333632	240120 464762
6 7.50 - 9.99	177259	144875	161067	190428 99321
7 10.00 - 12.49	127026	63128	165077	75144 51112
8 12.50 - 14.99	90313	33736	62025	42804 24667
9 15.00 - 19.99	64882	26236	45559	46792 5680
10 20.00 - 24.99	53877	30274	42076	28036 32511
11 25.00 - 29.99	19599	9858	14729	17833 1883
12 30.00 - 49.99	73070	14972	44021	10064 19839
13 50.00 and above	26988	12986	19987	25972 . . .
14 All sizes	4061264	3272071	3666670	3106460 3437676

**TABLE : 5**

Estimated number of persons by size class of household operational holdings with break-ups for adults and child members.

Sl.No.	Size class of household operational holding (acres)	Estimated number of persons						Total	
		Sub-sample I Adults		Sub-sample II Adults		Children	Children		
		Male	Female	Male	Female	Male	Female	Children	Total
1.	Upto 0.49	1253229	1288091	1596370	4138390	1550248	1762318	2528985	5841551
2.	0.50 - 0.99	481733	482108	772322	1736163	201827	210779	349400	762006
3.	1.00 - 2.49	532103	618166	801673	1951942	554994	597330	904963	2057287
4.	2.50 - 4.99	284177	277329	410648	972154	451401	457483	708404	1617283
5.	5.00 - 7.49	102071	104519	136954	343544	145629	167533	230376	543538
6.	7.50 - 9.99	32936	37790	45606	116332	55711	45685	74670	176066
7.	10.00 - 12.49	38110	39458	50917	128485	28631	30178	52002	110811
8.	12.50 - 14.99	9051	5983	5172	20206	13446	9861	16197	39504
9.	15.00 - 19.99	16059	12167	19254	47480	4915	5063	4846	14824
10.	20.00 - 24.99	3066	3997	4651	11714	14056	10143	16721	40920
11.	25.00 - 29.99	2756	3760	3927	10443	1345	807	807	2959
12.	30.00 - 49.99	3952	2516	11141	17609	6172	5251	9839	21262
13.	50.00 and above	12180	12800	26380	51360	1248	416	1248	2912
14.	All sizes.	2772128	2888684	3885015	9545822	3029623	3302847	4893458	11230928

TABLE 5

Estimated number of males, females, children, by size class of household operational holdings.

Sl. No.	Size class of household operational holding.	C E N T R A L			S T A T E			Total	
		Male	Female	Children	Male	Female	Children		
1	Upto 0.49	2160713	2299695	2921288	7381696	1402089	1525205	2062678	4989972
2	0.50 - 0.99	500194	507905	743309	1751408	341780	346444	560861	1249085
3	1.00 - 2.49	588783	647849	1018150	2254782	543549	607748	853318	2004615
4	2.50 - 4.99	346262	326054	503381	1175397	367789	367406	559526	1294721
5	5.00 - 7.49	120226	118278	181115	419619	123850	136026	183665	443541
6	7.50 - 9.99	68698	64414	104213	237325	44324	41738	60138	146200
7	10.00 - 12.49	54453	53149	74872	182474	33371	34818	51460	119649
8	12.50 - 14.99	23909	21497	31670	77076	11249	7922	10685	23856
9	15.00 - 19.99	27592	30309	46328	104329	10487	8615	12050	31152
10	20.00 - 24.99	13209	13419	28587	55119	8561	7070	10686	26317
11	25.00 - 29.99	6848	7150	11760	25758	2051	2284	2367	6702
12	30.00 - 49.99	19876	16980	29322	66178	5062	3884	10490	19436
13	50.00 & above	6859	5678	7472	20009	6714	6608	13814	27136
14	All Sizes	3937622	4112377	5701467	13751466	2900876	3095768	4391738	10388382

contd...../

TABLE 5 contd.....

Sl.No.	Size Class of household operational holding.	C O M B I N E D			
		Male	Female	Children	
				Total	
1	Upto 0.49	1781401	1912450	2491983	6185834
2	0.50 - 0.99	420987	427175	652085	1500247
3	1.00 - 2.49	566166	627799	935734	2129699
4	2.50 - 4.99	357026	346730	531454	1235210
5	5.00 - 7.49	122038	127152	182390	431580
6	7.50 - 9.99	65511	53076	82176	191763
7	10.00 - 12.49	43912	43984	63166	151062
8	12.50 - 14.99	17579	14710	21178	53467
9	15.00 - 19.99	19040	19462	29189	67691
10	20.00 - 24.99	10885	10245	19637	40767
11	25.00 - 29.99	4450	4717	7064	16231
12	30.00 - 49.99	12469	10432	19906	42807
13	50.00 & above	6787	6143	10643	23573
14	All sizes	3419251	3604075	5046605	12069931



TABLE :6

Estimated number of persons by size class of household operational holding with break-ups for working and non-working members.

Sl. No.	Size class of household operational holding (acres)	Sub-sample I.				Sub-sample II					
		Working members		Non-working		Working members		Non-working			
		Culti-vators	Others	Total	Members	Culti-vators	Others	Total	Members		
1.	Upto 0.49	203602	1224050	1427658	2710732	4138390	159339	2142603	2301942	3539609	5841551
2.	0.50 - 0.99	130712	314820	445532	1290631	1736163	44923	222794	267717	494239	762006
3.	1.00 - 2.49	27090	352434	631424	1320518	1951942	249824	384629	634453	1422834	2057287
4.	2.50 - 4.99	172587	112215	284802	687352	972154	232890	266840	499730	1117558	1617288
5.	5.00 - 7.49	70269	20250	99519	244025	343544	113087	63369	176456	367082	543538
6.	7.50 - 9.99	25078	7002	32080	84252	116332	30834	22240	53074	122992	176086
7.	10.00 - 12.49	20154	7973	34127	94358	128435	19887	5262	25149	35662	110811
8.	12.50 - 14.99	3098	3524	7122	13084	20206	6429	1112	7541	31963	39504
9.	15.00 - 19.99	10789	2428	13217	34263	47480	2021	6273	8294	6530	14824
10.	20.00 - 24.99	3107	..	3107	8607	11714	7667	2533	10200	30720	40920
11.	25.00 - 29.99	2993	1889	3582	6861	10443	807	..	807	2152	2959
12.	30.00 - 49.99	2513	..	2516	15093	17609	4851	879	5730	15532	21262
13.	50.00 and above	2020	2710	11730	39630	51360	416	..	416	2496	2912
14.	All sizes	936721	2057695	2996416	6549406	9545822	822975	3118534	3991509	7239419	11230928

TABLE 6

Estimated number of persons by size class of household operational holding with break-ups for working and non-working members.

Sl. No.	Size class of household operational holding.	CENTRAL		STATE		Total	Cultiva-tors.	Cultiva-tors.	Total	Others	Total
		Working	Non-working member	Working	Non-working member						
1.	Upto 0.49	100618	2923230	3023848	4357849	7381697	181474	1683327	1864801		
2.	0.50 -0.99	99510	521065	620575	1130833	1751408	87818	268807	356625		
3.	1.00 -2.49	221078	457602	738680	1516102	2254782	264407	368532	632939		
4.	2.50 -4.99	229047	139318	368365	807333	1175698	202739	189528	392267		
5.	5.00 -7.49	105101	25716	130817	288802	419619	91678	46310	137988		
6.	7.50 -9.99	51697	12412	64109	173216	237325	27956	14621	42577		
7.	10.00 -12.49	42272	18631	50903	131571	182474	23021	6618	29639		
8.	12.50 -14.99	13043	5790	18833	58243	77075	5014	2318	7332		
9.	15.00 -19.99	25991	4562	30553	73677	104230	6405	4351	10756		
10.	20.00 -24.99	16543	577	17120	38095	55215	5387	1267	6654		
11.	25.00 -29.99	4400	1225	5625	20133	25758	1550	645	2195		
12.	30.00 -49.99	16314	823	17137	49041	66178	3684	440	4124		
13.	50.00 and above	3906	1392	5298	14712	20010	4718	1355	6073		
14.	All sizes	389520	4102343	8691863	8659606	13751469	905851	2588119	3493970		

TABLE 6(Contd...)

Sl. No.	Size class of house-hold operational holding.	STATE			COMBINED			Total
		Non-Working member	Total	Working Cultivators.	Others	Total	Non-Working member	
1.	Upto 0.49	3127171	4989972	141046	2303279	2444325	3741510	6185835
2.	0.50 - 0.99	892460	1249085	93664	394936	488600	1011647	1500247
3.	1.00 - 2.49	1371676	2004615	272743	423067	685810	1443889	2129699
4.	2.50 - 4.99	902455	1294722	215893	164423	380316	854894	1235210
5.	5.00 - 7.49	30554	443542	98389	36013	134402	297178	431580
6.	7.50 - 9.99	103622	146199	39827	13517	53344	138419	191763
7.	10.00 - 12.49	70010	119648	32647	7625	40272	110791	151063
8.	12.50 - 14.99	22524	29856	9029	4054	13083	40383	53466
9.	15.00 - 19.99	20297	31153	16198	4457	20655	47037	67682
10.	20.00 - 24.99	19564	26318	10965	922	11837	28880	40767
11.	25.00 - 29.99	4507	6702	2975	935	3910	12320	16230
12.	30.00 - 49.99	15313	19437	9999	632	10631	32177	42808
13.	50.00 and above	21063	27136	4312	1374	5686	17888	23574
14.	All sizes	6894416	10388386	947687	3345234	4292921	7777013	12069934

TABLE : 7

Estimated number of operational holding reporting irrigation facilities and estimated area with irrigation facilities by size class of operational holding.

Sl. No.	Size class of operational holding.	CENTRAL			STATE			COMBINED.		
		Operational holding with irrigation facilities.	Area with irrigation facilities (Acres)	Operational holding with irrigation facilities.	Operational holding with irrigation facilities (Acres)	Operational holding with irrigation facilities.	Area with irrigation facilities (Acres)			
1.	Up to 0.49	90166	23872	..	..	45083	11936			
2.	0.50 - 0.99	101223	37827	13323	2035	57273	20431			
3.	1.00 - 2.49	103607	78102	44024	30944	76816	54523			
4.	2.50 - 4.99	72129	104541	48037	70310	60083	87426			
5.	5.00 - 7.49	32207	76253	13466	26262	22837	51260			
6.	7.50 - 9.99	23617	61239	1883	11066	11250	36153			
7.	10.00 - 12.49	6947	29729	665	2940	3806	16335			
8.	12.50 - 14.99	7917	48831	638	8440	4278	28635			
9.	15.00 - 19.99	5257	16072	229	1572	2743	8822			
10.	20.00 - 24.99	2794	20000	643	5308	1719	12654			
11.	25.00 - 29.99	2115	14387	..	..	1058	7193			
12.	30.00 - 49.99	4822	57458	540	2430	2681	29944			
13.	50 and above	1079	10896	..	..	515	5448			
14.	All sizes	436830	579212	123448	162307	290142	370760			

TABLE 8  
LAND HOLDINGS ENQUIRY (RURAL)

Estimated number of cattles owned by size class of household operational holding with break downs for age, sex and use.

Central and State	Sl. No. operational holding (acres)	1	Males over 3 years					Females over 3 years.					Total Young stock	Total Cattle.
			2.1	2.2	2.3	2.4	3.1.	3.2	3.3.	3.4	4	5		
			Breeding	Working	Ohters	Total	Breeding in milk	Others	Total	Young stock	Total			
	0													
	1	3616	24845	3340	31821	66862	63963	15175	146000	222557	400352			
	2	..	33736	1339	35135	54253	39973	18497	112723	101091	248949			
	3	3291	71776	8719	83786	79767	93762	20954	194483	154267	432536			
	4	2252	83006	3006	88264	61093	65932	15269	142494	114256	345014			
	5	484	54637	3306	58427	32079	28183	10032	70294	56498	185219			
	6.	226	29458	2498	32182	12441	16555	5500	34496	28962	95640			
	7.	204	15921	..	16125	9229	18539	..	27818	20917	64860			
	8.	41	14650	793	15484	6872	6859	1059	14790	11335	41609			
	9.	189	10793	310	11292	7882	10121	923	18926	14585	44803			
	10.	2204	13281	69	15644	7910	5809	1011	14730	12405	42779			
	11.	41	2929	..	2970	2252	3039	..	5291	4961	13222			
	12.	179	15257	930	16366	8068	11955	1122	21145	15602	53113			
	13.	..	10921	333	11254	5212	2880	6040	13132	8755	33141			
	14		380670	24643	418730	353920	367620	94782	816322	766191	2001242			

TABLE : 8

Estimated number of heads of cattle owned by size class of household operational holding with breakdowns for age sex and use.

Sub-sample: 1

Sl. No.	Size class of household operational holding (acres)	Males over 3 years			Females over 3 years.			Total Young stock cattle	Total cattle		
		Breeding	Working	Others	Total	Breeding in milk	Others			Total	
1.	Upto 0.49	13727	548	..	14275	88236	76347	10442	175025	1002963	795586
2.	0.50 - 0.99	..	72545	5355	77900	102073	50982	63693	216748	122781	417429
3.	1.00 - 2.49	6690	64019	386	71095	84955	79480	24395	188830	171217	431142
4.	2.50 - 4.99	3756	62528	2118	73402	37589	55495	30720	123804	86757	283963
5.	5.00 - 7.49	772	41929	5545	48246	27915	28073	20319	76307	55616	180169
6.	7.50 - 9.99	281	8671	2282	11234	6123	11217	4842	22182	14886	48302
7.	10.00 - 12.49	..	13086	..	13086	7801	18504	..	26305	14421	53812
8.	12.50 - 14.99	..	3461	..	3461	3861	3247	..	7108	2389	13468
9.	15.00 - 19.99	..	6536	..	6536	6441	8741	..	15182	11538	33256
10.	20.00 - 24.99	..	5558	..	5558	5509	3706	872	10177	4155	19890
11.	25.00 - 29.99	..	926	..	926	1545	1852	..	3397	2008	6331
12.	30.00 - 49.99	..	2872	..	2872	1077	3308	..	5385	2513	10770
13.	50.00 - and above	..	32214	..	32214	14020	5465	20160	39645	26070	97929
14.	All sizes	30226	314893	15686	360805	387145	347507	175443	910095	705147	1976047



TABLE 8

Estimated number of heads of cattle owned by size class of household operational holding with break downs for age, sex and use.

Sub-sample : II

Sl. No.	Size class of household operational holding (acres)	Males over 3 years				Females over 3 years				Total	Young stock	Total Cattle
		Breeding	Working	Others	Total	Breeding	Working	Others	Total			
1.	Upto - 0.49	..	38136	13359	51495	72315	33487	30892	136694	156941	345130	
2.	0.50 - 0.99	..	..	..	..	10811	8489	9174	28474	29981	58455	
3.	1.00 - 2.49	2962	64630	18960	86552	99715	90112	43474	233301	135784	455637	
4.	2.50 - 4.99	..	125004	4467	129471	110151	69748	16603	196502	128138	454111	
5.	5.00 - 7.49	377	90608	4827	96112	52981	13529	17231	83741	52260	232113	
6.	7.50 - 9.99	..	25989	269	26258	12647	3236	1650	17533	12848	56639	
7.	10.00 - 12.49	..	5579	..	5579	2011	4078	..	6089	4724	16392	
8.	12.50 - 14.99	..	11277	2916	14193	3450	2166	..	5616	2871	32680	
9.	15.00 - 19.99	..	148	..	148	1092	916	..	2008	1536	3692	
10.	20.00 - 24.99	..	13760	279	14039	3094	1492	279	4865	4722	23626	
11.	25.00 - 29.99	..	..	..	..	269	538	..	807	807	1614	
12.	30.00 - 49.99	..	610	..	610	2234	4605	..	6339	2539	9988	
13.	50.00 and above	..	..	..	..	..	..	..	..	..	..	
14.	All sizes	3539	375741	45077	424457	370770	232396	119303	722469	533151	1680077	

TABLE 181

Estimated number of heads of Cattle owned by size class of household operational holding with breakdowns for age sex and use.

Sl. No.	Size class of household operational holding (acres)	Sub: Samples Combined.											Total Cattle.
		Males over 3 years					Females over 3 years.					Total Young stock	
		Breeding	Working	Others	Total	Breeding	Working	Others	Total	Others			
1	Upto 0.49	3864	19342	6679	32885	80276	54917	20667	155360	173618	362363		
2	0.50 - 0.99	..	36273	2678	38951	56442	29736	36433	122611	76381	237943		
3	1.00 - 2.49	4626	64324	9673	83323	92335	84796	33935	211066	153501	443390		
4	2.50 - 4.99	4373	93766	3293	101437	73870	62621	23662	160153	107447	369037		
5	5.00 - 7.49	725	66269	5186	72130	40448	20301	18775	80024	53933	206142		
6	7.50 - 9.99	140	17330	1276	18746	9385	7226	3246	19857	13867	52470		
7	10.00 - 12.49	..	9333	..	9333	4906	11291	..	16197	9572	35102		
8	12.50 - 14.99	..	7369	1458	8827	3656	2706	..	6362	2880	18069		
9	15.00 - 19.99	..	3342	..	3342	3766	4829	..	8595	6537	18474		
10	20.00 - 24.99	..	9659	139	9798	4302	2644	575	7521	4439	21758		
11	25.00 - 29.99	..	463	..	463	907	1195	..	2102	1408	3973		
12	30.00 - 49.99	..	1741	..	1741	1655	4457	..	6112	2526	10379		
13	50.00 and above	..	16107	..	16107	7010	2732	10080	19822	13035	48964		
14	All sizes	16933	345318	30382	392633	378958	289951	147373	816282	619149	1828064		



TABLE 9

Estimated number of buffaloes owned by size class of household operational holding with breakdowns for age, sex and use.

Sub+ Sample. II

Sl. No.	Size class of household operational holding (acres)	Males over 3 years			Females over 3 years			Total	Young stock	Total
		Breeding	Working	Others	Breeding in milk	Others	Others			
1.	Upto 0.49	..	..	3240	..	12126	..	12126	..	15366
2.	0.50 - 0.99	..	..	..	..	..	..	..	..	..
3.	1.00 - 2.49	26%	25800	1042	12260	21470	2514	36244	2822	67172
4.	2.50 - 4.99	17990	50664	279	25636	8402	1934	35972	19542	124447
5.	5.00 - 7.49	..	20663	..	8705	1134	2217	11956	3637	36256
6.	7.50 - 9.99	..	13980	..	192	407	..	599	192	14771
7.	10.00 - 12.49	..	19586	8506	19024	17012	..	36036	8506	72634
8.	12.50 - 14.99	..	..	..	2916	..	..	2916	..	2916
9.	15.00 - 19.99	..	..	..	..	..	..	..	..	..
10.	20.00 - 24.99	..	..	..	..	..	..	..	..	..
11.	25.00 - 29.99	..	..	..	..	..	..	..	..	..
12.	30.00 - 49.99	..	..	..	436	..	..	436	436	872
13.	50.00 and above	..	..	..	..	..	..	..	..	..
14.	All sizes.	18254	130693	13067	69169	60551	6565	136285	36135	334434

TABLE 9  
Estimated number of buffaloes owned by size class of household operational holding with breakdowns for age, sex and use.

Sl. No.	Size class of household operational holding (acres)	Males over 3 years					Females over 3 years					Total		
		Breeding	working	Others	Total	Breeding in milk	Others	Total	Young stock	Total				
											3		4	5
1	Upto 0.49	..	274	1620	1894	..	7386	..	7386	..	..	..	..	9280
2	0.50 - 0.99	..	22677	764	33766	15111	13598	2247	30955	..	7737	..	72458	
3	1.00 - 2.49	325	45638	1112	56530	14104	5876	1210	21189	..	10732	..	88451	
4	2.50 - 4.99	9750	2495	..	21495	5212	1012	1647	7871	..	1885	..	31251	
5	5.00 - 7.49	..	1993	..	14993	283	2203	..	10377	..	4334	..	15532	
6	7.50 - 9.99	..	1577	4739	20359	9871	8506	..	18377	..	4612	..	43348	
7	10.00 - 12.49	243	243	..	2743	1458	..	..	1458	..	..	..	4201	
8	12.50 - 14.99	..	586	..	5586	223	..	..	223	..	..	..	5899	
9	15.00 - 19.99	..	1709	..	1709	..	374	..	374	..	..	..	2083	
10	20.00 - 24.99	..	926	..	926	..	..	..	..	..	..	..	926	
11	25.00 - 29.99	..	540	..	540	218	..	..	218	..	218	..	976	
12	30.00 - 49.99	..	1806	..	2906	..	..	1008	1008	..	..	..	3914	
13	50.00 and above	..	..	..	..	..	..	..	..	..	..	..	..	
14.	All sizes	10348	14454	8235	163447	46480	36953	6112	89545	25538	278530	..	278530	

TABLE 9

Estimated number of Buffaloes owned by size class of household operational holding with breakdowns for age, sex and use.

CENTRAL AND STATE.

Sl. No.	Size class of household operational holding (acres)	Males over 3 years					Females over 3 years.					Total Young stock	Total Buffaloes.
		Breeding	Working	Others	Total	Breeding in milk	Others	3.1	3.2	3.3	3.4		
1	Upto 0.49	202	810	1832	2354	6059	8423	7757	18012	5			
2	0.50 - 0.99	5508	594	6102	11387	14231	25618	14013	45733				
3	1.00 - 2.49	332	745	21811	9109	8234	1141	6618	46913				
4	2.50 - 4.99	6233	915	47008	11528	4978	813	12271	77043				
5	5.00 - 7.49	..	342	22499	3755	1479	1325	1751	36809				
6	7.50 - 9.99	43	201	20188	714	290	1278	1191	23661				
7	10.00 - 12.49	122	2370	17356	5758	6199	907	6152	36372				
8	12.50 - 14.99	..	..	11351	923	..	..	194	12468				
9	15.00 - 19.99	..	..	7324	266	73	..	3571	11234				
10	20.00 - 24.99	..	..	4572	310	807	..	310	5999				
11	25.00 - 29.99	..	..	1014	..	310	..	310	1634				
12	30.00 - 49.99	..	..	7371	834	117	73	1024	9418				
13	50.00 and above	..	..	4055	81	..	837	162	5135				
14.	All sizes	12243	160857	173483	47019	42787	6379	96185	55763	330531			



Table 10. Estimated number of agricultural machinery and implements owned by size class of household operational holdings.

Sub-sample I.		Pump																	
		Cane crusher				Oil crusher				Elec- tric. rs.				Tray ctors					
Size class		Plough		Cart		Boat		Harrow		Sickle		Power opera- ted.		Othe- rs. opera- ted.		Power opera- rs.		Othe- rs.	
Sl. No.	of house- hold opera- tional hold- ing(acres).	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	Upto 0.49	14370	24446	114870	6599	20397	288	170341	502428	110789	151	517	517	517	517	517	517	517	517
2	0.50- 0.99	92394	53142	22236	1945	20397	192	179084	110789	301581	451	7981	7981	7981	7981	7981	7981	7981	7981
3	1.00- 2.49	24795	11026	24795	1945	20397	281	182128	156883	156883	451	1674	1674	1674	1674	1674	1674	1674	1674
4	2.50- 4.99	24795	11026	24795	1945	20397	281	182128	156883	156883	451	1674	1674	1674	1674	1674	1674	1674	1674
5	5.00- 7.49	24795	11026	24795	1945	20397	281	182128	156883	156883	451	1674	1674	1674	1674	1674	1674	1674	1674
6	7.50- 9.99	24795	11026	24795	1945	20397	281	182128	156883	156883	451	1674	1674	1674	1674	1674	1674	1674	1674
7	10.00-12.49	24795	11026	24795	1945	20397	281	182128	156883	156883	451	1674	1674	1674	1674	1674	1674	1674	1674
8	12.50 -14.99	24795	11026	24795	1945	20397	281	182128	156883	156883	451	1674	1674	1674	1674	1674	1674	1674	1674
9	15.00 -19.99	24795	11026	24795	1945	20397	281	182128	156883	156883	451	1674	1674	1674	1674	1674	1674	1674	1674
10	20.00- 24.99	24795	11026	24795	1945	20397	281	182128	156883	156883	451	1674	1674	1674	1674	1674	1674	1674	1674
11	25.00 -29.99	24795	11026	24795	1945	20397	281	182128	156883	156883	451	1674	1674	1674	1674	1674	1674	1674	1674
12	30.00 -49.99	24795	11026	24795	1945	20397	281	182128	156883	156883	451	1674	1674	1674	1674	1674	1674	1674	1674
13	50.00 & above	24795	11026	24795	1945	20397	281	182128	156883	156883	451	1674	1674	1674	1674	1674	1674	1674	1674
14	All sizes	410231	20377	20938	25360	796769	1237010	451	517	972	35111	517	972	35111	517	972	35111	517	972



Table 10: Estimated number of agricultural machinery and implements owned by size class of household operational holdings.

Sub-samples combined.

Sl. No.	Size class of household operational holding (Acres)	Flough			Cart		Boat Harrow Sickle			Cane crusher			Oil crusher			Pump		Tractors
		Wooden	Iron	Animal drawn	Others	Boat	Harrow	Sickle	Power operated	Others	Power operated	Others	Electric	Others				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
Upto 0.49	8925	3300	10199	..	144	111778	437986	..	..	..	..	..	259	..				
0.50 - 0.99	12223	13139	628	..	..	90829	87864	..	..	..	..	..	259	..				
1.00 - 2.49	111931	4360	7857	..	2178	150890	346702	..	..	1010	..	1305	5611	..				
2.50 - 4.99	115553	5524	2075	..	4629	108539	189530	..	140	..	259	..	4984	..				
5.00 - 7.49	50583	538	..	..	348	61303	724494	..	..	..	..	..	2342	..				
7.50 - 9.99	20672	243	270	..	3030	27114	26169	..	225	..	..	..	2472	..				
10.00 - 12.49	21082	972	..	..	8146	15130	22853	..	..	..	..	..	5670	..				
12.50 - 14.99	12660	..	..	..	967	7061	8104	..	..	..	..	488	2860	..				
15.00 - 19.99	7841	..	..	..	1547	6084	12640	..	..	148	..	162	990	..				
20.00 - 24.99	8949	..	..	..	1997	6047	11446	..	..	..	..	..	1209	..				
25.00 - 29.99	1696	..	..	..	..	3515	2155	..	..	..	..	..	..	..				
30.00 - 49.99	5923	..	..	..	..	3231	3231	..	..	..	..	..	..	..				
50.00 & above	5905	..	..	..	..	3782	10120	..	365	1158	259	1953	26656	..				
All sizes	390943	28076	21029	..	22986	592072	1238249	..	365	1158	259	1953	26656	..				

Table 10: Estimated number of agricultural machinery and implements owned by size class of household operational holding.

Household type : A 11

Central and State.

Sl. No.	Size class of household operational holding (Acres)	Household operational holding (Acres)														
		2.1	2.2	3.1	3.2	4	5	6	7.1	7.8	8.1	8.2	9.1	9.2	10	11
		Upto 0.49	0.50 - 1.00	1.00 - 2.49	2.50 - 4.99	5.00 - 7.49	7.50 - 9.99	10.00 - 12.49	12.50 - 14.99	15.00 - 19.99	20.00 - 24.99	25.00 - 29.99	30.00 - 49.99	50.00 & above	ALL sizes	
1	Upto 0.49	14871	1650	2730	5099	2730	5099	72	149689	451410	..	..	..	..	..	..
2	0.50 - 1.00	10053	7241	664	5359	664	5099	1663	175718	164427	..	..	..	..	..	..
3	1.00 - 2.49	111658	2628	664	5359	664	5099	2962	119731	314563	..	..	..	..	..	..
4	2.50 - 4.99	115046	3458	1697	170	170	1697	237	70883	87761	..	..	..	..	..	..
5	5.00 - 7.49	66775	515	419	419	419	419	2298	27082	50582	..	..	..	..	..	..
6	7.50 - 9.99	40421	122	810	810	810	810	4467	23043	32223	..	..	..	..	..	..
7	10.00 - 12.49	32008	609	229	229	229	229	1008	11761	12230	..	..	..	..	..	..
8	12.50 - 14.99	23173	97	96	96	96	96	1658	9958	19789	..	..	..	..	..	..
9	15.00 - 19.99	14065	96	96	96	96	96	1199	19558	22583	..	..	..	..	..	..
10	20.00 - 24.99	20553	4091	1629	1629	1629	1629	394	5293	4423	..	..	..	..	..	..
11	25.00 - 29.99	4091	504	1629	1629	1629	1629	168	7725	13439	..	..	..	..	..	..
12	30.00 - 49.99	20038	96	96	96	96	96	161	4625	7292	..	..	..	..	..	..
13	50.00 & above	9908	17016	18636	170	16287	694317	1373730	353	948	642	1582	18606	..	..	..
14	ALL sizes	481660	17016	18636	170	16287	694317	1373730	353	948	642	1582	18606	..	..	..

**TABLE II**  
 Estimated operated area under (i) sown (not area) (ii) miscellaneous tree crops (iii) pastures and grazing land (iv) current fallows (v) other fallows (vi) culturable waste (vii) non-agricultural uses (viii) barren and unculturable land and (ix) forest for each size class of operational holding.

Sl. No.	Sub-Sample I.	Size class of operational holding (acres)	Estimated operated area under ('000 acres)										
			1	2	3	4	5	6	7	8	9	10	11
					Sown (Net area)	Misc. tree crops.	Pastures & grazing land.	Current fallows.	Other fallows.	Culturable Waste.	Non-agricultural uses.	Barren land.	Forests.
1.	Upto	0.49	129	..	86	16	..	..	1	4	22	..	..
2.	0.50	0.99	230	..	160	27	..	11	..	..	18	1	..
3.	1.00	2.49	595	..	477	66	..	5	..	14	28	4	..
4.	2.50	4.99	512	1	418	51	1	8	..	13	14	2	..
5.	5.00	7.49	284	..	237	25	..	1	..	7	8	3	..
6.	7.50	9.99	173	..	137	11	..	..	..	13	4	4	..
7.	10.00	12.49	173	..	142	20	..	..	..	2	4	2	..
8.	12.50	14.99	60	..	45	9	..	2	..	2	2	..	..
9.	15.00	19.99	117	..	102	5	..	1	..	3	1	4	..
10.	20.00	24.99	57	..	45	2	..	..	..	8	1	2	..
11.	25.00	29.99	28	..	13	10	..	..	..	5	..	..	..
12.	30.00	49.99	107	..	96	1	..	1	..	6	1	2	..
13.	50.00 and above		204	..	89	2	..	1	1	97	5	10	..
14.	All sizes.		2672		2056	245	1	21	31	174	110	34	..

TABLE 11

Estimated operated area under (i) sown (not area) (ii) miscellaneous tree crops (iii) pastures and grazing land (iv) current fallows(v) other fallows (vi) culturable waste(vii) Non-Agricultural uses (viii) barren and unculturable land and (ix) forest for each size class of operational holding.

Sub- Sample II.

Sl. No.	Size class of operational holding (acres)	Estimated operated area under (1000 acres)										
		Operated area (1000 acres)	Sown (let tree area.)	Misc. tree crops.	Pastures & grazing area.)	Current fallows.	Other fallows.	Cultural waste.	Non agri. cultural uses.	Barren & unculturable land.	Forests.	
1	Upto 0.49	163	120	12	..	2	3	1	25	..	..	
2	0.50 - 0.29	91	80	2	..	..	..	1	7	1	1	
3	1.00 - 2.49	327	446	33	1	5	4	7	29	2	2	
4	2.50 - 4.99	851	685	83	1	14	5	12	23	3	3	
5	5.00 - 7.49	516	441	39	..	2	1	5	14	14	14	
6	7.50 - 9.99	136	126	4	..	2	1	1	2	..	..	
7	10.00 - 12.49	111	108	1	..	..	..	1	1	..	..	
8	12.50 - 14.99	83	73	4	1	1	1	2	1	..	..	
9	15.00 - 19.99	10	9	..	..	..	..	..	1	..	..	
10	20.00 - 24.99	113	109	6	..	..	1	1	1	..	..	
11	25.00 - 29.99	7	7	..	..	..	..	..	..	..	..	
12	30.00 - 49.99	66	55	6	..	..	..	1	1	3	3	
13	50.00 and above	..	..	..	..	..	..	..	..	..	..	
14.	All sizes.	2659	2263	190	3	26	16	32	106	23	..	



TABLE 11

Estimated operated area under (1) sown (net area) (ii) miscellaneous tree crops (iii) Pastures and grazing land (iv) current fallows (v) other fallows (vi) culturable waste (vii) Non-agricultural uses (viii) barren and unculturable land and (ix) forest for each size class of operational holding.

Sub-Samples combined.	Estimated operated area under ('000 acres)										
	1	2	3	4	5	6	7	8	9	10	11
Sl. No. operational holding (acres)	Operated area ('000 acres)	Sown (Net area)	Misc. tree crops.	Pastures & grazing land.	Current fallows.	Other fallows.	Culturable waste.	Non Agricultural uses.	Barren & unculturable land.	Forests.	
1. Upto 0.49	143	103	14	..	1	2	3	23	..	..	
2. 0.50 - 0.99	151	125	14	..	2	6	10	12	1	..	
3. 1.00 - 2.49	561	462	49	1	3	6	12	19	3	..	
4. 2.50 - 4.99	672	554	67	1	10	6	6	11	3	..	
5. 5.00 - 7.49	400	339	32	..	3	1	7	3	2	..	
6. 7.50 - 9.99	155	132	7	..	3	1	2	2	1	..	
7. 10.00 - 12.49	142	125	11	..	1	..	2	1	..	..	
8. 12.50 - 14.99	77	59	7	1	1	1	1	1	2	..	
9. 15.00 - 19.99	65	56	2	..	1	1	4	1	1	..	
10. 20.00 - 24.99	88	77	4	..	..	..	3	..	..	..	
11. 25.00 - 29.99	18	10	5	..	..	..	3	1	..	..	
12. 30.00 - 49.99	37	76	4	..	..	..	48	2	..	..	
13. 50.00 and above	102	45	1	..	..	..	..	..	..	..	
14. All sizes	2669	2163	217	3	25	26	102	105	28	..	

TABLE 11.

Estimated operated area under (i) sown (net area) (ii) miscellaneous tree crops (iii) Pastures and grazing land (iv) Irrigated fallows (v) Others fallows (vi) culturable waste (vii) non-agricultural uses (viii) barren and unculturable land and (ix) forest, for each size class of operational holding.

CENTRAL AND STATE.

Sl. No.	Size class of operational holding (acres)	Estimated operated area under ('000 acres)										Non-Barren Forests.	
		Estimated operated area ('000 acres)	Sown (net area)	Misc. tree crops.	Pastures & grazing land.	Current fallows.	Others fallows.	Culturable waste.	Non-culturable usgs. land.	22	9		10
1.	Upto -0.49	185	134	10	1	1	1	6	2	2	30	1	..
2.	0.50 -0.99	192	156	13	..	1	1	2	3	3	14	2	1
3.	1.00 -2.49	559	474	32	1	3	6	10	6	6	27	6	..
4.	2.50 -4.99	650	544	44	2	8	9	15	9	21	21	6	1
5.	5.00 -7.49	387	331	23	2	2	4	7	4	11	11	7	..
6.	7.50 -9.99	218	184	12	2	3	2	6	2	6	6	3	..
7.	10.00 -12.49	177	147	13	1	2	2	5	2	5	5	2	..
8.	12.50 -14.99	104	89	6	1	2	1	2	1	2	2	1	..
9.	15.00 -19.99	137	107	9	5	2	..	7	..	3	3	4	..
10.	20.00 -24.99	118	96	11	..	1	1	3	1	..	4	2	..
11.	25.00 -29.99	50	33	12	1	..	..	3	..	..	1	..	..
12.	30.00 -49.99	209	152	28	6	2	3	6	3	6	5	6	1
13.	50.00 and above	305	176	14	..	13	73	78	73	78	5	46	..
14.	All sizes	3291	2520	227	22	40	106	150	134	86	134	86	3

GOVERNMENT OF INDIA NATIONAL SAMPLE SURVEY 1960-61  
Household Schedule 6.1: Ownership of land and other particulars

RURAL

(Sixteenth Round)

(1) identification of sample household

(2) general particulars

1. Serial number	9. state	1. household size
2. Zone-state-region	10. district	2. land owned (acres 0.00)
3. stratum	11. tehsil/taluk/thana*	3. size class of land owned (code)
4. sub-round	12. village	4. whether land operated (yes-1, no-2)
5. sub-sample	13. hamlet(s)	5. how operated (individually-1; jointly-2; both-3)
6. sample village	14. house number	6. number of opera- tional holdings
7. C.P.A.classification**	15. name of head of household	7. land possessed (acres 0.00) from schedule 0.1
8. (i) second stage stratum (ii) sample household	16. name of informant	8. land possessed (acres 0.00) from schedule 6.2
	17. informant's relation to head.	9. size class of land possessed (code)
		10. household industry occupation (code)
		11. whether culti- vator household (yes-1; no-2)

(3) Particulars of investigation and scrutiny

Sl. No.	Item	Investigator	Inspector	Scrutiniser
(0)	(1)	(2)	(3)	(4)
1.	name			
2.	roll number			
3.	date of survey/inspection/scrutiny			
4.	date of receipt/despatch			
5.	number of scrutiny sheets attached			
6.	signature.			

(4) particulars of household members

Sl.No.	relation to age	sex	Whether	if working,	if working,	industry
(0)	(1)	(2)	(3)	(4)	(5)	(6)
	head.	male-1 female-2	working yes-1, no.-2	whether par- ticipation nominal yes-1, no 2.	principal activity description	occupa- tion code.
(0)	(1)	(2)	(3)	(4)	(5)	(6)
						(7)

\* delete whichever is inapplicable \*\* Codes: not in CPA -0 in CPA stage -1  
I-Stage-2 (2) community development block (3)



(6) Inventory of cattle and buffaloes owned on ..... (7) inventory of other livestock and poultry owned on.....

Item	Number owned		Item	Number owned	
	Cattle	Buffalo		Total (including young stock)	Young stock
1	2	3	1	2	3
1. Males over 3 years			1. Livestock		
1. breeding			1. sheep		1
2. working			2. goat		1
3. others			3. Horses and ponies		2
4. total(1)			4. mules		x
2. Females over 3 years			5. donkeys		x
1. breeding-in milk			6. camels		x
2. breeding-others			7. pigs		x
3. others			2. Poultry		
4. total(2)			1. fowls		x
3. Young stock			2. ducks		x
4. Total			3. others		x
			4. total poultry		x
			1 upto one year of age	2 upto 3 years of age	

(8) Inventory of agricultural machinery and implements owned on .....

Serial No.	Items	Number owned	Serial No.	Items	Number owned
0	1	2	0	1	2
1	plough - wooden		8.	Cane crusher-power operated	
2	plough -iron		9.	cane crusher-others	
3.	cart-animal drawn		10.	oil crusher-power operated	
4.	cart-others		11.	oil cusher-others	
5.	boat		12.	pump-electric	
6.	harrow		13.	pump-others	
7.	sick		14.	tractors.	

(9) Remarks

GOVERNMENT OF INDIA NATIONAL SAMPLE SURVEY  
1960-61

RURAL Schedule 6.2: Particulars of Operational holding  
(Sixteenth Round)

(1) identification of sample operational holding.		(2) classificatory characters	
1. Sl. Number	9. State	1. how operated (individually-1; Jointly-2)	
2. Zone-state-region	10. district	2. if jointly, No. of partners	
3. stratum	11. tehsil/ taluk/thana*	3. area of operational holding (acres 0.00)	
4. sub-round	12. Village	4. size class of operational holding (code)	
5. sub-sample	13. hamlet(s)	5. No. of parcels in the holding	
6. sample village	14. house No.	6. household industry-occupation (code)	
7. C.P.A. classification**	15. name of head of household	7. whether cultivator household (yes-1; no-2)	
8. (i) second stage stratum	16. name of informant		
(ii) sample household	17. informant's relation to head.		
(iii) Sl. No. of operational holding.			

(3) particulars of investigation and scrutiny.

Sl. No.	Item	Investigator	Inspector	Scrutiniser
0	1	2	3	4
1.	name			
2.	roll number			
3.	date of survey/inspection/scrutiny			
4.	date of receipt/despatch			
5.	No. of scrutiny sheets attached			
6.	Signature			

(4) summary particulars of household members

Sl. No.	Item	No. of persons	Sl. No.	Item	No. of persons
0	1	2	0	1	2
1.1	adults-male		2.1	Working-cultivators	
1.2	adults-female		2.2	working-others	
1.3	children		2.3	not-working	
1.4	total		2.4	total	

(5) Remarks

\* delete whichever is inapplicable

\*\* codes: not in CPA-'0'; in CPA Stage 1-'1'; Stage 2-'2'; community development block - '3'.



(7) Land utilisation during the agricultural year 1959-60.

area sown (acres 0.00)

area by utilisation (acres 0.00)

Sl. No. of plots as in col. (0) of B1.6.

Sl. No. of plots as in col. (0) of B1.6.	Season code 1	Rice	Jowar	Bajra	Maize	Ragi	Wheat	Barley	Gram	Sugarcane	Cotton	Jute	Groundnut	Name	Area	Total area sown	Net area sown	Misc. tree crops, groves, etc.	Pastures & grazing land	Current fallows	Other fallows	Culturable waste	Under non-agricultural uses	Barren and Unculturable land	Forests
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25

TOTAL

1 Season codes: autumn (August to October)-1; winter (November to January)-2; Spring (February to April)-3; Summer (May to July)-4; Perennial (throughout the year) - 5.



1. major agricultural reason for the operational holding during 1959-60

2. No. of attached farm workers during the major season.

(9) particulars of chemical manure used in the operational holding during 1959-60.

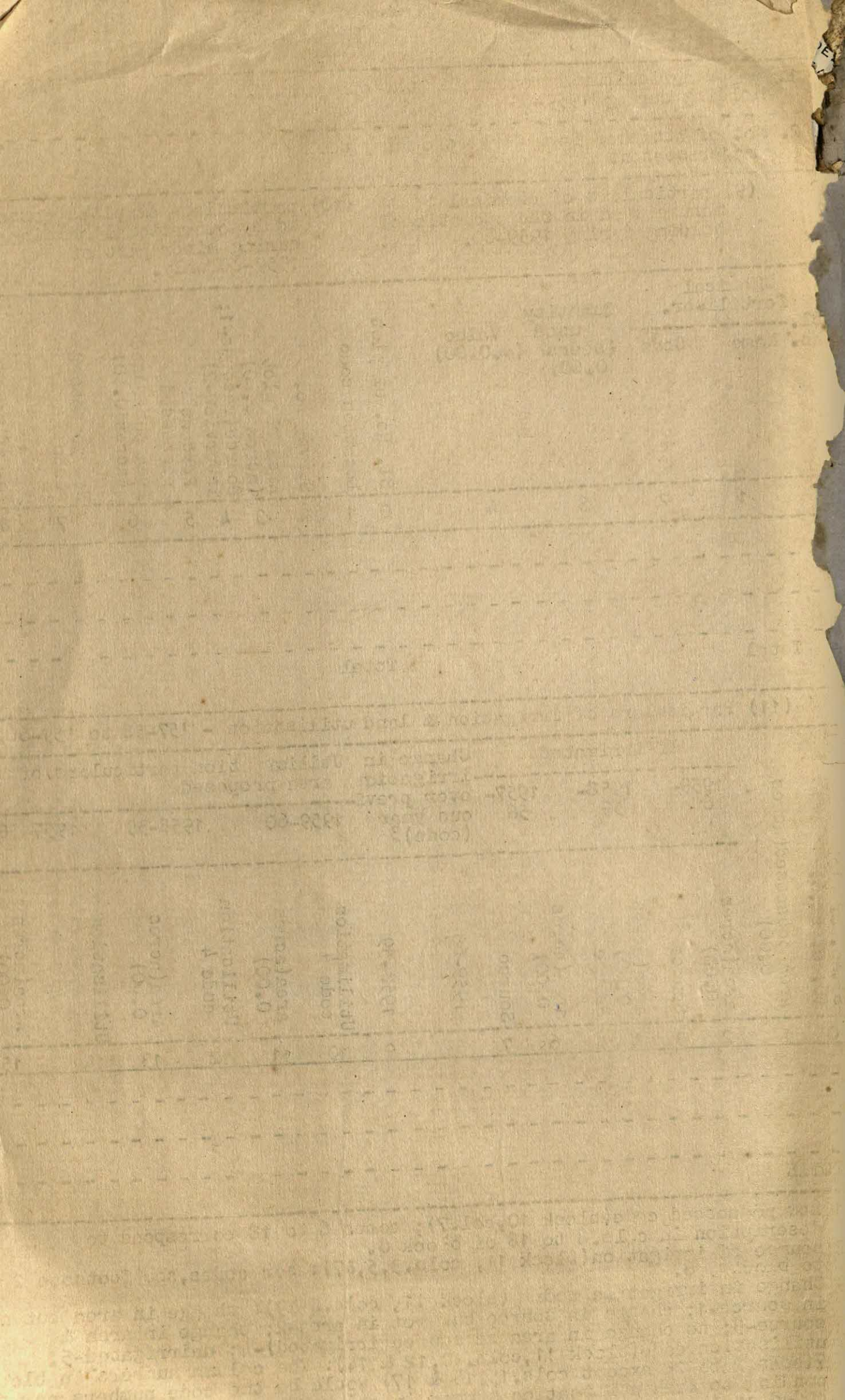
(10) particulars of plots possessed by operational holding during minor part of 1959-60 only.

Chemical fertiliser.		Quantity used		Value	(10) particulars of plots possessed by operational holding during minor part of 1959-60 only.									
Sl. No.	Name	Code	(seers 0.00)	(Rs.0.00)	Sl. No. of plot	Location code	Survey No.	Area of plot (acres 0.00)	Source (records-1; interview-2)	Percent possessed	Area possessed (acres 0.00)	How possessed Code 1	No. of months possessed.	
0	1	2	3	4	0	1	2	3	4	5	6	7	8	
Total					Total									

(11) Particulars of irrigation & land utilisation - '57-58 to '59-60.

Sl.No. of plot as in col. (0) of bl.6.	Area possessed (acres 0.00)	If irrigated			Change in Utilisa tion particulars of irrigation area proposed.			1959-60	1958-59	Utilisation code 4	Area (acres 0.00)	Utilisation code 4	Area (acres 0.00)	Utilisation	Area (acres 0.00)
		1959-60	1958-59	1957-58	over previ- ous year (code) 3	1959-60	1958-59								
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
TOTAL															

1 how possessed code (block 10, col.7); codes 8 to 18 correspond to description in cols.8 to 18 of block 6.  
 2 source of irrigation (block 11, cols.3,5,&7): For codes, see footnote 2 to block 6.  
 3 Change in irrigation code (block 11, cols.8 &9): change in area but n in source-1; change in source but not in area-2; change in area & source-3; no change in area or source (irrigated)-4; unirrigated-5.  
 4 utilisation code (block 11, cols.10,12 & 14): The column numbers in bloc 7 (cols.2 to 25 except cols.15,16 & 17) would be the code numbers corre ponding to each utilisation stated in col. headin gs; other crops would be coded as 14.





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